

The Life and Death of the Supermarket

*How Food Trade Infrastructure affects the
design of Architectural and Urban Settings*

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Research Proposal (MArch)

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Proposed Thesis: *The Life and Death of the Supermarket: How Food Trade Infrastructure affects the design of Architectural and Urban Settings*

Research Investigation

People have always come to markets in order to socialise as well as to buy food, and the need for such spaces in which to mingle is as great now as it has ever been – arguably greater, since so few such opportunities exist in modern life.¹

You who control the transportation of food supplies are in charge, so to speak, of the city's lifeline, of its very throat²

Historically food has played an important role in how cities are shaped. The modern city is no exception to this, yet it holds an abstracted relationship to the hinterlands that feed it (Steel: 2008), thus giving the perception (particularly in Western cities) that constant food supply to the city is a given right. The problem of feeding cities still remains a challenge (Diamond: 2005), one that, in combination with an ever increasing scarcity of fossil fuels, has led to a emerging tide of urbanism looking to bring localised food back to prominence in the city. More so, investigating building infrastructure to mass produce food in cities themselves: the return to a city state model. A consequence of this is also a move towards a more resource sustainable city framework.

However, there is little discussion around how this new food urbanism will be structured within the city, and conversely, how it will structure the city.

The most prominent architectural/urban typology which represents food in the city currently is that of the supermarket building, a type which has evolved from the urban market but has shed its civic role (Steel: 2008). This is further characterised by the common use of the private motor vehicle to access the supermarkets site. What if we were to amputate the car from the supermarket? Would we return to the urban market as the defining food space typology in the city? Or would food space be embodied in a new formal language?

Primary Research Question(s): How can we track the implications of food (supply, demand, requirements) for the contemporary Western city through a supermarket typology?

Secondary Research Questions: How does food culture and its resulting space enhance the urban public sphere (i.e. the vitality of the city)?

¹ Steel. pg. 111. *Hungry City – How Food Shapes Our Lives*. Published by Chatto & Windus, Great Britain, 2008.

² Cassiodorus. *Variae*. VII. pg. 25. Quoted by Steel. pg. 76. *Hungry City – How Food Shapes Our Lives*. Published by Chatto & Windus, Great Britain, 2008.

Methodology

Using the analysis model of design (institutionalised/autonomous design process) versus non-design (overlapping of cultural systems in which design is one of these) laid out by Diana Agrest³ in 1974 as an analysis departure point; the research will investigate the historical and contemporary role of food markets in cities. The supermarket typology will form the basis for how food exchange related design affects urban fabric build-up in Western cities. Through links in the literature review, as well as empirically based evidence, I draw through extrapolations of how a food market driven city might conduct urban change. This may nurture a more direct relationship to its surrounding geography (e.g. the hinterland) and the food sources needed to feed it.

Empirical analysis has been conducted on what might typify a vibrant and civically significant urban market to counteract the research into supermarket typologies. The Queen Victoria Market in Melbourne, Australia, has been selected as this case study. There is an assumption that there are qualities instilled in urban markets which have more positive effects for urban environments than that of supermarkets. Thus, through looking at these environments it may be possible to tease out new directions for solidifying the prominence of food in the city once more.

³ Agrest. pg. 333. *Design Versus Non-Design*. *Oppositions*, issue 6, fall, 1976.

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1. Introduction

Cities need food. It is not a coincidence that cities formed once agrarian societies became established in history. Yet, where the food comes from and how it makes it to the city are questions that are rarely asked by the urban dweller. We expect it to be there on time, in plentiful quantity, and in a fresh state, something that many people consider a right. Yet the resources required, and the amount of land needed to feed a city (depending on what city and culture you examine) are logistically astounding. Take for example the following figures illustrated by Dutch architectural firm MVRDV in collaboration with the Delft University of technology:

One person in the developed world consumes approx. 3kg of food per day, over 1000kg per year.

One person in the developing world consumes approx. 2kg of food per day, around 670kg per year.

The world average diet is approx. 850kg of food per year, the amount of land required to grow this amount is 1288m² per person. 789m² of that land is to grow food that a human directly consumes, and 499m² to grow feed for animals that a human consumes. By 2050 nearly twice as much meat will be produced as today, more than 465 million tons globally.

The amount of land required for a particular culture depends on its diet, for example:

USA needs 43,207km²: - 16,070 km² for human consumption.

 - 27,137 km² for animal feed.

Japan needs 21,198 km²: - 12,073 km² for human consumption.

 - 9125 km² for animal feed.

The Manhattan Example:

On average an American consumes over 1200 kg of food per year which takes 2600m² of land to grow, animal feed takes over half of that area (i.e. the amount of food it takes to feed the animals that are used to feed humans).

The annual population of Manhattan is around 1.8 million people (including visitors).

Manhattan's land area is 59.5km².

With current US production efficiency it would take 150 times (8925km²) the land area of Manhattan to feed the city's population.

With using hydroponic and organic farming methods the land area required would be 1/3 (2975km²) of the land area needed for conventional farming techniques to feed Manhattan, however this is still 46 times the land area of Manhattan.

If vertical farming was used to grow all the food for Manhattan in one tower it would need to be about 37km high.

If each ingredient was given its own tower (cereal tower, chicken tower, fruit tower, fish tower, etc) the animal feed tower would be 23km high.

If all these food towers were distributed across every roof top of Manhattan, there would be a food layer over the city 200m in height.⁴

Numbers such as these can be hard to comprehend or contextualise (the above numbers correspond with an animation which illustrates the sizes we are dealing with, see figures 1-5), yet they do illustrate one vital point, that the size and population of the city has a direct relationship with the amount of resources and land required to feed it.

This has been the case ever since urbanism began. The first cities (which were city states) sat adjacent to their productive hinterland and were restricted in size and population by how much sustenance they could grow. If a city was to begin encroaching on this hinterland it might starve. Historical case studies illustrate how cities that did not maintain their pastoral lands (through means of over farming or destroying too much surrounding vegetation which fed nutrients and secured the soil) resulted in erosion, drought, low crop yields and eventual abandonment of the city settlement. Alternatively, in cases such as ancient Rome, the rulers waged aggressive expansion campaigns designed to capture the food sources of distant cultures so that they might feed their own city. This action is what architect and author Carolyn Steel described in her TED conference talk (2009) as “one long drawn out militarised shopping spree”.

⁴ Source: **The Why Factory(T?F)**, *Food City & Food Print Manhattan*, by T?F (MVRDV and the Delft University of Technology), Research and design by T?F Delft: Winy Mass with Ulf Hackauf, Pirjo Haikola, Bas Kalmeijer and Tihamer Salij. Animation by Wieland/Gouwens, Rotterdam: Eline Wieland, Mario Gouwens (Food Print Manhattan), Eline Wieland, Mario Gouwens & Twan Haanen (Food City).via www.archdaily.com

Figure 1. Land area required to grow food for the world average diet of one person. The figure in the bottom left represents a person for scale.

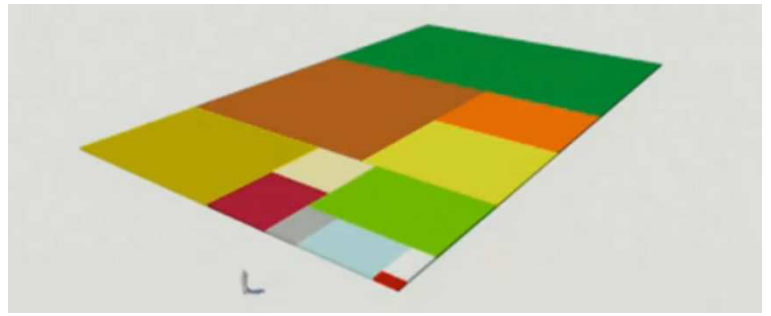


Figure 2. Land area required to grow food for the American average diet of one person. The figure in the bottom left represents a person for scale.

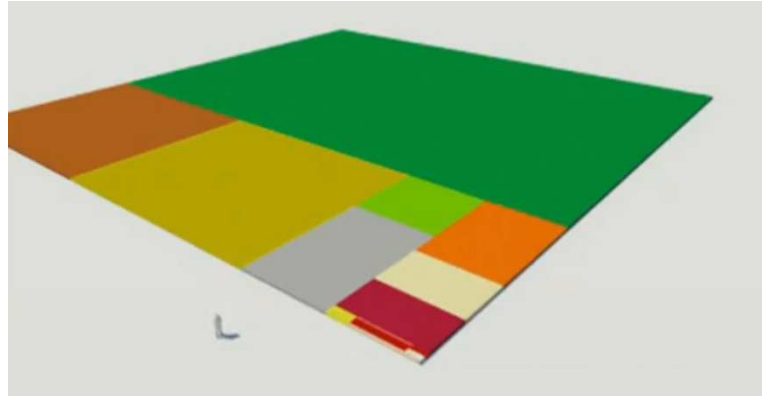


Figure 3. Land area required to grow food for the food consumption of the USA. The area is superimposed over the land area of the Netherlands.

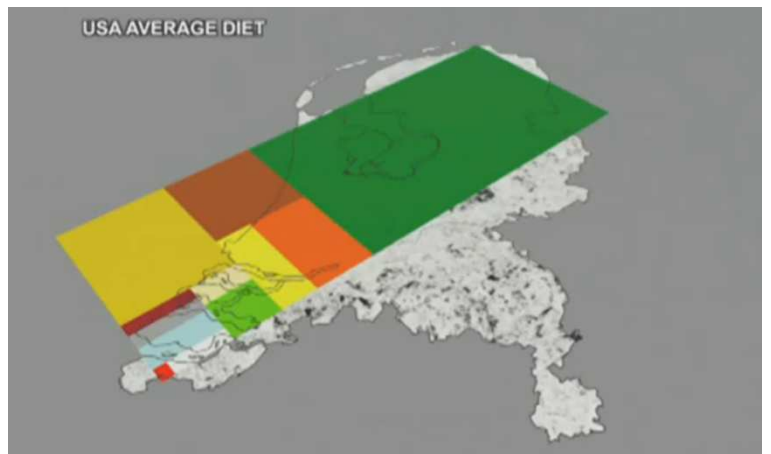


Figure 4. Land area required to grow food for the food consumption of Japan. The area is superimposed over the land area of the Netherlands.

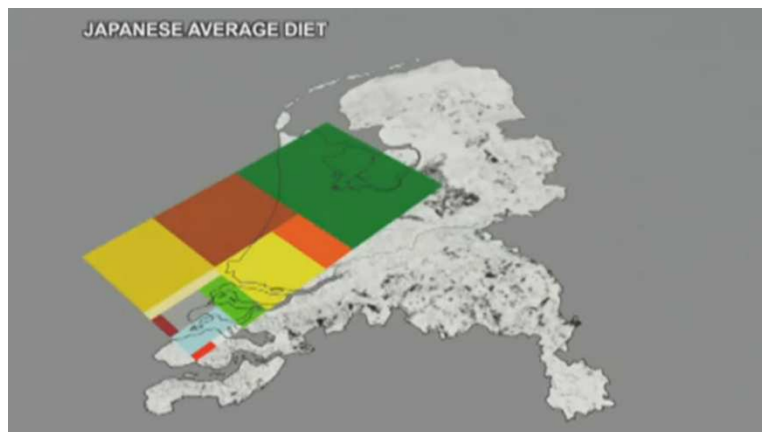


Figure 5. 200m high food layer over Manhattan. The colour shaded forms represent the amount of vertical farming needed to feed the population of Manhattan.



What we can take from such precedent examples is that food helps to shape our built environment. Whilst that is less obvious today, it is still the case. Cities settled and formed before the industrial revolution wear the marks of how the food driven landscape affected them, and for the most part (the exception being cities which had ports allowing import and export of food stuffs) had a defined relationship with the surrounding hinterland. Depending on the location of the hinterland in relation to the placement of the city, large spines often led from the periphery of the city to centres that were pivotal places where many tiers of urban life (civic relationships, trade, recreation, performance, politics, etc) were carried out. These centres were urban markets. Although it is an indirect relationship, these markets were the urban dweller's connection to the surrounding geography of the city. One could understand the city's reliance on the hinterland and we might speculate that the market was the face of this understanding – a piece of the urban fabric which represents the greater territory which the city sits within.

Today this very representation is muddled, the centre of food trade for the most part (particularly in Western cities) is bundled up in a new urban typology: the typical supermarket. The supermarket as urban typology has stemmed from a multitude of factors (technological advancement, economic doctrines, a changing mode of public/civic space, etc) which will be analysed throughout this text. Yet its existence is under question as the society starts to reconsider a city model which is resource hungry. The freedoms that we have come to live with such as suburbs and the private transport which takes us from the city to home to supermarket is threatened. Supermarkets as typologies are less pieces of the urban fabric than islands we must use motor vehicles to access, islands which are separated from the urban hinterland that supports them. If the private motor vehicle is to become less and less accessible to common city dwellers, and the option of cheap food imports from overseas becomes less feasible, what will become of the supermarket and the type of city that it has helped to spawn? A new food-oriented city must be considered.

As suggested by the contents chart, this text will discuss the intersection between the categories of geography and civility. The architectural product of this intersection is represented by the urban typologies of the urban market and the supermarket. It is also an aim that issues of sustainability in urban design are inherently discussed, as the motive in analysing how food distribution affects cities is also to consider how urban communities might form more sustainable relationships with their food resources.

As indicated in the title of this thesis, the supermarket will be the subject of urban design critique. It is the hope that this critique flows beyond throw-away criticisms usually directed toward supermarkets which are commonly based around questionable aesthetical design.

Instead this thesis attempts to take the typical supermarket as a serious urban form, one which affects the urban dynamic beyond how it looks. Having stated this, there are several key assumptions that are hopefully drawn, these are:

- Rethinking a food-orientated city that is sustainably driven, by cutting down food miles as well as understanding how to maintain local geographies. Furthermore informing urban residents about their reliance on those geographies.
- Food space should be considered infrastructural to cities, not as individual centralised points which are only accessible by private motor vehicle. As infrastructure, food trade space should be aligned with other services infrastructural to the city such as public transport, arterial routes into the city, and public/community institutions.
- As collective space, food trade infrastructure should allow hosting of bottom-up initiatives enacted by resident communities according to their needs. A consequence of such planning initiatives creates stages for urban vibrancy where strangers can interact, i.e. a place of civility. These places are multifunctional, allowing many urban activities to 'fold' upon one another.

Of these points, the second is the most critical to what seems to be a general complacency towards how we place food within our cities, and urban culture. If we are to truly value food and the security of its production, transportation, and distribution there are some key questions that need to be asked of the urban design strategies entrenched in supermarkets and supermarket cities.

Glossary of Terminology

Citizen	- A recognised subject of a state, nation or commonwealth. Civic space is constructed in order for citizens to interact and to fulfil a public life. Citizens are native and naturalised, therefore citizens of a city may be of varying ethnic and cultural backgrounds. When we engage each other as citizens in public space, it is with the knowledge that we all have a stake in the collective development of communities and collective space.
Civility	- <i>"Civility is treating others as though they were strangers and forging a social bond upon that social distance. The city is that human settlement in which strangers are most likely to meet. The public geography of a city is civility institutionalized."</i> ⁵

⁵ Sennett, Richard pg. 269. *The Fall of Public Man*. Published by Cambridge University Press, London, 1974.

Consumer	- A purchaser/user of goods for private means. The act of consumerism is an inherently private enterprise. Supermarkets are set for consumers, not citizens.
Fixed Activities	- Are human activities which have persisted throughout time in cities. They are elemental acts which collectives carry out in the course of everyday life. The trading of food is a fixed activity.
Geography	- Encompasses not only the natural terrain which the city sits within and where its food is drawn from, but also the architectural fabric of the city.
Limen/liminal	- Is a threshold which joins together multiple spaces. Liminal spaces might be formed by physical or perceptual conditions.
Locus Solus	- <i>“The locus is a component of an individual artefact which, like permanence, is determined not just by space but also by time, by topography and form, and, most importantly, by its having been the site of a succession of both ancient and more recent events... while the locus is a site which can accommodate a series of events, it also in itself constitutes an event. In this sense, it is a unique or characteristic place, a “locus solus””</i> ⁶
Supermarket	- A typology which is defined by ‘big box’ architecture. It is typically introverted and mono-functional in nature.
Urban Market	- A typology which is defined by the use of open or semi open space within a city for the trade of food and other goods. It is multifunctional and civic in nature.

⁶ Eisenman, Peter (intro). In Rossi, Aldo. *The Architecture of the City*. pg. 7. Published by the MIT Press, Cambridge, Massachusetts, 1982.

2. Agrarian Form – Food made the City

2.1. *The First Cities*

The emergence of rudimentary urbanism is generally credited to the Sumerian cities (Uruk, and its neighbours of Ur, Larsa and Nippur) in Southern Mesopotamia around 3500 BC, that is, one the first to be classified as ‘proper’ cities⁷.

The main attribute that a proper city exhibits is a division of labour where particular citizens are assigned to specialised tasks which included the running of a civic administration⁸.

Societal members no longer were completely devoted to finding food to sustain themselves, there is of course only one way which affords people such free time to devote their energies to non-essential creative pursuits⁹ - the founding of farming techniques and an agrarian culture:

By moulding the natural world to suit their needs, Sumerian cities established the basic ground rules of urban civilisation. Their municipal market gardens were the world's first artificial landscapes showing how nature might be modified to serve man.¹⁰

This also marks one of the first instances where human society was able to remain in one place for an extended amount of time, thus starting an evolution of culture in response to the surrounding geography. Whatever that geography may be determined the contextual response of the urban infrastructure (including architecture).

In the case of the Sumerian cities the geography were characterised by a semi-desert environment, thus the cities relied on the flooding of the nearby Tigris and Euphrates rivers to irrigate crops. Since that the times of flooding didn't always align to growing season, water had to be stored in large levees with irrigation systems to distribute water to farm land. Farm land directly related to the city, as they formed a symbiotic bond, the city may not exist without the crops that sustained it:

City and country combined to form a single entity, the city-state, and their mutual dependence, so clear in the ancient world and so obscure in ours, has underpinned urban existence ever since.¹¹

⁷ Steel. pg. 13. *Hungry City – How Food Shapes Our Lives*. Published by Chatto & Windus, Great Britain, 2008.

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ *Ibid.* pg. 14.

¹¹ *Ibid.*

2.2. Grain made the Ancient City

What of these cities though? Why muse over something so seemingly obvious? To talk of such things now when so much food floods to the city seems inane. Yet that is exactly the point: farming (that is, food) made the city - the city was, and still is, what it eats.

It is useful to follow this transaction right through an historical example, from food production to the way in which societies and their cities manifested. This particular example looks to the ancient Mayan civilisation and its cities in Central America.

The Mayan story, although incomplete, is a well documented one. It was once thought that Mayan civilisation was somewhat peaceful due to its possession of sophisticated buildings, craft, and written language. It has now come to be understood that Mayan culture was fraught with warfare¹², waged between neighbouring kingdoms (apparently from the top of one city's temple, an observer could see the apex of the temple in the neighbouring kingdom¹³). The reason warfare was so prolific is simple enough – a lack of sustainable food production:

...a Maya peasant could produce only twice the needs of himself and his family. At least 70% of Maya society consisted of peasants. That's because Maya agriculture suffered from several limitations. First, it yielded little protein. Corn, by far the dominant crop, has lower protein content than the Old World staples of wheat and barley...The Maya depended on a narrower range of crops than did Andean farmers (who in addition to corn also had potatoes, high-protein quinoa, and many other plants, plus llamas for meat)...the Maya had no animal-powered transport or plows. All overland transport for the Maya went on the back of human porters...Thus, the modest productivity of Maya agriculture, and their lack of draft animals, severely limited the duration and distance possible for their military campaigns.¹⁴

In reality, it wasn't prolonged warfare that caused the collapse of the ancient Maya:

*"Collapses for ecological or other reasons often masquerade as military defeats"*¹⁵, but what Jared

Diamond refers to as *ecocide*, ecological suicide which stems from three main factors beyond that of war:

- Changed/damaged environment through deforestation & erosion
- Climate change (droughts, which deforestation can contribute to)

¹² Diamond, Jared. pg. 172. *Collapse – How Societies Choose to Fail or Succeed*. Published by the Penguin Group, New York, 2005.

¹³ *Ibid.* pg. 166.

¹⁴ *Ibid.* pg. 164-165.

¹⁵ *Ibid.* pg. 13.

- Political/cultural factors, competition amongst kings and nobles led to an “*emphasis on war and erecting monuments rather than solving underlying problems...*”¹⁶

The reason that deforestation and erosion was rife was due to the expanding populations of Mayan cities which led to a need for more arable land (in high yielding seasons for food populations grew). Once all prime arable land is used up, marginal land was cleared further contributing to erosion and ultimately, exhaustion of the soils growing capabilities which leads to drought (this is also coupled with the cyclic conditions of climate which will regularly generate dry seasons lasting several years at a time). The resulting famines brought about wars with neighbours so that the attacking kingdom could claim their crops. As quoted, the Maya also relied on a crop which had little protein (maize), thus it provided little sustenance. Furthermore, the way they prepared the maize was time consuming:

*Indigenous techniques for preparing maize tortillas were extremely labor-intensive... Because tortillas quickly went stale and nixtamal fermented overnight, women had to rise hours before dawn to cook for men going to work in the fields. Midwives warned newborn girls; Thou wilt become fatigued, thou wilt become tired; thou art to provide water, to grind maize, to drudge.” The subjugation of the grinding stone inspired a particularly oppressive version of patriarchy in Mesoamerica. With limited supplies, social hierarchies governed food distribution. Well-fed nobles stood some ten centimetres taller than commoners in the classical Maya city of Tikal.*¹⁷

Thus the societal structure of Mayan culture was patriarchal. This stood in contrast to the Andean (later Incan) peoples of Peru whose crops were numerous, high in protein, and were quicker to prepare for consumption. This meant that females spent less time cooking and more time working aside their male counterparts resulting in a greater social equality¹⁸. The outcome for the cities of the Maya was that their civic and religious structures (as built by their rulers) were decidedly power orientated, that is, they displayed militaristic stature:

*Their attention was evidently focused on their short-term concerns of enriching themselves, waging wars, erecting monuments, competing with each other, and extracting enough food from peasants to support all those activities... Maya kings sought to outdo each other with more and more impressive temples, covered with thicker and thicker plaster – reminiscent in turn of the extravagant conspicuous consumption by modern American CEOs*¹⁹

¹⁶ Diamond, Jared. pg. 160.

¹⁷ Pilcher, Jeffery M. pg. 20. *Food in World History*. Published by Routledge, New York, 2005.

¹⁸ *Ibid.*

¹⁹ Diamond, Jared. pg. 177.

Power orientated architecture in this case is not the representation of wealth, but of desperate rulers whose kingdoms were on the verge of starvation.

2.3. Seedlings for the Supermarket

From the Mayan example we can begin to understand the prominent place food took in the structuring of the city. What was the food distribution centre, became the symbol of religion (the temple), becomes the seat of power: a civic centre. A contemporary image is not so dissimilar from this. Food distribution concentrates on the centred supermarket, which becomes an indisputable place of food gathering for city dwellers, a type of ritual which parallels religion. While the supermarket's architecture isn't power oriented to the degree of the ancient Maya it nonetheless influences the structures the city, with the rulers of this influence being the big business of the modern food industry. The supermarket gains its very special demeanour from being unnoticed and unremarkable as infrastructure. To keep a privatised type of architecture removes any duty it has to the civic make up of the city.

The contemporary world may have shed the link between power and food distribution through the architectural manifestation of the supermarket, but its form is just as important to the city's inhabitants and the environment which they build for themselves. The car park, one of the most defining features of the supermarket is made possible by a change in the way people move about the city. The invention of the motorcar allowed suburbia to flourish in relation with the supermarket supplementing its growth and enabling a model where food distribution became centralised to within decentralised parts of the city: suburbia. Yet the motorcar, and the whole notion of private transport is now under threat with rising fuel costs and growing concern with the strain which such a transport system places on the planet and its resources.

To take the car away from the supermarket poses a problem, as the two heavily rely on each other. What is to happen to this typology if the car is severed? One could presume that food infrastructure is inherently a public domain, no matter how you build the places that distribute it and what types of transactions happen within those places. Food comes from the land, the same geography which the city is built on. How that geography is maintained concerns us all - this makes food and food infrastructure a civic institution. If private transport becomes less and less viable to the common collective, food infrastructure must move with this shift, and return to a civic role, one with links to public transport and public space within the city, and one which links to the geography that feeds it.

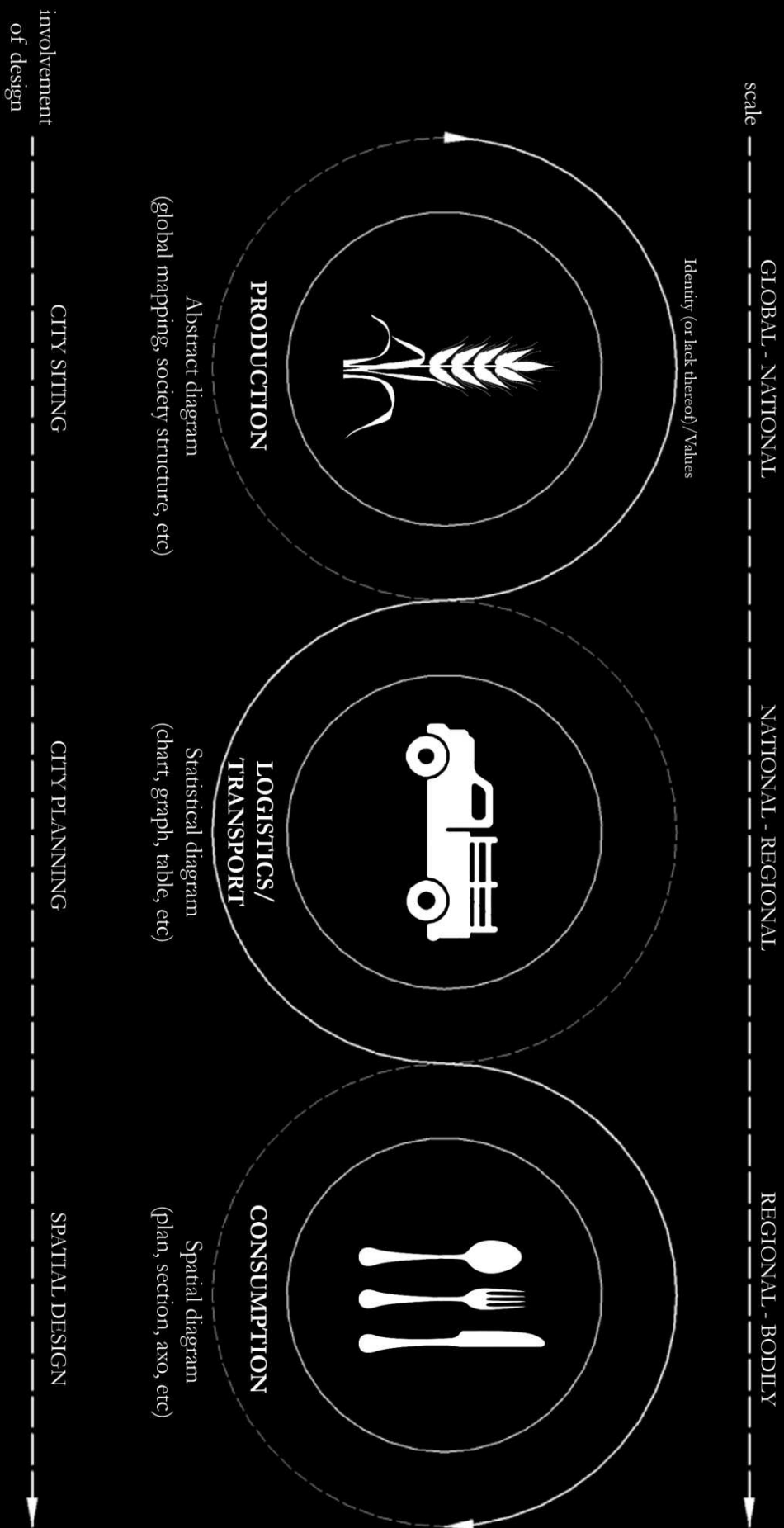


Figure 6. Food cycle vs. City Scale vs. Role of Design

2.4. Civic Politics and Food

Ancient city models like that of the Maya associated food and its distribution with temples. Food was seen to be given to people by the Gods, therefore before the harvest could be consumed a sacrifice of food had to be offered back to the Gods as a token of gratitude. The temple represented the seat of power of the ruling elite and their priests, but also the focal point of food trade and distribution. Food stores themselves were often inside the temples, thus we see a distinct connection between food trade space and governance in New World (American) cities before their encounter with Europeans.

In the old world, circumstances were much the same:

The pivotal role played by markets in urban life made them inherently political. Two of the most famous public spaces in the world, the Roman Forum and the Athenian Agora, were both originally food markets, that gradually made the transition from commercial to political use as the city they served grew in size.²⁰

Thus, in ancient Greece it would not have been uncommon for an individual to purchase their sustenance, and then to observe debates between politicians, philosophers and other thinkers. One could imagine eating bread and watching Aristotle muse over the five elements of physics, an ancient day equivalent to buying a coffee and watching a street performer today.

To carry this theme of food trade space defining civic/political space in the city further still, we can look at a well-documented architectural example: the Palazzo della Ragione. Affectionately known as the Salone (13th cent.) in Padua, Italy (Fig. 7 & 8), it is a stately building with a dual purpose. This building acts as a place where “*For centuries, representatives of the Paduan Commune gathered here to discuss matters of state, while the bustle of market life carried on below.*”²¹ The structure is composed of a council chamber which sits atop a series of arcades and shops. This vertical arrangement was necessary due to the building being built in the very middle of the city’s market square, where the two halves of the market had to be connected beneath the council chamber²². This example is striking as it is none other than the building made famous (that is to say, more famous) by the architect Aldo Rossi in his book *The Architecture of the City*. Rossi had this to say of the structure:

²⁰ Steel. pg. 122.

²¹ *Ibid.*

²² *Ibid.*

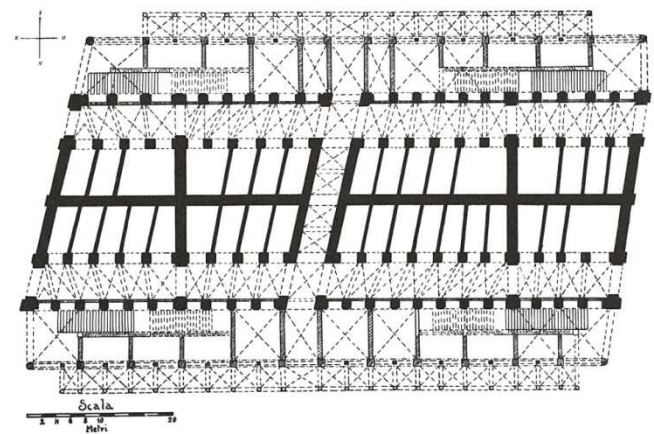
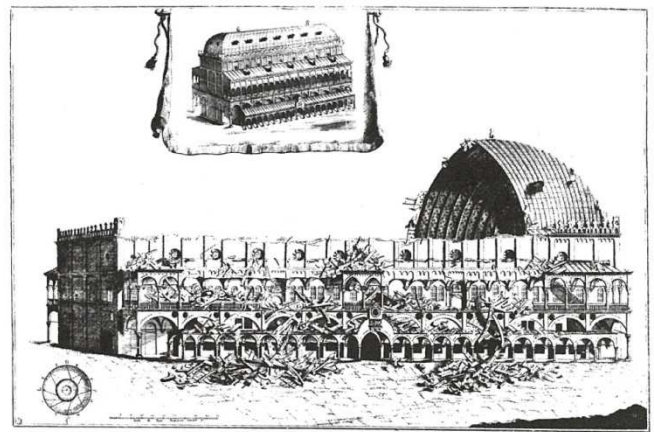


Figure 7. Palazzo della Ragione, Padua, Italy.



Figure 8. Palazzo della Ragione, Padua, Italy.

*In particular, one is struck by the multiplicity of functions that a building of this type can contain over time and how these functions are entirely independent of the form. At the same time, it is precisely the form that impresses us; we live it and experience it, and in turn it structures the city.*²³

Rossi is referring to the persistence of this structure over time. The enduring existence of the architectural form beyond the multiple functions it has had is important, as the form persists in our memory, not how it is used, thus it builds for us a particular *image* of the city. An image which influences how the city will develop independent of function. This is Rossi's way of saying that form gives structure to the city, but function does not necessarily give structure to form. It is an example of what Rossi calls an urban artifact:

*The Italian fatto urbano comes from the French faite urbaine. Neither the Italian nor the English translation "urban artifact" adequately renders the full meaning of the original, which implies not just the physical thing in the city, but all of its history, geography, structure, and connection with the general life of the city.*²⁴

Writer and architect Carolyn Steel (author of *Hungry City – How Food Shapes Our Lives*) raises a counterpoint about what Rossi may be missing in his analysis:

*What Rossi didn't say is that much of the Salone's power comes from its relationship with the market. Food is always getting overlooked in this way, not least by architects trained to think of space as something defined by bricks and mortar rather than by human actions... Such spaces may be ephemeral, but they are no less powerful for that. They remind us that it is often the way in which spaces are inhabited that matters most, not just the physical boundaries that appear to define them.*²⁵

Steel's point may be somewhat polarising, as Rossi does make allowance for permanence of human activities which he calls *fixed activities*, which will be discussed later in the text. However, she does raise a point which many architects throughout history have cited. This is that human activity goes a long way to bringing urban structures to life, that event is an empowering element of architecture, and event, whilst being something which designers and architects can make places for, cannot itself be designed. To give this phenomena another documented title, event falls under what may be called non-design which is defined by architectural theorist Diana Agrest as something which "...describes the way in which different cultural systems interrelate and give form to the built world; it is not a direct product of any institutionalized design practice but rather the result of a general process of culture."²⁶ More than just event, food

²³ Rossi, Aldo. *The Architecture of the City*. pg. 29. (Quoted by Steel. pg. 123. *Hungry City – How Food Shapes Our Lives*.)

²⁴ Rossi, Aldo. pg. 22.

²⁵ Steel. pg. 123.

²⁶ Agrest. pg. 333.

markets give particular type of vitality (the same vitality which encourages public parading, street performance and general festivity in the city) to the spaces that they inhabit. A vitality that is characterised by some specific ingredients which will be described over the course of this thesis.

By and large, the spaces we are referring to are the spaces of civility; spaces which allow people to come together as strangers and interact in both solicited and unsolicited ways.

Richard Sennett describes civility as follows:

*...it is the activity which protects people from each other and yet allows them to enjoy each other's company. Wearing a mask is a essence of civility.*²⁷

*"City" and "civility" have a common root etymologically. Civility is treating others as though they were strangers and forging a social bond upon that social distance. The city is that human settlement in which strangers are most likely to meet. The public geography of a city is civility institutionalized.*²⁸

Spaces of civility provide a certain dynamic - one which allows people to don their public persona or mask and relate to society as a whole by non-intimate means. Acts of civility do not revolve around transaction of intimate information, the exchanging of personal life histories, but a form of play acting:

*Playacting in the form of manners, connections and ritual gestures is the very stuff out of which public relations are formed, and from which public relations derive their emotional meaning.*²⁹

Yet, many public institutions have abandoned civic roles as privatisation eats into them. Certainly, a typical supermarket is an example of this. The supermarket seeks to tighten the ropes around unsolicited acts - acts of playacting, which conflict with an image they wish to project. CCTV and other surveillance tactics make sure of this, as what seems strange seems wrong and 'uncivilised', which runs contrary to the whole point of civility:

*The extent to which people can learn to pursue aggressively their interests in society is the extent to which they learn to act impersonally. The city ought to be the teacher of that action, the forum in which it becomes meaningful to join with other persons without the compulsion to know them as persons...the city has served as a focus for active social life, for the conflict and play of interests, for the experience of human possibility, during most of the history of civilised men. But just that civilised possibility is today dormant*³⁰

²⁷ Sennett. pg. 264.

²⁸ *Ibid.* pg. 269.

²⁹ *Ibid.* pg. 29.

³⁰ *Ibid.* pg. 340.

What seems clear, and this is a theme that will re-emerge throughout this text, is that food infrastructure which has persisted over time, what one might call an urban artifact has a latent sense of civility contained within its form. A case study that will be used to exhibit this phenomena throughout the text is the Queen Victoria Market in Melbourne, Australia.

However, at this point we must proceed with the historical circumstances under which the supermarket building type came to exist for the sake of context. An critical part of this history hinges on the city becoming industrialised.

2.5. Meat Defined the Industrial City

Pre-industrial cities, for the most part, heavily relied upon what could be sourced from nearby locations, as transport of food was a time consuming and laborious task. Thus, the size to which a city could grow was limited:

Given the physical difficulties of getting food into town, it is hardly surprising that most pre-industrial cities were compact by modern standards. A day's journey by cart, a distance of around 20 miles, was the practical limit for bringing grain overland, which limited the width of the city's arable belt. The simple laws of geometry meant that the larger the city grew, the smaller the relative size of its rural hinterland became, until the latter could no longer feed the former... Little surprise, then, that few cities reached a population greater than 100,000 in the pre-industrial world.³¹

Here we see the pre-industrial city's reliance on grain, and those cities inherent connection with their hinterlands, which is to say their geography. Cities with harbour access were somewhat liberated from this relationship, having the ability for offshore trade:

Before the railways, sea transport was the only way cities could transcend geography, and although not every great European city was a maritime power, those that were not – Paris, Florence and Madrid among them – all eventually faced the same fate. The larger they grew, the harder they found it to feed themselves, while their maritime rivals flourished.³²

Pre-industrial cities took forms which represented the nature of how food found its way to the city, and its distribution centres:

Look at the plan of any city built before the railways, and there you will be able to trace the influence of food. It is etched into the anatomy of every pre-industrial urban plan: all have markets at their heart, with roads leading to them like so many arteries carrying in the city's lifeblood.³³

Carolyn Steel uses the example of London (fig. 9) to signify what seemed like a meandering set of arteries without 'architectural order', were actually responsive pieces of infrastructure which brought the city and hinterland together. Main arteries could be attributed to different food groups (see fig. 10):

Sheep & Cattle – North to West (mainly coming from Scotland, Wales & Ireland)

Turkey, Geese & Chicken – North to East (mainly from Suffolk & Norfolk)

Fruit & Vegetables – South

Fish & Grain – South (after coming along the Thames)

³¹ Steel. pg. 70-71.

³² *Ibid.* pg. 72.

³³ *Ibid.* pg. 118.

The streets wore the names of their cargo, or at least indirect references to them. Such examples were the markets of Poultry (self explanatory), Cheapside (cheap etymologically stemming from the Old English term ceap, which is to barter), then streets around them such as Bread street, Milk Street and Friday Street (where one purchased fish on a Friday)³⁴. However unclear and cluttered London's plan seems, from a food distribution perspective it makes sense:

*At first glance, London's medieval plan may seem irrational, with its crooked streets, crowded spaces and lack of geometrical clarity. But seen through food, it makes perfect sense. Food shaped London, as it did every pre-industrial city, and as a way of engendering life and urban order, few things work half as well.*³⁵

Once these routes have been established into the city (*"Such physical longevity is typical of markets everywhere – once established, they very rarely move."*³⁶), they become structural to the city's evolution, what Aldo Rossi might have called urban artifacts or *corrosive agents*, and what become lasting vestiges to bygone times, memories which continue to linger in the structure of the street's form and the city's connection to its geography.

³⁴ Steel. pg. 118-120.

³⁵ *Ibid.* pg. 120.

³⁶ *Ibid.*



Figure 9. Map of London, 1676.

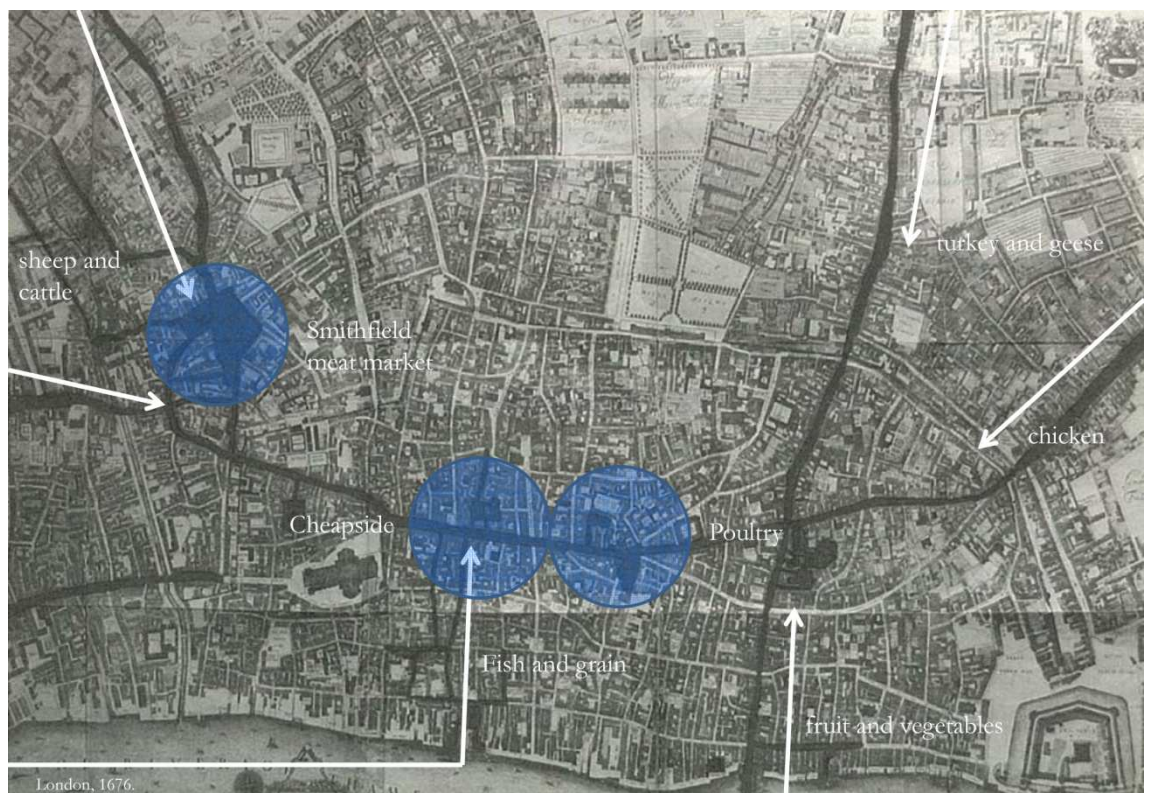


Figure 10. Map of London, 1676 (with food groups traced over).

With the onset of the industrial revolution, a new city typology was to emerge. One which began to drift away from a need to sustain a direct relationship with its surrounding geography, and was able to break down the parametric geometry which connected the size of arable land with the size of the city. Two of the first inventions which allowed this were the steam train and steam powered refrigeration which reinvigorated the freight ship. Historian James Belich cites the significant taming of distance in reference of the protein trade between Britain and New Zealand:

*Because distribution was disproportionately concentrated in London, the city lived on New Zealand protein to a significant degree. The town-supply district of London had shifted 12,000 miles to the south. What we are looking at here is not some dry-as-dust development in narrow agricultural or economic history, but a geographical miracle, a staggering conquest of distance.*³⁷

This brings us to the central point of the industrial age of food. The broadening of technology opened up possibilities between empires and their colonial outposts. Meat, a food previously reserved for the rich (the fine cuts of it at least) began to flow more readily into cities. Colonial outposts like New Zealand forged major economies on export of meat and dairy products to traditional world centres:

*From a purely technical perspective, refrigeration was the knight in icy armour that rode to the rescue of the New Zealand economy in the 1880's... It was the advent of the steam-powered mechanical freezers in the later nineteenth century that revolutionised the preservation and exporting of food.*³⁸

Although it is not accurate to pin the increase in consumption of meat and dairy produce solely on the advent of preservation and shifting technologies, they certainly did help create an environment where common people were able to access food stuffs previously out of economic reach. This in turn helped instigate a kind of culinary culture shift. Soon enough, meat became an everyday affair on the plates of the British:

*Continental visitors at this time were often struck by the English love of meat. "Roast meat is the Englishman's delice and principal dish... I do not believe that any Englishman who is his own master has ever eaten a dinner without meat".*³⁹

This of course was not an isolated occurrence in Britain; the United States was to also incubate a burgeoning meat orientated diet. Connecting New York City to the grain rich Mid West, the construction of the Erie Canal round 1825 cemented the city as a major port

³⁷ Belich, James. pg. 53. *Paradise Reforged: A History of the New Zealanders From the 1880s to the year 2000*. Published by Penguin Books (NZ) Ltd, 2001.

³⁸ *Ibid.* pg. 54.

³⁹ *Ibid.* pg. 55.

of export earning it the name the 'Empire State'⁴⁰. Surpluses of grain were diverted to feeding live stock, liberating farmers from pasture fed stock, and in doing so created the factory farm. Slaughter houses were to rise up in the around the peripheries of large cities, creating abstract geographies, abstract because the live stock wasn't visibly relying (obtaining sustenance) on the land where it lived, but on lands far to the west where grain feed streamed in from. New York's economy outstripped its rivals riding upon the back of new infrastructure and an industrialised meat wagon which seemed to solve how cities were fed:

By the mid nineteenth century, the age-old struggle to supply cities with food seemed to have been solved. The question was no longer whether cities could be fed, but how much it would cost to feed them... Cut from the land like never before, city-dwellers began to disassociate food from the very idea of nature.⁴¹

No longer would a city resident see a live animal wander into the city for consumption the next day, and no longer would spinal routes be carved out in the cityscape, leading off to where the city's varying food groups came. It would be fair to say that the geographic relationship between city and hinterland had not yet been severed completely, but the historical food-oriented city state had had its time, a new wave of urbanism had arrived carried and nurtured by industrial innovation.

2.6. Historical City Model – Permanences and Fixed Activities Interlude

It is worth taking a closer look at the effects of permanences in historical city layouts, the kind that Aldo Rossi brought to attention in his book *The Architecture of the City* (1982). Based upon historical city models, that is, cities as they were before Modernism brought its ill-fated planning tenets into practice, Rossi creates an argument for the influence of form as an active catalyst in how cities grow. For Rossi architecture constitutes the city:

By architecture I mean not only the visible image of the city and the sum of its different architectures, but architecture as construction, the construction of the city over time ⁴²

There is a distinction between what is the history of the city versus the memory of the city. Forms shift meanings as well as the roles they play in a city according to what distinction they belong to, that is, a city's form retains history so long as it stays in relation to its intended function. Once this relationship is severed it shifts from the realm of history into the realm of memory⁴³ thus taking on a different role in how that form relates to the city, and how it is perceived by the city's occupants, what meaning it has to them individually

⁴⁰ Steel. pg. 32.

⁴¹ *Ibid.* pg. 37-38.

⁴² Rossi, Aldo. pg. 21.

⁴³ Eisenman, Peter. pg. 7. *The Architecture of the City*. Published by the MIT Press, Cambridge, Massachusetts, 1982.

and collectively. A similar point was touched on earlier with the way London's food arteries (Fig. 5) had lost their initial purpose of providing a path for livestock to walk into the city, yet the memory of this action is imprinted into the city's structure and referenced in the names of streets and places. A similar point of view is shared by Michel de Certeau in his book *The Practice of Everyday Life* cited in a particularly striking chapter entitled *Walking the City*:

*The dispersion of stories points to the dispersion of the memorable as well. And in fact memory, is a sort of anti-museum: it is not localizable. Fragments of it come out in legends..."Here, there used to be a bakery". "That's where old lady Dupuis used to live". It is striking here that the places people live in are like the presences of diverse absences. What can be seen as designates what is no longer there: "you see, there used to be..." but it can no longer be seen*⁴⁴

The point here is that places and forms within the city wear memories, and that these memories constitute specificity of site, one that is un-replicable giving rise to what Rossi and Architectural theorist Peter Eisenman refer to as *Locus Solus*:

*...while the locus is a site which can accommodate a series of events, it also in itself constitutes an event. In this sense, it is a unique or characteristic place, a "locus solus"*⁴⁵.

The reason why this point is raised is that urban food market infrastructure, and indeed all places where food is traded over time can linger on through history, and memory. They are central places, linked to the geography of the city, and the geography beyond the city. They are direct and analogous connectors to nature, and remind us that indeed the city sits upon geography, and relies on geography to sustain itself. The city is what it eats.

With the development of industrial technologies, the way in which cities were to relate to their natural geographies had fundamentally changed. An abstraction of the hinterland had taken place, and urban markets began to lose their importance as civic spaces.

⁴⁴ Certeau, Michel de. pg. 108. *The Practice of Everyday Life*. Published by the University of California Press, 1984.

⁴⁵ Eisenman, Peter. pg. 7. *The Architecture of the City*. Published by the MIT Press, Cambridge, Massachusetts, 1982.

3. Supermarket City – Islands within Urban Fabric

3.1. Abstraction of the Hinterland

*When it comes to food retail these days, it is a truth universally acknowledged that a town in possession of a good fortune must be in want of a supermarket*⁴⁶

The relationship of city to site is in part affected by the relationship between food and the city. The notion of a city which cannot source food from its surrounding context means it relies on trade and external influences to feed itself. This manifests in the city's planning or physical structure being removed from its geography and more connected to the outside world. Jared Diamond signals out Australian cities as being such examples:

*...most Australians don't depend on or really live in the Australian environment: they live instead in those five big cities, which are connected to the outside world rather than the Australian landscape.*⁴⁷

This might also be true for cities we consider 'global' or trade based cities. Hong Kong, Singapore, and Dubai are examples of cities where their architectural development seem to reference more about the greater world before their own sense of regionalism.

In the case of Australia this is also tied to the fact that it was – and to a certain degree is still – measuring its identity against Britain's (as do New Zealand's cities). Hence the agriculture and diet resemble that of Britain's or, as James Belich points out in *Paradise Reforged*, the type of food that Britain yearned for. Therefore, making it economically advantageous for Australia and New Zealand to grow those foods and thus adopt Britain's diet in the process. Whilst there are still vestiges of British culture embedded in both Australian and New Zealand cities, both countries have made considerable efforts to forge their own cultural identity. This quest to find what is quintessentially New Zealand or Australian is embedded in the way these places brand their cities to the greater world, and in turn they catalyse how cities develop. Here we are introduced to the point that a city's idea of itself or its brand goes a long way to determining how it will develop as time passes. In both the cases of Australian and New Zealand cities food plays a large role in these branding exercises. And inevitably this brings us back to how cities form a relationship with the geography that grows this food.

⁴⁶ Steel. pg. 144.

⁴⁷ Diamond, Jared. pg. 387-388.

Local knowledge of the landscape doesn't just benefit local economies, identities, and practice of daily life, but also how societies can dwell upon the land and reap from it the foods that best suit those environments:

Apple varieties (and all other food varieties, for that matter) are the result of local cultures: the product of generations of farmers struggling to get the best out of the land, and the accumulated knowledge of how to do just that. It's what the French call terroir: a term originally used to describe the effects of local climate and geography on the quality of a particular wine – right down to the angle of the hillside where the vines are grown – and that now encompasses not just the physical terrain, but the traditional know-how that goes into producing any local food.

Local food, however, is not the sort that keeps vast, throbbing metropolises going... The food we eat today is driven not by local cultures, but by economies of scale, and these economies apply to every stage of the food supply chain.⁴⁸

If regional food production cannot sustain its cities we face various consequences. Firstly, we can read that the loss of various local food types (as in the case of the English apple) constitute the loss of a particular segment of culture. A segment which is derived from the geography of a particular territory and the knowledge of that geography's yield – it comes right back to our rudimentary connection with landscape, the place that provides us with sustenance, and therefore is home. The signifier of this connection being items of local food, a sign as it were. It is hard to distinguish such phenomena constitute loss of localised culture or conversely, represent progress. The line between both can be thin. Preserving knowledge of localised production may be seen as overly romantic and inefficient, when offshore production can be much cheaper to import. Yet on the other hand it might be considered perilous to rely upon importing many food products from abroad.

Subtleties minute as localised apple production are phenomena which contribute to making a city specific, a specificity which can bring together communities in the city. This segment of culture also serves as a connection – perhaps tenuous (yet still a connection) – to the country around the city, which can be totally obscure for many of its inhabitants. The very presence of the locally derived varieties of food groups supplies a catalyst for relating to the landscape and forming a culture based upon that landscape.

These signs of culture are now succumbing to the pressures of economies of scale, where locally derived food simply cannot compete with globalised trade:

According to Defra (Department for Environment, Food and Rural Affairs, UK), 38 per cent of the food we eat in Britain is now imported. The figure includes half of all our vegetables and a staggering 95 per cent of all our fruit⁴⁹... More than half the food we import into the UK is indigenous food in season: in other words, we could of [sic] grown it ourselves. The reason why we

⁴⁸ Steel. pg. 58-59.

⁴⁹ Defra. *The Validity of Food Miles as an Indicator of Sustainable Development*. pg. 6.

*don't is simple. Foreign growers, with their year-round sunshine and low-cost labour, can deliver apples and onions to us far more cheaply and consistently than we can grow them here – until they run out of water, that is, which some already are.*⁵⁰

This is no new phenomenon. Ever since the times of the Roman Empire society has imported goods they could have grown themselves because it was cheaper to do so:

Rome, London, Antwerp and Venice all had fertile hinterlands, yet all imported from overseas. One reason was that imported food – as is the case today – was often cheaper than local. Sea transport cost next to nothing relative to land transport in the ancient world: one estimate puts the ratio at 1:42.⁵¹ Even had Rome been capable of feeding itself from its own backyard, it would have still made economic sense for the city to import its grain from North Africa... Emperor Diocletian issues an edict to keep Mediterranean shipping costs artificially low, just as aviation fuel remains untaxed today by international agreement ⁵².

It would seem local food only has two options: get cheap or fade away. Yet the cost of traditional locally produced food could be described as a real cost compared to the artificially low costs we pay for industrial food⁵³. Yet, these are the directions cities have taken ever since the taming of distance that occurred during the industrial revolution.

3.2. *From Negative to Positive*

The Western city's drift and eventual detachment from its productive geography, and conversely its reliance on import produce from foreign territories, has coincided with a physical and spatial change in urban texture. The traditional urban market could be seen as negative imprint, a void in the city (see fig. 17). Often they were a series of voids which connected to the surrounding hinterland by main arterial routes, along which food supplies flowed daily. As other options became available through technological breakthroughs in transport of food (namely, the railway and refrigeration), city dwellers came to realise that they did not have to put up with the chaos, mess, and smell that bringing livestock and other goods into the city entailed before the industrial revolution. Such an account is evidenced in London and the curtailing of Smithfield Market (fig. 11) in 1885, the site of animal slaughter and trade: the centre for London's meaty needs:

⁵⁰ Steel. pg. 60.

⁵¹ Morley. pg. 65. *Metropolis and Hinterland*. Published by Cambridge University Press, 1996. (Quoted by Steel, *Hungry City – How Food Shapes Our Lives*. pg. 73.

⁵² Steel. pg. 73.

⁵³ *Ibid*. pg. 107.

*By Victorian Times, such grotesque scenes were no longer acceptable. A growing distaste for animal cruelty led to a clamour for the market to be closed down – a move made possible for the first time by the arrival of the railways... The moment the sight of animal slaughter became too much to bear, the railways came along and saved the day – or perhaps it was the other way around. It is human nature to deal only with what we really have to.*⁵⁴

The sight of mass animal slaughter in the city was stopped. This activity was moved out of London and the meaty produce distributed at Smithfield (as it still is today), but its “removal cost London something too. For all their mess, noise and nuisance, markets bring something vital to a city: an awareness of what it takes to sustain life. They are what French sociologist Michel Foucault called ‘heterotopias’: places that embrace every aspect of human existence simultaneously, that are capable of juxtaposing in a single space several aspects of life that are ‘in themselves incompatible’. Markets are contradictory spaces, but that is the point.”⁵⁵

From this point in time onwards, London’s authorities began to refuse market licenses, the discouragement of markets led to the formation of the self contained shops, and consequently the establishment of the British ‘high street’⁵⁶.

The high street model presented a cleaner scene, and its site became the hub of community for a burgeoning middle class. It was the type of environment that years later Jane Jacobs would praise in her book *The Death and Life of Great American Cities*, using Hudson street in New York City as the an ideal model. Whilst this urban typology fostered community and maintained an abundance of micro public life, it nevertheless marked the beginning of food distribution receding into a more privatised realm; the era of the grocer had begun.

Perhaps the two of the most influential of the early grocers were Thomas Lipton and Clarence Saunders. Opening his first store in 1871, Lipton combined the idea of buying and selling in bulk with aggressive advertising (a relatively new idea) and spectacles which brought custom to his business. An example of the ploys Lipton used was the issuing of ‘Lipton £1’ which a customer could purchase for 15 shillings but buy £1 worth of goods, such gimmicks brought Lipton the additional custom needed to undercut his rivals. By 1900 “Lipton had an international distribution network serving dozens of retail outlets, his own tea plantations in Ceylon, and 10,000 employees worldwide”⁵⁷.

⁵⁴ Steel. pg. 132-133.

⁵⁵ *Ibid.* pg. 133.

⁵⁶ *Ibid.*

⁵⁷ *Ibid.* pg. 136.

Alternatively, in 1916 Saunders created and patented the system of self service in his Piggly Wiggly store (fig. 12). This was conjured in order to stop the ‘unnecessary’ social dimension which traditional grocery stores generated. By taking the produce from behind the counter and arranging it in aisles for customers to gather themselves, then paying for at a checkout, he drastically reduced overhead costs used up in paying for multiple store clerks and the time needed for them to gather goods for customers⁵⁸.

This system has remained the norm in supermarkets today, where the social dimension is counterproductive for higher profits. The last piece to fully realise the supermarket’s dominance in food distribution was the motorcar, making once-a-week food shopping achievable, and bulk purchasing feasible. This occurrence was supplemented by home refrigeration. The scene was set for suburban spread, and at the heart of every suburban settlement was a supermarket.

⁵⁸ Steel. pg. 136.



Figure 11. Smithfield Market, London.



Figure 12. Piggly Wiggly Store (1918), Memphis, USA.



Figure 13. Southdale Shopping Centre, Edina, Minneapolis (completed 1956), possibly one of the defining moments of 20th century architecture and urbanism.

To fully realise the formal typologies we see today manifested in the big box architecture of the supermarket (see fig. 18), one more transformation had to be made. The transferral of traditional city centres (which were fading in American cities) to indoor malls (fig. 13). The architect responsible was Viennese migrant Victor Gruen, who upon seeing that city centres were being evacuated sought to transport ideas of the European street to an indoor controlled facility. Gruen envisioned that this new typology would become the community centre of suburbia:

Southdale Shopping Centre was the Result. The world's first enclosed shopping mall, its basic idea was simple: take the European high street, and recreate it, under controlled conditions, indoors... A vast, introverted, featureless box built in the middle of nowhere, the mall contained enough goodies on the inside – tropical birdcages, luscious planting, fountains and piped music – to become a destination in its own right... shopping would never be the same again.⁵⁹

Gruen genuinely believed in malls becoming true public forums, places of civic quality⁶⁰. His idea of an 'introverted architecture' for Southdale in Minneapolis was particularly inspired by the ambience of the Milan galleria⁶¹ which was an inherently problematic assertion "as that quintessentially urban structure stands several stories high and has a mixed program of shops on the ground floor and offices and apartments above"⁶². At the time the *Architectural Record* stated: "something was missing that might have formally expressed the importance and exuberance of the center"⁶³, yet the shopping centre was popular and its quick spread jeopardised the traditional city centres they were meant to emulate⁶⁴.

The year of 1956, the year Southdale Shopping Centre opened has proven to be one of the most defining architectural turning points of the 20th century. From this point in time onwards, negative spaces would not be the prominent gathering point for food distribution – the civic site. Big box architecture would occupy the centres of aggressive suburban planning: islands in the city which one had to use a car to access. Ever since the war has been waged between those who believe such developer driven planning is the antithesis of the vibrant city, and those forces who believe that the big box shopping centre is exactly what the city needs. Issues around 'authenticity' and 'sense of place' have been raised by urban and social theorists. Do cities require urbanism which attributes its own character, something that needs to be developed over time? Or should urbanism serve what a city

⁵⁹ Steel. pg. 138.

⁶⁰ *Ibid.* pg. 140.

⁶¹ Wall, Alex. pg. 101. *Victor Gruen: From Urban Shop to New City*. Published by Actar, Barcelona, 2005.

⁶² *Ibid.*

⁶³ *Architectural Record. New Thinking on Shopping Centers*. Cited by Wall, Alex. pg. 101. *Victor Gruen: From Urban Shop to New City*. Published by Actar, Barcelona, 2005.

⁶⁴ Steel. pg. 140.

needs at a particular point of time? The latter of these questions is answered well by big box architecture.



Figure 14. Southdale Shopping Centre, Edina, Minneapolis, master plan.

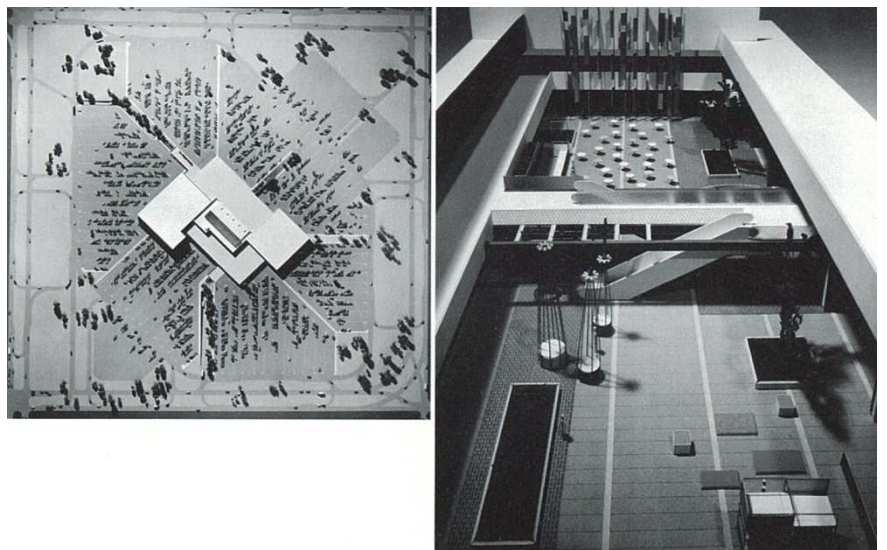


Figure 15. Southdale Shopping Centre, site model and working model of central court.



Figure 16. Southdale Shopping Centre, aerial view.

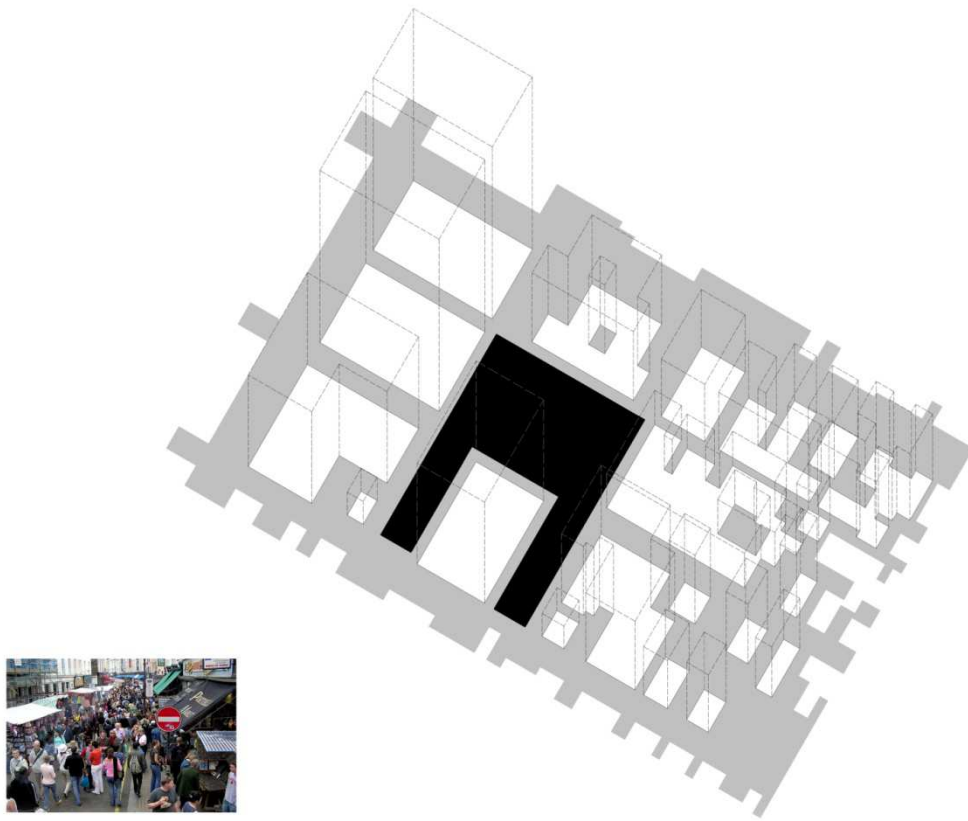


Figure 17. Urban Market - negative.

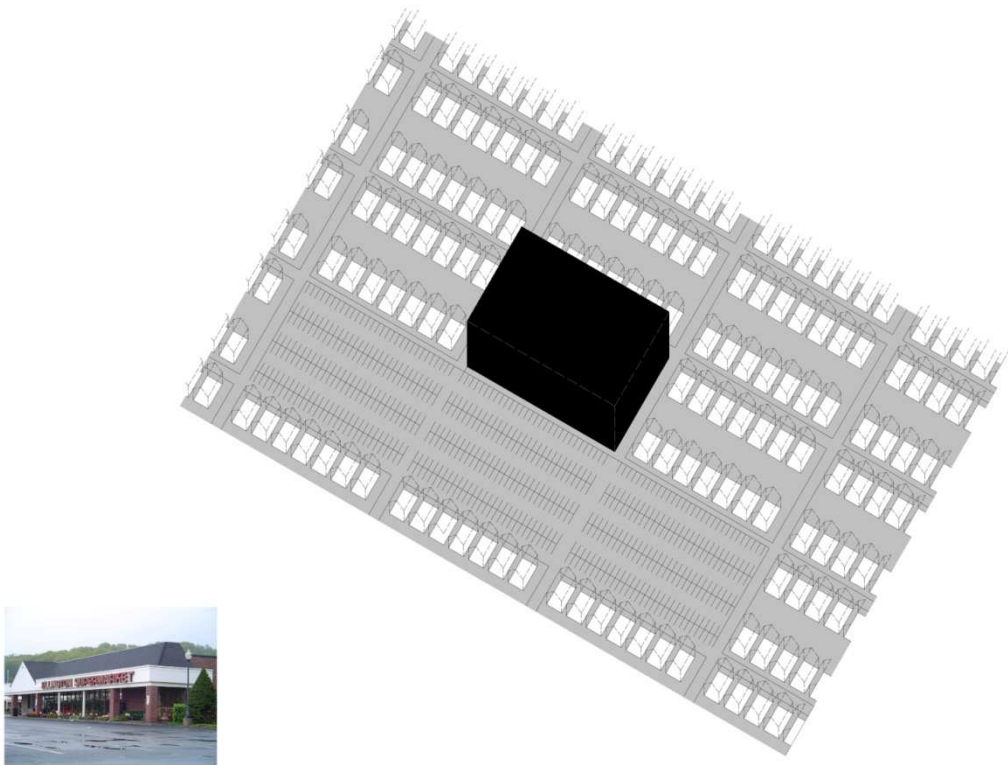


Figure 18. Supermarket – positive.

3.3. Opportunism – do we need identity and meaning?

If a place can be defined as relational, historical and concerned with identity, then a space which cannot be defined as relational, or historical, or concerned with identity will be a non-place.⁶⁵

Is the Contemporary city like the contemporary airport – “all the same”? Is it possible to theorize this convergence? And if so, to what ultimate configuration is it aspiring? Convergence is possible only at the price of shedding identity. That is usually seen as a loss. But at the scale at which it occurs, it must mean something. What are the disadvantages of identity, and conversely, what are the advantages of blankness? ... What is left after identity is striped? The Generic?⁶⁶

Concepts such as “sense of place”, “authenticity”, and “identity” are problematic words in the architectural and sociological worlds⁶⁷. In a time of unbridled and explosive building development which has ridden the wave of “market triumphalism”, a territory maintaining a sense of identity may be an obsolete phenomenon.

The generic modern day supermarket typology is certainly a product of such a tendency, its purpose being to serve quick transactions of food purchase at fixed prices, its functional programme carrying out this purpose particularly well. Architects such as Rem Koolhaas have seen this continuing trend as inevitable, and potentially advantageous for the profession of architecture and the development of the city. Koolhaas interprets identity as something which has been exhausted:

Identity is like a mousetrap in which more and more mice have to share the original bait, and which, on closer inspection, may have been empty for centuries. The stronger identity, the more it imprisons, the more it resists expansion, interpretation, renewal, contradiction... (Paris can only become more Parisian – it is already on its way to becoming hyper-Paris, a polished caricature. There are exceptions: London – its only identity a lack of clear identity – is perpetually becoming even less London, more open, less static).⁶⁸

Koolhaas considers the urban centre to be the site where this identity trap exists primarily; “Identity centralizes; it insists on an essence, a point”⁶⁹. This insistence is seen to deny the rest of

⁶⁵ Augé, Marc. *Non-Places*. Quoted by Dovey, Kim in *Dialectics of Place: Authenticity, Identity, Difference*. Paper for the Third International Symposium of The Centre for Asian and Middle Eastern Architecture, Faculty of the Professions, The University of Adelaide, 2002.

⁶⁶ Koolhaas, Rem. *The Generic City* in *S, M, L, XL*, (Koolhaas, Rem & Mau, Bruce). pg. 1248. Published by the Monacelli Press, New York, 1995.

⁶⁷ Dovey, Kim. *Dialectics of Place: Authenticity, Identity, Difference*. Paper for the Third International Symposium of The Centre for Asian and Middle Eastern Architecture, Faculty of the Professions, The University of Adelaide, 2002.

⁶⁸ Koolhaas, Rem. pg. 1248.

⁶⁹ Koolhaas, Rem. pg. 1248.

the city its legitimacy as places of design focus. The obsession with the centre results in persistent upgrading, in what might be viewed as the constant flogging of a dead horse:

In our concentric programming the insistence on the center as the core of value and meaning, front of all significance, is doubly destructive – not only is the ever increasing volume of dependencies an ultimately intolerable strain, it also means that the center has to be consistently maintained, i.e. , modernized. As “the most important place”, it paradoxically has to be, at the same time, the most fixed and the most dynamic... the systematic restoring of historic mediocrity, all authenticity is relentlessly evacuated.⁷⁰

The dilution of the centre gives rise to validity of the periphery as a zone of architectural and urban potential. Koolhaas' critique of identity and its place of being, the centre, begins to “mesh well with Deleuzian thinking about “lines of flight”, “folding” and “smooth space”⁷¹. These ideas will be discussed further in chapter 4. For now, what we can see emerging is the breakdown of dialectical relationships: hierarchal orders which urban centres traditionally epitomise. Typical supermarkets are problematic when viewed through this lens. When viewed in one way they are supreme points of centre in that wherever they might be built they become instant points of convergence. This stems from the fact that logistically, the city cannot do without them. Viewed alternatively, supermarkets striate urban space in ways that urban markets do not. The paradoxical problem being: the insistence on a centre without any consideration for a greater image of the city or its corresponding region. They epitomise the generic way of building as architectural object, but offer none of the advantages that Koolhaas' generic city proposes.

What views like Koolhaas' neglect somewhat is that image matters. Image should not be confused with identity. Cities project an image to the world, one which hopes to draw visitors (thus revenue) to them, and that very image is catalytic to the way Territorial Authorities hope to develop their city:

Images have above all a structural impact on cities. And images provide a definition of what a city is supposed to be, what it supplies and what one can expect from it. City images communicate the uniqueness of a city. They portray what a city offers to its inhabitants as a particular spatial environment.⁷²

⁷⁰ Koolhaas, Rem. pg. 1249.

⁷¹ Dovey, Kim. *Dialectics of Place: Authenticity, Identity, Difference*. Paper for the Third International Symposium of The Centre for Asian and Middle Eastern Architecture, Faculty of the Professions, The University of Adelaide, 2002.

⁷² Bittner, Regina. *The Spectators City*. pg. 21. Volume 19, *Architecture of Hope*, published by Stichting Archis, the Netherlands, 2009.

Food trade plays a big part in such images. Cuisine types take up roles of portraying the various cultures of a city. Melbourne promotes its various famous spots through dishes: Lombard Street for Italian food, Burke Street for Chinese, and so forth, and amongst this the Queen Victoria Market plays an iconic role as a kind of food Mecca, the same way Borough does for London, and Faneuil Hall for Boston. Wellington City's self promotion as having the most cafes per capita in the world just about guarantees that any mixed use development which is built reserves the ground floor for a cafe fit out (even when the New World supermarket on Wellington's waterfront implemented an urban design 'upgrade', the centre of this design was a obligatory cafe in its entrance foyer). The point being that these images monitor, and subsequently catalyse what structural developments occur in a city, and that they will at times cloak issues that need greater focus on the part of Territorial Authorities and designers.

At the same time we might see such images as a means to restore a sense of identity, not by traditional means (which operated in more homogenous societies), but by elemental needs which affect us all. Namely the need to grow and eat food which varies according to the territory we dwell upon. Western food trade as it stands, which relies heavily upon overseas import, supplements the break from territories:

The coincidence of physical territory with culture and society is diminishing. In other words, the production of urban places by numerous groups occurs as a strategic occupation of territories, but this occurrence does not rely on specific localities.⁷³

...urban lifestyle is no longer tied to a certain physical territory: the city. At least in Western Europe the difference between rural and urban is dissolving. What makes the city unique as a place to live, what distinguishes it from its growing suburbia must be redefined.⁷⁴

The image of the city is an assemblage of various modes of representation designed to dissolve the difference between reality and representation. This has led us to a practice of city image making characterised by entertainment: the tourist city. Entertainment is created for immediate consumption with little thought to its affect over time on cityscapes. Such a focus can have negative effects on what localised communities and their urban spaces need over time, the very stuff which gives the city a distinguished character. Nonetheless this imagery is influential, they affect the growth of the city over time.

⁷³ Bittner, Regina. pg. 20.

⁷⁴ *Ibid.*

The tendency of cities to cash in on globally projected imagery which communicates the idea of an 'authentic' place replaces the very real need for territories within the city that allow bottom up practice:

One gets the impression that the 'use value' (Henri Lefebvre) of the city, an issue urban movements have constantly claimed, has been replaced by talk about and images of cities as an adventure playground.⁷⁵

Food trade space can offer a valuable portal to establishing one's connection to the territory or geography they live on and are surrounded by. The generic supermarket ignores such a connection, why is this? It may have something to do with the idea that supermarkets do not act as infrastructure. Whilst vital to the functioning of a city they do not lay ground work for the development of the city over time. Rem Koolhaas raises compelling points regarding the city and its spaces shedding identity, but more than ever the city needs spaces where communities can create meaning for themselves. This isn't necessarily tied up in how the building fabric of that site is designed allegorically, but how it allows multiple groups to meet each other on collective ground, a place which traditional markets once offered.

Projection of cultural identity is a ground up practice which can never be fully guaranteed or denied, and is particularly hard to design for specifically, yet food space has always embodied such identities:

Sounds particular to the Chinatown district accompany the array of different food smells here – metal spoons and pans banging together, the hissing sounds of deep-frying, street vendors calling out prices in English, Chinese customers bargaining feverishly in Cantonese, and the general chatting on the street... There (Little Italy) is also the smell of coffee emanating from smaller cafes, and of cigars lingering around the sidewalk. Italian music, the clatter of wine glasses and the lively chatter of diners together present an interesting cacophony of sounds.⁷⁶

The smell of egg rolls identifies Chinatown as much as the Italian music in Little Italy's cafes identifies that district.⁷⁷

The above quote sounds out Chinatown and Little Italy in Manhattan, New York City - two districts that are separated by a single street, yet convey two very different atmospheres.

⁷⁵ Bittner, Regina. pg. 23.

⁷⁶ Fernando, Nisha. pg. 23. *Taste, Smell and Sound – on the street in Chinatown and Little Italy*. Architectural Design journal , *Food and the City*, Vol.75, No. 3, May/June, 2005. Published by Wiley-Academy, Great Britain.

⁷⁷ *Ibid.*

Whilst the architecture of these two quarters is similar, it acts as infrastructure to support two different street systems which host overlapping programs for everyday life. In these settings food acts as a representative practice for those cultures:

The cultural specificity of food activities produces very different olfactory aspects and contributes significantly to the culture-specific character of urban streets... food acts as a medium that connects the pedestrian with the indoors, and attracts more pedestrians to the activities on the street. Interestingly, eating on the street is an activity somewhat frowned upon in Sri Lanka, while the very same activity is common in New York City, even defining its urban character.⁷⁸

From a generalised point of view, we can read that food as a medium projects cultural identity onto the street, in a way which it can be absorbed and consumed by individuals and groups outside of that culture. This occurrence acts as one of the ways in which varying groups can come together to form the sense of civility and public life that cities should engender.

A historical and representational context has been set for a contemporary reading of the supermarket as an urban type. At this point it is useful to analyse how typical supermarkets relate to their environments, and alternatively, examine ‘designed’ supermarkets that do. Can supermarkets engender a sense of civility like urban markets?

⁷⁸ Fernando, Nisha. pg. 23.

3.4. *Supermarket – a Quick Contextual and Formal Description*

3.4.1. *An Evolution from the Urban Market*

As we have already recounted in sub chapters 3.1 and 3.2, a series of vital shifts in type accounted for the formation of the supermarket. Society became individually mobile causing an exodus to growing suburban fringes and the city centre became void of residential life. Food became distributed in large boxes designed to efficiently process consumers: the social dimension had been designed out of them. Suffice to say, communities accepted this change and indeed, encouraged it. For most part of the Western World, daily food shopping was seen as an annoyance, and now that we had another option, we no longer needed to deal with such an inconvenience. In many cases supermarkets have returned to the city centre (either by choice or the city has grown to encompass their formally suburban fringe land), yet they have retained that suburban form of the big box and its adjacent car park. The typical supermarket in the city is anti-urban. Its architectural space is characterised by the transferral of what was once a public practice – the gathering of food – into privatised commodity.

Supermarkets are typically set up for consumers, not citizens.

Yet it is useful to see examples of what happens when the typology of the supermarket does mould to suit an urban environment. Two such examples are that of the Moore Wilson Co Ltd food store in Wellington, New Zealand, and the Santa Caterina Market in Barcelona, Spain.

3.4.2. *Form – object*

Thus far we have looked at a typical supermarket type which leans heavily on private transport for it to work effectively, however this isn't always the case. Moore Wilsons food store (fig. 19-24) is a bulk buy and daily food shopping market in the CBD of Wellington, New Zealand. It is very much a supermarket in the sense that it supplies all the goods needed for people to live day to day. Yet it differs substantially by being laid out as a complex of zones and introduces the public space to the core of these. Its various supplies are divided into zones as follows:

Fresh	- where the public can shop day to day for fresh produce.
Food Service	- bulk buy purchase (set up for restaurants and caterers but can also be used by the general public).

Wine and Spirits	- alcoholic beverage.
Variety	- cookery ware, glassware, crockery, etc.
Fish	- seafood outlet set up in collaboration with a fishing company.
Toys	- wares for children.

Decentralising the program creates opportunities for the public sphere to penetrate the form unlike the ‘one form shelters all’ approach championed by typical supermarkets. The public gallery entrance (fig. 24) connects all the specific zones, which also acts as a thoroughfare connecting Lorne and College Streets which run either side of the building. Opening up the form in allows the pedestrian freedom to meander, something which is fundamental to public street life.

The Santa Caterina Market is based on a historical site in Ciutat Vella (Barcelona’s old central district)⁷⁹. The existing market had become dilapidated (fig. 25) and receded in its significance as a public forum. The aim of the renovation was not to just consider the site itself, but how it related to the neighbourhood and the greater urban network. Thus the project constitutes a kind of ‘urban renovation’⁸⁰. The older form is preserved through reuse of the facade (fig. 28) which retains a sense of the neighbourhood history and identity. A new canopy is draped over the old form creating a unified market forum, whilst striking in appearance, the form is greatly assisted by site context which provides negative space amongst a densely built up area - a hallmark of traditional market typology. The site’s history of market activity and the retention of the historical facade encourage experienced memory of locus solus, a sense of unique or characteristic place, which was previously discussed around the writings of Aldo Rossi. The design acknowledges such an effect, and delivers architecture which focuses on rejuvenating a community node, thereby supplementing the residential quarter of Ciutat Vella’s sense of place.

Typical supermarket chains have also come into the city in the form of ‘metro’ stores. Britain is familiar with the Tesco chain which pioneered the way in opening localised convenience shops to replace the old family run corner shops (which ironically had been pushed out of business by supermarket chains)⁸¹. The result was a hit, the new ‘convenience’ format was sorely missed in neighbourhoods and on high streets, and soon enough this format was common place: inner cities now had supermarkets

⁷⁹ Campos, Cristian. pg. 89. *New Supermarket Design*. Published by LOFT Publications, New York, 2007.

⁸⁰ *Ibid.*

⁸¹ Steel, Carolyn. pg. 113.

without car parks. Whilst the external typology had lost the car park in the form of these inner city supermarkets, the conventional internal layout of linear aisles (fig. 31) remained unchanged. The big box typology may not be present, but the mentality that creates it is. Such architectural intentions do not engage the public forum like they could when examples like Moore Wilsons and the Santa Caterina market exist as precedent for considerate urban design.

The resistance to acknowledging individual site characteristics is the main reason why the typical supermarket types cannot stimulate urban environments. At the core of this resistance is the interior layout which has become the tenet of conventional supermarket design.

Figure 19. Moore Wilson's, College Street
(main pedestrian) entrance.



Figure 20. Moore Wilson's, Lorne Street
(main vehicle) entrance.



Figure 21. Moore Wilson's, Lorne
Street/Tory Street corner.



Figure 22. Moore Wilson's, College Street
looking towards Tory Street.



Figure 23. Moore Wilson's,
sculpture representing water
fountain in public arcade.



Figure 24. Moore Wilson's, public arcade looking towards College Street.



Figure 25. Santa Caterina Market, before renovation.



Figure 26. Santa Caterina Market, after renovation. New apartments can be seen in background which were conceived in conjunction with new market.



Figure 27. Santa Caterina Market, interior.



Figure 28. Santa Caterina Market, new canopy draped over old facade.

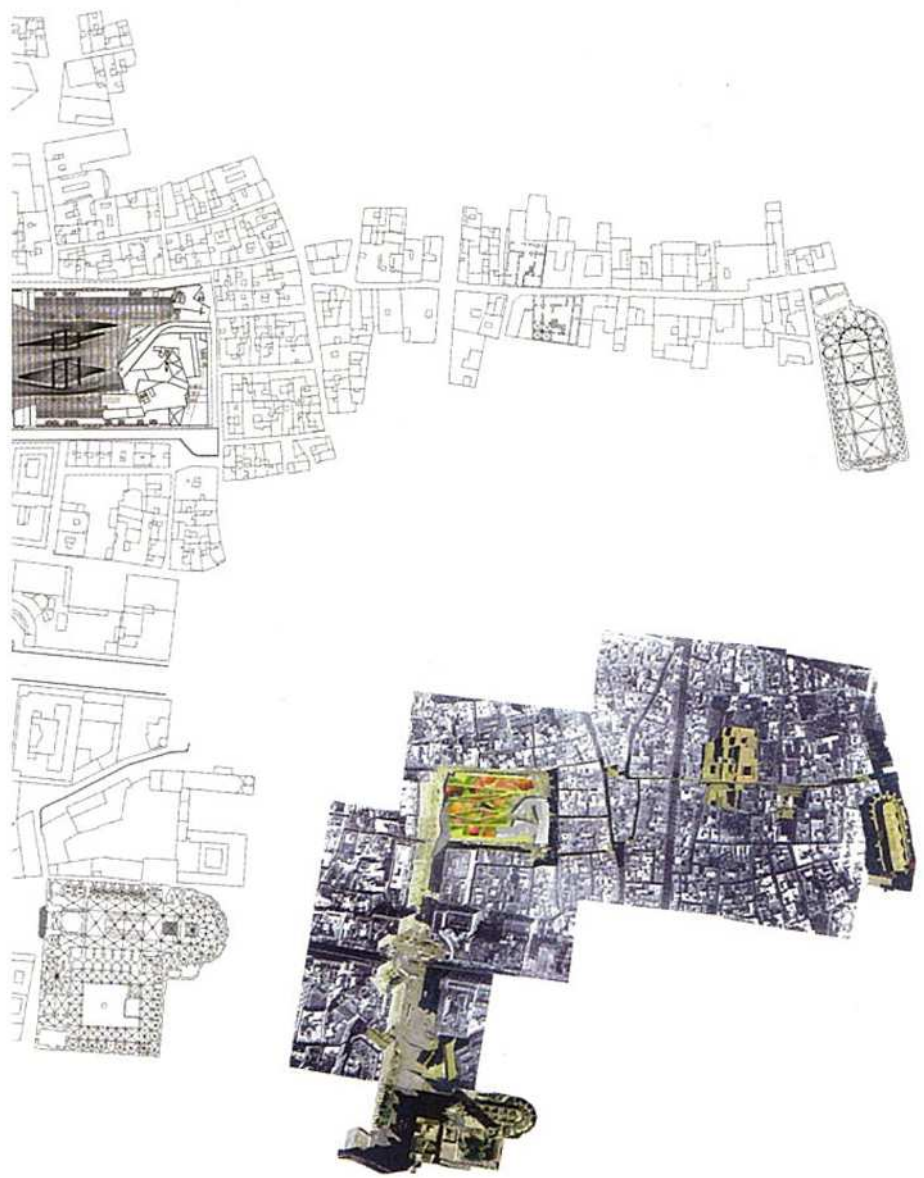


Figure 29. Context plan, Santa Caterina Market.

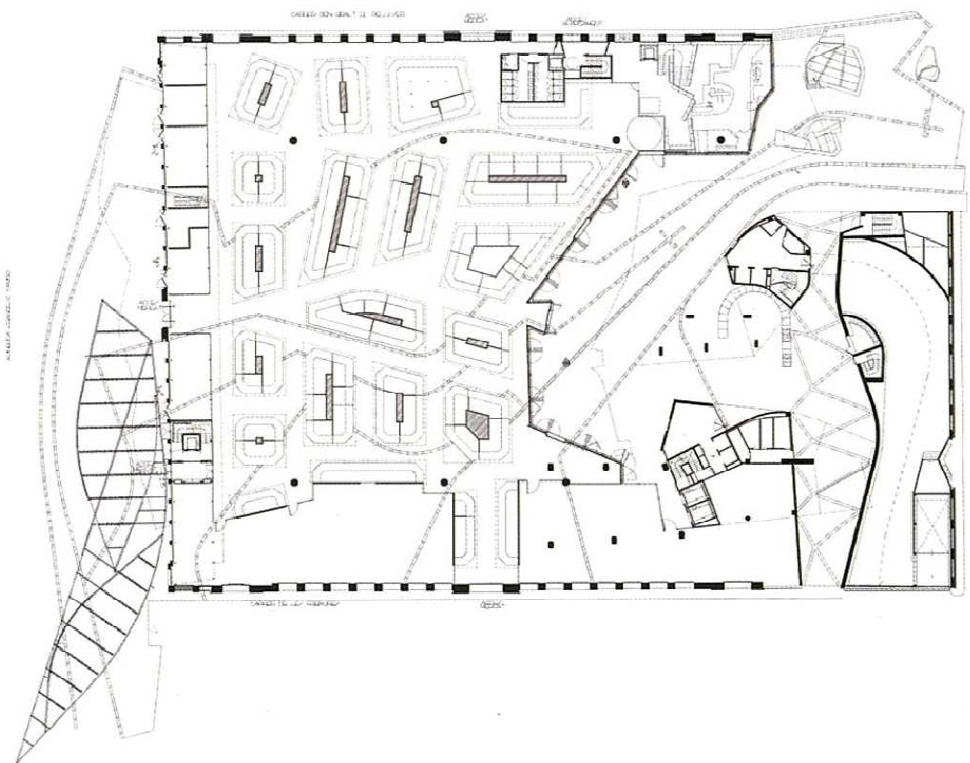


Figure 20. Floor plan, Santa Caterina Market.

3.4.3. Interior Space

The supermarket self-service aisle system has been discussed as to how it emerged in history. Popularised by Piggly Wiggly's grocer Clarence Saunders, its goals were simple: firstly, to free up store clerks from time spent gathering groceries from behind a counter, thus cutting down on overhead costs and secondly, to remove the social dimension that had caused community grocery stores to become unofficial social centres. The aisle system reset customer focus to personal gathering of goods making them less inclined to stop and chat, meaning the store could turnover customers at a higher rate.

This system today, despite being dressed up more than it was has not altered as a system; it is the recognised model for processing food shoppers. It is also largely this system that inhibits flexibility of the supermarket typology. To retain the linear aisle system which supplies all goods needed to feed and stock a household under one roof ensures that an impressive structure is required, one that shapes its own site rather than being shaped by the site itself. Such an occurrence is consistent with infrastructural architecture, yet common supermarket typologies are not conducive to public activity like that of infrastructural ones.

The examples of Moore Wilsons and Santa Caterina market are shaped by their sites, and thus the design of interior systems is also influenced by the context they sit within. In this way they are more consistent with traditional markets, in that how the site at large is accessed goes a long way to determining how the internal program will be organised. This is evidenced in the 'fresh' section at Moore Wilsons which stocks food for day to day shopping and its direct connection to the public gallery (fig. 23) flowing from College Street. While the College Street Facade might not be considered the best interface between the public street and the commercial activity of the market, it is an example of the desire to mediate two realms. It can also be observed at the Santa Caterina market where fixed food stalls are broken up to allow multiple pedestrian flows through the building as a result of the multiple entry and exit points of the site at large. The planning acknowledges the multi-sidedness needed to address public forums.

When considered in public settings, supermarkets are one sided. Commonly they supply only one point of entry and exit, which for a building typology which usually occupies a site area between half to a full city block stunts the evolutionary build up of the site and its surrounding context. It is strange that a building which contains goods so vital to cities shows its backside on three facades.

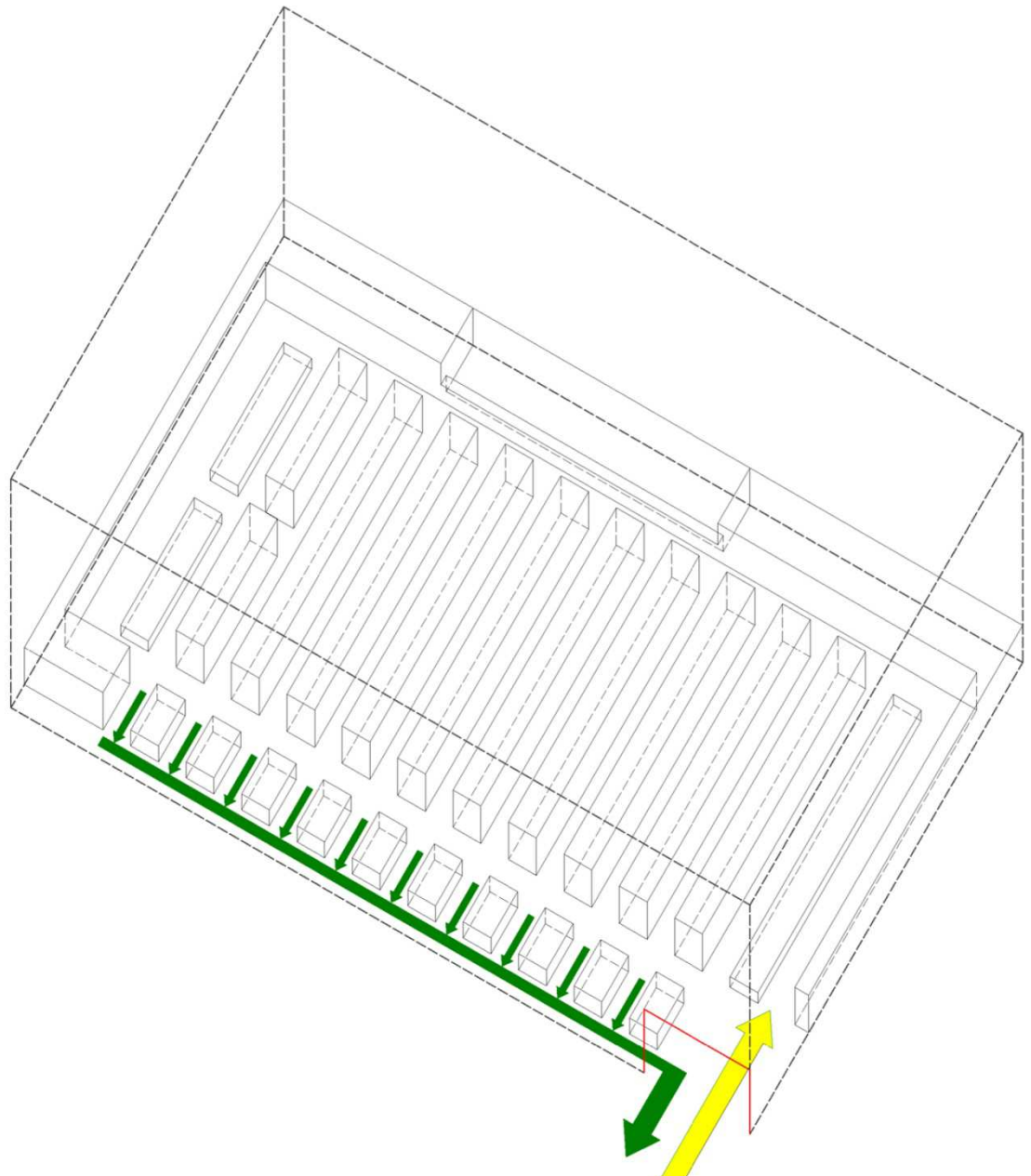


Figure 31. Schematic diagram of supermarket interior system.

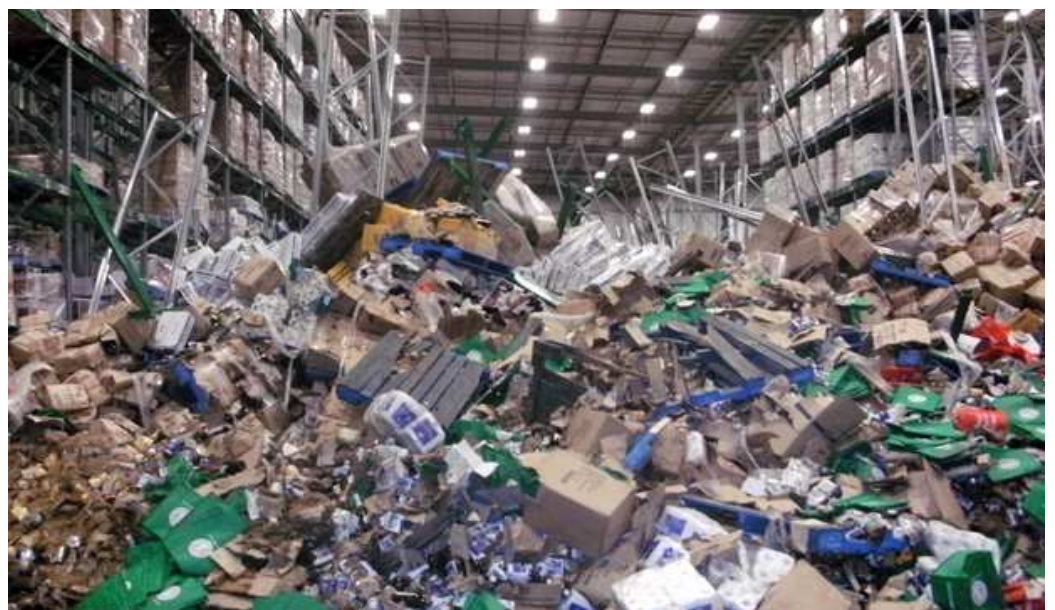


Figure 32. A food distribution centre in Hornby, west of Christchurch, South Island, New Zealand. 4 September, 2010.

3.4.4. Delivery Space – a back door hidden

...there is no doubt that supermarkets have got the business of food supply down to a fine art. Advanced preservative techniques and transport technology have combined to create the illusion that feeding cities is easy... The reality is that supermarkets have a stranglehold over not just the grocery sector, but the entire infrastructure that supplies our food. Without them, we would struggle to feed ourselves; and that makes their position close to unassailable.⁸²

One of the reasons it can be hard to appreciate the effort it takes to feed a modern city is the sheer invisibility of the process...⁸³

Modern food miles are substantially large. A report published by Defra (Department for Environment, Food and Rural Affairs) in Britain calculated that the country's food transport travelled 30 billion vehicle kilometres in 2002, the equivalent of circling the globe 750,000 times⁸⁴. Such distances bring new meaning to how cities relate to food bearing country. Food trade conditions like these supplement the idea that it is fine to promote suburban sprawl - that eating into the productive hinterland is healthy for a city's development. At the centre of these areas is the supermarket with its supply chain of food concealed from the public. Whilst the system of supply to supermarkets seems stable, food in reality arrives 'just in time' to be purchased.

The vulnerability of this system has been exposed through such events as the British fuel tax protest by lorry drivers in 2000, in which blockades of the main delivery arteries to the city caused food flow to be cut⁸⁵. This led to panic buying by city residents, supermarkets were reduced to rationing supplies, and if such events were prolonged supermarkets might run dry of food completely.

Food is stored in enormous faceless sheds, the modern day equivalent of ancient city granaries. The city relies upon large trucks to bring this food to the city, such a one dimensional approach to supply is like placing all the city's eggs in one basket. The recent 2010/2011 earthquakes in the South Island of New Zealand tested such a system. With most of the food distribution centres for the South Island located in and around Christchurch (where most infrastructural damage was caused, fig. 31), the region was faced with a very real threat of not being able to circulate food. Such an occurrence seems strange for an island that is largely devoted to growing food.

⁸² Steel. pg. 66-67.

⁸³ *Ibid.* pg. 67.

⁸⁴ *Ibid.* pg. 66-67.

⁸⁵ *Ibid.* pg. 100.

The problem of food storage and its transportation to supermarkets is not one that can be resolved by a quick redesign of supermarkets to accommodate food on site. Such a proposal would seem unlikely in inner city areas where available space is minimal, traditional food markets have much the same problem in that food has to be brought in daily, yet it is once again a sign of supermarkets and their supportive systems not being given the adequate attention they should be as public infrastructure. The process of bringing food to the market is not something which should be hidden away and conducted as a clandestine operation, but revealed, and indeed, even celebrated. As we saw with the mapped example of the main food arteries feeding London in 1676 (fig. 4&5), such routes can become spines of activity once they are layered with other practices of everyday life. Not only does such an activity have its own particular vibrancy, but it reveals to the public the nature of how a city is fed: it reveals that the city is not a whole within itself but part of an entire regional/national infrastructure.

3.4.5. *Approach (How do you get there? How do you leave?)*

One does not use one's car to see the city...The car instead gives freedom of movement...in making a journey from place A to place B. The city street acquires, then a particular function – to permit motion...motion has become the most anxiety-laden of daily activities. The anxiety comes from the fact that we take unrestricted motion of the individual to be an absolute right...the effect on public space, especially the space of the urban street, is that space becomes meaningless or even maddening unless it can become subordinated to free movement. The technology of modern motion replaces being in the street with a desire to erase the constraints of geography...as public space becomes a function of motion, it loses any independent experiential meaning of its own.⁸⁶

How individuals access food markets, and how they get what they gather to their home is the second motion of how food travels (the first being how food got to the market). As already stated, the car has become the main tool in which to access the supermarket. This Individualised motion has supplemented the urban typology of the supermarket as an anti-public forum. One arrives at the supermarket as an individual, shops as an individual, and leaves as an individual. Such a cycle marks us as consumers. Traditional food market typologies are commonly defined by individuals arriving en masse (i.e. by public transport, or by foot), purchasing food (or historically bartering) in collective forums, and leaving en masse. This cycle marks us more as citizens.

The reason for this has, in part, something to do with the above citation by Richard Sennett. Individualised transport has been responsible for privatising the street rather

⁸⁶ Sennett, Richard pg. 14.

than being viewed as a privileged occurrence where individuals can drive a vehicle on public land (apart from the fee incurred by road taxation, or in some cases tolls). We as individuals have come to believe that this activity is a right. This mentality has rendered what should be public streetscapes as motor vehicle corridors where pedestrians can be considered secondary subjects, or even a nuisance. Supermarkets cater for individualised transport tremendously, so much so, that the car park is inherently a part of its being as a typology.

The scales and proportions needed to ensure sufficient traffic flows to, around, and from supermarkets creates a relatively alienating environment for pedestrians who also wish to access its site. Moore Wilsons is a good counter example to this problem. Whilst it also has plenty of car parking space, the bulk of it is accommodated on top of the building and is contained by a perforated metal screen (fig. 21) which is considerably scaled and designed. In this case the pedestrian is privileged over the individual motorist, another small way in which the form acknowledges the circumstances of its site.

3.4.6. Site – relative?

The three examples looked upon in the preceding sub chapters have addressed site via various tactical means. All of which are top down initiatives in addressing public space. The schemes of Moore Wilsons and Santa Caterina Market share a common thread in the fact that they are both schemes which consider evolution of site over time. Firstly, Moore Wilsons has had two major building alterations. The first is the somewhat ‘postmodern’ aesthetic which can be seen in figure 20, this structure set up the identity of the market and became a recognisable part of the inner city streetscape: It was hard to imagine Tory Street without it. The restructuring of the building introduced the public alley way and reorganised the zoning of various pieces of Moore Wilsons, ultimately creating the pedestrian friendly interface experienced today. In this sense the building’s evolution has contributed to the store’s existence as a notable structure in the Te Aro quarter of Wellington. It has created a short history which has been bound to the development of the quarter as a whole. It contributes a sense of place, and may have catalytic effects on how the quarter continues to evolve.

Secondly, the Santa Caterina Market has addressed a history which is much longer than that of Moore Wilsons. Not only is it addressing the history of its immediate site, but also that of the Ciutat Vella neighbourhood. The market and the neighbourhood are bound up in each other's histories and formal evolution. The important idea here is that when designing in such circumstances, it is not just the renovation a dilapidated structure, but also the entire quarter's lounge, kitchen and dining room. The Santa Caterina market is in essence an urban artifact as it holds history within its form and generates a feeling of lived memory which is individual to each member of the public.

The typical supermarket has no such prerogatives. It exploits site for the here and now. The intention to cut out the social dimension (and thus overhead costs) by Clarence Saunders back in 1916 still emanates from supermarkets today. We have been given 'efficiency' in the name of progress and affordability, and paid for it with the loss of a vital public forum. The examples of Moore Wilsons and Santa Caterina Market may not supply the public forum we once knew with traditional markets, but they take steps to mitigate the loss of civility. Steps which lead us to feel more as citizens when we gather our food, not consumers.

3.5. *Dissatisfaction with Morals and Markets*

Some of the good things in life are corrupted or degraded if turned into commodities, so to decide when to use markets, it's not enough to think about efficiency; we have also to decide how to value the goods in question. Health, education, national defence, criminal justice, environmental protection and so on - these are moral and political questions, not merely economic ones. To decide them democratically, we have to debate case by case the moral meaning of these goods in the proper way of valuing. This is the debate we didn't have during the age of market triumphalism. As a result, without quite realising it, without ever deciding to do so, we drifted from having a market economy to being a market society. The hope for moral and civic renewal depends on having that debate now. It is not a debate that is likely to produce quick or easy agreement. To argue about the right way of valuing goods is to bring moral and even spiritual questions into public discourse.⁸⁷

The supermarket supply system is a typical example of a model within an economy which value efficiencies in trade and consumption. However, the last global economic recession (and an overall tendency for the free trade market to blow out periodically) has reopened the debate on how exactly to address the market economy's weaknesses, and how it should

⁸⁷ Sandel, Michael. Reith Lectures 2009: *A New Citizenship - Lecture 1: Markets and Morals*. Transmission on 9th of June, 2009. <http://www.bbc.co.uk/programmes/b00kt7rg>.

be positioned relative to society at large. As proposed by Michael Sandel in his lecture series entitled *A New Citizenship*, the self regulating economic market has moved into spheres traditionally governed by moral or civic virtues. One outcome is that identifiable issues in society are often 'solved' through the use of market incentives. An example that Sandel uses to illustrate this is a ploy used by some American schools to stimulate more reading by students. The ploy is to offer a student a small monetary reward for every book they read. The problem that Sandel sees in this is that such an incentive replaces the inherent advantages of reading (furthering knowledge, improving literacy skills, etc), with an idea that reading is good because it may economically benefit you. The ultimate point of this example is that markets 'taint' what they touch:

What this worry shows is that markets are not mere mechanisms. They embody certain norms. They presuppose, and also promote, certain ways of valuing the goods being exchanged. Economists often assume that markets are inert, that they do not touch or taint the goods they regulate. But this is a mistake. Markets leave their mark. Often market incentives erode or crowd out non-market incentives.⁸⁸

A similar point of view is shared in the work of Karl Polanyi as identified by Joseph Stiglitz:

...Polanyi stresses a particular defect in the self-regulating economy that only recently has been brought back into discussions. It involves the relationship between economy and society, with how economic systems, or reforms, can affect how individuals relate to one another.⁸⁹

Polanyi's book, *The Great Transformation* observed the transition modern society had moved from being a society with a market economy, to being a market society. Part of this transformation suggests that the market becomes an end in itself rather than a system which serves greater society:

Polanyi saw the market as part of the broader economy, and the broader economy as part of a still broader society. He saw the market economy not as an end in itself, but as a means to more fundamental ends.⁹⁰

A common criticism which emerges due to this transformation is the increase in greed; the drive of individuals or groups to accumulate mass fortunes, sometimes at the expense of less fortunate people. Sandel, however, does not see this to be the main problem facing society and its market:

⁸⁸ Sandel, Michael. Reith Lectures 2009.

⁸⁹ Stiglitz, Joseph E. (Foreward) in Polanyi, Karl. *The Great Transformation*. pg. x.

⁹⁰ *Ibid.* pg. xv.

Looking back over three decades of market triumphalism, the most fateful change was not an increase in the incidence of greed. It was the expansion of markets and of market values into spheres of life traditionally governed by non-market norms.⁹¹

The prioritisation of the free market in society can cloud our views on how to value varying products and services. This has impacted on how we value food as well as those who grow and produce our food. The food grower is not someone who is greatly valued in society, though they provide that which sustains our lives. However, we do value the food distribution companies who provide the interface in the form of the supermarket. Just as it seems peculiar to rely solely on one means of food distribution, it would seem awry to fix the economy of food to a handful of companies, and ensure them an excessive market share. It was not always this way:

The food supply was so vitally important to cities that most had laws in place to prevent anyone from gaining a monopoly in the trade, either by getting too large a share in the market for any one food, or by operating in more than one stage of the food chain. Bakers in pre-revolutionary Paris were prevented from milling their own grain, and millers prevented from baking bread, for that very reason.⁹²

The urban community has been disconnected from the growers who feed them, they have been replaced by monopoly companies who control most steps of the food cycle. Supermarkets ensure that these growers remain faceless, and focus the collective's attention on the efficiency of gathering food, at low cost. Economically speaking, this situation makes sense. The systems in place are economically efficient machines.

But what have we traded for economic efficiency?

A tenuous food supply chain which has no option B in the event of disaster; the forum upon which to deal with our growers directly (the traditional urban market being such a place); a devaluation of the environment upon which we grow our food in the name of economic development; the curtailing of small scale food business due to what social scientist Bill Hefferman calls 'food clusters'; the very idea that our city relies upon the country, instead food magically appears. It is not an easy equation to solve, the chain of food is a complex network:

The irony of the modern food industry is that it has made the very thing it promised to make easier – the feeding of cities – infinitely more complex. We depend just as much on our gas guzzling, chilled plug-in, 'just-in-time' food deliveries as ancient Romans did on foreign conquests, shipping and slaves –

⁹¹ Sandel, Michael. Reith Lectures 2009.

⁹² Steel. pg. 61.

*and our food system is no more secure, ethical or sustainable than Rome's was. In both cases, the problem is one of scale.*⁹³

If there are ethical and moral problems with how cities are fed, and how food is distributed, then it is a question that needs to be addressed beyond economic reasoning. If market incentives are infringing upon these moral questions we must once again consider them relative to society at large. As Sandel asserts, the problems of economy and society can only be solved through civic renewal.

The supermarket is the architectural face of the problematic way in which cities relate to their food stock, and this is embodied in the non civic way it addresses the city. There is also the fact that supermarkets do not have the flexibility to allow independent producers, traders, and growers, something which traditional urban markets can offer. The coming together of individuals around food trade provides potential for civic interaction, as well as the potential for bottom up (micro and macro) community phenomena to occur. As historically shown, urban markets are also where varying cultures can meet around a universal necessity, something which invariably connects all individuals:

*Guaranteeing basic human rights remains a fundamental challenge for contemporary societies, as they confront their invariably multi-ethnic nature. In this quest for social justice, food offers a valuable space for learning to appreciate cultural difference.*⁹⁴

True public food space asks for the empowerment of individuals on both sides of the counter. If there is a growing public dissatisfaction with economic market incentives; if they are absorbing moral realms: then something as quintessential as food which involves moral and economic questions needs to be reconsidered regarding how it is placed within the city's public realm. It is here that design's role intercedes, in the forming of grounds for reconsidered food trade to take place. At this point it is useful to observe a cross section of how design has related to food as a source of inspiration.

3.6. Food as Architectural Allegory – can we go further?

*Rather than elaborating solely on the more facile comparison of "like architect, so too the chef," we propose that the rituals of dining, the design of meals, and the process of cookery form and inform a distinctly expressive architecture.*⁹⁵

⁹³ Steel. pg. 102.

⁹⁴ Pilcher, Jeffery M. pg. 115.

⁹⁵ Horwitz & Singley. pg. 5. *Eating Architecture*. Published by The MIT Press, Cambridge, 2004.

The above passage signals the intention of editor's Jamie Horwitz and Paulette Singley in their publication *Eating Architecture*. The book seeks to bring together architectural projects that place food processes and rituals as source material for architectural investigation, a method the authors call *culinary formalism*. Such an example exhibited is a project by Sarah Wigglesworth Architects which traces the transition from clean table setting to messy aftermath through the course of a meal. This tracing procedure is consequently used to generate planning for a house (fig. 33). Such an example takes what is seen as ritualistic vibrancy around the table and transforming the phenomena into 'vibrant' architecture, namely disrupting the grid. Shifting to an urban scale, the authors use the drawn analyses of Aldo Rossi (fig. 34&35):

*Consider the projects of Italian designer Aldo Rossi (1931-1997), who draws his architecture, at least in part, from a uniquely culinary dimension of analogous form. Inspired by what he terms *apparecchiare la tavola* – meaning “to set the table, to prepare it, to arrange it” – his numerous drawings of concurrent scales and spaces blur the distinction between table settings and cities.⁹⁶*

This comparison is supported in the book edited by Morris Adjmi and Giovanni Bertolotto of Rossi's drawings and paintings, where they suggest the impact of everyday practices and the objects linked to them have on Rossi's conception of the city:

Coffee pots and packages of cigarettes are elevated to the status of architecture, taking on strange proportions that make them seem fantastically larger than life... Bottles and buildings are drawn to an equivalent scale such that the bottles cast ominous shadows over the houses and become, in effect, part architecture, part domestic artifact.⁹⁷

The above references to Rossi suggest that the practice of cooking should not be something which is bound up and secured, but presented to us, albeit it in a formal dialogue. To observe this Rossi has manipulated scale bringing objects associated with life's everyday practice to the forefront of his urban studies. Both Rossi and Wigglesworth's projects pursue the instruments or processes of eating as an allegorical reference. Though they both approach the allegory through different means, the outcomes result in formal composition.

An understanding of the form and space of cookery provides a site to rethink and reorder the material and metaphysical, empty and full, high and low, or dirty and clean into mutually inclusive investigative categories.⁹⁸

⁹⁶ Horwitz & Singley. pg. 6-7.

⁹⁷ Adjmi & Bertolotto. pg. 101. *Aldo Rossi: Drawings and Paintings*. Published by Princeton Architectural Press, New York, 1993.

⁹⁸ Horwitz & Singley. pg. 10.

Again, this reading serves as a generative practice for form making, be it analogous, abstract or direct through a designed interpretation of cookery's site. This reading fits conveniently into autonomous architectural practice, but may struggle to appreciate that the practices of cooking, eating, trading and growing are enfolded cycles and cannot all be accounted for comprehensively through conventional formal tactics. That is to say that architecture goes only so far towards addressing how food might feature in a city's development. These allegorical processes are useful in that they provide us with considered architecture, embodied with narratives which collectives can relate to in different ways. Yet when considering food trade space, they cannot embody large scale logistical requirements, nor can they facilitate varying facets of culture which permeate such realms.

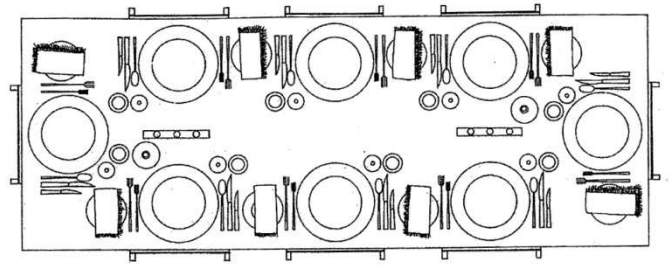
Another perspective which has been supplied by design collectives takes a more logistical approach for the analysis of the city. Such projects as The Why Factory by T?F (cited in introduction) and New Ark: Mega-Agropolis (growing all New York's food within 100 miles of Manhattan) by Workac deal with raw data to schematically etch out large scale propositions for regions and their corresponding cities.

Such research cannot hope (and does not seek) to encompass the nature of urban space or urban typologies that would result from realigning cities to their hungry needs. They work as open ended propositions, teasers which show mass potential and illuminate issues that cities should be dealing with.

An example of public space which might occur was exhibited by Workac in the form of an installation for PS1 (sister institution of the NYC MoMA) named *Public Farm 1* (fig. 36-38). It is an emerging typology for addressing food in the city, one which is much more direct in its approach, and displays a rawness not exhibited in the allegorical projects of Wigglesworth or Rossi, yet being a temporary design it is hard to gauge its long term catalytic affect on a city. Such projects work beautifully as spectacle and places for temporary event, yet we are still to find out how such a typology will work over time.

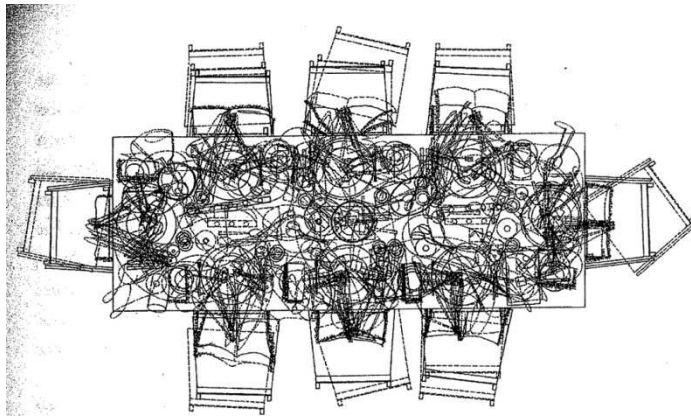
What we need are types of analysis which can negotiate and interpret the fluctuant ground between bottom up and top down approaches, logistical and allegorical. Analyses which are inclusive of the complexities which surround how a city relates directly to its food, how much of these complexities design may encompass, as well as how much it does not. Such analysis must also look to distinguish how fixed activities, activities quintessential to everyday life, relate to our greater framework of civic space, and how collectives inhabit those same spaces. This is to say that food markets create opportunities for individuals to relate to each other in civic ways, that we may relate to strangers as members of macro communities, not as threatening figures. To determine such an approach we must first look

at what it is that makes an urban market a space of civility, and conversely why supermarkets are not.



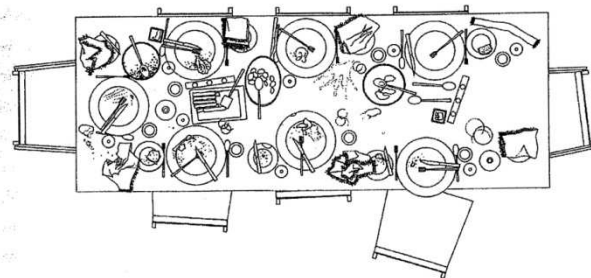
THE LAY OF THE TABLE

An architectural ordering of place, status, and function. A frozen moment of perfection. This is how architects see.



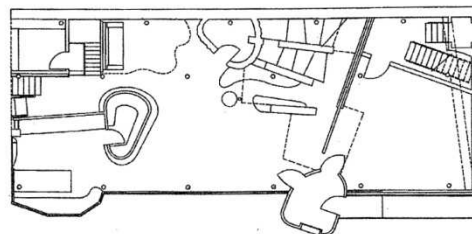
THE MEAL

Use begins to undermine the apparent stability of the (architectural) order. Traces of occupation in time. The recognition of life's disorder.



THE TRACE

The dirty tablecloth, witness of disorder. A palimpsest. This is the reality of domestic life.



THE LAY OF THE PLAN

The trace transformed into the plan of our house. Clutter filling the plan(e). Domestic difficulties interrupting the order of the grid.

Figure 33. Sarah Wigglesworth Architects, tracing dining process to influence layout of a house.

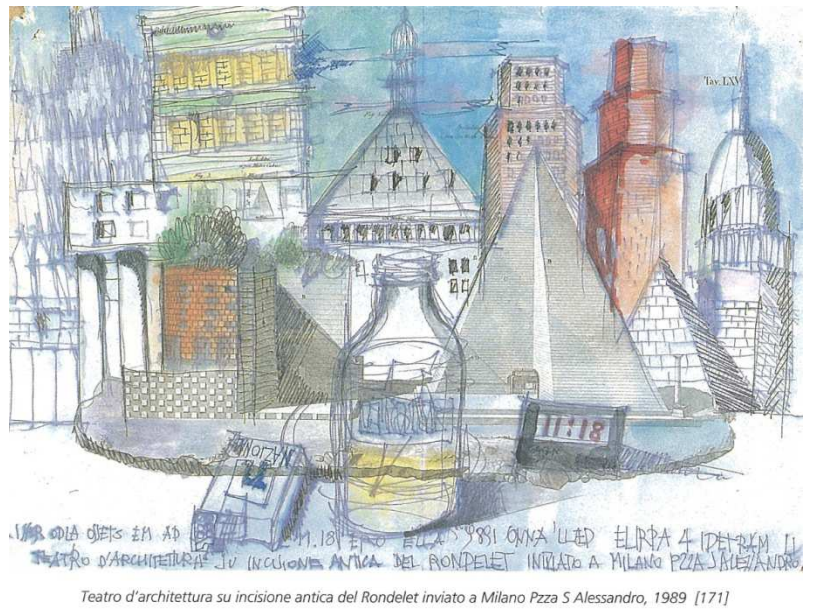


Figure 34. Aldo Rossi, painting, 1989.



Trespass, 1993 [201]

Figure 35. Aldo Rossi, painting, 1993.

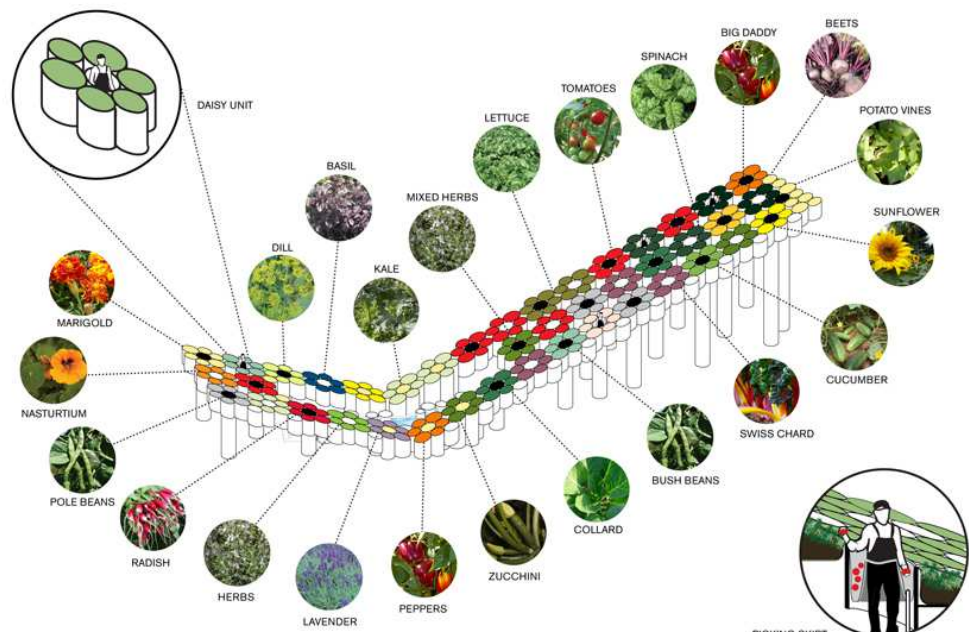


Figure 36. Workac, PF1.

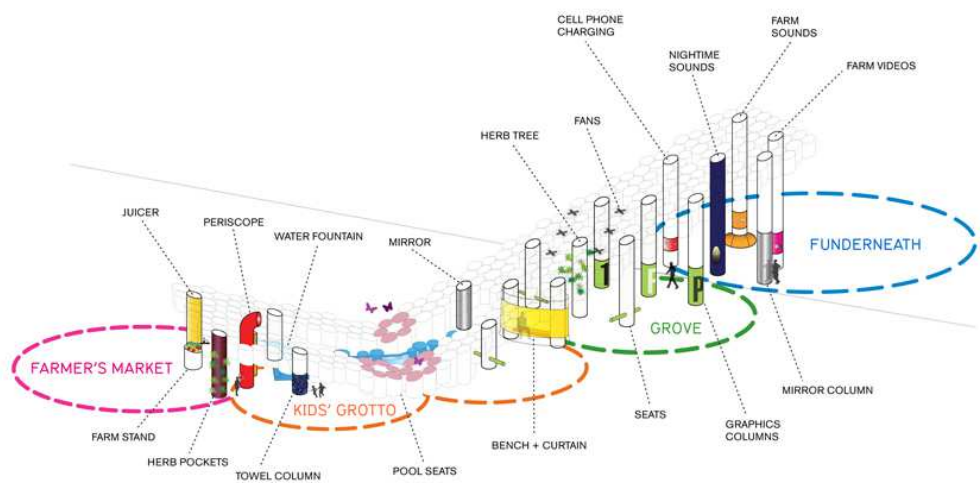


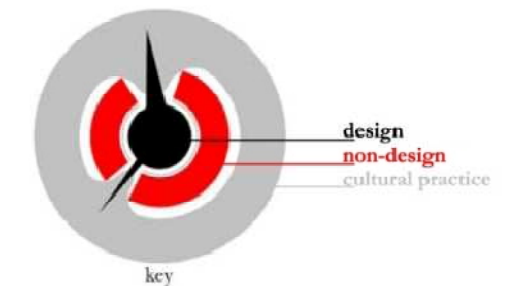
Figure 37. Workac, PF1.



Figure 38. Workac, PF1.

New World Fruit	The tomato before its explosive arrival into the culinary arena par peasantry had its roots in the not yet dominant land of the Americas. The fruit from the new world – transplanted from America to Europe in the 17th century in exchange for the flu which transplanted mass death from Europe to America – Did it become something that the European elite never had guessed it might? Indeed it sat upon the table of the wealthy as table decoration, its adorning features in direct proportion to the shared fear that it held lethal poisons and should not be devoured – the apple of Eden laying in wait to take its rightful place in history. Only the poor dared eat the flesh, as the desperate will in times of need, as would the man stuck at sea drink saline water. But this did not prove to be the end of those who tasted, but in fact a beginning loaded with potential. Was it to launch a new cuisine, brand and hype all at the same time?
Sauce	The time, late 18th century; the place, Naples; the ingredients, flat bread, cheese, basil, and tomato sauce (perhaps olive oil for good measure); the result, birth of the modern pizza and notoriety for the city involved. Tourists flock from all of Italy to dine upon this new dish, Italy has a new icon and it isn't the Leaning Tower.
Cuisine	Other Italian dishes follow suit. Soon all Italian cuisine is rife with tomato. The fruit grows abundantly in the warm and sunny climate of Italy, all classes may grow and eat them - is a sense of unity achieved between the classes through food and the tomato? Is cuisine the great leveller?
Re-immigration	Large groups of Italians migrate to America from around 1880 onward. The tomato has its homecoming, the return to the old country. Much has changed and hope is plastered on the collective head and drips from every building. The largest group of Italians arrive in New York as Manhattanism is in its adolescent stages. The tomato however is now an adult amongst the culture which settles in New York, is its significance about to be realised?
Branding	Does the tomato and the food it influences become less and less like what it was in Italy and more and more like America? As do the immigrants as they start to lose hope of returning to the motherland. Are they 'Americans'? A brand made up of peoples from all countries except America and cuisines from other countries which are not as they were – is a refined sense of 'purity' lost? Is cuisine now Manhattanised? Is the tomato now a brand, no longer an icon?
Junk Food	Is the brand like the grid and the opposite of typology? Once the tomato is branded (and the food made from it) does it lose a sense of history? Does the grid make everything the same? Are differentiation and articulation invalidated? Does the brand commoditise and pitch all that has become branded into the same sweltering market? Is it that the more notoriety a brand tries to gain the more mediocre and meaningless it is? Does it become junk? Is the tomato in Manhattan junk food?

charting
the
tomato
within a
design/
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design
context



Tomato in United States of America

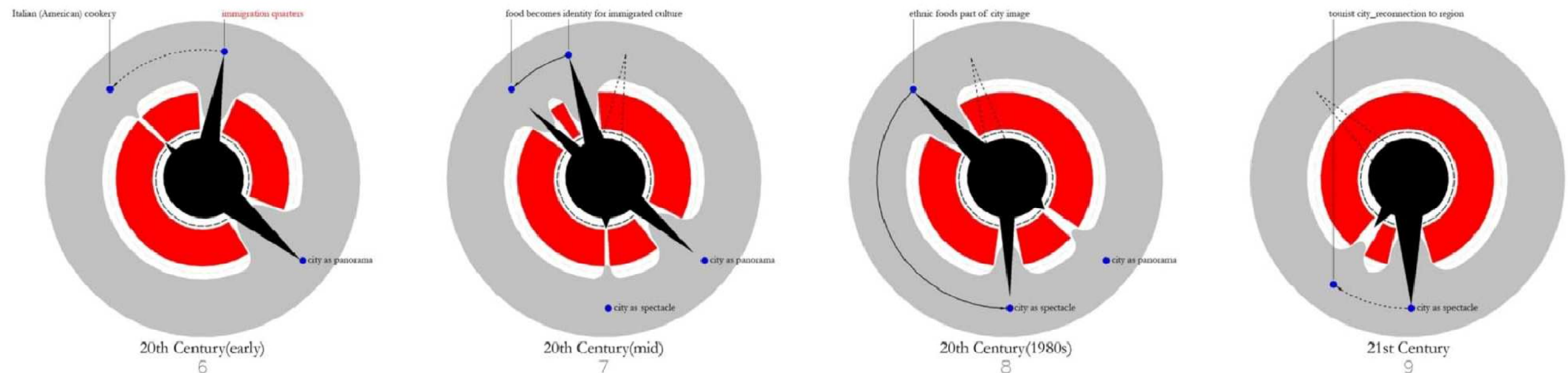


Figure 39. Narrative of tomato

4. Supermarkets Unpackaged – Infrastructure for Food Trade

4.1. Civility and Food Trade

A lot of our public institutions - public libraries, public transportation, public parks and recreation centres - are only partly for the sake of looking after those who couldn't afford those services left on their own. They are also traditionally sites for the cultivation of a common citizenship, so that people from different walks of life encounter one another and so acquire enough... sense of a shared life that we can meaningfully think of one another as citizens in a common venture.⁹⁹

From the above passage we can ascertain the faceted role that public institutions have in cities. These kinds of infrastructures have always hosted the practices of public life: they are the vital organs of cities. Common ground is vital to fostering a sense of community for collectives, yet somehow food trade structures slip out of that circle of common ground when they take the form of the supermarket. Due to factors such as market initiatives (intentional removal of the social dimension from the first self-service food stores to cut overhead costs), uncomfortable atmospheric conditions (intentionally cold interiors to push customers through faster), consumer demand for convenience (once a week bulk shopping supported by private motorcars) and monopolisation of the food cycle (companies controlling multiple stages of food industry from production to sales) food has receded from the public forum. So strange for something so vital to the existence of cities. Food is presented to us like we are consumers, rather than citizens (as with water) in a community:

...the time may be right for a new kind of politics - a politics of the common good. What might such a politics look like? Unlike market-driven politics, a politics of the common good invites us to think of ourselves less as consumers, and more as citizens... when we deliberate as citizens, when we engage in democratic argument, the whole point of the activity is critically to reflect on our preferences, to question them, to challenge them, to enlarge them, to improve them.¹⁰⁰

Citizenship engenders coming together as strangers with awareness that the collective share a common destiny in the quality of the city and its society. Yet market driven societies and their cities have disconnected private life from public. That is not to say public life has ceased to be important, but the chemistry between public and private has been altered:

⁹⁹ Sandel, Michael. Reith Lectures 2009.

¹⁰⁰ *Ibid.*

Today public life has become a matter of formal obligation...The stranger himself is a threatening figure, and few people can take great pleasure in that world of strangers, the cosmopolitan city...We have tried to make the fact, of being in private...an end in itself...to know oneself has become an end, instead of a means through which one knows the world...Masses of people are concerned with their single life-histories and particular emotions as never before; this concern has proved to be a trap rather than a liberation.¹⁰¹

How we act impersonally to each other as strangers is just as important as how we maintain personal relationships with those closest to us. Food space has always offered a fertile forum for such interactions – markets, restaurants, bars, cafes, street vendors – these are venues in which strangers have happily coexisted:

These establishments also straddled the boundary between public and private, with chambers available for more than culinary pleasures... Condemned by moralists as the haunts of drunken men and disrepute women, cafes actually became a place for workers to socialize and for families to spend a quiet evening; Balzac described them as the “parliament of the people.”¹⁰²

Unfortunately supermarkets don’t offer such exchanges. The space of supermarket shopping can offer stressful conditions, the bringing together of people in these privatised commercial circumstances is reminiscent of the interactions experienced by motorists in overly congested streets.

The intentional curtailing of any activity except shopping ensures the separation of the supermarket from the civic sphere, yet common supermarket typologies assert themselves as prominent nodes in the urban fabric. The business of supermarkets gains every economical benefit of this exchange but offers little in return. Fixed activities such as food trading and the sites they occupy are ideal places for individuals to come together as citizens in a common venture. This is not to imply that every food shop must be accompanied by political discussion, but that such an opportunity might exist: this would also provide the opportunity for bottom up community activity ranging in scale from sub groups to the greater city collective.

Creating public space for the sake of creating public space can often result in its emptiness and lack of activity. Historically and currently, citizens frequent public realms in the search for an event. Events which may be minor or major in scale, casual or formal in tone. The joy of coming upon unsolicited events is one of the defining virtues of dwelling in cities, and one that food markets historically accommodated, they engender suitable grounds for the cultivation of civility. The need for this cultivation is a question of moral significance, and one that the compelling economical efficacy of supermarkets has crowded out. If we

¹⁰¹ Sennett, pg. 3-5.

¹⁰² Pilcher, Jeffery M. pg. 65.

are to truly value food we need to reassert its social/cultural significance with its presence in civic space, not as an economical commodity housed in privatised conditions.

If we take such an observation into account, it is logical to relook at the traditional urban market typology in a contemporary setting via an empirical lens to ascertain if such civic interactions still take place. The particular setting selected in this case is the Queen Victoria Market in Melbourne, Australia.

4.2. *Urban Market – a Quick Formal Description*

4.2.1. *Form – negative space*

The mark that a traditionally developed food market leaves on the city is, formally speaking, a negative one. A recurring characteristic is that the traditional food market occupies the space between buildings (especially in high density cities), a space which is allowed a certain amount of flexibility, yet where the liminal condition which borders is considerably designed (often taking the form of arcades, colonnades, etc). This might be true for markets in pre industrial cities, yet open food markets were planned as nodes of importance after this time also. Queen Victoria Market in Melbourne has been selected due to its relatively short existence (opened in 1878), its inner city location, its status as a tourist draw card for the city of Melbourne, and conversely the way it acts as a macro community centre for the residents of the city.

Formally speaking, Queen Victoria market is a negative space defined by a horizontal plane which occupies a city block; its setting is not amid high density urban fabric but one which sits astride the denser CBD of Melbourne to the South and East of the market. Whilst the market is bordered by streets which are major to the inner city, they are not major arteries which act as gateways to the surrounding geography (which is common with major cities and their placement of markets established before the industrial revolution). Yet as an artifact in the city, the Queen Victoria Market is certainly a catalyst to how the city develops. This is exhibited in the nature of how the public accesses the site which will be discussed in 4.2.5, and how the city of Melbourne uses the market as a flagpole in its overall brand to draw visitors.

Whilst the market is not bordered on all sides by dense city fabric, it establishes its own sense of negative space by a walled exterior elevation to Victoria Street and Elizabeth Street (see figures 45 & 46). This is predominantly marked by the stately building named the 'Meat Hall' (built 1868) and the more discreet 'Deli Hall' (built 1868) at the junction of the same streets. This is supplemented by the single storey brick building running the length of the market along Victoria street, the only major void in this solid periphery being the Queen Street entrance which separates the main market structures from the market sheds. It also acts as a kind of festival ground for the weekly night market that runs during the summer months. The overall spatial quality is one of passing through a perimeter wall (and consequently a series of liminal spaces) to open ground on the other side which hosts the main trading activity of the market (fruit, vegetables, cheap

wares, novelty items etc.). One is struck by the transition from the more structured and fixed design of the shops within the meat and deli hall, relative to the more chaotic and variable condition of the stalls in the market sheds. The latter provides a labyrinth of food spaces in which one can meander for hours at a time. One also gets a sense of the build-up of structure over time as certain parts of the market have been renovated which offset parts that are maintained in their original states. The food court acts the most vivid example of this where due to its being placed like an incision through the layers of construction.

The activity of the market varies according to the time of day, and the atmosphere, the most festive of these being the night market which erupts with festivity through music, dining, and general joviality. Such festivities set up a forum of true civic virtue: a type of civic virtue that is lacking in supermarket as a non public institution:

...public institutions such as schools, parks, playgrounds and community centres cease to be places where citizens from different walks of life encounter one another. Institutions that once gathered people together and served as informal schools of civic virtue have become few and far between. The hollowing out of the public realm makes it difficult to cultivate the sense of community that democratic citizenship requires.¹⁰³

Such an institution as the Queen Victoria Market is a breeding ground for the renewal of civility. One which must be retained and used to prop up the public forum which has experienced decline (especially in residential sectors of the Western city) since the rise of suburbia. As this scarcity of civic space grows the urban dweller should still have access to centres of community:

...the virtues of democratic life - community, solidarity, trust, civic friendship - these virtues are not like commodities that are depleted with use. They are rather like muscles that develop and grow stronger with exercise. A politics of moral and civic renewal depends, it seems to me, on a more strenuous exercise of these civic virtues.¹⁰⁴

The position design plays in politics has always been contentious, but one thing we might be certain on is that residents need places in which they can pursue civic interaction. The place of bottom-up action where people aide each other and generate renewal, be it political, economic, or generating a higher quality of living via greater community interaction. Design can make such places possible, and that they might be located in points of convergence that might be existent, latent or undiscovered.

Negative spaces in cities have traditionally made this possible, and continue to do so

¹⁰³ Sandel, Michael. Reith Lectures 2009.

¹⁰⁴ Sandel, Michael. Reith Lectures 2009.

presently. Negative spaces might be best defined as a space between objects, great enough in area to accommodate public activities that extend beyond the use of transit (such as the street, though some streets too can be defined as negative imprints, often these incorporate pedestrian malls or use layered screening techniques to break transit areas away from dwelling, the boulevard being one example of such a system), these public activities are allowed to be various, and are both formal and informal in nature.

As mentioned above, the edge of these spaces are important, and they often allow the vitality contained within non-fixed public space to flow through to more formal structures (such as streets, pedestrian malls) which connect the city network of public space. In this way edges and liminal spaces take on a kinetic life of their own, in that they can be set up to accommodate fixed activities in daily life, but emerge to host more spontaneous events that take place in cities. Thus they gain a specific history of their own and contribute to the organic build up of a site over time. The Queen Victoria Market has hosted such an evolution throughout its history.

Figure 40. Crowd under shed canopy where food stalls are located.



Figure 41. People queue for various cuisine types.



Figure 42. Crowds gather on Queen Street for music and entertainment.



Figure 43. Crowd on Queen Street. Tables and chairs are set out for an informal dining atmosphere. For some this is treated as a night at a restaurant.



Figure 44. Food is temporarily covered during the night market ready for the next day's trade.



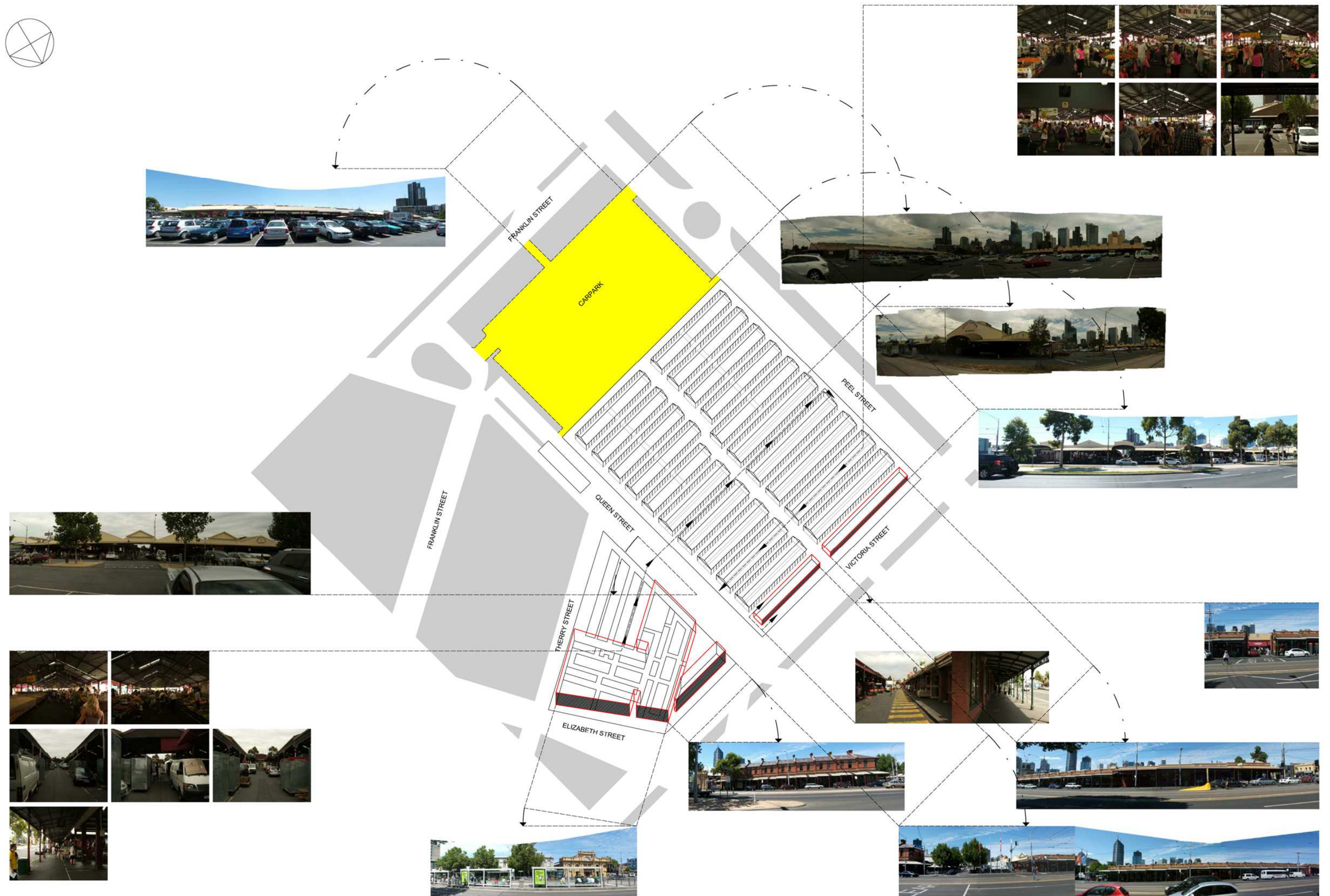
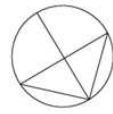


Figure 45. Queen Victoria Market, site axo.



Figure 46. Queen Victoria Market, main building axo.

4.2.2. Site – organic emergence?

Form gives structure to the city, but function does not necessarily give structure to form. This might be a key point to Aldo Rossi's analysis of the structure of the city, and that beyond Modernism's fascination with function operating as a primary generator of architectural space; that form itself through no connection with its intended function can be a catalyst to how cities may evolve. Returning to his use of the Palazzo della Ragione in Padua as such a form, the following description recognises the interplay between form and function going beyond conventional hierarchies:

The pragmatic nature of this form is entirely appropriate since the structure originated in booths of the markets which still operate on the site... The multi-level arcaded nature of the hall, facing on its two long sides towards the market squares was surmounted by a great barrel vaulted roof which defines the uninterrupted central space, behind the layers of arcades and market stalls. There is therefore an incremental intensification of the functional relationship from the space of the market to the space of the hall, and a direct continuity between daily life of the city, the higher functions of civil society and the sense of the city's own history through the reuse of earlier structures.¹⁰⁵

Such relationships occur as an organic emergence over time, and in this case certainly, this occurrence has made for a definitive site. It breeds what we might consider to be cross-pollinated space, a site which accommodates all the requirements for a community to function. These requirements are what Rossi calls fixed activities, activities that are required by the collective community throughout time in order for it to sustain the civil city environment. The trading of food is one such activity, and is commonly bound up with the very nature of living in the city. The supermarket is no different in this sense, it is inherently connected to suburbia, the decentralised city, which seeks to zone the different facets of living into sectors connected by transport networks supported by the private automobile. It is this very model which has undermined our sense of community in urban centres, undoing what Rossi refers to as the quartiere, which has no direct English equivalent, but is like a working class quarter, a residential area which has evolved over time rather than being superimposed on the city¹⁰⁶.

¹⁰⁵ Canniffe, Eamonn. *The Politics of the Piazza: The History and Meaning of the Italian Square*. pg. 55. Published by Ashgate Publishing Limited, USA, 2008.

¹⁰⁶ Eisenman, P. & Frampton, K. (eds.). Rossi, Aldo. *The Architecture of the City*. Published by the MIT Press, Cambridge, Massachusetts, 1982.

This is not to say that we must return to some medieval notion of what the city should look like, but it is a model which is inspirational. It sets up framework that elemental needs for living are located as points of convergence for community. Food trade offers one such opportunity as a civic fixed activity, one which the supermarket unfortunately misses. These elemental spaces must allow more leeway for a layered build up of urban life, one which dislodges the non-lateral program the supermarket currently upholds.

The Queen Victoria Market's evolution of site from a strictly commercial venture to one of cultural and community value is engendered in the way Melbourne marks this site as a flagpole of what the city is, its identity. Such identity questions hang over the city like a ghost, and in turn affect how that city might develop over time, and what the city prioritises as sites of value to be focused upon for renewal and expansion. In this way, the main meat hall building and adjacent deli hall are artifacts which represent the market's history - and influence its future.

Yet, when one visits the site, it is the less conspicuous market sheds beyond those representative facades that engender the pulse of everyday life. It is here that the enfolding of community event and localised commercial endeavour meet and service each other. Without such convoluted localised activities, the identity which cities seek to project would not exist.

4.2.3. Delivery Space & Approach – regional roads lead to the market

As mentioned, urban society has become disconnected from the idea that we, as a collective, rely hugely on the surrounding geography for sustenance. That cities share an intricately symbiotic bond with natural geographies. This disconnect has much to do with the sheer invisibility of the process in which food makes its trip from countryside to city, or in the case of imported food, from dock and airport to food store. It has also been mentioned how well supermarkets conceal the feeding of cities, yet in traditional markets the delivery, un-packaging, and dispersal of food is a process that is open. When perusing Queen Victoria Market one routinely stumbles upon interceding service lanes where produce is brought in to stock the varying stalls. The prospect of this messiness reminds you as a market goer that food has to come from somewhere, and furthermore, that it is arriving on that very day.

It is interesting to imagine the journey of fresh produce coming from the surrounding region into the city for dispersal, and one cannot purchase food, without giving a little thought to where it might come from. Markets also mark the season in which various foods appear. They tell us about what the land is capable of producing at a particular

time of the year, and thus there is a considerable reflection in the cuisine we eat then also. The overall point is this, urban markets still hold on to a vestige that they are distribution sites for entire regional geographies, and that the city too is part of that landscape.

Just as major arteries which lead to the market feel like lifelines to the city, collective transport could be seen as the minor blood vessels that connect it to the rest of the city. To consider the urban market as a public forum is to also consider the way in which the public can access it on a daily basis. The car supports the weekly shop to supermarkets, the bus/tram/train represent the daily shop at the market. For markets to function in their public role fully, collective access must also be aligned to service it.

The primary way of accessing the urban market is on foot, the secondary way by public transit. Queen Victoria Market's site is factored into the wider city transport infrastructure, with the prominent tram network being the most visible vessel to carry people to and from the market. Suffice to say, Melbourne's public transit system by international levels is not the best, especially when compared to the subway networks of Europe or high speed lines of Japan and greater Asia. Yet this infrastructure has a markedly positive effect on the Queen Victoria Market, and indeed, the greater city of Melbourne. Just as food is collectively brought into the city, it is also of vital importance how communities can collectively access it.

4.2.4. Interior Space – smoothly tangled

The interior or contained network of stalls within the Queen Victoria Market there are myriad stalls of varying nature with wares spanning from the necessary to the novel. To track and describe the atmosphere through traditional design analysis is challenging, however there are methods set up to perform such tasks. One such method is proposed by Kim Dovey and Kasama Polakit in their essay entitled *Urban Slippage*. In this they use Deleuzian theory to look at ways of defining the ever changing streetscape of Ban Panthom, an inner city neighbourhood of Bangkok, which is set around a characteristic of instability: "...the identity of the place can be defined by slippages, by the fluidity of forms, practices and meanings"¹⁰⁷.

Due to high population density and intense demand for space the use and meaning of public space is subject to readings of secular/sacred, private/public, and legal/illegal, as

¹⁰⁷ Dovey & Polakit. pg. 113. *Urban Slippage – Smooth and Striated Streetscapes in Bangkok* in Franck, Karen A. & Stevens, Quentin (ed.). *Loose Space: Possibility and Diversity in Urban Life*. Published by Routledge, New York, 2006.

well as “negotiable forms of governance and urban planning”¹⁰⁸. Overall we can read that the top down nature of street networks is consistently undermined by the bottom up initiatives put in place by locals in order to facilitate everyday life. The top down facet of this tension is described as follows:

Striated space:

- Striated space is where identity is “being”.
- “Striated space is structured like a tree, hierarchically organised and deeply rooted with a vertical stem.”¹⁰⁹
- “...captures the etymological links to the Latin: “stringere” to draw tight, linked to “strict” and “stringent.””¹¹⁰

The spatial consequences of bottom-up initiatives enacted by the local population are described as:

Smooth space:

- Smooth space is where identity is “becoming”.
- “The smooth is identified with rhizomatic modes of practice – migrating horizontally within the interstices of a larger order”¹¹¹.
- - “...not to be read as homogenous, but rather as without boundaries or joints. Smoothness implies a slipperiness and movement where one slides seamlessly from one site (place, meaning, image) to another”¹¹².

We can read from this that traditional binary oppositions and hierarchies enfold upon one another when public space is at a premium. It is such an enfolding of local priorities that contribute to their sense of place, a local identity as it were. These priorities however are not central points of focus in the spaces which host them:

*“The fold is not a crease or a boundary, rather, it involves a focus away from things, elements or points of stability and into the movements and foldings between them. This focus on the “between” is also a way to rethink binary and dialectic oppositions as an enfolding of each other.”*¹¹³

Such phenomena create conditions like those of the market sheds at the Queen Victoria Market. It is not to say that they have the same spatial atmospheres, the fluctuant streets of Bangkok have a very different atmosphere to that of the calmer market in

¹⁰⁸ Dovey & Polakit. pg. 113. (note: the concept of the fold is credited to Gilles Deleuze in his work *The Fold: Leibniz and the Baroque* (1993).

¹⁰⁹ *Ibid.* pg. 115.

¹¹⁰ *Ibid.*

¹¹¹ *Ibid.*

¹¹² *Ibid.*

¹¹³ *Ibid.* pg. 116.

Melbourne. Yet the focus away from hierarchies and priorities is shared, this kind of folding of *'things, elements, and points of stability'* sets up the conditions for meandering. The meandering pedestrian is something which can be drowned out in theories of planning and structuring. Yet walkers in the city create a fantastic sense of civic space. The importance of pedestrian movement is stressed by Michel de Certeau in his publication *The Practice of Everyday Life* which documents empirical analysis of street life and movement. In this way he expresses the importance of the undersigned world in cities:

*The ordinary practitioners of the city live "down below", below the thresholds at which visibility begins (high up is a 'visual simulacrum'). They walk – an elementary form of this experience of the city; they are walkers, Wandermänner, whose bodies follow the thick and thins of an urban "text" they write without being able to read it... These practitioners make use of spaces that cannot be seen; their knowledge of them is as blind as that of lovers in each other's arms.*¹¹⁴

The pedestrian's movements can undermine the structured nature of planned space, and give new shape to spaces which may be considered unimportant or even derelict. Not only does the space that pedestrian movements shape lend vibrancy and energy to cities and their public spaces, but it also serves as connective lines between civic centres:

*Their swarming mass (pedestrians) is an innumerable collection of singularities. Their intertwined paths give their shape to spaces. They weave places together. In that respect, pedestrian movements form one of those "real systems whose existence in fact makes up the city". They are not localized; it is rather they that spatialize.*¹¹⁵

The pairing of food trade with public space is one such catalyst in which pedestrian paths of desire lead them to such forums. And thus, they also energise the paths which lead to markets and its adjacent spaces. Common supermarkets have long since underwritten the importance of such phenomena, and as such the interior systems they have in place quash the meandering public interaction which can take place inside and around traditional urban markets. The periphery of supermarkets in this way also present hostile environments to pedestrian shaping. The priorities of elements and points of stability are striated and hierarchical, stiffening out street life which gives vibrancy to cities.

It is essential that fixed points exist in urban spaces, be it through built fabric or fixed activities in public space. This is exhibited in the street network/hierarchy of Ban

¹¹⁴ Certeau, Michel de. pg. 93.

¹¹⁵ *Ibid.* pg. 97.

Pantheon, and the fixed structures of the meat and deli halls of the Queen Victoria Market. Yet it is also important to allow various interpretations of how collectives occupy spaces around and between these points of stability. These interpretations, which are commonly bottom up initiatives, allow the enfolding of various activities and elements within space, and thus create places of event which pedestrians are drawn to. These are the circumstances under which individuals in greater collectives can come together to forge social bonds: the basis of civility in the city. This is the vibrancy that urban markets can supply, and which supermarkets undermine.

Having established the importance of considering the theoretical meeting between bottom up and top down initiatives in urban public space, especially that of food trade space. It worth investigating further the theoretical realm of what Diana Agrest calls *Design and Non-Design*. An analytical method in which designers can consider where the practice of design might end, and where community driven motives begin.

4.3. *Non Design vs. Design*

In infrastructural urbanism, form matters, but more for what it can do than for what it looks like ¹¹⁶

The above citation establishes a theme which has become evident in relation to urban food trade space: that architecturally formed settings for which food is gathered are (mostly horizontal) grounds for events. Urban spaces which achieve this successfully become infrastructure. They host multiple practices of life which stem from or relate to the buying and selling of the food which sustains us. Earlier chapters established that the common big box supermarket prevents the fluidity necessary to maintain vibrant urban space. More importantly, it undermines the vital place which traditionally hosts various sub groups and communities that interact. The program of the common supermarket and its resulting architecture is directly responsible for this. Grounds for vibrant urban life do not result purely from ‘good’ architectural design (although ‘bad’ design can surely stifle formally decent public space), yet it is one of the social systems that operates to create such an environment. Design is often considered a top down intervention. Diana Agrest, in her essay *Design Versus Non-Design*, describes it as follows:

Design - *...is that mode by which architecture relates to cultural systems outside itself; it is a normative process and embraces not only architectural but also urban design...Design, considered as both a practice and a product, is in effect a closed system...Properly defined, it is reductive, condensing and crystallizing general cultural notions within its own distinct parameters...That is, it possesses specific characteristics that distinguish it from all other cultural practices and that establish a boundary between what is design and what is not. This boundary produces a kind of closure that acts to preserve and separate the ideological identity of design. This closure, however, does not preclude a certain level of permeability toward other cultural systems – a permeability which nevertheless is controlled and regulated in a precise way.*¹¹⁷

This essay lays out one traditional perspective. This is not to be read negatively, but as a matter of positioning architecture relative to other cultural systems (history, politics, art, music, science, economics, etc). Well-designed architecture has, and continues to be, designed on such grounds. Yet when one considers the complex overlapping of cultural systems upon public infrastructures this traditional mode of design can struggle to address

¹¹⁶ Allen, Stan. *Points + Lines: Diagrams and Projects for the City*. pg. 57. Published by Princeton Architectural Press, New York, 1999.

¹¹⁷ Agrest. pg. 333-335.

all that is needed to ensure common ‘practice of everyday life’, the civic city. Bottom up practices form part of this equation, practices which cannot be encompassed by design. This realm Agrest calls ‘non-design’:

Non-Design - *...describes the way in which different cultural systems interrelate and give form to the built world; it is not a direct product of any institutionalized design practice but rather the result of a general process of culture.*¹¹⁸

In order to read these passages accurately, we need to understand what Agrest’s definition of culture is:

*Culture, on the other hand, is understood to be a system of social codes that permit information to enter the public domain by means of appropriate signs. As a whole, culture can be seen as a hierarchy of these codes...*¹¹⁹

The definitions laid out by Agrest and the corresponding essay set up an appropriate lens in which we can view the fluctuant environment of food markets.

One of the reasons why it is difficult to frame food trade environments within design is the fluctuation of various cultural codes, as well as the ‘looseness’ of functions, forms and their associated meanings which are all well enfolded within each other. Kim Dovey and Kasama Polakit observe through the deployment of Deleuze and Guattari’s opposition of smooth and striated space in their analysis of a Bangkok street which hosts:

- Loose forms – *“food stalls, hawkers trolleys, chairs, tables, laundry, retail goods and vehicles.”*¹²⁰
- Loose function – one space used in many different ways at the same or different times; *“one function may slip into another or be camouflaged within it”*¹²¹
- Loose meanings – *“instability of symbolic connotation and identity often based on ambiguous cultural codes and multiple naming”*¹²²; change of ritual, change of interpretation of ritual.

These are rhizomatic practices which are non-hierarchical and multiple (smooth), rather than dualistic or binary (striated).

The ambiguity of space is generated by local communities which produce urban vitality stemming from practices of everyday life. It is the bottom up initiatives that give the site

¹¹⁸ Agrest. pg. 333.

¹¹⁹ *Ibid.* pg. 335.

¹²⁰ Dovey & Polakit. pg. 114.

¹²¹ *Ibid.*

¹²² *Ibid.*

specificity, turn it from being any street into a Locus Solus – a place of specific formal and community identity.

When we observe the two typologies of the traditional food market and the big box supermarket in their basic forms, we seem to have traditional design practice or ‘striated’ space manifested through the supermarket, and non-design or ‘smooth’ space manifested through the traditional food market:

...if design is the production of an historically determined individual subject, which marks the work, non-design is the product of a social subject, the same subject which produces ideology. It manifests itself in the delirious, the carnivalesque, the oneiric, which are by and large excluded or repressed in design...Non-design may also be seen as an explosive transformation of design. This kind of explosion implies in some way the dissolution of the limits of architecture, of the ideological limits which enclose different architectural practices.¹²³

To place the supermarket and the food market in opposition is unhelpful however. Each typology is enfolded in the other, indeed the supermarket is a direct descendent of the food market, and it was society's avid patronage of the supermarket which lifted it to prominence, which makes it far from a meaningless typology. Yet, in order for public space to function to its fullest civic potential conditions, it must be allowed for in which collectives can shape such forums to suit their needs for events. Such a shaping does not preclude design at various stages and in more intricate scales, yet the civic grounds themselves are set up as open ended bases for inhabitation in various forms. Supermarkets are closed ended forums in which economic efficiencies have been allowed to crowd out the civic role which food plays in cities.

The supermarket typology falls into a more privatised category of architecture, logistically they are infrastructural to cities, but socially they are not. Traditional food markets assert themselves as infrastructure both logistically and socially. If we are to consider food markets as infrastructure it is important to understand what infrastructure's role is to the city.

¹²³ Agrest. pg. 344.

design at a
particular
moment &
time

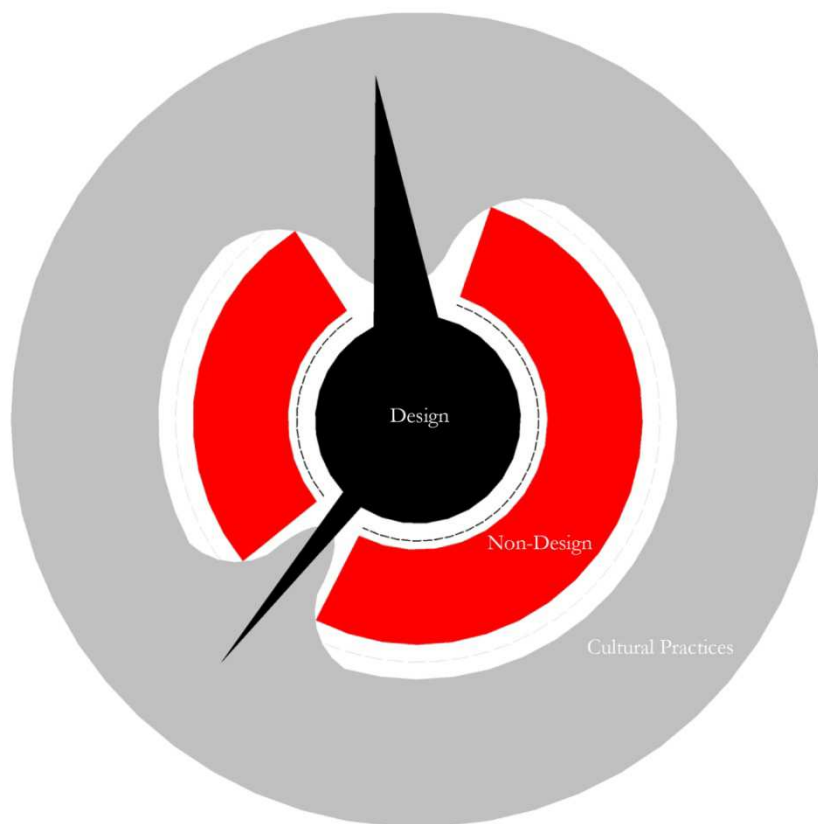


Figure 47. Design and Non-design.

4.4. Re-stating Permanences – Food Space as Infrastructure

Architecture is uniquely capable of structuring the city in ways not available to practices such as literature, film, politics, installation art, or advertising. Yet because of its capacity to actualize social and cultural concepts, it can also contribute something that strictly technical disciplines such as engineering cannot. When Walter Benjamin writes that "construction fulfils the role of the unconscious," he articulates the capacity of certain structures to act as a scaffold for a complex series of events not anticipated by the architect-meanings and affects existing outside of the control of a single author that continuously evolve over time.¹²⁴

The above citation sets up several important points which have become clear when considering the nature of food trade in public space. Firstly, that the practice of food trade and its related activities constitute a complex series of related events; secondly, architecture acts as the scaffold upon which these events take place; thirdly, that as scaffolding architectural design cannot, and should not, look to address all activities and uses that are going to take place in that particular place. Instead it acts as grounds to allow bottom-up activity to occur over time. This is how we can consider architecture at an infrastructural scale:

Infrastructure works not so much to propose specific buildings on given sites, but to construct the site itself. Infrastructure prepares the ground for future building and creates the conditions for future events. Its primary modes of operation are: the division, allocation, and construction of surfaces; the provision of services to support future programs; and the establishment of networks for movement, communication, and exchange. Infrastructure's medium is geography.¹²⁵

The open-ended nature of architecture as infrastructure does not propose that fixed forms should not be designed and constructed at all. It is important to have anchored points with which fluid inhabitation of space can associate itself. Forms which mark the site as a specific setting in the city. Yet, this form is derived from the geography of the city, both natural and constructed. In this way, the design of infrastructure takes its site response not just from the immediate context, but also the wider network of the city, and even the greater region.

Infrastructures are flexible and anticipatory. They work with time and are open to change. By specifying what must be fixed and what is subject to change, they can be precise and indeterminate at the same time. They work through management and cultivation, changing slowly to adjust to shifting conditions. They do not progress toward a predetermined state (as with master planning strategies), but are always evolving within a loose envelope of constraints.¹²⁶

¹²⁴ Allen, Stan. pg. 54.

¹²⁵ *Ibid.*

¹²⁶ Allen, Stan. pg. 55.

The meeting of top-down design and bottom-up initiatives must be addressed within grounds of constant negotiation. In invariably multiethnic cities, interpretations of what constitutes culturally charged public space can be problematic. Infrastructural architecture offers ways in which sub groups can shape public space according to their needs. Ideally, it offers grounds wherein many sub groups can come together on a daily basis: the meeting of strangers in places of civility.

Infrastructural work recognizes the collective nature of the city and allows for the participation of multiple authors. Infrastructures give direction to future work in the city not by the establishment of rules or codes (top-down), but by fixing points of service, access, and structure (bottom-up).

Infrastructure creates a directed field where different architects and designers can contribute, but it sets technical and instrumental limits to their work. Infrastructure itself works strategically, but it encourages tactical improvisation. Infrastructural work moves away from self referentiality and individual expression toward collective enunciation.¹²⁷

The notions that are set out above constitute favourable conditions for the design and implementation of food trade space as infrastructure. From this point of view we can begin to move away from presupposed types of big box architecture for supermarkets, and negative imprints for urban markets, and understand that the solution is not latent within one form or the other. Such thinking is exhibited in Stan Allen's competition scheme (circa. 1994) for the Beirut Souks (markets) in Lebanon. Allen comments on the conditions when designing for such a context:

When reconstructing a city that has grown slowly over time to encompass the architectures of many cultures, it is imperative to recognize the passage of time and to accept the partial and incomplete nature of the planning process itself. Precise understanding of the city's architecture is required, but it is also important to recognize the intrinsic limits of design operations. A city culture as complex as Beirut's cannot be recreated overnight on the basis of a single "masterplan". How can one impose a measure of unity while respecting the essential diversity of the city to come?¹²⁸

From these conditions he proposes four main design intentions:

1. *To preserve and reconstruct as many of the existing historic structures as possible, accepting all the limitations and irregularities that this might impose.*
2. *To recover the ground of the site with a series of continuous surfaces.*
3. *To construct a series of new buildings to accommodate a variety of functions: markets, restaurants, offices, residences, cinemas, and department stores.*

¹²⁷ Allen, Stan. pg. 55.

¹²⁸ Allen, Stan. *Points + Lines: Diagrams and Projects for the City*. pg. 59. Published by Princeton Architectural Press, New York, 1999.

4. *Finally, and perhaps most importantly, to construct a vast roof of steel and glass extending across the site, stitching together a previously fragmented context.*¹²⁹

(note: It is worth while acknowledging that the site for this scheme is on the so called 'green line', the neutral zone between the Christian and Islamic factions of the city, which had been destroyed during the civil war).

The figures (48-52) exhibit how this approach might be formalised. The canopy acts as site signifier in multiple ways:

- the specificity of its form
- the spatial relationship it creates with existing buildings
- the way it creates liminal conditions at the edge of the site
- the way it measures itself against the wider network of public space.

Beyond these points it also mediates the environment (weather conditions), and acts as a facilitator for further urban transformation. These points mark it as infrastructure. Just as we saw with the example of the Santa Caterina Market, we can consider this example as urban renovation: it takes into consideration the greater network of the city. Yet Allen's scheme goes one step further in that he recognises and announces the limitations of design in making all inclusive civic space. He also accepts that multiple authors from top down and bottom up initiatives are essential in allowing the kind of non-design that permeates vibrant public space.

When architecture takes on the role of being infrastructural it also sets up a time scale which can see formal types deployed to take on meanings beyond that of intended functions. The build up of a site's specificity is intrinsically linked to the to and fro of various fixed activities which occupy the site over time. Infrastructural architecture is not tied to single author meanings but is open to the various tactical methods in which collectives look to inhabit the site. Yet a key consideration that needs to be made when designing infrastructural architecture is identifying what fixed activities are essentially public in nature: activities that we engage in as citizens who have a share in the destiny of the city. As already identified, food trade is one of these activities. Consequently traditional urban markets were developed to acknowledge the civic nature of this act; urban markets are one of the first instances of infrastructural architecture. Typical supermarkets are built on similar scales as infrastructure, yet neglect the critical role they play in cities.

¹²⁹ Allen, Stan. pg. 59.

The rising awareness of food security issues has given rise to an emerging type of paper architecture. This is vertical farming, a type of infrastructure which seeks to bring farming not only to the cities gates, but to the heart of it.



Figure 48. Context plan for Souks, Beirut, Lebanon.



Figure 49. Plan for Souks, Beirut, Lebanon.

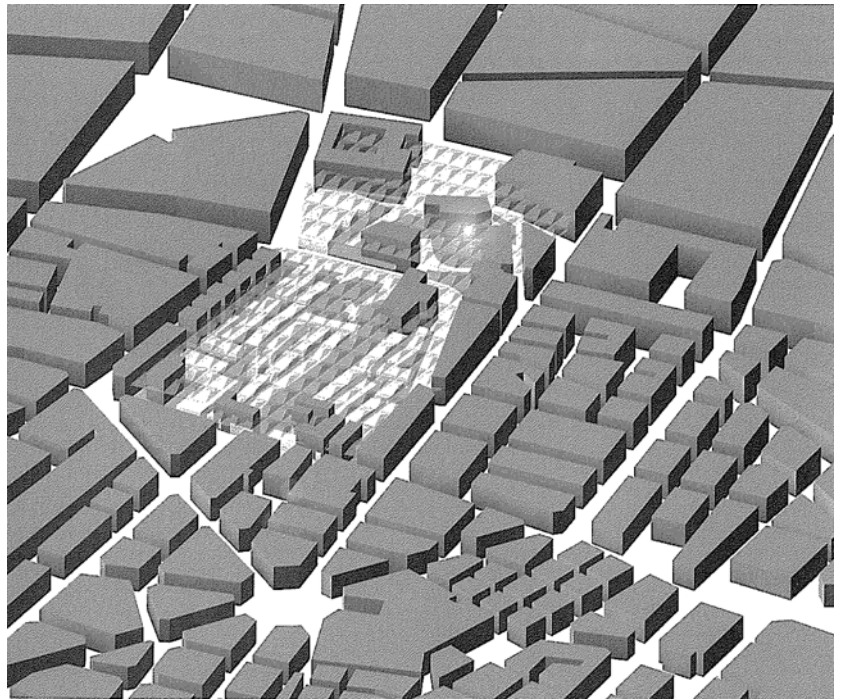


Figure 50. Massing model showing canopy.

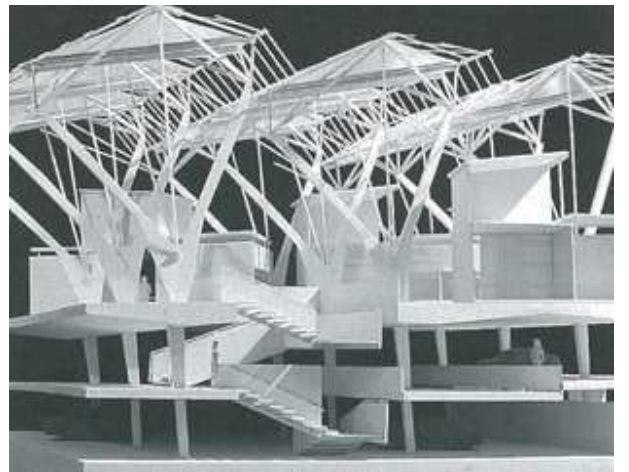


Figure 51. Sectional model.



Figure 52. Sectional model.

4.5. Vertical Infrastructure

In the ongoing struggle for finding solutions to make our cities sustainably proactive, a new vertical farming urbanism has emerged, one which seeks to bring as much food production back to the city as possible. To say 'new' is perhaps inaccurate, as the idea to retain food production within the city limits or directly adjacent to it has existed ever since urbanism came into being (remember the first cities did exactly that). Once more, the idea to grow food vertically in glass houses has been experimented with; an example of this is shown in figures 54 and 55 where a conveyor system was developed to rotate plants over set cycles within a 41m high tower (designed by Othmar Ruthner & Co. Austria, 1964) resulting in over 1000m² of cultivation being achieved in 63m² of land. This kind of design initiative replaces the need for huge plots of land required for conventional greenhouses (fig. 53).

The contemporary model of the vertical farm concept is significantly larger and grander, with schemes proposing structures of skyscraper proportions (see fig. 56-58). These ideas have commonly received criticism for their economic and logistical inefficiency, much the same as many other idealistic initiatives of its kind. When considered from a food security perspective, on the surface, the core concepts to these pieces of vertical food infrastructure seem to make some sense. Yet at the same time there also seems to be some flaws.

The first of these flaws is that, as infrastructure, many of the vertical farming proposals fail to link the idea that in their capacity of infrastructural urbanism, they must consider the city as a network. They also fail to address the overall effect such proposals may have on a city's growth. The varying representations of these schemes tend to suggest the vertical farm as an island in the city taking the form of a skyscraper. Such lack of forecasting parallels the unbridled building of skyscrapers since the beginning of the 20th century.

This notion of the skyscraper working as an urban island driven by intensive development has precedent in urban theory. Rem Koolhaas covers such phenomena in his seminal text *Delirious New York*.

Told as a reflective narrative of Manhattan's history, *Delirious New York* unfolds to expose a forth coming type of urbanism: Manhattanism – “to exist in a world totally fabricated by man, i.e. to live inside fantasy”¹³⁰

He labels the skyscraper as an automonument due to its self referential nature. This self referential game is a result of the skyscrapers exterior nature stressing the sculptural

¹³⁰ Koolhaas, Rem. pg. 6. *Delirious New York – A Retroactive Manifesto for Manhattan*. Published by the Oxford University Press, New York, 1978.

qualities of its own object. The interior workings of the building are fluid and outside the realm of the architect which give rise to a new type of urbanism:

In terms of urbanism, this indeterminacy means that a particular site can no longer be matched with any single predetermined purpose ¹³¹

Outside the control of the architect – the skyscraper is the instrument of a new form of unknowable urbanism. In spite of its physical solidity, the skyscraper is the great metropolitan destabilize: it promises perpetual programmatic instability ¹³²

The accelerated densification of Manhattan leads to a phenomena Koolhaas calls the *Culture of Congestion*: “Manhattan’s architecture is a paradigm for the exploitation of congestion”¹³³

Density is inherent in the original block layout of Manhattan and thus urban hyper density is an obvious unchangeable outcome.

Blocks as Islands – Manhattan’s gridiron:

*Advocated by its authors as facilitating the “buying, selling and improving of real estate”, this apotheosis of the – “gridiron with its simple appeal to unsophisticated minds” – is a hundred and fifty years after its superimposition on the island, still a negative symbol of the short-sightedness of commercial interests... it is the most courageous act of prediction in Western civilisation: the land it divides, unoccupied; the population it describes, conjectural; the buildings it locates, phantoms; the activities it frames, non-existent*¹³⁴

*All blocks are the same; their equivalence invalidates, at once, all the systems of articulation and differentiation that have guided the design of traditional cities. The grid makes the history of architecture and all previous lessons of urbanism irrelevant.*¹³⁵

The discussion which Koolhaas framed in *Delirious New York* is worth repeating when we consider skyscrapers which act purely as food producers. Koolhaas’ text discusses the disconnection that is established between inhabitants of skyscrapers and the immediate site the skyscraper sits within. The issue that vertical farms tend to bring up is they encourage the disconnection between city dweller and regional geography, one of the main reasons that cities have come to face problems of food supply and trade.

The inherently ‘hi-tech’ nature of them also poses a problem. Invariably movements for urban farming have been bottom up initiatives relatively modest in the equipment and costs needed to start and maintain urban farming projects. The case for vertical farms

¹³¹ Koolhaas, Rem, pg. 70.

¹³² *Ibid.*

¹³³ *Ibid.* pg. 7.

¹³⁴ *Ibid.* pg. 13.

¹³⁵ *Ibid.* pg. 15.

calls for highly controlled and highly designed environments, which require specialisation beyond the traditional know how urban collectives possessed for urban farming.

There is also the possibility that the increase in food supplied by vertical farms will simply supplement the unsustainable growing of food throughout the world, rather than replace. This is problematic being that one of the core ideals behind vertical farming is to reduce the strain on natural geographies. Once again it comes back to how urban dwellers relate to the regions that their city sits within.

Being that the concept of vertical farming is relatively new, there is yet little thought to how they might catalyse urban development. From a logistical point of view, in some cases it is hard to imagine that vertical farming can feed the massive populations in cities. The evidence for this lies within the research between MVRDV and Delft University of Technology, where they exhibited the metrics that show Manhattan alone would need 200m of vertical farm on top of every building in the borough.

Realistically the vertical farm as urban infrastructure will not solve food security issues in itself, though they may form part of a solution. The solution has much to do with the perceptions city dwellers have about where food comes from and how it relates to their cities. In this way urban markets and supermarkets invariably say much about these attitudes. These places have the potential to inform us about the food regions that we as urban residents rely upon. Local markets especially have been used as tools to reform dilapidated areas of cities, and to educate communities about the importance of a rounded food supply.

Yet markets in this way have also transcended the potential to help and feed communities when they focus less on collecting food as a daily practice and more on celebrating food as an artisan practice.



Figure 53. Glasshouse District, Naaldwijk, Netherlands.

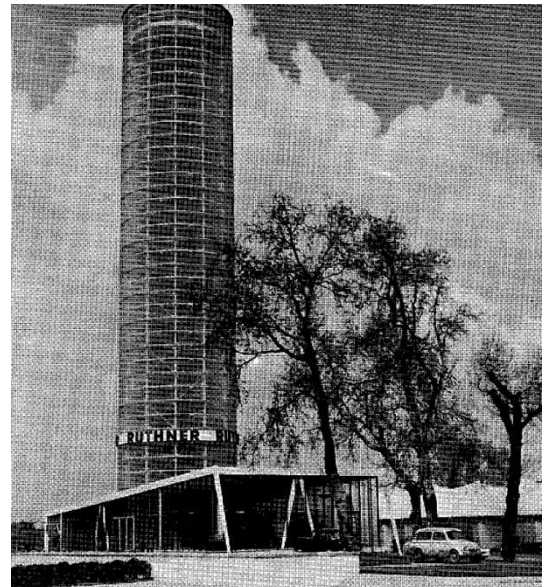


Figure 54. Glasshouse tower, International Horticultural Exhibition, Vienna, 1964.

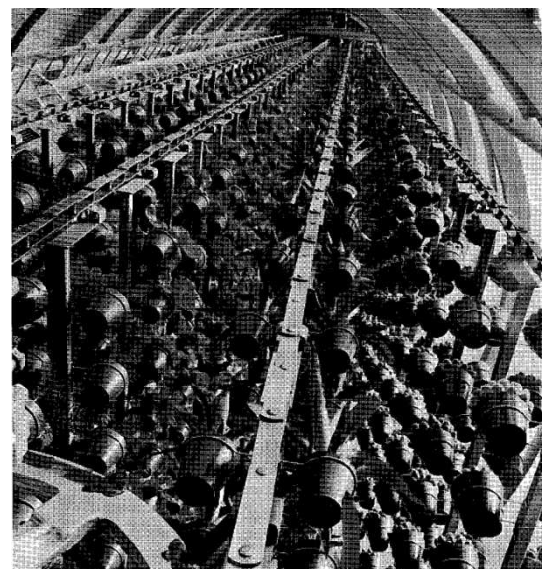


Figure 55. Conveyor belts in glasshouse tower, School of Gardeners, Langenlois, Austria.



Figure 56. Urban Epicentre, New York City, by Jung Mi Nam.

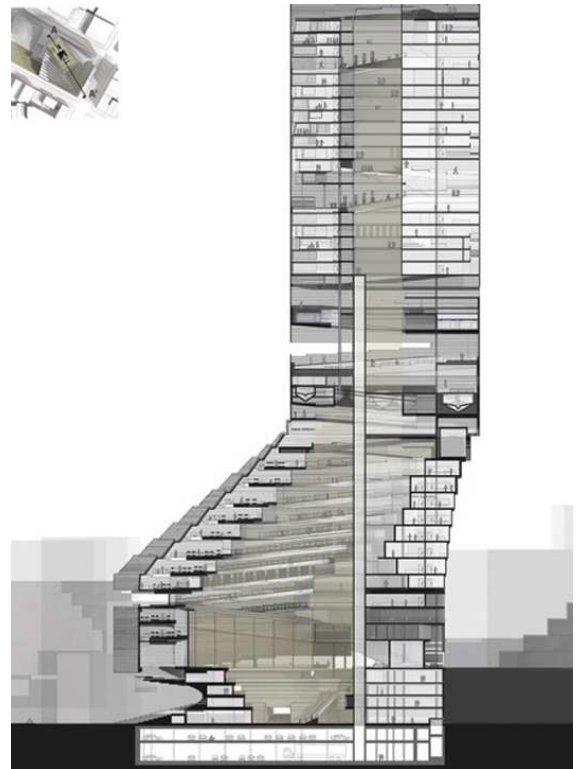


Figure 57. Urban Epicentre section, New York City, by Jung Mi Nam.



Figure 58. The New Los Angeles Greenway, by Dutton Architects.

4.6. *The Double Edged Sword of Food Market Regeneration*

People have always come to markets in order to socialise as well as to buy food, and the need for such spaces in which to mingle is as great now as it has ever been – arguably greater, since so few such opportunities exist in modern life.¹³⁶

Carolyn Steel asserts that food being used as a catalyst in urban renewal is a relatively new phenomenon. One of the main early examples being that of Faneuil Hall (Boston, US), which, in the 1970's was on the brink of having its market architecture torn down. That was until the intervention of a shopping mall developer Jim Rouse, whose investment in the Boston waterfront rebooted the area; the market achieved immediate success and continues that success today¹³⁷. This model of development was what Rouse called a 'festival marketplace':

Although in some respects 'festival marketplaces' are fake, the life they engender is very real. By inhabiting buildings and spaces made by food, they acquire an authentic quality that transcends the inevitable shop and restaurant chains that form the backbone of their commercial operations.¹³⁸

We might read that these markets aren't organic in their build up, that is, it took considered planning to reinstate their importance in the city. Yet we can see that the reinstatement of the market space driven by economic incentive can have positive spill over in the sense of vitality for street life. Thus there is a reconnection of food market to urban tissue and subsequent positioning of it as a catalyst in the development of the city.

Indeed, the trend to renovate city areas is on the rise, yet it can come with a mixture of positive and negative effects:

In many cities, new food-consumption venues are the forerunners of urban regeneration... Either way, by chance or by intention, restaurants and food shops that cater to those with sufficient money to spend on these luxuries are likely to raise rents in the area, forcing out existing businesses and excluding new ones that might serve a different clientele. Municipal governments, keen to encourage consumption by residents and tourists, and to increase the economic wellbeing of the city, often support these trends, perhaps by changing land-use and zoning regulations, as New York and Philadelphia have done, to encourage sidewalk cafes on certain streets.¹³⁹

¹³⁶ Steel, Carolyn. pg. 111.

¹³⁷ *Ibid.* pg. 109.

¹³⁸ *Ibid.* pg. 110.

¹³⁹ Franck, Karen. pg. 9. Architectural Design Journal, *Food and the City*, vol. 75, no. 3, May/June, 2005.

As we read in this citation, using food as an urban change catalyst can backfire on the residents who reside in such ‘revamped’ areas. The popularity of an area due to food driven initiatives can drive local prices up beyond what the traditional residents can afford, thus displacing them. Once again, it comes back to ideas of branding cities and their areas (as discussed in chapter 3.3). Markets such as Borough Market in London receive international acclaim as urban market environments, yet the artisan nature of the food sold there is beyond what many communities can afford. In this way these aren’t markets which embody the sense of the everyday practice of food purchasing that traditional urban markets once did. They are places which celebrate food, and that celebration comes at high costs. Food market development initiatives need to be considered for their urban virtues so as to avoid toppling the communities they are meant to solidify. The irony of displacing communities who established the identity of desirable urban quarters (Greenwich Village and SoHo areas in New York, Soho in London, Fitzroy in Melbourne, and Aro Valley in Wellington are but a few examples) due to gentrified branding is a real phenomenon. When it comes to food markets such ironies can also become evident, yet when executed thoughtfully, food markets can bring together all peoples of a society on an even keel. The mixing of land use and moving away from Modernist zoning techniques is essential in creating such an environment:

Food is a mechanism of change in a great variety of ways – for entire neighbourhoods as well as individuals... The Modernist tenets, which too often posited a segmented and sterile city where dining and shopping were hidden in interior spaces and where growing occurred in distant locations, need to be replaced by the encouragement, through planning and design, of a true mixing of land uses that incorporates places (and ways) for growing and selling local produce as well as for consuming it. Open space need not always be interpreted as space exclusively for leisure.¹⁴⁰

Food space as an exploratory practice has gains (and potentially fallbacks) for the collective and for the well being of self. To achieve such ‘planning’ practices which remove an outdated mode of zoning and segregating different areas of the city it is critical to acknowledge the city beyond its spatial and physical boundaries. It is important to study on what basis the city was founded (a city directed towards offshore trade and not on local resource is more complex to connect to a sense of region via food space, especially if the surrounding region is not capable of producing agriculture): What role identity has in defining urban quarters; what image the city has of itself

¹⁴⁰ Franck, Karen. pg. 10.

inwardly and outwardly and how this affects its spatial and planning practices; the way we consider the role of design as a critical and cultural practice; and how far design can really span to include the above conditions.

5. Applied Geography – A Hunger for Civic Renewal

5.1. Cultural Processes & Collective Integration

To approach a city, or even a city neighbourhood, as if it were a larger architectural problem, capable of being given order by converting it into a disciplined work of art, is to make the mistake of attempting to substitute art for life.¹⁴¹

Designers dealing with the urban environment strive to create places which draw public activity, reinforce meanings of culture, interpret a sense of place/site, and generally attempt to supplement the grounds for vibrancy within urban fabric. These responses vary in their success, architectural history is populated with famous cases of designs which have been successful or famously flopped. How this degree of success is measured varies according to what system of critique is used, and who is using it. A thread which links many seemingly successful public spaces is (be it formal or informal) a cross integration of use: that is, the space in question hosts activities ranging from the everyday (eating, commuting, recreating, etc) to the ritualistic (religious ceremony or secular ritual), to the celebratory (festival, parades, etc). What is relevant here – the determining factor – is that these places are constantly in flux, one activity always gives way to the next or it occurs in unison. Kim Dovey and Kasama Polakit refer to this type of space as being ‘smooth’:

*The smooth is identified with rhizomatic modes of practice – migrating horizontally within the interstices of a larger order¹⁴². (note: the concept of rhizome is credited to Gilles Deleuze in his work *The Fold: Leibniz and the Baroque* (1993).*

...not to be read as homogenous, but rather as without boundaries or joints. Smoothness implies a slipperiness and movement where one slides seamlessly from one site (place, meaning, image) to another¹⁴³.

A non-hierarchical space in which binary oppositions are not necessarily broken down but ‘folded’ upon each other, is a concept that is lifted from Gilles Deleuze’s writings:

*Folding is a luminal condition associated with “becoming”. A labyrinth is a multiplicity of spatial folds where the twists and turns of lanes and alleys disorient its subjects, producing a sense of both desire and danger”¹⁴⁴ (paraphrased from Deleuze’s *The Fold*, 1993).*

¹⁴¹ Jacobs, Jane. pg. 486. *The Death and Life of Great American Cities*. Published by the Modern Library, New York, 1993.

¹⁴² Dovey & Polakit. pg. 115.

¹⁴³ *Ibid.*

¹⁴⁴ *Ibid.* pg. 116.

*The fold is not a crease or a boundary, rather, it involves a focus away from things, elements or points of stability and into the movements and foldings between them. This focus on the “between” is also a way to rethink binary and dialectic oppositions as an enfolding of each other.*¹⁴⁵

Whilst this concept has fruitful applications in the analysis of public forums, it becomes more complex when it comes to its application in designing public spaces. It could well be that there is an inherent contradiction in its use as a design tool, and try as they might, designers simply cannot force public vibrancy into existence just because that may be the outcome their design has intended. The sorts of activities which Dovey and Polakit are referring to are products of culture at large. Whilst architecture and design are contributing parts to these products they are not definitive.

A similar concept occurs in Diana Agrest’s writings of *Design versus Non-Design* wherein design is marked by being institutional: a quality to preserve its own identity (specifying what is design and what is not) and the mode by which it relates to cultural systems outside itself. This effectively makes it a closed system, but one that does not preclude a mediated permeability towards other cultural systems¹⁴⁶. Non-design on the other hand accounts for all those cultural systems in their entirety, how they interrelate, and how they give form to the built world¹⁴⁷. The general point that, whilst designers may give form to the stage set, they do not write the script to the play and nor do they define how this script may be interpreted by the actors (i.e. the public) at play.

This is a highly relevant point when we consider food markets as an historical artifact. While infrastructure was traditionally provided (designed) for them to take place, design did not dictate how vendors arranged their food stalls, how people interacted in the market environment, or what sort of unsolicited activities might occur there. The atmosphere of this place can change hour to hour according to the cultural practices at play: the sense of space is constantly in flux.

This is a valuable point to consider when we analyse supermarket settings. Their design influences just about every action that occurs, from the flow of the buyers to the amount of space allowed for activity. This is generally only enough to perform one action: to collect and purchase goods. This is supplemented by security staff curtailing ‘suspicious’ behaviour, which might be tolerated in traditional market environments. This comparison between the supermarket and the urban market might also be an allegory for the street, or rather, two types of streetscape: one being a safe and sanitised corridor designed for passing through,

¹⁴⁵ Dovey & Polakit. pg. 116.

¹⁴⁶ Agrest. Diana. pg. 333-335.

¹⁴⁷ *Ibid.* pg. 333.

the other being the cluttered platform where multiple activities take place (performance, chatting, trading, etc):

In many cities around the world, the culture of food activities and crowds of consumers on the sidewalk – often blocking the easy passage of others – is the subject of some controversy. Some believe that sidewalks should be kept orderly, clean and free of crowded gatherings. They also suggest that sidewalks must be devoid of chaotic and cluttered sights, confounding sounds and strong odours. However, although the intention here is to create convenient, safe and unobstructed thoroughfares, such streets are often empty of pedestrians since people have no reason or opportunity to stop, linger, touch, smell or chat. Ironically, people pass by in a hurry, or never even use the very streets that are expected to be orderly, ‘aesthetically pleasing’, more ‘sanitary’ and ‘cleaner’.¹⁴⁸

It would seem that when one sets a street up for one purpose (to commute) it loses any real sense of life, but a street which is allowed to be at cross purposes (a convergence of many uses) creates its own site: the locus solus. To truly allow the build up of a locus solus a site must host many everyday activities such as work, living, trade and leisure within a specific territory. The negotiation of these practices is fluid and governed by a set of local and cultural rules which change over time. Such an evolution is difficult to encompass in the application of zoning which looks to isolate and separate these practices. The messy vitality of these practices constitutes an enjoyable and vibrant experience for many individuals, but not necessarily all. It is difficult to promote such a concept in a time of suburban dreaming, yet the heart of many cities is being watered down. Simply placing more apartment buildings for living in the central areas of cities does not guarantee a cosmopolitan environment, when many activities which make up this atmosphere are being barred from city centres creating a sequence of sites that one might call ‘non places’.

French anthropologist Marc Augé refers to places such as stream-lined streets or super markets as ‘non places’, which are:

...branded versions of the real world with little sense of local identity. Augé contrasts such places (for example, shopping malls and airports) with what he calls ‘anthropological places’, spaces that carry memories and associations, that express embedded history. Vibrancy can only exist in such places, where public life in all its forms is allowed: not just what is safe, familiar and comfortable, but also what is unexpected, strange, even dangerous. Public life, with all its contradictions – its ‘otherness’ – is the essence of urbanity¹⁴⁹

From this we might read that the supermarket presents a clean face, a sort of anti-history which eliminates any connection to a site but also assures a contained safety and ‘normal’

¹⁴⁸ Fernando, Nisha. pg. 25.

¹⁴⁹ Augé, Marc. *Non-Places, Introduction to an Anthropology of Supermodernity*. pg. 34. (Quoted by Steel, Carolyn, pg. 147. *Hungry City – How Food Shapes Our Lives*. Published by Chatto & Windus, Great Britain, 2008)

standard of behaviour which is alluring to parts of the populace. This sits in contrast to traditional market infrastructure which is open to the city and its activities (be they fun, comfortable, strange or dangerous) and serves as a plane of convergence for urban life: a place of citizenship. We might also assert that vibrancy in the city is nourished by a sense of embedded history within a setting, a setting which is populated by artifacts of the kind analysed by Aldo Rossi in *The Architecture of the City*.

Melbourne's Victoria market exhibits such an embedded history. Although not as old as the structures Rossi discusses, it has a place in Melbourne's heritage, and as a subsequence, in the image Melbourne presents to the world. The image that Melbourne projects is one of many cultures coexisting and adding their own quality to the urban fabric. This is represented to the world through tourism marketing campaigns by the culinary variety one can expect to encounter in Melbourne. The Victoria Market has resisted a certain level of gentrification which has swept over many urban markets in the world (such as Borough Market in London). This was recently exhibited when traders attacked proposals to 'upgrade' the market to a more 'boutique' atmosphere¹⁵⁰. Such proposals are double-edged swords. They may attract more tourism (although this may be questionable as a sole prerogative) and thus bring more offshore money into the economy as well as promote a 'boutique' atmosphere in the market place. However, they consequently drive out the community vendor, whose prices on food trumps that of the higher priced supermarket. A consequence is that local populations are driven away due to simply not having the means to purchase boutique food items day to day. A site cannot have identity without its local collective using it.

A final point that needs to be considered with the above discussion is the practice of zoning. Something of a hangover from modernist city planning tenets, zoning calls for the singling out of various functions of the city so they might be confined to their own piece of the urban fabric. The supermarket is food infrastructure which has been influenced by zoning practices. With the option (one partly created by cheap private transport) to push residential quarters to the fringes of the city (creating the suburb), shopping malls and supermarkets replace that of community gathering spaces historically engendered by market squares. They are privatised and enclosed trade space for an increasingly private Western society. It is an interesting occurrence that as the Western city decentralised, food distribution points became more centralised, creating what are called 'food deserts'. Historical food markets were horizontally dispersed throughout the city enabling daily shopping. They were not central urban points but spinal networks which defined entire

¹⁵⁰ Hastie, David. *Traders attack boutique market plan*. Herald Sun, Jan. 03, 2010.

urban quarters. As an urban type, typical supermarkets insist on a sole point of convergence contained within the bleak world of big box architecture. In the sense of spatial vibrancy supermarkets generally create an environment with a formal and linear motive (enter, gather goods, pay for goods, depart), whereas urban markets allow a more casual and cyclic progression which encourages meandering.

A defining factor in the difference of atmosphere between urban market and supermarket is the civic quality that they generate. The formal typologies which they generate seem to be reflections of this civic quality. On one hand the supermarket is closed and inward looking, while the market is permeable with streets penetrating its edges and making it less obvious where the street ends and the market begins. Indeed, sometimes the market is the street. The supermarket resists this permeability: there is a definite beginning and end to the supermarket in its box form, an island in the city.

5.2. *Re-combining Civility, the Public Sphere, and Market Infrastructure*

As addressed in Chapter 1, the ancient form of the market hosted multiple tiers of daily activities, from everyday trade to debate and festivities. Following this environment through to the middle ages and up to the industrial revolution, the public realm drew out people's public persona, that is people (to state it broadly) related to each other through a public mask. As Richard Sennett explains in *The Fall of Public Man*, this mask enabled people to relate to each other in a civil way, that is, to form public relationships without the trading of private/intimate information. Sennett's text at its time illustrated the decline of the public forum as people began to discard this public mask in favour of living more private lives. The rise of the private life as a means in itself is held in direct proportion to the decline of public space and the fear of strangers that we encounter day to day, as Sennett states it, "...to know oneself has become an end, instead of a means through which one knows the world..."¹⁵¹.

Traditionally, food spaces offer opportunities for people to relate by civil means, casual conversations that don't involve personal life histories, yet the city has lost the public life that it once had:

*Intimacy is an attempt to solve the public problem by denying that the public exists. As with any denial, this has only made the more destructive aspects of the past the more firmly entrenched.*¹⁵²

If architecture is the setting to support this civic interaction, the city as an organism must be considered. The flight to the suburbs is a syndrome of civility unravelled; the supermarket and shopping mall as a gathering mechanism for civil exchange only seems to exacerbate the

¹⁵¹ Sennett, Richard. pg. 4.

¹⁵² *Ibid.* pg. 27.

decline of the public forum. If we accept that food trade spaces will continue to gather people into one location, we must also accept that they require more focus as to the role they provide in a civil society. As Lewis Mumford put it: *‘If we would lay a new foundation for urban life, we must understand the historic nature of the city’*¹⁵³. When considering the vital role food trade space has played in some of history’s most famous public spaces, it would be pertinent to see how the rest of the city related to those public forums. From this we may also ascertain how cities as a whole related to the arteries which connected them to productive geographies. Such a study isn’t a lesson in nostalgia, it simply looks to establish how urban societies have forged links between food and civility. If we are looking to make such a link prominent once more, the contextual elements of this relationship must be established.

One might also muse that the ability for people to enjoy each other’s public identity is supported in part by the way in which they relate to their geography. As urban societies in cities are no longer homogenous, food offers a chance to share in a common ground:

*Food experiences enrich our perceptions, understanding and appreciation of city streets. ‘Sensoryscapes’ that create rich urban experiences through ‘visualscapes’, ‘olfactoryscapes’ and ‘soundscape’ sharpen our senses. In addition, they signify specific cultures. At a time when Western cities are becoming increasingly multicultural, understanding the role and relevance of food activities in different cultural enclaves is a crucial contribution towards a more inclusive decision-making process in urban planning. Rather than stereotyping cultures, this approach may generate more appreciative perceptions among urban consumers... The focus must be on making urban streets flexible to their users under regulations other than those that overspecify land uses and apply strict zoning codes, so that users of different cultures can then modify, add to or change the streets in ways appropriate to their society and culture.*¹⁵⁴

*To feel authentic, difference must emerge with the support of others who share in that difference. The result is a proliferation of clusters, groups of people cultivating the same differences and eccentricities, generally existing in discrete localized spaces but bound together by global networks...Dense urban areas offer the possibility for individuals to meet others in such micro-communities.*¹⁵⁵

Civic space is the place where this can occur, yet fixed ideas on how this space is used can undermine the abilities for different culinary opportunities to express themselves, around which broader displays of culture can occur. Supermarket space certainly does not reflect an evolving landscape of cultures (unless you count a visit to the ‘international’ food aisle as a multi-cultural encounter). Conversely, the non-fixed layout of market/street space enables

¹⁵³ Mumford, Lewis. *The City in History*. 1966. Quoted by Girardet, Herbert. *Cities People Planet: Urban Development and Climate Change* (2nd ed.). Published by John Wiley & Sons, Ltd, West Sussex, England, 2008.

¹⁵⁴ Fernando, Nisha. pg. 25.

¹⁵⁵ Sumrell, Robert & Varnelis, Kazys. *Blue Monday: Stories of Absurd Realities and Natural Philosophies*, pg. 146. Published by Actar, 2007.

cultures to come together with varying forms of expression. This expression is commonly represented through various spatial typologies determined by the objects at use and is not only tied to function, but also ceremony, methods of communication, cultural taste (aesthetic fancies), etc. Such cultural modes of expression are exhibited in the streetscapes of Chinatown and Little Italy in Manhattan, New York, or the streets of Bangkok to name but a few (see figs. 59-61). It is interesting to note that these public forums aren't squares or central points of convergence, but more like spinal strips which allow passage as well as activity.

From this perspective we can start to see an image where civic space should no longer occur in a vacuum for the sake of it being 'public'. Rather it can exist as a more inclusive exercise that pulls together activities that draw people into civic settings. These activities begin with elemental needs (i.e. food gathering, eating), the phenomena which link us as individuals in a collective. From this gathering a greater notion of civility has the possibility to grow.



Figure 59. Little Italy, Manhattan, New York City.



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Figure 60. Chinatown, Manhattan, New York City.



Figure 61. Street side food vendor, Bangkok.

5.3. Public Movement & Food Space as Infrastructure

Supermarkets enjoy the same monopoly over food that markets once did, but unlike markets, they have no civic role to play... Wherever they build their stores, we must follow. Control of food gives control over space and people – something our forebears knew very well, but we seem to have forgotten.¹⁵⁶

This abstract suggests an essential point. Urban Markets were public spaces and supermarkets/malls are private ones. Malls and supermarkets regulate behaviour. ‘Otherness’ which might occur in public domains is curtailed in the faux public realm of the mall and supermarket¹⁵⁷. These places parade as public by using indicators which belong to public spatial traditions, such as the street, arcade, or even a mini version of the square. These typologies are changing the texture of the city dramatically, severing themselves from centuries of urban build up, and undermining the civic life of urban fabric:

Streets are the building blocks of cities, providing something that supermarkets can never provide: a common space with which people can identify, in which they have a stake. Above all, streets are shared spaces: in both use and ownership, they form the basis of the urban public realm. It is no accident that ‘street life’ is synonymous with the social buzz of a busy city, and that no equivalent term exists for suburbia. The suburban ideal has always been one of autonomy: private ownership of your house and garden, garage and car. Now supermarkets are extending that notion to urban dwelling as a whole.¹⁵⁸

If we accept the idea that big box supermarkets catalyse a city geared towards the individual before the collective, which in turn supplements a sprawling urban model, then we might accept that the private automobile plays a vital stake in maintaining that model. The car is embedded with a kind of singular vision. Most times it can be seen as an anti-cosmopolitan object, its role to take the driver from one place to the next without engagement with the in-between:

One does not use one’s car to see the city...The car instead gives freedom of movement...in making a journey from place A to place B. The city street acquires, then a particular function – to permit motion...motion has become the most anxiety-laden of daily activities. The anxiety comes from the fact that we take unrestricted motion of the individual to be an absolute right...the effect on public space, especially the space of the urban street, is that space becomes meaningless or even maddening unless it can become subordinated to free movement. The technology of modern motion replaces being in the street with a desire to erase the constraints of geography...as public space becomes a function of motion, it loses any independent experiential meaning of its own.¹⁵⁹

¹⁵⁶ Steel. pg. 145.

¹⁵⁷ *Ibid.*

¹⁵⁸ *Ibid.*. pg. 145-146.

¹⁵⁹ Sennett, pg. 14.

An increasing strain on resources (oil being the current focus, and water likely to be the next) has brought an uneasiness in regard to whether or not the common commuter is able to keep a private car running day to day. Sadly, the high cost of doing so is the root of this concern which takes precedence over issues such as air pollution, opulent resource consumption, congestion, and alienation of the pedestrian. In countries that don't already have an efficient network, public transport will be the substitute for the vacuum left by individual cars. Indeed, it is no new discovery that to formalise streets as pedestrian avenues public transport needs to be given preference, both in logistical theory and spatial theory. If the individual car was the means by which people were to access the supermarket, public transport will also have to do this, yet public transport cannot efficiently service the dispersed satellite network of supermarkets as they now stand. Therefore public transit must be aligned with how food will be distributed in civic settings.

Public transport could be another platform upon which we might regenerate civic forums. When (re)combined with market space which, rather than being dispersed satellites the public must reach, might be spines upon which the public can pass, meander, alter, recreate, etc. Such spines (if not already existing) begin the build up of a locus solus: a defined territory with which localised collectives can relate. This relationship begins with the collective feeling that they have a stake in shaping this space day to day. At a larger scale these spines might also be considered as arterial routes (recall the 1676 map of London where market areas make distinct connections to the geography from which food came) which bring the hinterland to the city made via the connection of market space to grower.

Once more we are brought to the notion that infrastructures need to be considered against each other. The concept of public food markets is not feasible unless they lie at cross roads serviced by adequate public transport, or if they can be accessed by foot.

The spatial and logistical theory of public movement must be consolidated with that of the urban market. The intersections of these two infrastructures should be viewed as points of civic renewal, not places of purely logistical substance. It is in this way that urban design has a role to play in setting the grounds for these intersections of architectural infrastructure.

5.4. Re-address the Periphery

Despite the much advertised charms of the densely built metropolis, whatever policy the planners and politicians have pursued, the inescapable background to the evolution of the city in the last twenty years has been accelerating decentralisation. The population of the central core of every major city in Europe, America and Japan has fallen while that of the constantly spreading outermost ring around them has continued to grow¹⁶⁰

Sprawl has become the whipping boy for a variety of ills, including the destruction of nature, the decline of inner cities, the predominance of consumerism and the loss of civic consciousness... Yet simply demonizing the suburbs – and idealising the traditional city – will not do.¹⁶¹

The fringe of Western cities has developed at an accelerated rate throughout the post-war era of cities. The resulting suburban model has received much criticism from architectural theorists and writers. In many cases these theorists promptly refer to traditional models of cities and closely knit town typologies as ideal settings for fostering a true sense of place and community. As Rem Koolhaas identifies (*The Generic City*), there is the proposition, contrary to traditionalist architectural theory, that this burgeoning suburban sprawl is far from meaningless. Philosopher and urban theorist David Kolb agrees in his publication *Sprawling Places*. Within suburbia he sees the potential for development of a new urbanism through a thoughtful dialogue with the actual complexities inherent within the suburban model:

...suburbs are more complex places than many critics admit. Are there ways that suburbs can become more self-aware about their own growing complexity and in involvement in larger linkages and processes?¹⁶²

Kolb cites some of the frameworks which the New Urbanist movement is hoping to implement on suburban models:

The New Urbanism is not primarily a stylistic movement. It is concerned with the spatial and social arrangements. Multiuse development should allow as much daily activity as possible to take place within walking distance of home or work, and, ideally, should provide access to effective public transit. Community units should include mixed-income housing in styles that do not sharply distinguish income levels. Parks and civic buildings should be incorporated into the street layout to give shape to the public realm.

¹⁶⁰ Sudjic, Dayan. pg. 25. *The Hundred-Mile City*. Published by Harcourt, New York, 1992. (Quoted by Kolb, David. pg. 136. *Sprawling Places*. Published by the University of Georgia Press, Athens, Georgia, 2008.)

¹⁶¹ Rybczynski, Witold. A26. *The Virtues of Suburban Sprawl*. Wall Street Journal, 25th of May, 1999. (Quoted by Kolb, David. pg. 143. *Sprawling Places*. Published by the University of Georgia Press, Athens, Georgia, 2008.)

¹⁶² Kolb, David. pg. 162. *Sprawling Places*. Published by the University of Georgia Press, Athens, Georgia, 2008.

Of course the main concern of growing suburban fringes is the environmental impact such low density satellite planning can have. At the centre of this impact is the consumptive practice of individual mobility: individuals driving their cars to work day in and day out. It may be problematic to critique suburbs through a lens based on central city qualities. However, it is important to consider the relationship of satellite suburbs to the greater urban network as it is important to consider the city as a part of greater regional network. Suburban fringes mark the periphery of the city against its surrounding geography. Traditionally, and presently, this periphery can be defined by peri-urban agriculture: areas for growing food to supply direct to the city. These areas test the notion of what is urban geography and what is natural geography. As such, it is a place where cities can define their formal and ecological relationship with the land they sit upon.

High design culture has left these peripheral zones to the interests of developers and real estate agencies, and in turn has questioned the design tactics deployed in the resulting fabric. Yet urban design must consider the connective networks between the central city and its suburban satellites. Both the suburb and the supermarket are inseparable. There is simply not one without the other. If the supermarket is to be reconsidered as an urban and suburban type, the suburb must also be reconsidered for how it relates to food distribution. The instance of available space for peri-urban culture seems to provide interesting grounds for such an investigation, so too does the prospect that suburban fringes are the gate ways for produce flowing into the city. In their assessment of British allotment farming, H.F. Cook, H.C. Lee and A Perez-Vazquez conclude that the social benefits outweigh quantitative ones (self sufficiency and money saving) when it comes to this form of agriculture¹⁶³. Yet the formal role such farming could play in the boundary between building development and productive geographies have latent opportunities for new suburban forms. Considered initiatives have to be made in creating public transit infrastructure which aligns to that of the food infrastructure which services the suburb. As with the central city, food trade space should be seen as an opportunity to promote civic space. The face of which can promote the idea that the idealised geography of suburbia is built on the same geography which feeds us.

¹⁶³ H.F. Cook, H.C. Lee and A Perez-Vazquez. pg. 215. *Allotments, Plots and Crops in Britain*. Essay in Viljoen, Andre (ed.). *CPULS (Continuous Productive Landscapes) – Designing Urban Agriculture for Sustainable Cities*. Published by Elsevier Architectural Press, Oxford, England, 2005.

In the drive for sustainable solutions for a hungry suburban question, it is the application of efficient and thoughtful urban infrastructures which will make this peripheral city region socially and geographically reactive.

5.5. *A Sustainable Cornerstone*

5.5.1. *Spines, not Centres?*

Rem Koolhaas' critique on the flailing nature of the identity of cities, and by association the centres of cities, as well as various critiques regarding the striated nature of the centre have activated a need for reflection. We begin to get the sense that urban planning which revolves around concentric planning programs is struggling to address the holistic needs of the modern city. If we are to develop food infrastructure, public transport, and civic space in relation to each other, we initiate a drift from the urban centre as a prevailing civic place (see fig. 62). What begins to (re)emerge is horizontally dispersed spinal infrastructures which not only connect the internal network of the city, but also the peripheral zones and the geography beyond the city limits (see fig. 63). This is not a new phenomenon, at least in part. Similar urban textural patterns can be seen in the plans of cities established before the industrial revolution. They can also be seen in schemes for urban and peri-urban farming initiatives like André Viljoen, Katrin Bohn and Joe Howe's concept entitled CPULS (continuous productive urban landscapes, see figs. 64&65). In this scheme they look to make the city self sufficient for its food, whilst these CPULS are the means to create community centres, recreational ground and collective infrastructures.

The implementation of spinal networks isn't synonymous with large scale demolition and reworking of cities like that of Haussmann or Le Corbusier's Parisian plans. It begins with identifying existing urban infrastructures (food distribution centres, public transport), public plots of land, vacant or contaminated sites and wide streets set up exclusively for private motor vehicles as potential genesis points. The implementation of spinal infrastructural planning hangs like a ghost over the city for decades so that such urban forms can build up over time, by the hand of various authors in the form of bottom up or top down initiatives. It prepares a site so fixed activities can take place amongst the more fluctuating activities of everyday life, and takes clues from regional geographic environments so as to influence the phenomena of locus solus. Most of all, spinal infrastructure connects urban residents back to an idea that cities are part of regional networks, that they rely on these networks for food, and that these geographies must be nurtured.

Places of civic quality in which individuals and collectives feel they have a stake can promote a proactively sustainable culture in which contemporary ideas of 'efficiency' give way to a more holistic sense of what is quality urban dwelling.

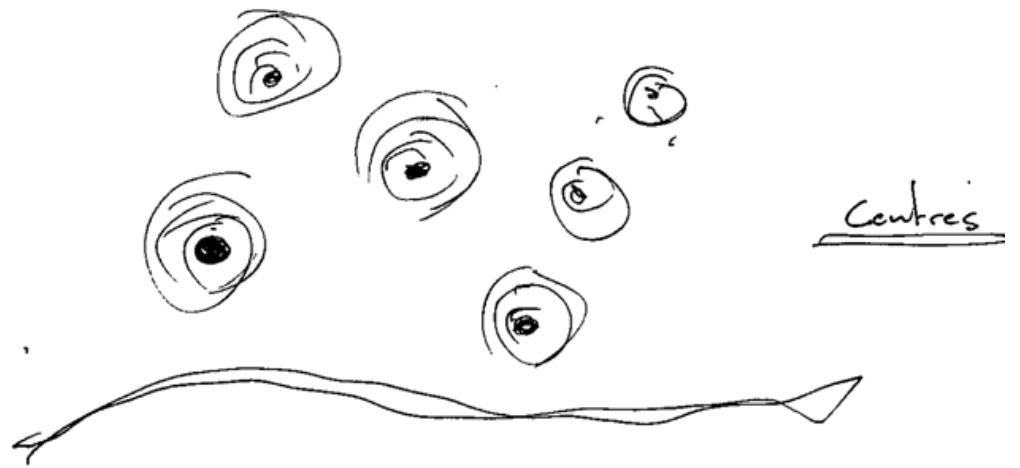


Figure 62. Central points of convergence.

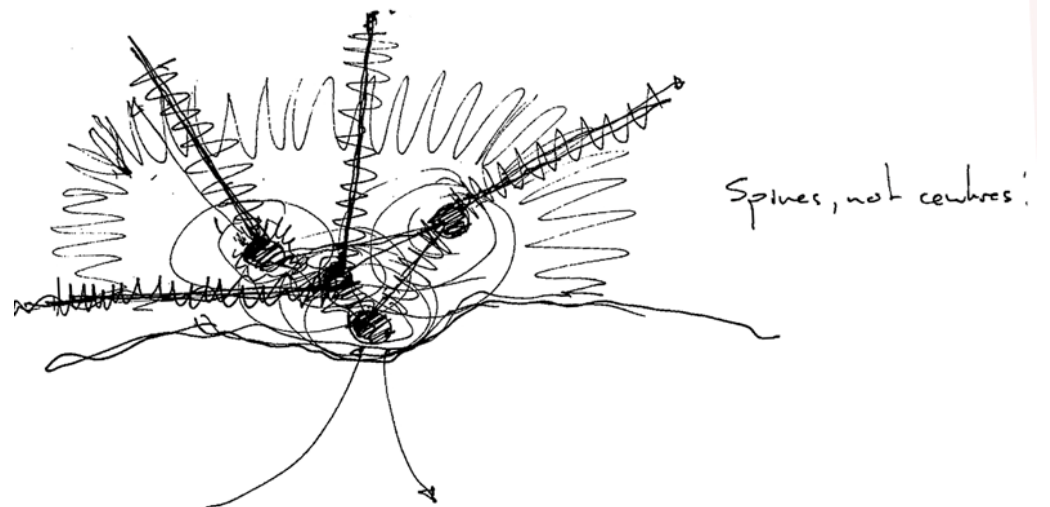


Figure 63. Horizontally dispersed spines defined as architectural infrastructure.

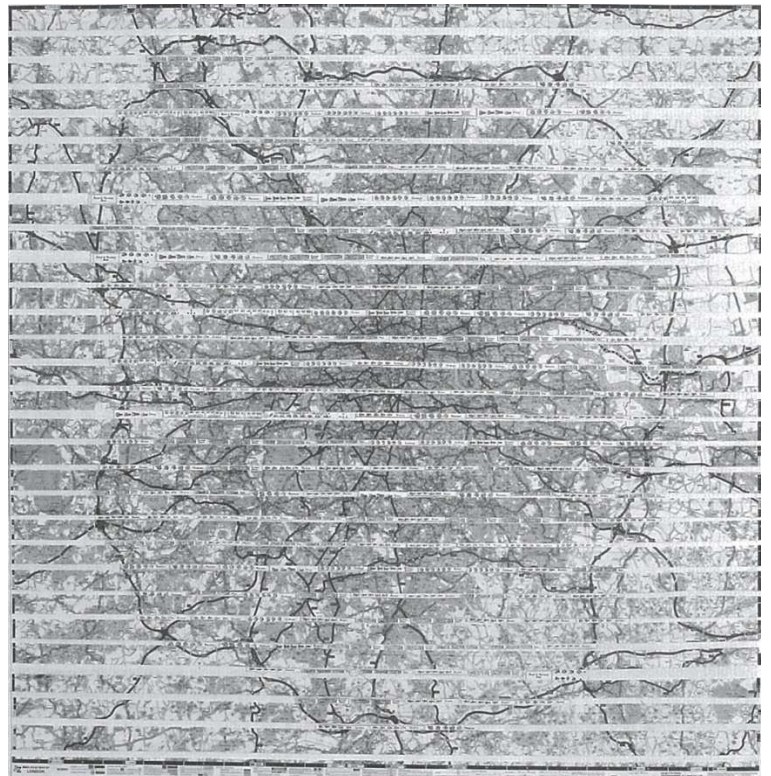


Figure 64. CPULS, early study for dispersing markets and agriculture throughout London.

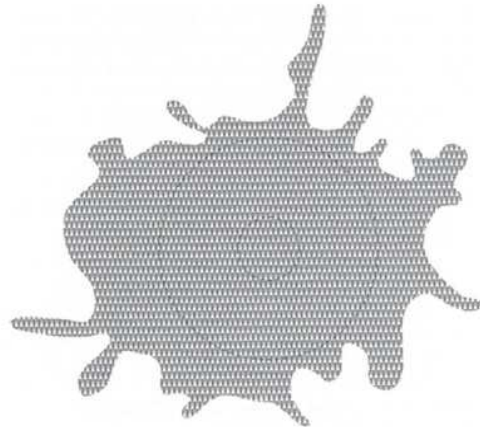


Figure 2.1

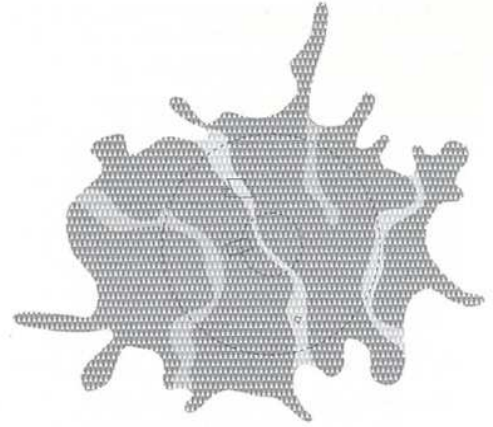


Figure 2.2

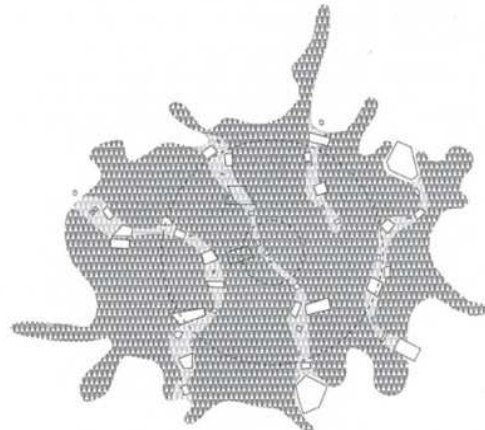


Figure 2.3

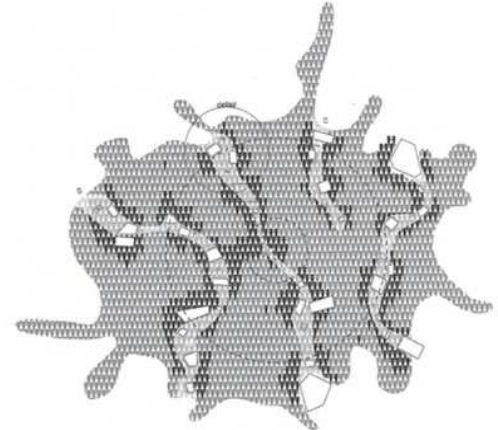


Figure 2.4

Figure 2.1 *An established city with no CPULs.*

Figure 2.2 *Identifying continuous landscapes.*

Figure 2.3 *Inserting productive urban landscapes.*

Figure 2.4 *Feeding the city.*

Figure 65. Stages of introducing CPULS into urban fabric.

5.5.2. Food City/Sustainable City

With half of the world's population now living in urban settlements, and with the world's population due to grow to 8 billion by 2025... sustainable urban management and development is one of the critical issues for the 21st century. National states cannot, on their own, centrally manage and control the complex, fast-moving, cities and towns of today and tomorrow – only strong decentralised local governments, in touch with and involving their citizens, and working in partnership with national governments, are in a position to do so.¹⁶⁴

The methods for promoting and creating a sustainably proactive city are widespread and variable in nature. As such, to address them here is beyond the scope of this thesis yet, a brief note regarding the food cycle and its relationship to the city should be made.

The most obvious concern is the way in which society treats the geography which grows the food cities consume. The maintenance of this valuable resource cannot be overstated, and its value is something which directly affects urban communities. In this way the city can no longer view itself as an autonomous system. Instead the notion that they make up a part of regional, national and even international geographical network needs to be promoted and solidified in how cities are built and how they relate to food production. To question this more specifically, logistical and social analysis must be done on a case by case basis addressing:

- Where a city's food comes from (how much does it rely on its local geography national geography, or international geography? What distances are involved?).
- How does it get to the city? (ship, plane, train, truck, van?)
- How is it distributed in the city?
- How does the public access these distribution points?
- The regularity in which urban dwellers buy food (shopping weekly? Daily? having it delivered?)
- The feasibility and implementation of urban and peri-urban agriculture, in both hi-tech (vertical farming) and low-tech (community gardens, allotments, roof-top gardening, etc) forms.

¹⁶⁴ Local Government Declaration, www.iclei.org/europe/ECHARTER.HTM. Quoted by Girardet, Herbert. pg. 7. *Cities People Planet: Urban Development and Climate Change* (2nd ed.). Published by John Wiley & Sons, Ltd, West Sussex, England, 2008.

- The management of food waste. Currently this is a highly underused resource which through infrastructural thinking could become a valuable resource to fertilise soil.

The questions vary according to scale. Some of them require international cooperation in finding the answers, some of them can be addressed by regional city governments and others can be addressed by local urban collectives as top-down or bottom-up initiatives. The latter of these certainly has the most appealing and perhaps positive effect when it comes to acting as citizens, the fact that as urban dwellers we can be the authors of our own destiny. Such empowerment is seen in community gardens like that in Fitzroy, Melbourne (fig. 66 & 67) where residents of the local Public Housing Estate struggled to afford the food offered by the surrounding area (which consists of trendy cafes and restaurants as well as a fairly expensive supermarket)¹⁶⁵. As such they supplemented their food supply with the community garden and established a local market in which to sell the produce at prices affordable for the residents. But several streets away stood another example of a resident looking to activate a local urban culture which could empower itself through growing food: a small planter box (fig. 68) exhibited growing vegetables with a notice asking if anyone else was interested to begin planting out the street.

Such examples are minute when measured against international concerns of food security, yet they take little time to enact, and their contributions can be measured visibly and directly in relationship to local urban collectives. The idea that food security initiatives and more sustainable practices are synonymous with a drive for civic renewal is perhaps the most powerful way in which we can consider implementing sustainable strategies in cities. When considering food distribution and the roles of supermarkets and urban markets, the availability of mass mobility to access these points is the most obvious link between civic renewal and resource sustainability.

The use of mass private transport is a wasteful and polluting practice, not to mention the negative impact it has on public settings. Yet to simply state these things doesn't do much to reduce its occurrence. Instead there needs to be material and spatial examples of public transit (either through being able to walk to gather food or taking public transport) supporting the quality of public space. It is the role of architectural and urban design to reveal how this can be done. This is how we can consider infrastructural urbanism: as a mechanism in which civic institutions can be aligned and related in ways

¹⁶⁵ Christensen, Peta & Neil, Ben. *Feeding the Cities – Case studies from Australia, Brazil, USA and Canada exploring the role of urban agriculture and rural family farms in community food security*. www.regional.org.au/au/apen/2006/refereed/2/2847_christenson.htm

which benefit managing resources sustainably; as well as improving the incidence of urban life.

Infrastructural architecture reveals processes of daily life in a bid to promote a greater understanding of how the city relates to phenomena beyond its own borders. The supermarket's abstraction and subsequent obscuring of the food cycle and its relationship with the city has created an atmosphere where food seems to magically appear. Milk no longer comes from a cow, it comes from the supermarket. Such an atmosphere makes the implementation of sustainable practices challenging due to the fact that parts of society cannot understand how they benefit us. This is a failure of urbanism in developing the inward looking and insular environment of the city. To steer the cities in directions of sustainable practice, these initiatives need public support. Food infrastructure can create an atmosphere which supplements a wider understanding of how natural geographies feed the city, and how without them cities would not exist. This, in turn, fosters the support to sustainably manage those geographies and the way in which cities are built. It is in representations of this sort where notions of identity, image and branding (as discussed in 3.3) play a role in the process of design of infrastructural architecture.

In this way, implementing sustainable practice is not just a logistical initiative but also a social one, which needs to permeate civic space and supplement the meaning of locus solus.



Figure 66. Community garden project established by residents of council flats in Fitzroy, Melbourne.



Figure 67. Community garden project established by residents of council flats in Fitzroy, Melbourne. Sign indicates advertises when market will be held to sell produce.



Figure 68. Box garden on street side, Fitzroy, Melbourne.

5.6. Conclusive Points

The city is what it eats. The symbiotic bond formed between the agrarian society's transformation of geography for farming and the subsequent build up of urban form supplies us with evidence of the city's reliance on natural geographies. Historical imagery of the city state should not be viewed romantically as a perfect urban world to which we must return in order to achieve harmony with our surroundings. Nor should we lament the passing of pre-industrial city models that connect directly to their adjacent productive geographies. These sit as contextual examples and catalysts which allow us to re-imagine what initiatives we might take to stabilise the food security of our cities. Furthermore, these contextual examples demonstrate and materialise the central role food has in shaping the built world. As a rudimentary element of human society food should take a central and civic place in the urban environment. It is a breeding site for the phenomena of civility.

The supermarket holds an important place in cities, but not a civic one. Richard Sennett's fear of the ever increasing inward looking society is embodied in the urban form of the supermarket.

There is an unprecedented control over the food cycle by major corporations in the food industry. The exponential growth in privatised motion (by the private motor vehicle), and an increasing invisibility of the food cycle have made a major impact; they have turned food trade, a formerly civic activity, into a consumer exercise.

In effect the supermarket is suffocating the urban integrity of cities and the grounds upon which citizens can gather. The degradation of public urban form encouraged by supermarket development is matched in proportion by the shirking of civic responsibility these big box typologies celebrate. The economic gains supermarkets are rewarded with through their occupation of important urban plots is reciprocated in no large way. Rather, they crowd out civic and moral virtues with the promise of economic development. An economic development which sacrifices a critical social dimension needed in food trade spaces and cities in general. Supermarkets take the kudos for bringing food to the city, whilst very little attention is given to the people who strive to grow the food that they supply. If we are to acknowledge Michael Sandel's argument for civic renewal then their behaviour as corporate citizens is laughable, as are the urban planning practices they implement. There is no joke in the damage they inflict on the city blocks they occupy, nor the alienation of pedestrians through promotion of private car usage. They stifle the notion of vibrant public space, both in their design and their promotion of the car as the primary means in which to access them. They are islands in the city, they sit apart.

As an urban typology supermarkets have distanced urban communities from the geographies which feed them, and inevitably impede a greater concern for how these environments are maintained.

Western cities have all but lost the civic space which supported multiple tiers of urban life: the urban market. A typology which promoted civility in the city and stood as the face of the city's interaction with the natural geographies which fed it. It is also a place where bottom up initiatives could occur, where urban collectives could give meaning and form to the urban public realm. Importantly, urban markets represented a dialogue between the logistics of feeding cities and the social practice of trading food.

This is not an argument to disband supermarket chains and return to urban market typologies as a primary means of food trade. Rather, it is a call for the reinstatement of food trade space as active infrastructure in the city. An urban typology, food trade infrastructure has a civic duty to cities.

As an infrastructural form it should relate to, and catalyse other services which are infrastructural to the city such as public transit, recreational space, and public institutions. As public infrastructure, food space should allow the authorship of bottom-up initiatives as well as top-down interventions to nurture urban collectives, ranging from the macro population of the city to micro communities. The layered nature of this infrastructure allows and accommodates the myriad practices of everyday life. A space where many activities can occur and become enfolded in to each other: it moves away from the hierarchal occupation of space to a more fluctuating mode of inhabitation. By all means, it may accommodate the big business of the supermarket, but in conjunction with the smaller (although just as important) practice of localised food trade from independent vendors.

The presence of food trade space as infrastructure represents and promotes the social and logistical need for sustainable practice in city development: it exposes the processes which are vital to maintaining cities. It represents a notion of a greater understanding of the regional geography we rely on, in so much that it supplies collectives with a place of local identity: a locus solus.

The security of food as a design problem must be addressed through multiple solutions. The call for urban and peri-urban agriculture may fulfil part of these. Inevitably urban collectives must consider the city as part of a greater natural geographical network, as well as considering its position and reliance on international trade. Food trade space as architectural infrastructure in the city exposes the processes which result from various food flows, rather than obscure them. To address the need for a greater public understanding of this problem

is to address the circumstances in which we trade our food. Such an understanding can only be promoted in civic forums: a sphere that all citizens have a stake in.

At this juncture in history, the life and death of the supermarket is a story which requires closer attention in architectural and urban design circles. Food trade space offers valuable initiatives for civic renewal when linked with sustainable practices in urban networks. To reinstate and invest in the value of food for initiating a greater quality of public life, food trade space and its architecture proves to be a rich sphere in which to begin.

To undervalue our food is to undervalue our quality of life, and is to miss a critical opportunity for civic renewal.

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