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Master of Architecture [Professional]

by

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to reveal, to make clear by gradual disclosure

how to un[fold] structural / compositinal / constructional principles at the level of affect in generating new spatiallities?
I know the meaning of plagiarism and declare that all the work in this document, apart from the work which is properly acknowledged, is my own.

Khalilo Motene

October 2010

Signed:
Acknowledgement

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Lastly, I would like to thank my family, here and abroad, for their support, and sincerely appreciate the fact that they were there for me, supportive and willing to do whatever necessary for me to get to this point.
This thesis investigates a link between food security and rural to urban migration in the city of Cape Town. Philippi as a Gateway to the City of Cape Town for many people migrating from rural South Africa, especially people from the Eastern Cape is therefore a natural site for the investigation.

The point of departure is that the city is defined in relation to the landscape (agriculture being the generator of this landscape). My observations are that when migrants come from rural settlement, where land is a primary source of food, through farming at household/community/commercial level, they abandon the embodied knowledge of how to produce a livelihood from the land as this knowledge is perceived to be of little value in the city.

The aim of this thesis is to propose an architecture that allows the spatial practice of the migrant, as it relates to food production, to become visible as a function of the city.
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Any meaningful work is built on a tradition. There is no sensible communication in human culture without reference to a tradition.

It is my belief that architecture needs to express the world, not somebody's aesthetic opinions. And in that sense, everything returns back to tradition and to what exists. And that also implies the vernacular reality which is by far the more dominant in the world than any architecture of today.
Introduction

This research stems from a personal interest in trying to understand how the legacy of apartheid spatial planning continues to influence everyday life for many in post-apartheid South Africa, particularly in the city of Cape Town. Following from our recent past represented by laws seeking to separate and divide, it has been a concern to me for some time now, how to begin to re-create our cities from being contested terrain of exclusivity characterized by competing cultural values to places of inclusivity that have the capacity to accommodate a range of varying livelihoods.

In this regard, I am drawn to Henri Lefebvre’s (Lefebvre 1991) ideas on space. These are namely:

Abstract space: This relates to the organisation of cities and to me, speaks first and foremost to the planning discipline.

Representational space: Imageability, this refers to how space is read as an image with meaning, by users. This idea of space is culturally specific and is located in a particular reading of the places’ history.

Spatial practice: This idea of space relates to how space is produced and used in particular societies. This category of space can also be read as social space. This speaks of everyday life and therefore real space as it is constituted materially.

Lefebvre’s ideas on space, often referred to as triad of space; most times serve as a useful conceptual framework within which to begin to analyses other prevailing ideas of space within the professional built environment disciplines. Within this theoretical framework, I have identified three such ideas, as they are relevant to the situation contemporary South African architectural discourse finds itself in, and also relate to my interest.
These other ideas are:

**Agricultural primacy | urban primacy:**

This idea begins to help generate thinking on how economies of prosperous cities have come to exist, and what the nature of the relationship between the city and its surrounding, centre and periphery ought to be in order to constitute a sustainable relationship. I have compared the traditionally accepted view as according to Paul Bairoch (Bairoch 1998); Micheal Pacione et al (Pacione 2001) against the non-orthodox point of view as put forward by Jane Jacobs (Jacobs 1968) to come to a determination that in modern society, city economies are a prerequisite in order for agricultural economies to develop. In the context of post apartheid South African cities, this finding has far reaching implications against the high rate of urbanization experienced in the post apartheid South African city.

Lefebvre's idea of abstract space serves as a useful concept at this point in understanding whether the post apartheid city, in this case Cape Town, has begun to accommodate the challenges arising from urbanization.

**Mapping:**

For me, James Comers' (Comer 1999) account of the agency of mapping as a way of working, serves as a precedent, when seeking to spatialise Lefebvre's triad of space. Essentially this process is an attempt to understand the existing condition through a representation of abstract space and spatial practice, taking into account seemingly unrelated factors, with the aim of representing previously unimagined spatialities and in doing so unfolding the potential of the place. This process of unfolding starts to give clues of possible program as well as siting.

**Continuous Productive Urban Landscapes:**

South African cities are experiencing high levels of urbanization, with large numbers moving from a surrounding rural environments. Therefore, it seems to me only natural to begin an architectural project that begins to take into account the spatial practice of the rural migrant, namely farming, and attempts to make it acceptable as an urban activity.

Lefebvre's idea of representational space is called upon here as continuous productive urban landscapes propose a kind of spatiality that is dominated and repressed through planning action (abstract space) in the South African city and as such not evidenced in the imageability of the city. This is yet another instance where spatial practice as an idea becomes important in negotiating a possible program.

In conclusion, the aim of this research as mentioned previously, is to find a way to unfold new spatialities in the post apartheid city, in this instance the city of Cape Town.
Introduction

Migrants coming from rural situations, where 'working the land' is traditionally a primary economic activity and a source of food (through farming whether it be at a household | community | commercial level), abandon the embodied knowledge related to the land as it is perceived to be of little value in the city. In locating themselves in the city, they are forced (in the main due to unfavourable economic circumstances) to dwell in the periphery of the city in places referred to as informal settlements. Furthermore, in the search for economic opportunities they often then seek work unfamiliar to what they already know. As a consequence they find themselves in a disadvantaged position, seldom capable of adapting and extending their socio-economic situation. They are at the margins of the fundamental transactions that both characterise and enable everyday life for the human being in a modern globalising world.
A sharp and powerful dichotomy between what is considered urban and what is rural has served to hide, from urban residents and professionals, the many interconnected activities that make up a "food system". The production of food is deemed "agricultural"; agriculture is assumed to only happen in rural areas and hence becomes a matter of rural policy, distinct and treated independently from urban policy and from urban problems.

Agriculture is being increasing abandonment (as a practice from the rural condition) arising in a situation where it becomes difficult to maintain the landscape in a natural way. This signifies the loss of the natural relationship between man and earth, which ultimately is what, configures our landscape.

This research seeks to advance the idea that a project for the periphery ought to be an urban project that maintains a balance between a city's peripheral growth and its central core. With the imminent and prevailing concerns over food security, the high urbanisation rate witnessed at the periphery of the city by people moving primarily from the rural (with its historic relationship with the city as a resource provider) to the urban (consumer) the spatial practices of the migrant can earn currency in the overall production of the city.
Proposition

To re-establish an interdependent relationship between the city centre and its periphery through the mitigating strategies around food security.
In an abandoned cement factory site in Philippi, a low-income housing settlement, recognized by the City as a future urban node, on the periphery of Cape Town.

A productive landscape which offers the urban poor an opportunity to become self-sufficient. The project seeks to address the issue of sustainable water systems.

Housing Production Exchange
Part I:
Peripheral Production | Central Consumption

South African Cities

South African cities, including Cape Town, are born of the kind of spatiality Lefebvre refers to as 'abstract space', or 'representations of space'. (Lefebvre 1991, 49) This signifies a geometric and homogeneous space of separation and power, built upon a dominance of the visual, of formal relations amongst objects organised on the basis of technical knowledge [See Figure 2]. This legacy has ensured the dominance of abstract space to the form of the modern city. Abstract space is exemplified by the homogenization and division involved in the capitalist commercialisation of land and the construction of alienating environments in which the possibilities for alternative spatialities are repressed.

The collapse of the artificial boundary that racially defined a society of 'two' cultures has made space for the flowering of a heterogeneous society. Sixteen years into democracy, this emerging tendency towards space for a heterogeneous society has begun to broaden the mix and extend the range of possibilities for dwelling in the 'new' South Africa. This 'newness' is predicated predominantly by the economic necessities of survival for those located in the periphery of the city. (Law 2005)

The question that arises is how in contemporary South African architecture can this heterogeneous space become evidenced in the form of post-apartheid Cape Town.
In seeking to shift the legacy of abstract space, Lefebvre suggests three strategies (Lefebvre 1991).

In the first instance Lefebvre suggests that we could consider exploiting what the 'contradictory' nature of abstract space, the material inconsistencies of the way in which cities are organised. (See Figure 2.) In the dialectic of centrality, for example, Lefebvre sees not simply as a contradiction in space but a contradiction of space. For me this contradiction signifies a domination of spatial practice from becoming imageable in its context. In many different historical contexts, Lefebvre suggests, the centre 'concentrates wealth, means of action, knowledge, information and culture' (Lefebvre 1991). The relation with the periphery, created through the assertion of dominance by the centre, is potentially explosive, potentially driven by a dialectical conflict, or potentially burst asunder as a consequence of pure opposition.

The other potential source of change follows from Lefebvre's concept of 'representational space'. Lefebvre describes representational space as a 'space as directly lived through its associated image and symbols, and hence the space of "inhabitants" and "users". This is the dominated - and hence passively experienced - space which the imagination seeks to change and appropriate'. (Lefebvre 1991, 41) In representational space we find a spatiality which draws on cultural and historical resources, the possibility and memory of ways of living in space other than those dictated by the dominant order, designated as representations of space. Furthermore alongside representational space Lefebvre describes another kind of space which he calls spatial practice (how space is produced and used in particular societies). This I see yet as a possible strategy in the aim to address the dominant abstract space.

The third strategy called upon by Lefebvre what he defines as spatial practice. Here Lefebvre brings into view the body and the unconscious to signify the possibility of space beyond the dominant, abstract space. The body is drawn upon as it is a lived, sensual realm. The body is potentially disruptive of the visually based ordering which underpins abstract space. The unconscious, on the other hand, signifies this possible other space because it is produced, like the individual unconscious. Through the denial of domination (by the ego; by rational space), affectivity along with the sensual realm, cannot accede to abstract space and so informs no symbolism. (Lefebvre 1991, 51)

Conclusion

In the search for potentially new spatialities, Lefebvre identifies three possible strategies to consider. Firstly Lefebvre points to the subversion of the agency of abstract space through the inherent 'contradictions of space' the practice represents. Alternatively, Lefebvre puts it to us that there is representational space which suggests a way of working that acknowledges inhabitants of a space as well as their reading of that space together with cultural and historical readings of that space. Furthermore, Lefebvre presents an emergent agency of spatial practice. This strategy concerns itself with the body and the unconscious, as they represent real space which is otherwise dominated by abstract space.

Idea to take forward

Lefebvre's analysis of the triad of space leaves one with the impression that the three spaces strategies can operate independently, that is to say one can choose to use representational space strategy over spatial practice and so on, and at same level of hierarchy. In locating Lefebvre's theory in architecture, one has to bear in mind the instrumentalities of the wider profession of the built environment. A hierarchy needs to be in place for the triad of space to be useful outside theoretical discourse.

Therefore, in seeking to challenge the dominant practice of abstract space over representational space and spatial practice, it is imperative to understand that space is not a thing in itself, i.e. autonomous, independent of economic, social and natural forces, but that the production of potentially new spatialities is social located and produced. It is based it my contention that as an architect, spatial practice should inform the 'contradiction in space' inherent in abstract space as well as representational space. This comes out of conviction that lived space is socially produced, and as such it takes primacy over the other two types of space.
Urban | Rural | Agriculture

Agricultural Primacy

The dominating theory on the establishment of cities holds that cities first formed after the Neolithic revolution. In his book *Cities and Economic Development*, Paul Bairoch takes up a position in his argument that agricultural activity appears necessary before true cities can form. The Neolithic revolution, he points out, brought about agriculture, which made denser human populations possible, thereby supporting city development (Bairoch 1998, 3-4). Furthermore, he asserts that the advent of farming encouraged hunter-gatherers to abandon nomadic lifestyles and to choose to settle near others who lived by agricultural production. The increased population density encouraged by farming and the increased output of food per unit of land, created conditions that seem more suitable for city-like activities.

According to Vere Gordon Childe, for a settlement to qualify as a city, it must have enough surpluses of raw materials to support trade (Pacione 2001, 18). Bairoch points out that, due to sparse population densities that would have persisted in pre-Neolithic, hunter-gatherer societies, the amount of land that would be required to produce enough food for subsistence and trade for a large population would make it impossible to control the flow of trade.

To illustrate this point, Bairoch offers an example: "Western Europe during the pre-Neolithic, [where] the density must have been less than 0.1 person per square kilometer" (Bairoch 1998, 13). Using this population density as a base for calculation, and designating 10% of food towards surplus for trade and assuming that there is no farming taking place among the city dwellers, he calculates that "in order to maintain a city with a population of 1,000, and without taking the cost of transportation into account, an area of 100,000 square kilometers would have been required. When the cost of transportation is taken into account, the figure rises to 200,000 square kilometers."
Urban Primacy

In her book *The Economy of Cities*, Jane Jacobs makes the controversial claim that city-formation preceded the birth of agriculture. Jacobs does not lend her theory to any strict definition of a city, but her account suggestively contrasts what could only be thought of as primitive city-like activity to the activity occurring in neighbouring hunter-gatherer settlements.

To argue this view, Jacobs suggests a fictitious scenario where a valued natural resource leads to primitive economic activity—in her example, the resource is obsidian. The stock of obsidian is controlled and traded with neighbouring hunting groups. Hunters who do not control the stock travel great distances to barter what they have, valuing obsidian because it "makes the sharpest tools to be had" (Jacobs 1968, 23). This activity brings more people to the centre as jobs are created and goods are being traded. Among the goods traded are seeds of all different sorts, stored in unprecedented combinations.

In various ways, some accidental, the seeds are sown, and the variation in yields is observed more readily than they would be in the wild. The seeds that yield the most grain are noticed and trading them begins to occur within the city. Owing to this local dealing, the city dwellers find that their grain yields are the best, and for the first time make deliberate and conscious selection. The choices made now are purposeful, and they are made among various strains of already cultivated crosses, and their crosses, mutants and hybrids (Jacobs 1968, 23).

Conclusion

Bairoch et al in their thesis about city formation, put forward the notion that agricultural activity necessarily need to be at an advanced stage yielding a great surplus, so as to support human activity. This argument puts agricultural economies as a prerequisite for cities to emerge. In her research on developing a theory of city economic growth, Jane Jacobs counters this argument as she uncovers an unsettling observation which posits that rural economies, including agricultural work, are directly built upon city economies and city work (Jacobs 1968, 3).

One school of thought in support of Bairoch's idea, holds that cities evolved slowly, but directly, out of villages that were at first simple agricultural units but gradually grew both larger and more complex. Another school holds that cities were organized by non-agricultural warriors who put peasants to work for them, in return protecting the peasants from warriors. In either version, the food produced by agricultural work and workers is presumed to have been an indispensable foundation for cities.

This sequence – first agricultural villages, then town, then cities – ostensibly explains only the first cities, as argued by Jacobs. But this assumption has affected ideas of what cities are and what may be their place in the economic scheme of things now, as well as historically. If it is true that cities could not have been developed before agricultural settlements appeared, then it follows also that cities would differ from lesser settlements primarily by being bigger and more complicated, or by being the seats of power.

Jacobs makes a convincing argument, in the main that cities have long been acknowledged as primary organs of cultural development; that is to say, of the vast and intricate collections of ideas and institutions called civilization. They are also primary economic organs. To elaborate on this, she touches upon modern and historical relationships between city and rural work; then speculates what those relationships must have been in prehistoric times; and finally suggests why the conventional and contrary theory took hold.

Idea to take forward

Jacobs's observation which posits that rural economies, including agricultural work, are directly built upon city economies and city work gives a firm backing to my research. The evidence she puts forward, although of an anecdotal nature, seems to me to be more plausible as compared to the thesis put forward by Bairoch et al.
Mapping

In his seminal text, James Corner (Corner 1999, 213) puts forward a compelling argument for the agency of mapping, as it is instrumental in the construing and constructing of lived space.

He describes the function of mapping as less to mirror reality but rather as an active process which seeks to engender the reshaping of the world in which people live. In a sense, the agency of mapping has the potential to emancipate potentials, enrich experience and diversify worlds, as it seeks to uncover realities previously unseen, or unimagined. The capacity to reformulate what exists is the main aim of mapping, thus mapping unfolds potential (Corner, 1999: 215).

Figure 7: Revealing to unfold the nature of site.

Longhouse Cave, Mesa Verde, Colorado
(Corner, 2005)
Conclusion

Through rendering visible multiple and sometimes disparate field conditions, mapping allows for an understanding of terrain as only the surface expression of a complex and dynamic imbroglio of social and natural processes. In visualizing these interrelationships and interactions, mapping itself participates in any future unfolding.

Idea to take forward

For me, James Comers’ (Corner 1999) account of the agency of mapping as a way of working, serves as a precedent, when seeking to spatialise Lefebvre’s triad of space. Essentially this process is an attempts to understand the existing condition through a representation of abstract space and spatial practice, taking into account seemingly unrelated factors, with the aim of representing previously unimagined spatialities and in doing so unfolding the potential of the place. This process of unfolding starts to give clues of possible program as well as siting.
Continuous Productive Urban Landscapes (CPULs) (Viljoen 2005) as presented by Andre Viljoen in his book of the same name are about urban food growing and local consumption. They include livestock, but consist largely of vegetation which is locally managed: mainly organic vegetables, fruit and trees, planted in rows, planted in groups, fields, patches, etc. Vegetation is chosen for its inherent extractable energy (i.e. it can be eaten) or its material quality (i.e. it can be worn), then grown, harvested, traded and consumed. The main production is carried out by local occupants who rent the land and work it commercially within an individually defined local framework.
Why CPULs?

Producing food where one wants to eat it, or consuming food where it has just grown, establishes a healthy and sustainable balance of production and consumption. It is an effective and practical, but at the same time self-beneficial way of reducing the energy embodied in contemporary Western food production.

This reduction of embodied energy is crucial for several reasons. The energy - mainly non-renewable – currently used for conventional food production, for example in Europe, exceeds by far the energy received in return from consuming the produced food. The unlimited, daily usage of non-renewable energy contributes significantly to global resource depletion and, through greenhouse gas emissions, to global warming.

One might argue that concentrating on the energy consumed by current remote food production does not allow for the future development of environmentally clean energy technologies. Viljoen points out that firstly, such a position fails to recognise that the inequitable distribution and consumption of resources extends beyond energy usage, i.e. to raw materials, desirable land, water and food. Reducing the energy requirements of goods and processes shrinks the divide between those who have access to abundant energy supplies and those who do not, without limiting the availability of final products.

CPULs according to Viljoen can also be sociologically productive: as their urban concept involves, amongst others, cultural, educational and leisure activities, shopping habits or diet and health concerns. Last but not least, they will be economically productive, provoking new strategic socio-economic thinking and changing local employment and product-cash flow. CPULs will provide a completely different concept for the use of the city.

Where will CPULs be?

According The emphasis of CPULs on connection and movement, on uninterrupted routes between local urban centres, will influence their layout and positioning. Whilst they will hold areas sufficiently sized for many activities, there will be other parts which will mainly provide continuous and direct urban connections. Both of these CPUL types will draw from well-established, existing or newly reclaimed open urban space. According to Viljoen, an extensive network of CPULs could be imagined as a contemporary city with every other road given over to farming, leisure, and pedestrian and cycling routes (in addition to occasional and emergency vehicular traffic) thereby connecting larger existing and new open spaces of any size and designation. It could look like Venice with the canals transformed to become fields.

However, reclaiming and recycling those areas poses two problems: the proposed sites could be toxic and their current mono-use activities would have to be accommodated somewhere else, either by redesigning or relocation. Successful attempts to do this have taken place in various countries, mainly in connection with the necessary repair of existing urban tissue.

Conclusion

Cities that decide to support this concept of organic local farming, trading and seasonal consumption will never be fully self-sufficient in food production. They will still be required to bring food into the city from the hinterland, but less of it and in a more focused, need oriented way.

Furthermore, CPULs will not solely concentrate on addressing embodied energy in the first place. They will be environmentally productive dealing not only with local food, but also with issues such as greenhouse gas (CO₂) reduction, improving air quality and humidity, noise filtering and biodiversity.

Ideas to take forward

South African cities are experiencing high levels of urbanization, with large numbers moving from a surrounding rural environments. Therefore, it seems to me only natural to begin an architectural project that begins to take into account the spatial practice of the rural migrant, namely farming, and attempts to make it acceptable as an urban activity.

Lefebvre's idea of representational space is called upon here as continuous productive urban landscapes propose a kind of spatiality that is dominated and repressed through planning action (abstract space) in the South African city and as such not evidenced in the imageability of the city. This is yet another instance where spatial practice as an idea becomes important in negotiating a possible program.

In conclusion, the aim of this research as mentioned previously, is to find a way to unfold new spatialities in the post apartheid city, in this instance the city of Cape Town.
I am convinced that if we as architects are to begin to re-create our cities from being contested terrains of exclusivity characterized by competing cultural values to places of inclusivity that have the capacity to accommodate a range of varying livelihoods, we have to come to terms with the form of the city as it today.

Furthermore, we ought to look for solutions within our situation. Here we are reminded of Lefebvre as he sees as one possible strategy of new spatialities, the 'contradiction in space' of abstract space.

In seeking to challenge the dominant practice of abstract space over representational space and spatial practice, it is imperative to understand that space is not a thing in itself, i.e. autonomous, independent of economic, social and natural forces, but that the production of potentially new spatialities is social located and produced. It is my contention that as an architect, spatial practice should inform the 'contradiction in space' inherent in abstract space as well as representational space. This comes out of conviction that lived space is socially produced, and as such it takes primacy over the other two types of spaces.

Food is it a cross cutting issue, can begin to bring our post apartheid South African cities out of its alienating constructs and provide a bases for new spatialities. New not in the sense that this does not exist else, new in the sense that South African cities should begin to accommodate the hopes and dreams of all who live in them.
Introduction

The contemporary understanding of the term architect comes about largely as an invention of the Italian Renaissance. Since that period, the architect and the architectural drawing are thought to be twins. Interdependent, they are representative of the same idea— that architecture results not from the accumulated knowledge of a team of anonymous craftspeople working together on a construction site, but is the artistic creation of an individual architect in command of drawing who designs a building as a whole, removed from the construction process. From the 15th century to the 21st, the architect has made drawings, models, and texts—not buildings.

Hegel believed that architecture, more than any other visual art, 'whether because of its content or its representation, is, by its nature, intrinsically symbolic.' He asserts that: 'the first, original requirement of art is that an idea, a thought born from the spirit, be produced by man as his work and set in motion by him, just as in language it is the idea as such that man communicates and renders understandable to other. Art must not only use pure signs, but also give to the signified a corresponding tangible presence. In other words, architecture as art must be an image that is understandable in its context.

Issue

In the digital age of advanced technological processes, it increasingly difficult to construct architecture that is responsive to context.

Proposition

An architecture that seeks inflection through the sketch.

Figure 12: Initial sketches of design
Figure 3.2: The sketch demonstrates...

Interior view of the courtyard...
Architectural Sketch

Mark Hewitt asserts that it is a paradox of modern architecture that, in an age dominated by rationalist theory, the sketch has become a legitimate means of expressing complete architectural concepts (Hewitt, 1989: 163). The concept sketch, encapsulating many of the formal, theoretical and phenomenological aspects of a design in a single stroke, now occupies an important place in the canon of architectural representation. The sketch is fresher, more vivid, and more personal than the mechanistically produced presentation drawing. In a sense, this seemingly informal and irrational drawing type can be proof of the clarity and objectivity of method which has been a hallmark of twentieth-century theory. And, as important, the sketch can express the romantic, avant-garde gesture of creative individualism that nearly all contemporary artists cultivate. The architectural sketch can therefore be a site for inflection.

Conclusion

With the advent of abstract, gestalt conceptualization fostered by the Bauhaus system, and the avant-garde linkage between abstract art and architecture, the idealized first sketch took on greater significance - somehow closer to the pure idea behind a design. Architects make idea sketches in order to facilitate thinking. Especially in the earliest stages of design, when mental images and vague intuitions of a concept are all that inhabit the imagination, the sketch is the limbus test and first manifestation of an idea. A set of crude, incomplete and imperfectly formed drawings can aid in the crystallization of a formal concept.

Ideas to take forward
The sketch is significant in architectural representation as it is a cogent way to capture elusive intuitive concepts that occupies the imagination. These concepts can then be clarified and begin to form a coherent architectural concept.

My understanding is that the sketch can bring into reality the unconscious, that is to say the sketch can lead to the production of the imagination. Here I am reminded of Lefebvre when he talks about the potential in representational space strategy to bring about new spatialities.

It follows then that the act of making an architectural sketch is a useful tool in seeking new spatialities.
Building the Site

The act of building, like agriculture, tends to be a somewhat anachronistic procedure, one that by standards of techno-science cannot be truly regarded as being "high-tech" (Frampton, Spector and Lynne 1998, 13). We need look no further than to the typical foundation in order to have proof of this. I am alluding to the tangled mass of mud, rock, and pre-existing pipes, etc., that even today is still the prelude to almost every building operation. It is precisely this schism between wet and dry construction, together with the split between craft-practice and industrial technique that compels one to acknowledge the hybrid character of building. Within this mixed activity, it is possible to apply various levels of production to different parts of a given work, not only for reasons of economy and efficiency but also for the realization of certain expressive values.

Technological maximization as an end in itself is categorically opposed to the expressive potential of the consciously hybrid approach, since the latter yields a range of forms that are more open to inflection. The very opposite of this mediatory attitude is made evident by the maximization of technique. Frampton illustrates this point by referring to the optimization of air-conditioning in hot-dry climates where protection from the sun has been traditionally provided by thick walls, overhangs, and cross-ventilation, of late by the provision of brise soleil and by the possibility of opening and closing windows and shutters at will (Frampton, Spector and Lynne 1998). The capacity to open a structure to natural ventilation is equally crucial in temperate climates. Similar observations may be applied to the traditional roof and its capacity to shield a building from the inclement weather. Moreover, all such responsive elements can be said to be automatically expressive of the climate and hence of the place in which the structure happens to be situated.

Figure 19: Initial site plan sketch, reveals the potential spatiality of the place.
From this it follows that technological maximization as such is often antithetical to the creation and maintenance of the place form. As against such maximizing techniques, often applied for economic or ideological reasons, we may posit the judicious application of technology to the real issues confronting society. The challenge as presented by Frampton, is to maintain cultural quality in an epoch largely devoted to the instrumentalization of quantity (Frampton, Spector and Lynne 1998).

Conclusion

Technological maximization, irrespective of whether it is bureaucratically enforced or ideologically adopted, also has the tendency to reduce the creation of built-form to the production of freestanding objects, whether the object in question is merely a technological instrument or the occasion for a spectacular aesthetic display. Against this, we may posit the critical strategy of the place-form, the ecological obligation that each new structure be inscribed into its site in such a way as to permit the creation of an articulated earthwork. Thus Mario Botta's slogan “building the site” means to engender a condition in which it is all but impossible to discern where the ground ends and the building begins. Hence the critical import of the tectonic and the topographical value in the development of the built form, or to put it more directly, the protective value of the roofwork and the sustaining value of the earthwork.
This evocation of the earthwork returns us to the issue of global urbanization and to the fact that the reintegration of land-form into built fabric is crucial today if we are to be able to mediate in any way the consequences of megalopolitan development. Aside from the application of minimum standards, as these are essential to the regulation of highway construction and suburban zoning, regional urbanization over past sixty years has shown little regard for the cultural and ecological impact that scattered suburban settlement has had on the overall character of the landscape. This impact has been felt on land that, within living memory, was almost exclusively devoted to agriculture or forestry. It is desirable that every architectural commission be conceived as a potential place-form, or that, where necessary, the work should create its own micro-environment context. In this sense, the art of landscape is absolutely critical. At the same time one must remain open to the use of advanced technique, particularly where judiciously applied and inflected so as to create a culturally significant work.
Concluding Thoughts

What I take from this reading of representation is that when conceptualizing, the architect must navigate quite quickly through many issues. Many times these issues can be contradictory. The sketch can be instrumental in mediating this situation.

Furthermore, while architecture is not immune to change in the technological sphere, it is important to remind ourselves that there is no substitution for the ground when it comes to foundations. By this I mean to say that architecture is not a 'high-tech' pursuit, but rather hybrid. This is most pertinent in a developmental state that South Africa is.

When seeking novelty, I would argue the architect should rather concentrate his efforts on the existing condition. It is through the engagement with the site, that the architect can uncover potentially new spatialities.
Part III: Synthesis

Urban Re-vision: Philipp Market Space

Figure 22: The library courtyard space as seen from the stepped ramp towards the top of the deck.
Abalimi

Abalimi is a Non-Profit Organisation which works to empower the disadvantaged through urban agriculture and environmental programs and projects. It operates in the socially and economically neglected townships of Khayelitsha, Nyanga and the surrounding areas on the Cape Flats near Cape Town. Abalimi means "the Planters" in Xhosa, which is the home language of the community Abalimi assists.

Through Abalimi's experience, it can be seen that organic group gardening facilitates community building, and helps the personal growth and self esteem of individuals. Once produce has been harvested, approximately 50% gets packaged and sold on consignment through a project called Harvest of Hope, which has been set up in partnership with the South African Institute of Entrepreneurship (SAIE) and the Business Place Philippi, funded by the Pick 'n Pay Foundation and located at the node of Philippi. The other 50% is consumed by the farmers, sold locally or given to sick or poor people in their neighbourhoods.

Harvest of Hope was established to find and secure long term external markets for the farmers. The farmers provide produce such as carrots, lettuce, tomatoes, potatoes and much more. By 2009/2010, there will be between 150-200 farmers in about 20 community gardens producing 600 boxes per week and earning up to R2000 or even R3000/month each. Over the last 25 years since its establishment in 1982, Abalimi has helped the community to initiate and maintain the growing of many thousands of organic vegetable gardens.
Haverst for Hope

Boxes of freshly packed vegetables grown with love and care to the highest organic standards in the food gardens of Cape Town's townships. 25 years ago Aballini Bezekheya planted a seed of hope. That seed grew into abundance, the abundance overflowed into a harvest of plenty, the overflow became 'Harvest of Hope', where the goodness can reach the homes of many more.

Aballini is based primarily in township communities like Nyanga and Khayelitsha, where they encourage self sustainability and teach them to grow their own vegetables to feed their families. Organic vegetables are now grown in hundreds of gardens in the townships to sustain the communities. Aballini works at any one time with over 50 community and institutional gardens and hundreds of home gardens.

There is more than enough to feed the families and a growing excess which is sold locally or given away. Growers have little access to outside markets to sell their high quality produce. Harvest of Hope has provided a new market for excess produce. By collecting from all the various gardens involved, making up extraordinary vegetable boxes and taking them to schools where parents collect them for their homes.

There is a need for these structures to be realised in the wider community. At present, they are detached. This has resulted in some problems, such as theft and a general lack of awareness by the surrounding community to the benefits of this activity.
The Old Cement Factory Site

The Old Cement Factory site has been transformed into the Philippi Shopping Centre – a vibrant and relatively secure retail and services precinct. A magistrate court has also been located there by the improvement of one of the old buildings. The department of Agriculture has an office here as well. There is still 11 hectares of vacant land, which have been purchased by Investec’s social responsibility programme to create a "business place" and, in partnership with British American Tobacco, Abalimi Bezekhaya and the Sustainability Institute to also create a sustainable residential development using alternative building materials, energy sources and water systems.
The first level of differentiation: five squares superimposed on a non-differentiated grid. The position of the square, as well as the crossover, create hierarchical levels of location importance.

The fracturing of the grid makes the interstitial space one of great potential.

Figure 28: Urban Concept
Interstitial space where two grids fracture

Connections within the broader site

Interstitial space where two grids fracture intersected by movement further differentiates the important location

Potential other nodes could be located within the three areas
Figure 29: Architectural Concept

Application | Philippi Market Space
Bibliography


Wetton - Landowrne Corridor. (1997). The Spatial Plan for the Corridor


Endnotes

1 In the opening chapters [Part one especially] by his own admission, Bairoch puts forward loose hypotheses that do not say anything conclusive. He expects the reader trust that he is an authority at the subject at hand.

2 For a further reading into these ideas read (Evans, Translations from Drawing to Building and Other Essays 1997). This to me signifies the extension of the “Site” beyond the physical limit of the proposed artefact, into the drawing.
Appendix

The following is a work produced, initially as part of UCT’s School of Architecture and Planning, vertical studio. The work was subsequently commissioned for the AZA 2010 Moving Space Student Films Competition.

The film, named Timmy, is about a character through which we are able to suspend disbelief and activate the imagination in an exploration of scale and contestations in the city. Both physically and subconsciously, he highlights aspects of the city, form a tall skyscraper to a small cobblestone, and takes us from feelings of sorrow to those of joy.

Through Timmy, we begin to re-read the spaces around us and notice potential for new spatialities, those that appeal to our sensibilities, our human condition and our everyday encounters.

As a conceptual narrative, Timmy serves to inspire a paradigm shift in how we live and dwell in our cities. If we are to change the world we live in, change has to happen in our minds first as opposed to strategies of social engineering.

Timmy does not seek to discard or destroy the contemporary form of the city; he merely wants to add another layer as in a palimpsest.

**Synopsis**

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Timmy tries to play

Timmy is a body through which we explore scale and allows us see the city through his eyes, from his perspective, a new viewpoint. He allows us to observe things that one wouldn't usually be aware of. Timmy shows the negative and the positive aspects of the city through his contact and interaction with people and spaces. Through the public’s response to new situations and ‘people’, Timmy’s near accident with the motorcar we see the impact the car has on the city. Timmy’s mood changes when he is engaging in the public spaces of the city. We learn that it is in the small interactions with people and situations that Timmy finds happiness and joy. Timmy forces us to look more harshly, to see the flaws and potential of our city.
Motivation / Concept

The film 'The City' is based on an attempt to (re)read the contemporary South African city and to (re)design the existing spatialities. We see the Moving Space short film competition as an opportunity to engage with the issue of how to (re)create the city through the medium of film, using a conceptual narrative. The contemporary spatialities of the city are being contested by different competing cultural values that are involved in the transformation of the apartheid's legacy of homogeneity and inequality. The City of Cape Town provides a setting as it is our base, it also has similar beginnings to all other South African Cities.

In Lefebvre we find an ally with a theoretical idea of [re]presentation space [space as directly lived] which has strong resonance with our (re)search as it holds great potential in generating new spatialities, different to what he refers to as 'abstract space', or 'representations of space'. The latter signify a geometric and homogeneous space of separation and power, built upon a dominance of the visual, of formal relations amongst objects organised on the basis of technical knowledge.

As Lefebvre seeks to determine the source of potentially new spatialities, the body and the unconscious come into view to signify the possibility of space beyond the dominant, abstract space. He draws upon the body as it is lived, sensual realm beyond and potentially disruptive of the visually based orderings which underpin abstract, or conceived space. The unconscious also signifies this possible other space because it is produced, like the individual unconscious.

This idea of (re)presentation space invites a fairly promising tale about how we might imagine space changing. Every time we move around in the city we potentially use spaces differently, imagine them differently. Walking down the street, differently. Walking past another person, next to me, then far away. Walking past and not seeing. Walking past and seeing. Walking past and hiding inside. Walking past and smiling. Stopping in the street. Not walking. Driving...

Dreaming.

For visual treatment please see film on link below

http://www.youtube.com/watch?v=3MLL18PNEn4