Naomi Panter
Eamonn Kelly, *Briain*
Moriarty, *Silvia*
Zheleva, *James*
O'Donovan,
Sinéad MacMahon,
Ben Mullen, *Diarmuid*
O'Sullivan, *Clare* Reidy,
Michael McLaughlin,
Ian MacDonald,
Eugene
O'Callaghan, *Gerard*
Walsh

A compilation
of His-
tory & Theory
dissertations
by Third Year
Students
from
SAUL
School of
Architecture
University of Limerick
Volume 2
the SAUL press 2009

A compilation
of His-
tory & Theory
dissertations
by Third Year
Students
from
SAUL
School of
Architecture
University of Limerick
Volume 2
the SAUL press 2009

Internal

Architecture of the Self and The Within
Naomi Panter

Introduction

From the moment one becomes conscious of space, one becomes conscious of self. It is instinctual to measure the world in respect to the body but from the point where one begins to consciously study the world architecturally or philosophically, our senses become honed to the relationship between the greater world at or above the scale of the individual, a relationship which Gaston Bachelard describes as 'Intimate Immensity.' (1994) The world/environment we inhabit directly affects us. Like a nest it is something which sustains us. Bachelard discusses the nest as something we are adhered to which is free from human quality yet something which plays a role in our identity and we in turn become part of the identity of our environment. When speaking about the bombed houses of Parliament and the importance of democratic institutions in 1944, Winston Churchill suggested that, 'we shape or buildings and afterward our buildings shape us.' There are few things that we personally associate as necessary in a desirable space. These include opportunities for shelter, security, comfort and growth but we must consider that as individuals we truly give meaning to things through a common understanding of actions, language and a symbolic language etc. I believe this 'symbolic interactionism' (Mead, 1934) can give key clues as to how to design for the needs of the individual in architecture.

I see this dissertation as a slice of a longer progressive study, a snapshot of my personal thought process with regard to the relationship between architecture and a greater context and architecture and the individual. The dissertation is divided into two main parts but I hope that the progression from one to the other is clear. The dissertation begins with thoughts on how larger factors can influence the way we function and how this can manifest itself in architecture, particularly by turning ones back to it and focusing on an inner tailored environment. I have then discussed how people may react to unsatisfactory conditions by altering their immediate environment or forcing a change on a larger scale. This has prompted me to think about how successful ideas/changes are usually prompted by the action of the individual, for example with the events of Mai '68. While the revolution is viewed by some as a failure, the effects of the uprising reverberated around the world. It was a protest driven by the actions of the singular people who fought/made themselves known on the streets.

The achievements of the collective are usually a massing of individual effort. For this reason I have begun to consider the public realm in the second part of my study as something to be inhabited by the individual (en masse) rather than a clouded image of the collective. A study of the notion of body and self is necessary to understand this while I have also considered the sociological discourse which is raging at present regarding providing a built environment suitable for inhabitation of the crowd and the individual. When considering the notion of self etc on a philosophical/sociological level, it is important to remember that this dissertation is driven by a great desire to benefit my own work and understanding of design and for this reason each section throughout is completed with a main case study which anchors my research strongly to architecture. My choice of case study in each case is one which is personal but I feel suitable as references for my argument.

Turning Inwards

One. Turning Inwards.

'The well being I feel, seated in front of my fire, while bad weather rages out-of-doors, is entirely animal.' (Vlaminck, 1931)

To turn inward is an instinct, an expression derived from an awareness of self. While we can try to trace any architectural style or detail through an age as a sort of benign timeline, it has become obvious to me that to seek an inner world is as primitive as to speak, to draw, to sing. It is understood that we all turn inward for many reasons; some seek solitude while others shelter in the intimacy of the nest to escape loneliness. The architecture of looking inward can be derived from a need for defence, a need to create a specific environment but overall it is a general sense that we are seeking, a desire to live on one's own terms, to shape the circumstances of one's world, however local your focus may be. As a race we have a primitive desire for shelter and comfort. Our desires largely begin with the idea of home and self. It has become clear that comfort is largely derived from the familiar. In 'Eccentric Spaces,' (2000) when discussing the character of Sherlock Holmes, Robert Harbison comments on how the excitement of his various adventures is derived from his first instinct to seek accommodation in the beginning of each story and the variety of spatial experiences this offers yet also recognises that Holmes is tied to the intimacy of the familial, his domestic surroundings. 'He never tries to banish intimacy, only to keep from knowing that without it he would die.' (Harbison, 2000)

Increasingly, architects are becoming aware of the tendency of the profession to abandon the interior to the interior architect I feel this is an issue worthy of much discussion but what I am personally more interested in is the refined spatial understanding and psychological nature of architecture that turns inward itself. I wish to develop a deeper understanding this architectural type/gesture which is hugely driven by a tertiary factor, a space shaped as a direct reaction to a social, physical spiritual or environmental force. This is not a discussion on the philosophy of the dwelling. There are also deeper questions to be discussed in relation to form where the idea of form following function becomes less important and new ways of thinking are introduced. I have selected a number of building types/architectural examples which I feel contribute to this discussion and ask interesting questions. Any order is derived from a timeline and not the development of a 'type' as I have discussed above.

Buckminster Fuller is most noted for his passionate discourse of his belief in the role he could play as an individual. He focused his study on improving the condition of the world and fighting huge dilemmas regarding poverty, disease etc from which his most notable project type, the geodesic dome was created. His spherical shell structures were designed for many purposes by especially to envelop vast areas to create single communal environments. The domes were envisioned as covering huge portions of cities and small examples were built including the famous dome in

Montreal. The focus on creating these common inner spaces is interesting as while the shell provides both a physical boundary and a very definate symbolic link, the idea seems far more tangible that the idea of community. This is discussed further later in the dissertation. I would like to suggest that there is a direct and fascinating link between this early futurist work and contempory projects like the BMW Central Plant in Leipzig designed by Zaha Hadid. (2002)

Even as an overtly formalist architect, the building is still strongly shaped around the function within. The building is one which is keenly planned to encourage the workers to socialise but what is most fascinating in the project is the link that Hadid makes between the Blue collar and white collar workers. Both work symbolically in tandom, The assembly line runs through the administration sectors in the building. Half finished cars move at a constant stream overhead and not only is the desk worker in contact with the product or essence of the company but if the assembly line slows or stops, everyone is immediately aware of a change in productivity or an emergency etc. It is a beautifully simple example of the 'symbolic interactionism' that I discussed above. There is an inner focus in the building. People don't look to the windows; they look to the cars as a means of understanding how successfully their company is progressing. The building is imposing in form but simple in essence. The formal desires of the architect seem to spring from rather than inhibit the function and place of the individual with the building.

Fig 2 & 3

Chapter Face Image. *Aerial View of The White U, Toyo Ito. showing its distinctive U shape and lack of openings to the outside.*

Fig 2 *Providing all one needs in an inner environment. Reyner Banham, Environment Bubble, 1969.*

Fig 3 *BMW Central Plant in Leipzig (2002) All departments are linked by common visual interaction with the half finished cars traversing between departments.*

White U (1975-76)
Creating an Inner Sanctum.

'It is a poetic room, in a sense completely excluded from the exterior, fully isolated from the world outside.' (Taki 1999)

From the moment I began planning this section of the dissertation, Toyo Ito's 'White U' house has remained the figurehead of all I sought to discuss. The very nature of the building stands out as a pure example of quality of spatial understanding and intense personal investment, a locus towards which I am constantly heading. This project embodies a pureness of internal space that as an architect I hold in high esteem while the rare situation that ignited the design process allows us to discuss the nature of architecture and the dwelling and the emotional/familial role of the designer.

The house is famous as an inward-looking project, a conception of grief and a desire to be close to the earth. Mrs Goto, Ito's sister was struck with grief when her husband lost an eighteen month struggle with cancer and passed away. Her need to mourn lead her to buy a plot of land which became available near the block of flats in which she had lived with her husband and two young daughters. She desired to escape the high –rise and live close to the earth in her own house, a space in which she and her daughters could mourn and begin their new life. Ito was a young Architect at the time and this was to be his second commission. Mrs Goto's background as a musicologist meant she was very sympathetic to the structure of light and dark which

she desired in her new house inspired by the paintings of Georges de La Tour.

Ito's U-Shaped design was simple and clear. The every-day functional areas were in the straight sides while the curved space was left empty. This is the space which was most frequently photographed. The cast concrete external envelope was un-penetrated by any openings. All light came from 5 roof lights and the central courtyard. The themes of the work were clear, light and earth. Christine E. Broker suggests the term 'light' embodies Japanese architecture as it also suggests an absence of weight, a theme common in contemporary Japanese work. A single beam of light penetrates the curved white space within and its width varies throughout the day. I would suggest that this is an incredibly potent symbol considering the introverted nature of the dwelling as the connection to the outside is a connection to the sun, something much larger than the city they are tuning out of their lives. In an interview before the family left the house forever, Mrs Goto was clear in explaining how she was determined that at a time when her children could so easily be absorbed by darkness, a pure light would continue to shine on them.

The virgin black soil in the centre of the house is intended to be free from metaphor but does connect the grieving mother and daughters to the earth. Ito is responsive to aesthetics and the ephemeral. He gives great thought to the nature of the dwelling. This building is his first work in which he creates what

he describes as a 'curved field,' a method which is repeated and developed in further projects in his career. Traversing this curved field is a sensual experience. One cannot see if anyone is at another point in the curved white space but one may sense another presence. The play of shadows is paramount. The symmetry of the building is greatly softened by this curve. The danger of introverted architecture is to create what resembles a fort or bunker and to avoid this Ito presents the curved facade to the road, a choice which at first puzzled me. I now see that a curved envelope is far more dynamic than what could have appeared to be a barrier. The intention is not to stop or disturb space but to redirect it, allow the activity of the city to slip by. It is a beautifully delicate composition in a dense urban neighbourhood.

After twenty years the family decided to move out of the house. When interviewed it became clear that the building had done its job. It had enveloped and cradled the young family and the girls had now grown up. The decision to demolish the house in spring 1998 was a crucial episode in the life of the building and the career of Ito. To see his creation age over time and become wrapped in ivy as the family also grew within the house and then to see it demolished is to come full circle. Had the building remained, the house that was built with the specific task of providing an environment to grieve grow would have become a relic to a private, outdated time. If the home represents the family, the house was no longer representative of the new mature relationship the

Fig4

Fig 4 *Ito watches as the Goto Children play with shadows in the great 'curved field' within the house. Light etering the space was carefully designed by Ito.*

mother and daughters had developed. White U is a project which has earned great affection from those who have heard its story. As a building that no longer exists, it has been attached with a symbolism that fits the delicate nature of the project itself. It is fascinating to study the building as a project as one is forced to ask, what is the role of an architect and how much should one allow oneself to become emotionally invested in the process of the design and the lives of clients? This was a special case but it cannot be denied that the sensitivity with which he approached the design contributed enormously to the success of the building. The manipulation of material and light has given the building a spiritual sheen which becomes all the more potent as the building no longer exists. In my opinion it only fitting that a building designed to envelope a secret and personal world remains completely inaccessible in its extinction.
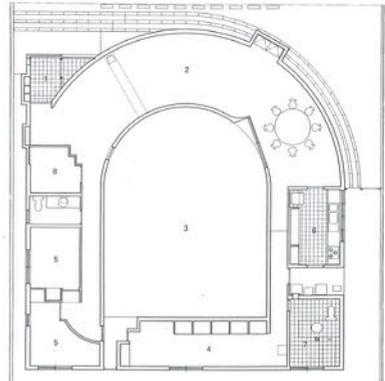

Fig 5 & 6

Fig5 *Light piercing the curved living space in the house. This beam of light changed throughout the day. Within the inwardlooking house it symbolised a link to something greater.*

Fig 6 *The Plan of the White U describing the relationship of the spaces to the courtyard and shows the lack of openings to the outside.*

To Alter

To Alter.
The Actions of the Individual.

The natural reaction to an unsatisfactory condition is to turn ones focus inward in a sort of hermetic fashion. I find it very interesting therefore when the desire to alter that condition appears as the dominant instinct. The effects of that instinct are driven by a strong sense of self whether the result is needed or desired and it is fascinating to see the effects of the actions of the individual. The power of the individual to cause radical change is what fascinates me here. In 'Tribes', (2008) Seth Godin describes the current state of business practice as 'sheepwalking.' (Godin, 2008) He suggests that the power of the individual is quickly stamped out of us as we progress through the education system and calls for us to lead rather than follow. He suggests that even in higher education where the stakes are higher that, 'students fall back on what they've been taught to be; sheep. Well-educated sheep of course, but compliant nonetheless.' (Godin 2008)

In the previous chapter, I discussed how architecture can be influenced by ones environment. This chapter deals with the individual influencing architecture and the environment, usually through habitation. In 1967, the students of the Architecture Faculty in MIT became frustrated with being forced to sit at drawing boards placed in neat rows, Their distaste was so great that they decided to alter the studio environment by using reclaimed/discarded construction materials to create a variety of new enclosures and platform spaces. Driven by self awareness they created the spaces they wanted were they could 'work, eat, sleep and receive their tutors on their own ground.' (Hertzberger , 2005) It is interesting to consider how the inhabitants shaped their own ground. If one was to design a space for study, how would one do so in a way which allows for the individual to make their mark or should we really ask if one is simply seeking a sense of ownership in a space? Individuality of a space for the collective is fascinating but one wonders if this could be done to the same effect without division of the space into small singular lots.

The events of Mai '68 are an excellent example of the potential power of the individual to force change. The revolution though regarded as a failure in essence due to its rather deflated ending nevertheless resonated through the world and sparked similar movements internationally. I believe that the true power of the protests came from the input of each individual. Each person played his/her part in this movement which was born of frustration with the de Gaulle Government in France, the politics of the education system and the 'old society. Street graffiti bore revolutionary slogans which were directed at spurring on the individual to make their mark. 'The most beautiful sculpture is a paving stone thrown at a cop's head.' * May '68 was a watershed moment in which new views regarding sexual liberation and human rights became prominent over the traditional ideas of morality, religion, patriotism

and respect for authority. A desire for change was instilled in the European mindset and the effort of the French was mimicked all over the world. 'When examined, answer with questions.' *

This power of the singular translated into further smaller expressions of distaste what the world had become and in the same year, Haus-Rucker-Co, a Viennese experimental architecture and design group created a range of appliances entitled 'Environment Transformer.' Our spatial understanding and ability to perceive is a sensory action and to distort ones senses is to distort our perception of the world around us. They experimented with the idea of sensory distortion as a method of adapting the environment around them. 'The processes of seeing and hearing are drawn out of their habitual apathy, separated into their individual functions and put together again as special experiences.' (Hertrich, 2008) Their intention was to change ones visual and acoustic impressions so as to allow a freedom of environmental perception.

They created 'Flyhead', 'Viewatomizer' and the 'Drizzler,' a series of facet like round helmets which were furnished with coloured glasses and stereo headphones which intensified optical-sensory impressions. A new environment is not created and the existing remains yet one can escape the restriction of our natural way of reading the world. Even the title of the project, 'Environment Transformer' suggests distaste for what is normal and the devices that were created allowed for the instant

Fig 8 & 9

Chapter Face Image. *'Flyhead' by Haus-Rucker Co.*

Fig8 *MIT Architecture Facility.*

Fig 9 *Drawing from Mai '68 describibg the efforts of the individual during the period of revolution.*

apparent disillusion of this world. One does not physically turn ones back the surrounding world. Instead one distorts their perception and in doing so becomes aware of one's body and senses, ones breathing becomes a conscious act and one becomes even more aware of the movement/rhythm of the body. Deprivation of perception of the greater environment means that the focus is immediately placed on the immediate context and self.

Fig 10

Fig 10 *Environment Transformer modeled by Haus-Rucker Co. (1968)*

The Crannóg.
Altering the Edge Condition.

I have chosen to discuss the Crannóg as a dwelling type as it is wholly derived from a desire to control ones surroundings. Its nature is derived from a defensive impulse, the most primal factor in turning inward. It is a building type that is/was vernacular to Ireland and Britain and one which is largely extinct now. Our interaction with the crannog is therefore one of historical focus, it is largely an archaeological exercise. For this reason I have questioned whether this prehistoric building practice can truly be discussed in an architectural context and I believe it can, simply because it stands as a truly vernacular example of defensive living on the scale of the family or household while also questioning relationship to site, the privacy of the household and the altering of one's immediate environment. The relationship of man and water is a complex one yet there is evidence that man has always desired to live near water and archaeological surveys can prove that Irish lakes and waterways have always been the site of dwelling from the Mesolithic hunter gatherers who quickly learned of the abundance of rich wetland resources and the Neolithic and bronze age farmers who created enclosed lake side dwellings like the crannóg. (O' Sullivan, 1998)

The crannóg is interesting as the process begins with the creation of a new artificial island. It is, in a sense, a tabula rasa. It seems strange that in order to live safely in a lakeside environment at
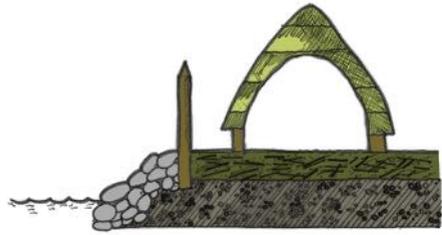
Fig 11 - 13

**Fig 11** *Section through the traditional Crannóg to describe use of materials and construction process.*

Fig 12 *The crannóg on Boilin Island, Lough Gur, Co. Limerick.*

Fig 13 *Impression of the crannóg in full use during the Bronze Age*

the time, one must first alter that environment. The name crannóg is derived from the Gaelic word *crann* meaning tree due to the large amounts of wood that exist on the old waterlogged sites. A large ring, usually approximately 30 metres diameter, was marked out with wooden stakes and this ring was then filled with large rough stones and finished to the desired level with smaller fine stones. Then brushwood and earth were placed on top to finish the platform on which the actual dwellings and sheds were built. The 'island' was then surrounded by a ring of wooden posts which were bound together by wattle to create a boundary wall/fence. This island was home to the animals belonging to the family and this palisade was placed more to keep these animals in rather than keep undesirables out. The island was reached by dugout canoes which were built by craftsmen who would burn the surface of a log to soften the wood and then carve out the inside with metal tools. It is clear that the huge resources needed to construct such a dwelling meant that only the rich members of society could afford to build one.

The crannóg on Boilin Island, Lough Gur, Co. Limerick was built between 500 and 1000 AD by the people famed the land by the lake. It stands as an overgrown island but has been the focus of much archaeological interest. It was 30 metres across and would have sustained one household. As a child growing up in the countryside I was always close to a number of prehistoric forts and encampments which took on a sense of mystery and magic and were often also associated with the kingdom of the fairies and the crannóg at Lough Gur has always shared a similar mystery for me. The physical evidence of people dwelling off shore in such a way has always seemed so strange but so impressive. In its existence the crannog as a defensive structure held its own secrets and in its extinction these become all the more evident. The legend that sunken stepping stones to the island mapping a route only few knew is one which shall never be answered but immediately gives the crannóg a very special architectural quality.

Measures such as this, derived from a desperate need for defence and control makes the crannóg seem so intensely personal. I would suggest it is an ultimate act, the early lock and key. This also makes the crannóg even more self isolating and inward looking. Its dominating position in the river is juxtaposed by its impenetrability. It is a structure, borne of its environment that escapes its environment, a minimal but intense gesture to the landscape. While the idea of one's own island now seems romantic and idyllic, the immense amount of work to create the minute gap between land and home, danger and safety tells all about the violent nature of Bronze Age Ireland. One must have been intensely aware of self and ones larger environment as the need for defence was so great in Bronze Age Ireland and the attention to quality of construction must have mead these dwellings incredible to experience spatially and materially.

Designing for the Individual

Two. Designing for the awareness of self among the collective.

The second half of this dissertation is written with an aim to discuss the idea of the individual as part of a collective. That is to say that I am keen to discover how greater and greater numbers of people and perhaps less and less privacy can often provoke a greater sense of self and ones position relative to others, individually or en masse. This idea is frustratingly difficult to grasp as it is a concept whose hypothesis is embedded in the juxtaposed. It is strange but true that a greater sense of self is often derived from an awareness of or connection with others. I would personally suggest that it is much more comfortable to be alone in public that alone in solitude and I believe this is largely the kind of unspoken philosophy around which the park operates. It is free from the community.

Community

The term 'community' is one which has troubled me greatly recently, particularly at a time when I am considering large scale housing as an urban intervention in my own work. There are countless definitions and arguments through each generation which discusses the idea of community. Anthony Paul Cohen (1985, p.7) suggests that the term community is one which is an 'infuriatingly slippery notion.' He suggests that as a society we fail to grasp any true meaning and therefore create our own sense of what community means. He also argues that people are encouraged to like the idea of community and that it has taken hold

of society in a bid to assert ones locality and ethnicity. We are bound/constricted by an idea that no one understands and even if we decided on a common understanding that the idea may simply be outdated. It is clear however that communities have boundaries whether symbolic or physical and this raises the greatest issue for me. Newton's third law succinctly states that for every action there is an equal and opposite reaction. Similarly, on a social scale I would suggest that for every sense of inclusion there is an equal and opposite sense of exclusion. This is not the sense of inwardness I like to discuss or encourage. As in the film 'Rear Window' (Hitchcock 1954) the collective is always far deeper when one considers the individual. The courtyard around which the film unfolds does not describe the actions of members of a community. Here we see the lives of the individuals. I would suggest that when architecture is successful, it encourages a sense of the self and the collective that is free from 'community' in a straight forward sense.

The Notion of Body and Self.

It has become clear through my studies that long-standing arguments exist regarding the notion of self and the relationship of the body to the greater physical environment. The issue was raised in the fifth century by the Eleatics who focused their thought on isolating that which must be homogeneous and could therefore exist without a body. This prompted the Atomists such as Leukippos and Demokritos to consider the body as an entity which is used to

measure both conceptual and material reality. Plato and Aristotle made great progress in the subject of corporeality. For Plato the body was never this simple, he considered the body to be part of a process of order. In 'The Architectonics of Embodiment,' Dalibor Vesley states that Plato's placing of the body as part of a process which is never complete and always open to further improvement suggests that the body is a 'relatively stable structure ordered in the context of reality as a whole (cosmos)' (Vesley 1996) Similarly, Erving Goffman (1959) suggests that the self is in a constantly evolving state which is shaped and defined as an object among other social objects. The self breeds identity through interaction with the social, symbolic and physical world. Our self identity is formed around our understanding of others. To me, this places the body as a body within a larger environment, a mathematical constant to be repeated, yet to me there is a suggestion of individuality in the ethos of these thinkers. The uniqueness of the corporeal experience suggests to me that there is room for consideration of the individual when designing for the collective and a definite need to provide a physical environment which allows social for social interaction but more importantly allows for the environment itself to convey meaning and impact self definitions.

The interaction of self and the built environment is one which is still keenly discussed at present among architects but it is especially dominant in the sociological discourse. Sociologists are calling architects to have a greater awareness
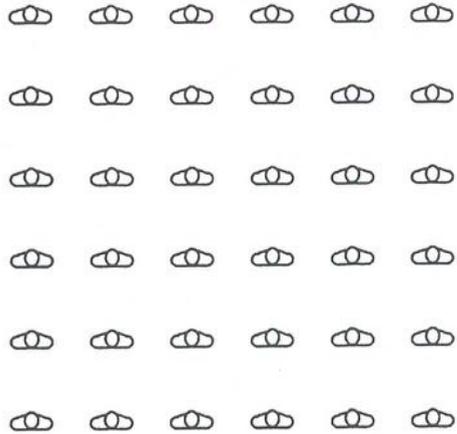

Fig 15

Chapter Face Image *An elderly man finds his individual space to read within the vast inner landscape.*

Fig 15 *Scheme of the Phalanx. (Martha Montgomery) This image could be applied to the idea of the collective, a multiple of repeatable modules. There is no suggestion of the individual.*

of the role that the individual plays in the function of the built environment. 'We need to convey how these environments impact people, and especially how self definitions and expressions of self are affected, and to demonstrate how people simultaneously construct meaning for their physical structures and places.' (Smith, 2003) This issue is far more complex than one would immediately think. This is especially difficult when considering a workforce. For example,, Elton Mayo conducted the 'Hawthorne Experiments' in an Electric Plant in Chicago in the late 1920's and early 1930's.(Stallworth 1996). The experiment began as an examination the effect of illumination on the productivity of the workforce. On increasing the illumination it was noted that productivity increased yet when illumination was reduced the level of productivity didn't suffer but continued to increase. It became evident that what had actually increased productivity was the notable increase in attention from the management, 'social influences,' which made the work seem far more gratifying. (Mayo 1945).

This forces the question, can we design for a sense of self in the built environment. Is it beyond design to create spaces which encourage similar individual gratification? Can the attention of the architect who anticipates the needs of the individual breed similar gratification in people who will never see him/her? I would agree with the view of many sociologists/architectural sociologists that 'In project after project, I have seen major gaps and disconnects in the process of creating humanized

spaces for people and in creating meaningful places for organizations.' (Beaman, 2003) I believe there is need for greater consideration of the issue but I would also call for a greater degree of experimentation in the design of the built environment. It is an issue best discussed as a critique and for this reason I present a critique of a public building on these terms. I have chosen the Staatsbibliothek Berlin by Hans Scharoun 1964-78. It is a building I have constantly refused to like until recently as I am always cautious of being 'taught' to like something but when I studied the building on my own I realised the huge power of design and spatial quality that I feel answers the call beautifully.

Berlin Staatsbibliothek,
Hans Scharoun. 1964-78

The Berlin Staatsbibliothek stands out in my mind as one of the finest examples of a public building that I have been exposed to. The library as a type is an ideal platform for discussion of how one provides for the individual in a collective space. There is an inherent tension between the logistics of collective use and the need for individual space and the opportunity to focus on one's own pursuits. The rigour of the established library systems are juxtaposed by the need for freedom. The freedom of the internal landscape is an ideal tool which Scharoun adopted to create his new state library. There is a resonance about the way in which Scharoun commands a spatial landscape which whisks you up into the depth of the building which encourages one to find ones place in the building. Where Asplund set out his Stockholm library as a processional ascent to 'heaven,' Scharoun's route through the building is powerful yet malleable. Here the derivé is encouraged. The individual user has the freedom to wander and there is a suggested looseness within this landscape.

The Staatsbibliothek was proposed as the third building to be constructed as part of seven building scheme to make up the new 'Cultural Band,' of Tiergarten on a cleared bomb site. Two Buildings had already been completed; the Philharmonie and Mies New National Museum. In 1964, a limited design competition was announced for this project which would house the new Prussian

Fig 16

Fig 16 *The 'Staircase Fantasy' encourages the derive. The building is almost a seat for the individual and a stage for social interaction.*

State Library that had been dispersed to Tübingen and Marburg during WW2. Eleven Architects entered the competition of which Hans Scharoun was announced the winner. The original brief described a relief road that would eventually run North-South behind the completed building. This road heavily influenced Scharoun's design. He proposed a shielding band of administration/service rooms which would lie between this road and his group of buildings which he described as an 'urban landscape.' The Western side of the building was intended as a far quieter space protected from the disturbance of heavy traffic and because of this the western arrangement of spaces was treated in a far more open and fragmented manner, open to the 'valley' space which would lie outside between the Library and a proposed terraced Guest House opposite.

The building is an agglomeration of a number of facilities including an Institute of Library Technology and the Ibero-American Institute to the south. The building does not find a unified form/mass like its surrounding contemporaries. Scharoun's design however was heavily praised at the time for its response to its nearest neighbours to the west. Scharoun described his design as a 'staircase fantasy', a device he used to create his famed internal landscape of high spaces and platform areas. The plan of the library is unusual but efficient. Strangely from the very beginning, on entering the entrance hall you are expected to climb a stair towards the reading rooms yet the sensitive design of the staircase means that this

change of level is quite comfortable and the facility of a large furnished foyer is offered as an extension of the first landing. Here you may read newspapers and recline away from the reading rooms.

As you return to the half landing you get a glimpse of the main reading room which is unveiled as you ascend the stair. This room is regarded as the finest space in the building. The large multi storey space composes of a main first floor and a number of platform stack and study spaces. The plan of the room is deep yet the large openings to the west means one will always have a personal connection and orientation with the outside. The landscape of the room is also visible in the ceiling which changes texture and rhythm to denote the programme beneath it. This dissolves the mass of what could have been an overwhelming, large, planar surface and allows one to orientate oneself by it within the greater space of the reading room. It is the 'skyscape' that the space is mostly famed for. The concrete ceiling is punctured with spherical polythene orbs which disperse the light that penetrated the saw-tooth roof above and provide an even light throughout while above the platform spaces, pyramidal windows provide diffused north light.

The building was designed with the needs of all Berlin in mind and Scharoun himself said the library should, 'make life possible.' This quote from Scharoun is extremely resonant as a sort of slogan for the building in my opinion. Scharoun's intense desire to create a large scale pubic building but with clear

inclination to the requirements of the individual is extremely strong as an architectural intention and is equally strong in its manifestation. Scharoun selected the artists to produce a number of specialised architectural pieces within the library; the glass wall of ground floor entrance hall and catalogue rooms were to be designed by Alexander Camaro (who also worked on the Philharmonie), Erich F. Reuter designed the floor in entrance hall, Guner Symmank designed glass walls in the book exhibition room and Erich Hauser designed the large mural in the east foyer. These rather large pieces were obviously placed as a gesture of quality and fineness of space and material but they also represent key moments within the building. The individual can navigate by these markers as a much more subtle and beautiful description of the intended main passage throughout the massive building.

The criticism is often made that the library is overwhelming to the individual but I would offer the point that if this is so at present it is due to change of use. As Scharoun died in autumn 1972, he didn't see his building progress any further than a skeleton and artistic control was delegated to Edgar Wisniewski. One could suggest that this may have diminished the effect of the completed building but I would disagree. The building was a finely tuned, efficient, modern building when it was completed and was designed to hold up to 4 million volumes in the stack-rooms (10,0000 new volumes per year or 500 per working day.) These figures while large would not make the building overwhelming
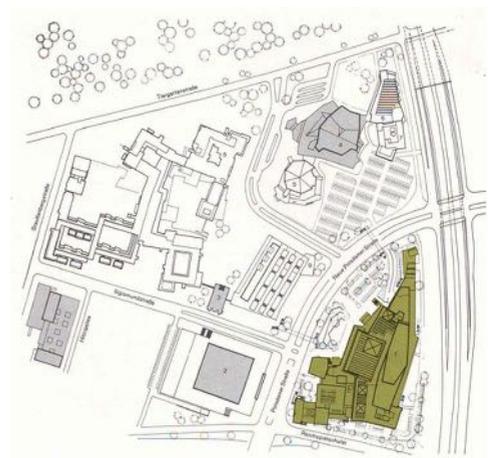
Fig 17 & 18

Fig 17 *The main reading room reveals itself as one turns the first landing*

Fig 18 *The Site Plan shows the Staatsbiliothek in context with the surrounding cultural buildings, notably Mies New National Museum and the Philharmonie.*

in my opinion. I would suggest that any issue of this kind is due to change of use over time. For example the reading room was planned to have 1200 individual reading spaces and this has been decreased since to allow for more storage of books. The space is now accused of being over furnished and blocking vistas. Is the original landscape becoming too dense and if it is can we comment on Scharoun's prediction of how the library would change? I would suggest that the library has adapted very well over time, particularly as the book is often accused of becoming less popular.

I feel strongly that the Berlin Staatsbibliothek stands out as a key building in contemporary architecture but more importantly it stands with conviction in favour of the experience of the user. There is no god complex with the architect. He allows the reins to slack and in doing so allow the building to breath. It becomes a breathing organic landscape which is so sensitive to the scale and needs of the individual. This is a building where you may get lost. You may enjoy getting lost. In the film Wings of Desire, (1987) a series of continuous panning shots takes us on a journey around the main reading room. It is a sequence in which the tension between the scale of the space and the user is addressed and the focus is placed on key figures and their pursuits in the library. Minimal but effective detail is given to the characters and the importance of self in this collective space becomes all the more evident. The incredible ominous soundtrack grows louder as the sequence continues and

the space takes on a quality which is celestial but free of hierarchy, a quality far more worthy of the title heaven than Asplund's version in my opinion. It is an incredible example of freedom and focus within an incredible landscape.

Conclusion.

As architects facing a time of over population, developer driven architecture and a shortage of space our profession is becoming increasingly driven by the political and sociological discourse that comes with a rise in population. Maybe we have little opportunity to design for the luxury of the family anymore. We are beginning to design towns and huge housing complexes which tend to be repetitive, homogenous and dull. There is a need to call for greater consideration of the individual and how one can react to or play a part in something larger. Maybe this is something as simple as placing a desk in the lightest part of a room or the careful programming of public space but in these times more than ever it is crucial to allow the individual to be part of a collective while being able to react to ones environment as an independent gesture. The architecture which answers this call is the architecture which I personally find most successful. I feel that consideration of 'symbolic interactionism' and common understanding of our environment will lead to greater architecture.

Opposite Page. *The concrete ceiling of the main reading room in the Berlin Staatsbibliothek before at the time of Scharouns Death.*
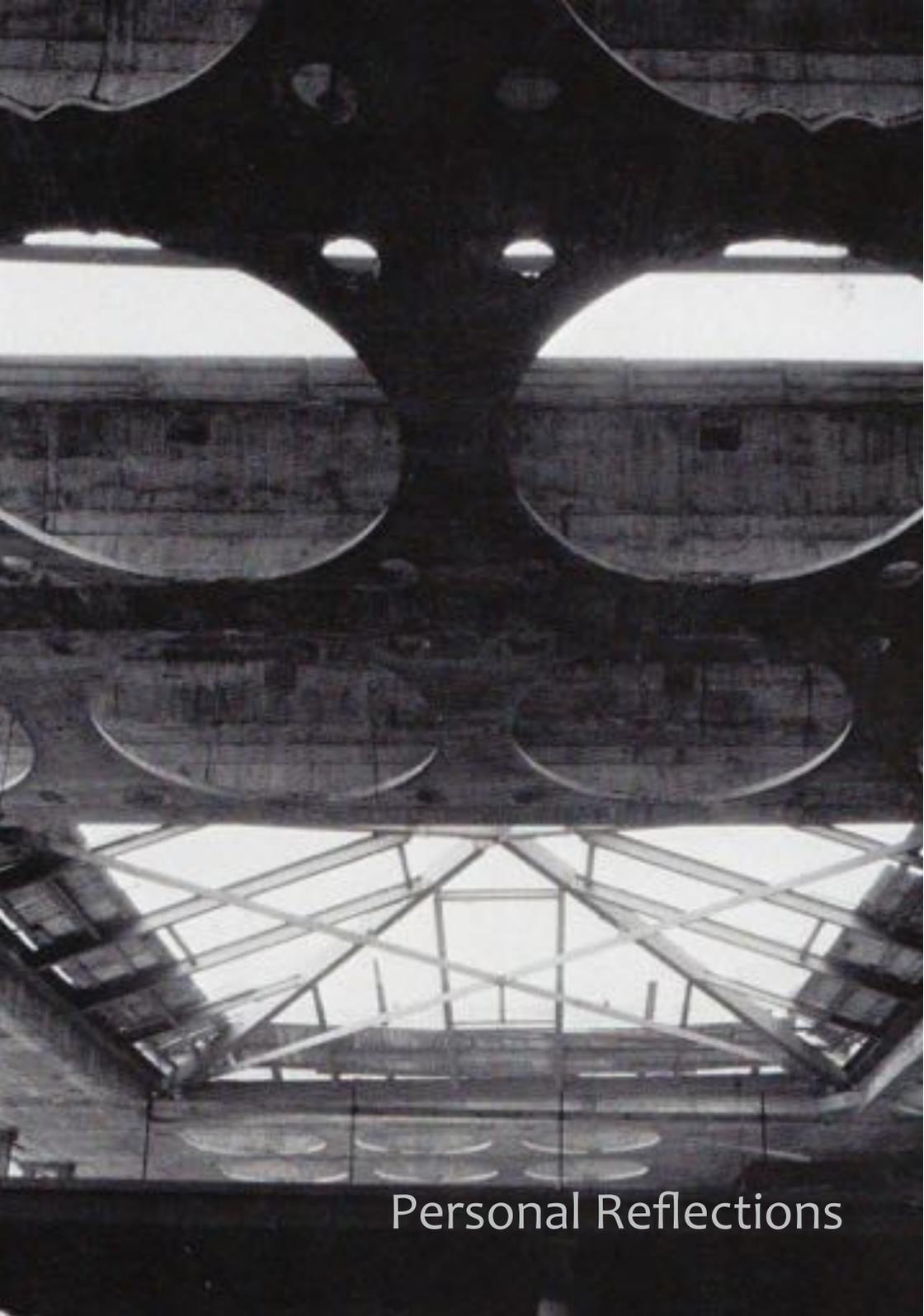
Personal Reflections

Personal Reflections

From the beginning this dissertation has been a learning tool for me as an architect. The research I have done and the things I have explored, questioned and discovered will always stand to me as I continue my studies. I know we never stop learning but I will always believe that it is important to always carry all you have learned. As I said at the beginning of this work, I see what I have written here as a slice of a longer progressive study. I have tried not to simply summarise what exists in current discourse or paraphrase history but to constantly question, critique and put forward my own opinions. As a young architect it has been a useful exercise to try to refine opinions and express them concisely.

I have gained a great amount from the work that has been done and I hope that the passion I have developed for this topic has become clear. In particular I will take forward from this work a strong desire to consider the individual when designing, not simply the scale of the body but the needs and often luxuries that can create exemplary spaces. I hope that one day I can return to further my studies in a more direct focused way but I am confident that I have really achieved what I set out to achieve here. It has been a personal task to pursue something I have a passion for but knew little about. I am grateful for the opportunity to present a piece of work which I am proud of and I hope you enjoy reading it.

Naomi

References.

Bachelard, G. 1969. The Poetics of Space. Boston, Beacon Press.

Beaman, J. (2003) 'Using Sociology in Architecture,' from Smith, R.W. and Bugni, V. 'Defining Architectural Sociology.'

Cohen, A. P. (1985) The symbolic construction of community, Routledge.

Godin, S. 2008. Tribes. We Need You To Lead Us. Great Britain, Portfolio for enguin Books USA.

Goffman, Erving. 1959. The Presentation of Self in Everyday Life. New York: Doubleday.

Harbison, R. 2000, Eccentric Spaces. MIT Press.

Hertrich, S. 2008. 'Environment Transformers by Haus-Rucker-Co,' from Notes on technology, design, people, places and things. Blog. Posted Dec 18, 2008.

Hertzberger, H. Lessons for Students in Architecture. 5th ed. 010 Publishers, 2005

Hitchcock, A. 1954, Rear Window. U.S. Paramount Pictures.

Ito, T. 1999. Blurring Architecture. Charta, 1999.

May '68. Street Posters from the Paris Rebellion. (online) Available www.parismai68.net

Mayo, Elton. 1945. The Social Problems of an Industrialized Civilization. The Graduate School of Business Administration: Harvard University.

Mead, George Herbert. 1934. Mind, Self, and Society. Chicago, IL: The University of Chicago Press.

O' Sullivan, A. The archaeology of lake settlement in Ireland, Discovery Series. Dublin. Royal Irish Academy.

Orgel-Köhne, L & Conrads, U. Staatsbibliothek Berlin 1980. University of Virginia, SAUR.

Smith, R.W. (2003) 'Designed Physical Environments as Related to Selves, Symbols, and Social Reality: A Proposal for a Humanistic Paradigm Shift for Architecture, ' from Smith, R.W. and Bugni, V. 'Defining Architectural Sociology.'

Stallworth, O. and Kleiner, B. (1996). "Recent Developments in Office Design," Facilities, Vol. 14.

Vesley, D. (1996) 'The Architectonics of Embodiment,' in Dodds, G. And Tavernor, R. Body and Building. Essays on the Changing Relation of Body and Architecture, Cambridge, Massachusetts, The MIT Press.

Wenders, W. 1987. Wings of Desire. Road Movies. Filmproduktion/Berlin. Argos Films/Paris

* Revolutionary slogans recorded during the events of Mai '68. Bureau of Public Secrets, Berkeley, www.bopsecrets.org

Bibliography

Bachelard, G. 1969. The Poetics of Space. Boston, Beacon Press.

Beaman, J. (2003) 'Using Sociology in Architecture,' from Smith, R.W. and Bugni, V. 'Defining Architectural Sociology.'

Bürkle, J. Christoph Hans Scharoun. 1993. English ed. Zurich; London : Artemis, 1993.

Blundell, J.1997. Peter Hans Scharoun. London. Phaidon.

Cohen, A. P. (1985) The symbolic construction of community, Routledge.

Futagawa Y and Hara, H. 2001. Toyo Ito 1970-2001 - Tokyo : A.D.A. Edita,
Weston, R. 1953. Richard, 1953. Alvar Aalto London, Phaidon.

Godin, S. 2008. Tribes. We Need You To Lead Us. Great Britain, Portfolio for enguin Books USA.

Goffman, Erving. 1959. The Presentation of Self in Everyday Life. New York: Doubleday.

Hanley, D.L. Kerr, A.P. May '68, *Coming of Age.* 1989. University of Reading. Association for the Study of Modern and Contemporary France.

Harbison, R. 2000, Eccentric Spaces. MIT Press.

Hertrich, S. 2008. 'Environment Transformers by Haus-Rucker-Co,' from Notes on technology, design, people, places and things. Blog. Posted Dec 18, 2008.

Hertzberger, H. Lessons for Students in Architecture. 5th ed. 010 Publishers, 2005

Hitchcock, A. 1954, Rear Window. U.S. Paramount Pictures.

Ito, T. 1999. Blurring Architecture. Charta, 1999.

Ito, T. And Maffei, A. 2002. Toyo Ito: Works, Projects, Writings. Illustrated Edition, Electa.

Lalor, B.1941. The Irish round tower: origins and architecture explored. Wilton, Cork: Collins Press.

Mathews, S. 2007. From agit-prop to free space. The architecture of Cedric Price. London. Black Dog,

May '68. Street Posters from the Paris Rebellion. (online) Available www.parismai68.net

Mayo, Elton. 1945. The Social Problems of an Industrialized Civilization. The Graduate School of Business Administration: Harvard University.

McCullough, N. 1987 A lost tradition : the nature of architecture in Ireland. Dublin. Gandon Editions,

Mead, George Herbert. 1934. Mind, Self, and Society. Chicago, IL: The University of Chicago Press.

O' Sullivan, A. The archaeology of lake settlement in Ireland, Discovery Series. Dublin.

Royal Irish Academy.
Orgel-Köhne, L & Conrads, U. Staatsbibliothek Berlin 1980. University of Virginia, SAUR.

Pevsner, N. 1990. An outline of European architecture. 7th ed. London: Penguin Books.

Pevsner, N. 1991. Pioneers of modern design: from William Morris to Walter Gropius. 2nd ed. Harmondsworth: Penguin,

Rasmussen, S. 1964. Experiencing architecture. Cambridge, M.I.T. Press.

Smith, R.W. (2003) 'Designed Physical Environments as Related to Selves, Symbols, and

Social Reality: A Proposal for a Humanistic Paradigm Shift for Architecture, ' from Smith, R.W. and Bugni, V. 'Defining Architectural Sociology.'

Stallworth, O. and Kleiner, B. (1996). "Recent Developments in Office Design," Facilities, Vol. 14.

Tuomey, J. 2004. Architecture, Craft and Culture. Reflections on the work of O' Donnell & Tuomey. Cork. Gandon Editions.

Vesley, D. (1996) 'The Architectonics of Embodiment,' in Dodds, G. And Tavernor, R. Body and Building. Essays on the Changing Relation of Body and Architecture, Cambridge, Massachusetts, The MIT Press.

Wenders, W. 1987. Wings of Desire. Road Movies. Filmproduktion/Berlin. Argos Films/Paris

www.zaha-hadid.com

* Revolutionary slogans recorded during the events of Mai '68. Bureau of Public Secrets, Berkeley, www.bopsecrets.org
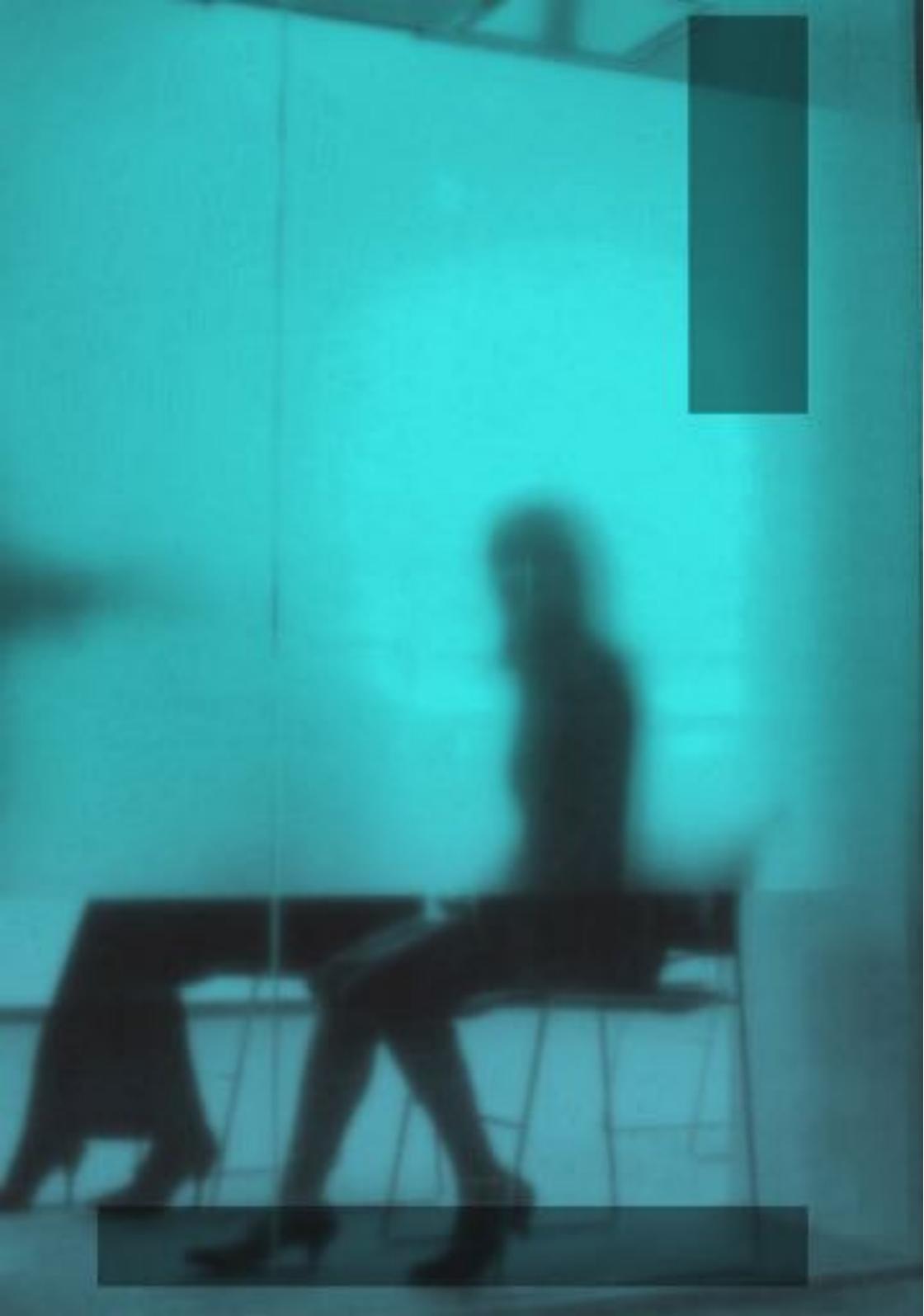
Mallow

D€v€lopm€nt Strat€gy 2010-2016?

Wh€r€ Do€s it all go wrong?

FOREWORD

On completion of my dissertation, I must admit that the process was long, laborious, and quite often frustrating. The information was often difficult to source, and even though my focus changed over the course of the study, the result was enlightening. Originally interested by the idea of the suburban sprawl and its adverse affects on the Irish landscape, the design, layout and the social problems that ensued. I focused more closely on Mallow town though in the context of the historical background, and its effects, as it was a subject matter with which I could get more of a grasp upon. The development of the small Irish town is interesting on so many levels, much of which had to be omitted regrettably. The result personally was hugely beneficial and insightful in terms of the understanding I gained into the process' by which many types of settlement, heritage and architecture styles have come to be. The omission of references regarding specific architects and their respective work is a deliberate attempt to focus on the style and consequences of a particular building or type so as not to over load the writing with unnecessary data. Without submerging into a detailed account of the broad and checkered history of the town, there are a number of historical issues which needed addressing in light of the subject matter but shall be merely used as a background in highlighting the various concepts and influences being discussed, in a view to analyzing the effect a changing architecture has and will have on the growth of the town. I have enjoyed the investigation and research aspect of the dissertation thoroughly. Understanding the processes which have been at work for hundreds of years and relating international architectural trends to recognizable local features has been a process by which I have grown to understand the true meaning of, and variations in Vernacular Architecture.

Introduction

Mallow town, today a sizable town in County Cork was founded on the banks of the "River Blackwater". Thought to have been originally setup to act as a defensive settlement, the towns focus has shifted repeatedly throughout history. Industry, agriculture, tourism and religion are just some of the driving forces which have funded, and developed the town over hundreds of years, and the recurring effects of these are still clearly evident today in many of the physical and social attributes of the locale. Mallow's main axes stretch between the castle on the banks of the river, and a busy roundabout which serves as a major infrastructural benefit for the entire province of Munster. This is as a result of the gradual transition that Mallow has under gone from being a strategic river crossing, developing into a tourist hot-spot to becoming a commercial/ supply centre for North Cork and the upper Blackwater Valley. King John is reputed to have built the first castle in Mallow as early as 1175, in the area today known as the "Castle-lands" within twenty years of the Normans first Landing in Ireland. Very few records remain of development from this period on but this hasn't posed a problem as a majority of the towns growth culturally and architecturally occurred from the seventeenth century onwards.

The great development of the Agricultural industry, of creameries and sugar factories, led to the expansion of Mallow in all directions. From having only one side street of note in 1800 (that is Fair Street) Mallow has developed into the complex of streets roads and lane ways that we know today. Even to this day it continues to expand outward in all directions, all be it in a very different manner, and has become quite reputable as a centre of commerce and trade. Population is at an all time high as the towns boundaries radiate outwards. However growth of late has been severely stunted do to the economic down turn which has brought an end to capitalizing developments in the outskirts.

BRIDGE STREET MALLOW DURING A FLOOD
IN THE LATE 1800'S

THE SAME STREET TODAY (PHOTGRAPH
TAKEN FARTHER BACK). LITTLE CHANGE HAS
OCCURRED SINCE IN TERMS OF LAYOUT, OR
BUILT FABRIC.

34

The town itself has been described as "the humpback town with an irregular roof line" and the population today stands at somewhere in the region of seven and a half thousand people. Naturally it has been continually changing over time, and influences of particular eras are clearly evident on the resulting streetscape and make-up of the town. Through a blend with a very particular type of vernacular architecture Mallow has evolved. The Nineteenth century brought about many changes to the street façade as buildings were amalgamated or sub-divided to suit the needs of the time and society. The individual buildings themselves are new in relative terms to the street layout which got its origins back in the thirteenth century.

With no particular typology of architecture to speak of Mallow would have been heavily influenced by external aspects such as national and international architecture trends, as well as technology, and society's means in a particular era. Ordinary people continued to build their own houses, workshops, barns, and shops in a way that suited their own needs and within their own resources. This is true not only for the private and residential but also for the civic, public and religious buildings of which many were originally constructed conservatively before being remodelled, restored and varying in function according to societies requirements and abundance over many generations. This is the case for the courthouse, church and schools to name but a few. Alternatively developments have always been occurring outside of its type of necessity driven vernacular, local authority housing projects along with some institutional religious, and monumental buildings break away and are clear derivations of the particular style of architecture at that time, be it Neoclassical, Victorian, or Georgian. They demonstrate little or no response to context in terms of form, except perhaps in orientation, but are still evocative and insightful regarding the forces by which they came to be, economically, ecologically, and socially. Changing societal needs has manifested itself in the demand for diversification of buildings and built space, styles and sizes. This meld of ordinary vernacular architecture with that of an external influence

The street at Ballydaheen- Southern approach to the town- as seen today. Few alterations have been implimented on the over all architecture for over fifty years

is what has modified the town in so many different ways for centuries, making Mallow a very interesting study in terms of its built heritage domestically, commercially, and indeed socially.

Generally not noted as being an especially pretty town, partially due to its fragmented growth pattern, yet Mallow has a particular charm and intrigue which is unrivalled by any of the perhaps more picturesque "planned" towns in the Munster region. That's not to say that it is without its scenic qualities in terms of natural landscape, just that the built fabric and streetscape often portray less urban coherence, a defining feature for town and city. Mallows architecture is defined by how the buildings and spaces look and feel in the urban context, and even though urban design normally dictates how these integrate to the larger urban scale, it appears not to be the case in Mallow. Layers of history and a style of 'design by alteration' seems far more prevalent. Although probably impacted upon more by the constant local vernacular response and development to date, this type of influence is slowly losing its footing in terms of modern development in the town. The use of local materials simply because of their availability and affordability is a tradition all but lost, and craft of construction typical to the area is an art form replaced by modernism and standardization. Mallow is not a town designed by architects, in fact it is not a town which has been designed at all, yet it has grown and developed in a very particular and interesting way. In this age of increasing knowledge, communication and architectural availability, will this almost organic type of growth be stunted by design? Will Mallows history and heritage become unrecognizable amidst the advancement of modern development? Does the present day architectural advancement of the town conform to national trends as opposed adhering to its own needs? The challenge of this piece is to try to gain insight into, and evaluate some of the key issues which have shaped the town physically and socially thus far and perhaps attempt to speculate its future in light of recent economic, cultural and architectural shifts. Is the positive development of Mallow's architectural heritage dead? And if so, then where did it all go wrong?

Mallow from its earliest days was known to be a focal point for the province of Munster, be it for defence, travel, trade or communication, its strategic importance dates back to the times of the early Normans. When examining the origins of the town, one must look to the early military presence (English) which can be traced back through Cromwellian and Elizabethan times when control of the only Blackwater River crossing of that time was of vital importance. This generated the impetus for settlement near the security of armed protection, and a cluster of dwellings formed around the castle its grounds and the church. This is thought to have been the origins of the main street in the medieval period and the key generator in the layout of area from the castle gates to what we know today as 'O'Brien St.'. Very little is known about the type of houses that existed at the time but Mallow town was born. Its believed that a strong fortification would have been put in place, yet there is no record of Mallow ever having town walls and by the end of the thirteenth century its an estimated up to sixty families, made up of artisans and traders occupied the town. Little remains as evidence from this early era in terms of built fabric or settlement patterns, and although it may unknowingly be of great significance to the over all origins of the town, its significance is overshadowed by developments succeeding it. Great expansion of the town took place in the early seventeenth century as the town became heavily impacted upon by English settlement. Thus Mallow grew and developed in a similar way to most English settlements at the time, a seemingly unorganized row of houses straggling along the main highway with a few subsidiary lanes branching off of it. The town progressed westward along what is still today its main street and was now protected on this side by a smaller castle, in the area today known as "Shortcastle". The street between the two castles was now lined with some two hundred English houses, thirty strongly built in stone, the others of some form of wattle

and daub construction. During this period of the mid sixteen hundreds the old medieval town was revamped, old mud walled; thatched and timber-framed houses were replaced and renovated. Strong stone slated buildings became common place as people became more secure and financially abundant or as the other buildings required replacing following an attempted siege of 1645. However there was very little if any expansion or overall change in plot layout over the intervening century and a half. The discovery of a spa in the 1720's transformed Mallow into a fashionable tourist destination and brought great prosperity to the town for the remainder of that century. So while many of the buildings were improved, the over all geography of the ground plan remained the same. In 1775 north of the river the town consisted of about 400 houses and 120 on the southern side in a street leading from the bridge named Ballydaheen, One feature which emerged at this time was the popular first floor bay window which gave the people of the town a good vantage point at which to sit to watch the promenade and the people to and from the "Spa". Sadly few original examples remain today but they are a feature undoubtedly recognizable and influential even on modern development in the town. A great consistency remained for over three centuries of the basic layout and ground geography of Mallows Main Street. The physical count of premises on the main street in 1995 stood at one hundred and sixty, up from one hundred and thirty six judging from a sketch map drawn almost two hundred years previous. There were many changes to the town however during this period, the street façade was continually being upgraded, and greater attention was paid to churches, barracks and schools because of political, cultural and religious shifts both locally and notionally. Catholic emancipation meant that the church need no longer be hidden from view and a spectacular clearing of houses took place in order to open it up to the main street. Premises became amalgamated to form hotels and banks but the famine dealt a final blow to the towns prosperity brought about by the "Spa". The arrival of banking establishments, economically as well as their visual presence and sturdy facades initiated further change in the

town. The transition toward the commercial, industrial and agricultural requirements meant major expansion through to the twentieth century, transforming the town culturally and economically leading to its development in all directions. The west end now extends beyond Shortcastle to where the street intersects with the main Cork, Limerick, and Killarney roads at the roundabout responsible for the "Crossroads of Munster" tag which the town upholds. Until this point the town's growth, development and built heritage were derived from the needs and means of ordinary local people. A particular type of vernacular had developed, the links to which can be traced back through history, to particular eras, social and cultural shifts, merged with influencing architectural styles. Row and terrace houses of Georgian, Victorian, and Gothic Revival influence were introduced in prosperity. This was not necessarily the typical development pattern of Irish town development as many of the other medieval market towns were redesigned and new towns were laid out. Mallows diversity of interesting streets, facades and levels of craft emerged over hundreds of years of development directly from settlement to town. Classically inspired market-houses which often doubled as courthouses and meeting rooms became focal points in the town. The economic stagnation of most of the twentieth century appears to have had, ironically, an important benefit for Mallow, and indeed all of North Cork's architectural heritage. It helped to preserve the eighteenth and nineteenth century fabric of the majority of the town. However this architectural fabric is now under threat as a result of intense development pressure arising over recent decades. The same level of heritage cannot be seen in the town's development nearing the end of the twentieth century. Interesting levels of quality, and craft seem all but lost in modern evolution. Vernacular no longer counts for much in this era of "modern design" as the town loses its sense of a natural growth and development, giving way to the epidemic of opportunistic construction. Urban sprawl, driven by economic abundance has tainted the architecture of this and many other Irish towns, resulting in a post "Celtic Tiger" Mallow littered with poor quality developments and

falling house prices. Estates with a mundane, yellow tint, and a faceless design have brought very little of benefit to the town as urban plans aim to promote the advancement of development, to make Mallow a "hub" for the "Gateway City" of Cork. The town is no longer self-contained. It has become a satellite of a city located thirty minutes to the south as Mallow town grows only in its suburbs. An alarming neglect towards the development of any form of urban consistency has seen large-scale projects blanket the towns periphery forcing a loss of a sense of identity and architectural fabric to not only this but countless towns and villages under similar constraints of proximity.

Architectural Conservation Area (A. C. A.) restrictions are in place to control development within certain parameters of the town centre, but no such control governs the outskirts of the town. Certainly planning, zoning and environmental restrictions are put in place regardless of location, but in recent times their flexibility and governance must be questioned. Justice has become a concept to be aimed at by all agencies and individuals responsible for development. This can never become a reality if money continues to be the one major source of development. A countless number of similar quality developments have been providing for an apparent increase in "demand for housing", and the results can be seen nationally. The "Celtic Tiger", unlike episodes of prosperity from by-gone days, has alas failed to advance the richness of architectural diversity, and heritage quality which makes Mallow unique. The type of construction borrows little from any emerging architectural trend, or responds to any genuine social or cultural requirements of this era. It reacts only to what has shown to be a false economy in terms of housing demand, construction capitalism, and speed. Perhaps this economic recession will retrospectively, also have been of great benefit in Mallow town in the years to come. It has already stunted the development of poorly designed, speculation led housing schemes. Perhaps we will see a return to the preservation of genuine architectural heritage, within and around the town, so that future growth and development may respond accordingly to the built fabric

and return to some form of architectural quality and diversity. Mallow has had a prosperous history since medieval times, perhaps the twenty first century will develop a further layer of built heritage, resulting from tough economic decisions, to meld with the present wealth of architecture and produce exciting results for future generations to enjoy.

LIMESTONE

A widely used building material not just in Mallow, but across Ireland and particularly in North Cork. In general, limestones underlie the valleys in the region, and its availability is evident in the fabric of the structures built in Mallow town. Its use emerges in the eighteenth century as a structural material in the building of houses. As building techniques and materials developed, its use became more decorative, as working with stone was laborious. As a progression from this, today the use of limestone locally as a building material in is raw unprocessed state is rare. The craft and detail involved has been mechanized and modernized, but perhaps lost. Cladding is about as close as can be expected. Steel, timber and concrete have moved to the forefront of building design and construction in Mallow town, and this adds to a loss of identity through the vernacular use of materials and developing styles that promote it.

18C DRAWING OF A MALLOW LIMESTONE QUARRY

Down through the years the various eras of prosperity saw different levels of impact on the town in terms of its heritage, density, and design. The seventeen hundreds saw Mallow change little in terms of built fabric or plot, but it seems the old medieval town was forever being upgraded and stone, slated buildings were replacing old timber-framed, wattle and thatched houses as society became more affluent. The discovery of the spa (c.1724) along with the thriving market economy of the region brought about major improvements to the area in terms of wealth, infrastructure, and architecture. An act brought about in 1739 encouraged additional development and consolidation of Mallow as the crossroads of Munster, through vigorous road construction. By 1775 no fewer than ten roads radiated from the town, of which only four had existed in the early 1700's. Mallows alterations were far less dramatic than many of those in similar towns of that time, as the prosperity was reflected in the care and design of individual buildings, some of which remain today as fine examples of the architectural, social and economic influences in play at the time.

Large terraced residences, along with classically inspired market houses were built in this era of fashionable transformation in the town. As Mallow developed a reputation as a resort for pleasure the establishment of assembly rooms for dining and dancing (i.e. The Long Room) ushered in a new lease of life to the area and it seems the positive development of Mallow town took hold.

The townhouses of 'Shortcastle Street' are prime existing examples of the type of handsome terrace residences which emerged as a result of this era. These townhouses featured in the recent Irish award winning movie "The Wind That Shakes The Barley" which was based in North Cork. The houses were used to represent an old 'barracks' or 'safe house' during the Irish war of independence. Constructed c.1780 these almost monumental buildings (and more similar, in Mallow and North

Cork) were of definite influence on building design moving forward. The roughcast rendered facades, with cut limestone sills are original features although minor alterations and refurbishment has taken place. The pitch slate roofs and rendered chimney stacks are indicative of constructional advances of the era. The rear walls were constructed with exposed rubble limestone. The facades to the street are beautifully detailed with fine timber door cases, open bed pediments and cob-web fan-lit doorways. The door case is well executed and provides a decorative focal point to the façade. The cast iron railings, the cut limestone plinth and steps, are also a feature which became typical to the townscape of Mallow buildings. Detailing was quickly becoming of vital importance in the developing architecture of the town and an entire spectrum of influences is strikingly evident in the period to follow.

No.1-3 Shortcastle Street Mallow

ROUND-HEADED DOOR OPENING WITH TIMBER PANELLED DOOR, TIMBER DOOR CASE COMPRISING FLANKING PILASTERS WITH PLINTHS, MOULDED CAPS AND OPEN-BED PEDIMENT, AND WITH LIMESTONE STEPS

COMMERCIAL STREETSCAPE DEVELOPMENT THROUGH THE NINTEENTH CENTURY, MAIN STREET MALLOW c.1820

Mallow was thriving as it progressed into the nineteenth century. Further improved communication between towns and cities by road and the arrival of rail services, opened the way to increased commercial activity. This was to be the era of the merchant, which began to make available the goods previously beyond the reach of the now burgeoning middle class. Shops trading in tobacco, wine, spices, together with the more traditional, butchers and grocers began to dominate the town and indeed all of North Cork. Streetscape's decorated with often colourful and ornate shop fronts, demonstrated not only the diversity of styles

FIGURE GROUND PLAN: EARLY NINETEENTH CERNTURY - LONG ROOM SHOWN IN GREEN

FIGURE GROUND PLAN: LATE NINETEENTH CERNTURY - CLOCK HOUSEShown IN GREEN

N

that characterized the century but also the ever emerging skill and attention to detail of the local craftsmen. These were often executed in timber, or render, or both, and decorated with painted enamel or render lettering. Simple buildings were often given a sense of grandeur through the addition of ornamental cornices and neoclassical motifs such as quoins and pilasters. In the latter part of the century, tiled entrance ways decorated in dark rich colours became fashionable.

Merchants, shop keepers and artisans often occupied rooms above their premises. Others built elegant, classically proportioned town houses with ornamental fan lit doorways or carved timber door cases. The attached three-storey over half basement townhouse built c.1820 is only one of the fine examples of detail elaboration, and artistic interest to the facade in Mallow town. The Classically-inspired decorative scheme culminates in the heavy cornice to the front elevation, the proportions of which still mark it out on the streetscape.

St. James Avenue/ Main Street
Mallow. c.1820

47

Main Street and O'Brien St. in particular are still heavily impacted upon following this prosperous period of Mallows growth. In general the nineteenth century towns development seemed directed at streetscapes or individual buildings rather than at individual settlement as a whole, in the shape of new facades, shop fronts and the further development of some public buildings (notably schools, churches and courthouses).

Technology, trade and commercial advancements brought about further changes. One over one pane sliding timber sash windows became common as further styles were continuing to emerge. Urban residences became popular among the upper class professionals, however homes with all the grandeur of the country residence were also being set on private grounds on the towns outskirts. This was the towns first glimpse at the emergence of suburban living. Increased commercial activity in a still increasingly urban Mallow created a need for civic and commercial buildings in the town, a trend which a number of towns in the county were also undergoing around this time.

Mallow Courthouse (c.1830) is robustly classical, a venetian type window offering the only light through an otherwise blank and forbidding facade. Very similar in design to many others of that era, it

MALLOW COURTHOUSE PICTURED AGAINST THE BACKDROP OF MODERN, DEVELOPER DRIVEN DESIGN IN THE TOWN. HOWEVER BOTH PORTRAY A LACK OF RESPONSE TO A VERNACULAR INFLUENCE.

speaks little of any developing vernacular unlike the domestic dwellings. Restrained use of decoration and the symmetrical façade add to this and its austerity. While context and its relationship within the urban setting are all but neglected.

The first purpose built banks appeared in the streetscape in the latter half of the century, Although most were incorporated into the existing fabric in the form of integration into former townhouses and building amalgamation. In fact there were many of these types modification to street facade during the nineteenth century as buildings were amalgamated or subdivided to suit the towns growing needs. Again limestone was the favoured construction material although employed quite differently in its application of decoration over construction. This demonstrates an increased consciousness of material availability as well as emerging revolution in structural techniques.

The arrival of the banking establishments initiated a requirement for visual presence and sturdy facades. Mallow began a gradual transition from being a tourist destination to becoming a commercial/supply centre for North Cork. The Bank of Ireland Building on the main street again utilized limestone but not however as the main constructional component. It was successfully incorporated with red brick, adding textural variety to the walls without compromising the solemnity of the overall design. This combination creates a certain feel of monumentality and the cut limestone and gives an emphasis on the doors as focal points on the facade.

BANK OF IRELAND BUILDING C.1880

Peculiarly, whilst all of these changes were being implemented on the streetscape, great commercial changes were underway in the town. The spa was no longer the thriving tourist attraction it once was and even the upgrade of facilities (building the Spa House and Baths) wasn't enough to save the industry from the onset of the famine, which dealt a final blow to the fashionable seasons at Mallow. While the spa house and baths on the northern approach to the town remain as important historical reminders and recognizable trademarks of the time, another distinctive feature remained as a result of the cultural shifts. The peculiar architectural feature of the protruding first floor bay windows had become common where inquisitive people could keep an eye up and down the street as visitors promenaded back and forth in the height. of the fashionable season.

THIS EARLY VIEW OF MALLOW SHOWS THE CLOCK HOUSE IN THE BACKGROUND, IN THE FORGROUND THERE ARE MANY PRIME EXAMPLES OF THE CARVED AND CRAFTED TIMBER SHOPFRONTS, AND TRIPARTITE WINDOWS. THE ORIEL WINDOWS TO THE UPPER FLOORS ARE PROMINENT, AND ALTHOUGH FEW EXIST TODAY, THEIR INFLUENCE IS STILL PREVELANT.

The Clock House, probably the most recognizable and distinctive building in Mallow town, is a remodelling of an earlier building (the Long Room) which was partially demolished as it protruded out onto what had become a road, right at the end of the main street. Said to have been inspired by an alpine holiday. The Clock House was designed to provide meeting rooms and entertainment for visitors to the town.

THE CLOCK HOUSE, MALLOW. c.1855

The building comprises of a gable-fronted three-storey (with dormer attic) block and has a timber-built projection spanning ground, first and second floors, with box oriel windows to first and second floors. Again the protruding windows indicative of the era, exhibiting the vernacular meld with the emerging architecture. It occupies a prominent site, closing the vista east from Davis (main) Street. It is notable for its Tudor Revival style and its unusual form which is enhanced by the retention of early original features and materials such as the barge boards, canopied doorcase and windows to add decorative emphasis to the building. This was arguably the most exciting time in Mallows history with regard to the emergence of architecture and built heritage in the town.

The early twentieth century was not however without its elegance and progress. It appears the continuing growth of the most affluent professional classes increased the occurrence of suburban residences, the number of which had been few preceding this. Multiple gabled bays, steeply pitched roofs and protruding features are strikingly representative of the internal and external influences which permeate their design.

ANNABELLA TERRACE MALLOW C.1910

Rows of terraced houses were constructed to enhance the main arteries of the town, particularly to the north, west and southern sides. Annabella Terrace on the western approach is one of these elegantly designed terraces. They are unified by the elaborate gable dormer window and common decorative render details. The pedimented doorways and bay windows are again indicative of the design process developed. Many of the smaller terraces were used by the local authority as a solution for increasing housing requirements in the urban area.

Glen View Terrace, Spa Walk Mallow c.1910
Terraced two-bay two-storey with dormer
attic house, and single-bay single-storey
pitched-roofed return to rear. This house
forms part of a relatively intact terrace,
which occupies a prominent site on a main
entry road into Mallow. It retains its form
and much of its detailing although its clear
that many have undergone restoration, many
of early features and materials such as the
timber sash windows remain.

Mallow Town Hall, Davis Street. c.1926
Rebuilt following its destruction during
the war of independance, it was given a red
brick facade with cut limestone bands, and
quoin pilasters. Indicitive of the change in
use which see's limestone developed as a
sturdy decorative feature.

The early twentieth century was a troubled time in Irish history. It was overshadowed by a decline in trade, industry and agriculture, resulting from the first world war and from the struggle for independence. The formation of Dail Eireann and the civil war marked an end to the old order which ruled the country for over three hundred years. Mallow because of its military presence was subject to attack, and counter attack, and the original town hall was burned down along with many other (less significant) buildings. The damage took five years to repair and the result was one of the first state expenditure buildings, which took advantage of new emerging architectural trends. These trends, many of which drew inspiration from domestic architecture, were a reaction against arts and crafts design ethos which was much more limited. Celtic revival influence is apparent on the interlace motif applied on the door surround at the town hall. It seemed the first step in the promotion of a national identity, and created an attractive focal point on the otherwise sombre facade. Shops in the town began to exhibit greater confidence in displaying a diversity of styles, using elaborate geometrical render ornamentation and art deco style swags. These created distinctive buildings in the streetscape.

The economic slump for the remainder of the century saw retention and preservation of the built fabric and architectural heritage in the town and was ironically beneficial in retrospect. However this was all to change towards the end of the twentieth century, and the purr of the "Celtic Tiger".

Єstatє

Housing estate construction in Ireland has become common-place in the late twentieth century. Celtic Tiger Ireland saw a surge in these types of developments around every town and village in the country. Mallow is no exception. The town is now dotted with individual estates in its outskirts on almost all sides, and a variety of housing typologies make up what have become large suburban areas. There is little variation in architectural style however, and the design effort in many of these estates is minimal as capitalization is the aim. They all share many common traits in both physical and social attributes, from the unprogrammed landscaping, to the large commuter occupancy of dwellings. The construction was quick, the materials were cheap and the results were the same. Timber framed construction was widespread because it was quick cheap and easy. Its ironic to recall that two hundred years previous, the wooden houses were being demolished to make way for sturdier stone when economic affluence permitted. It seems surreal that in modern times, a similar financial stride could provoke almost the opposite, regression. Is Mallows architectural heritage on the brink of receding? In the wake of economic prosperity, a large number of these estates (at least in Mallow) have been left with large vacancy figures, many new, yet disused houses with little or no market for their rental or purchase. This is happening to houses in estates literally only

two minutes walk from the main street. It seems that as we are now a part of a consumer society, our values have been tainted. We are focussed on respecting those who waste the most, who derive their status from their pattern of consumption, rather than their efforts at production, and who make big money in return for little service. It is from here that our development problems stem, from the type of houses built, and why, to the type of people who live in them, and the whole culture that encompasses it. Too often the workmanship was poor, and all too often the houses were purchased as investments for those who sought to cash in on the speculation led economy which they themselves were fuelling. But then it stopped! A global recession, but a national (construction led) "slump" in particular has brought about these particular events which are evident in every urban setting in the country. The boom led to great economic prosperity, but the development in quality of fabric and built heritage of Mallow Town did not reflect the rapid advancements in the construction industry, but in fact suffered as a result. These types development problems can be solved only when correct use is made of our resources. When we value work which develops these, when we have wage, salary and fee arrangements which value service more than status, and we cease respecting people who acquire great wealth through property dealing.

CASTLE PARK HOUSING ESTATE. ARBITRARY LAYOUTS. DEVELOPMENT PATTERN ALTERS DURING PROGRESSION TO MAXIMISE DENSITY.

THE FINAL STAGES OF CONSTRUCTION IN CASTLEPARK MALLOW. THESE HIGH DENSITY BUILDINGS LOCATED AT THE EDGE OF TOWN, MANY OF WHICH LAY IDLE DUE TO ECONOMIC RECESSION, DEMONSTRATE NO RESPONSE TO HERITAGE OR CONTEXT.

But where does that leave Mallow. A town blinded by development, scarred by consumerism, and perhaps ignorance to design, heritage and future development. Where does it go from here? Clusters of houses arranged, in (too often) arbitrary rows reflecting nothing of natural development, rate or pattern, are the latest rung in Mallows development ladder. This urban sprawl is admittedly not confined to Mallow or indeed Ireland, but does create a type of semi-urban ring of the town, which limits any further expansion of the town proper. The town could no longer progress in a similar vernacular fabric even if desired. Its bounds have been limited, its heritage neglected, and its peripheries infested with economically symbiotic but architecturally parasitic development.

Conclusion

Many!, or None!

"The shuttered shops apart, the town is so much cleaner, brighter, the houses are freshly painted. The one way traffic system seems, along with the new roads, a vast improvement, opening the town up to pedestrians. Now there are suburbs, with their own schools, churches, pubs. This seems inevitable, wherever you go. Much has changed for the better and what has been retained has enhanced Mallow",

Bill Thompson, 'Final Days'

Perhaps it is inevitable, wherever you go to expect the type of development seen in Mallow to happen regardless of built heritage preceding or succeeding it. Presumably the natural progression turns towns into city, but this is clearly not the case. Development cannot be categorized and surely it would be misguided and narrow minded of anyone to assume the way in which any form of settlement should develop. Celtic Tiger Ireland has produced countless failures in terms of urban situations, built fabric and effective design, however it is not the first generation to which this has happened. Villages towns and cities have been trying and testing settlement patterns for thousands of years and no perfect solution has been reached. There is no correct method of development for the future by which everything must be governed. Perhaps the guidelines set out by Mallow Urban District Council are as effective as can be hoped for, in order to develop a continuous prosperity for a sustainable and architectural built heritage, in and around Mallow for the future developing generations. Mallow has reached great diversity in architectural language, built fabric and urban space quite successfully, but has indeed been tainted by its failures in these same fields. Perhaps not catastrophically so however. This period of the economic down turn in Ireland might benefit Mallow town in the long term, evidence of which has been seen before. This may be a tough time for architects, yet a great and exciting time for architecture. Tougher economic decisions are inevitable, what will be changed will be done so for the better, and what's retained will enhance Mallow.

Bibliography

Mallow Field Club Journal: 15 1997
Mallow Archaeology & Historical Society

Mallow Field Club Journal: 20 2008
Mallow Archaeology & Historical Society

Mallow Field Club Journal: 1 1985
Mallow Archaeology & Historical Society

A History of Mallow: 1971 Evelyn Bolster

The Munster Plantation- English Migration to southern Ireland
1583-1641: MacCarthy-Morrogh

Mallow "Hub Town" Urban Plan:
Mallow Urban District Council 2007

The City In History: Lewis Mumford

Final Days- collection of stories by Bill Thompson 2002

Growth Centres in the European Urban System: Peter Hall & Denis
Hay

Irelands Vernacular Architecture: Kevin Danaher

Ireland Green   Harry Bohan   1971

An Introduction To The Architectural Heritage of North Cork. Anna
Maria Hajba

www.buildingsofireland.ie

Eamonn Kelly

Ich Bin. Wer?

(I am. Who?)

The political and physical landscape of post World War II Europe was one of uncertainty, huge change and of little precedent. To the east, socialist governments came into power under a soviet sphere of influence, soon to recede from the west behind the secrecy of an iron curtain. Throughout east and west Europe countries took stock of their human and physical losses and began the process of rebuilding and moving forward.

The developments in technology during the war greatly affected industry and development. From the late 1940's on, the United States was to enter close to twenty years of economic boom and prosperity, whilst in east Europe centrally planned-economies set production targets on resources and allocated prices. The means of production were almost entirely state-owned. In East Germany, for example, state-owned enterprises or collectives earned 96.7 % of total net national income in 1985 . In the GDR (East Germany) five year plans were introduced for intensive productivity and development of resources in the country.

With these intensive industrialised economies in east Europe, manufacturing developed in such a way as to lend itself to the problem of solving housing shortages and regenerating areas affected by the war. Whilst in the United States a house in the suburb became the American dream and consumers had the right to choose their dwelling, socialist government approached the task from a different angle. Workers needed dwellings to live and sleep and socialist realism called for socially-equal housing; dwellings independent of class and social hierarchy. The apartment or house as a unit served primarily as another element in the socialist ideal of working for the economy and ultimately for a fellow man.

What is the reality of the experience of industrialised construction and production meeting that of the private family life?

The legacy of the construction policies in the former GDR from 1945 until 1990 resulted in a state controlled industry. Faced with the problems of solving housing shortages, rebuilding towns destroyed by bombing and modernising the countries housing stock, the government monopolised and industrialized the countries' construction industry.

The GDR was formally proclaimed in 1949, and from then until the fall of the Berlin wall in 1989, the Socialist Unity Party (SED) was in control of the country. From its inception the country was under the soviet sphere of influence; the policies and directives of the USSR largely coming into being in the GDR also. In terms of urbanism and architecture, at the inception of the GDR the modernist style was prevalent, Germany, of course being one of the birthplaces of modernism. However architects of the GDR who were trained in this discipline had to renounce their learning when the Stalinist style was imposed in the late 1940's. However, when Soviet leader Nikita Khrushchev called for industrialized construction in 1954 it opened the way for an architecture and urbanism free of historical references, enforced or un-enforced.

In order to impose a socialist transformation on the GDR, a legal framework was implemented. This meant state ownership of land in order to execute socialist urban planning without interference:

> "Starting as early as 1947, a constantly growing public control of land transactions and authoritarian planning was established. Although as late as 1981 only a third of all land in East Germany (the GDR) was legally public property, the planning bureaucracy was able, with the help of a rapidly growing public land stock to realize most of their projects without major restrictions."

In these early stages, as previously mentioned architecture had to

follow the tenet of socialist realism (the stated principles of socialist realism called for combining ideological content, truthfulness in artistic expression, and determination to make every building meet technical, cultural, and social demand) and the first, experimental socialist towns were built adjacent to heavy industry.

One of the first planned towns built in the GDR was *Eisenhüttenstadt*, founded in 1950. The "first socialist city" was built towards a "proletarian dominance", independent of class or bourgeois associations . The planning followed Fordist values, and isolated the two major zones (in Eisenhüttenstadt the separation of the residential and steel-production zone). In the space between green areas were kept to filter air pollution and to halt it reaching the residential zones. The housing built here was an example of *Wohnkomplex* housing; small-scale developments with a focus on a neighbourhood and outdoor space, with apartment blocks framing private courtyards. This style was usually of 4-6 stories in height and the ornamentation and monumentality was a result of socialist realism . This style of housing emerged during the Weimar republic in the 1920's, and in this instance was built for around 5,000 workers.
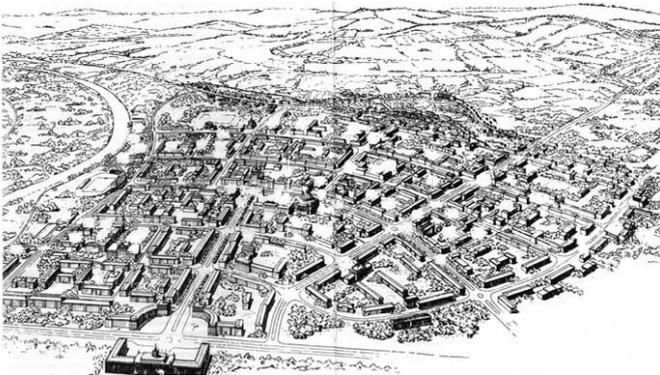
Eisenhüttenstadt, Urban Layout, 1951

However, in 1955 Soviet leader Nikita Khrushchev imposed a break on the ideology of socialist realism, owing to the high costs of building in the "nationalist tradition", and the order was given to manufacture housing on an industrial scale. This campaign of state funded production and urbanisation resulted in a huge increase in the number of dwellings built from the late 1950's on. It was at this stage that the GDR entered the period of constructing mass-produced housing for its citizens.

The call for an industrialised construction opened the way for the GDR to embrace an architecture and urbanism free of historical references. The sputnik era of technological advancement resulted in the ability to construct dwellings cheaply and extremely quickly. A highly standardised method of prefabrication was adopted and was used for the next thirty years to solve the problem of the housing shortage in the country.

PLATTENBAU

ing walls and floors assembled from large, concrete, factory produced panels. The 'Platten' or slabs which are the height of a storey and the length of a room are manoeuvred into place and assembled on-site by a crane. The front and rear elevations consist of concrete slabs with openings already fitted with glazed window frames.

In this housing construction technology, style and dwelling type developed independently. The first system-built dwellings hid behind socialist-realist ornament and had a traditional floor plan, that of the earlier Wohnkomplex building type. Some time later the ornamentation disappeared and the familiar Platten came into view, but the traditional floor plan continued. A floor plan that was an industrial product and that could be applied in any location was still some time away.

On 18 April 1956, the Ministry of Construction and Development established an Institute for Typological Research but it did not yield results until 1961 . The P series was based on a 6 by 6 metre grid and offered freedom in use by means of a more open and flexible floor plan, with the narrow and deep plan resulting in a cheaper construction.

At this time the rationale for the location of the Plattenbau developments came from the industrial plan for the country. While the first model city of Eisenhüttenstadt was located adjacent to a steelworks, the second, Schwedt grew from the decision by the SED to start a chemical program there in 1958. Several large petrochemical plants were to form a combine and develop the whole petrochemical industry . In 1963 a major pipeline was opened and the plant was situated 6 kilometers northwest of the city and covered an area of 16km . The Schwedt population exploded from 6,200 in 1958 to 34,000 in 1970 and 51,000 in 1989, despite the fact that the initial planning process begun in 1959 had envisaged a city of no more than 20,000 inhabitants by 1980 .

The construction of Plattenbau developments in Schwedt were characterised by a high population density together with extensive

green spaces and an extreme degree of functional segregation. The urban design of plattenbau developments as characterised by those in Schwedt can be explained in the comparisons between such developments and those of the earlier Wohnkomplex layouts:
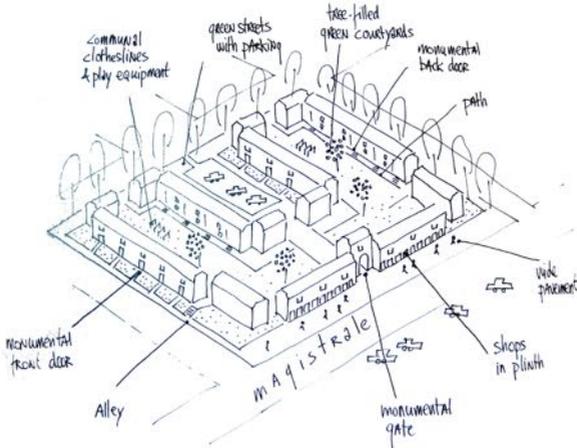
Block organisational principle, Wohnkomplex
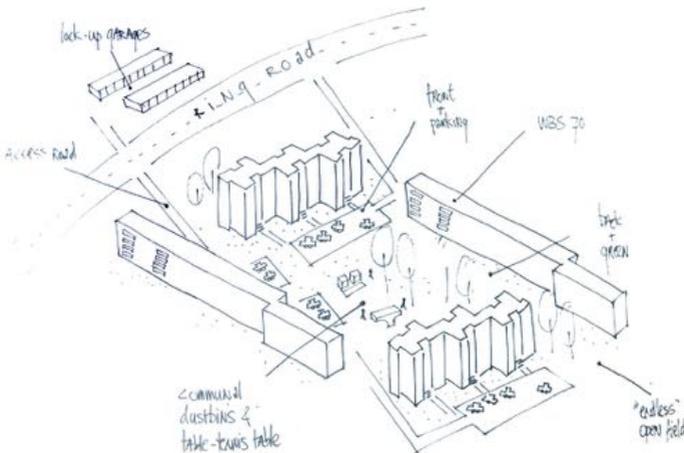
Block organisational principle, Plattenbau

These campaigns of massive urbanisation resulted in huge programs for the housing industry. From the early 1960s, the number of new dwellings was increased in most East European countries.

New Dwellings per 1,000 Inhabitants in East European Countries, 1960-1973

Country	1960	1965	1970	1971	1972	1973
Bulgaria	6.3	5.5	5.4	5.7	5.4	6.3
GDR	4.2	3.4	3.9	3.9	4.1	4.7
Hungary	5.8	5.4	7.8	7.3	8.7	8.2
Poland	4.8	5.4	5.9	5.8	6.2	6.8
Romania	5.5	6.4	8.0	7.3	6.8	7.4
Soviet Union	12.1	9.7	9.3	9.2	9.0	9.2
Czechoslovakia	5.4	5.5	7.8	7.5	8.0	8.4

SOURCE: Werner Rietdorf, *Neue Wohngebiete sozialistischer Länder* (Berlin: Verlag für Bauwesen, 1976), 24.

he 8th party conference of the SED in 1971 set out the most important challenges facing the country. Housing construction featured largely in this list, firstly because the design of the living and domestic environment gave shape literally and figuratively to the socialist family life, and secondly because of the existence of a housing shortage, especially in industrial areas where as previously mentioned the initial urban planning inaccurately predicted the influx of workers to the areas. The conference decided to not only conceive of housing construction as one big production machine, but to also treat the entire country as one well-oiled machine producing long-term plans, including new commuter towns around the by then grounded industrial towns

The increase in housing construction was able to happen due to the emergence of the WBS 70 housing type, developed in the early 1970s . The system was based on concrete panels measuring 1.2 metres or multiples thereof.

"The Wohnungsbausystem 70 is an open and dynamic system that is in accordance with the principles of the 'uniform way of building' and the stated goals of the GDR's housing construction policy. It is a system that in its present phase of adaptation follows the conditions of mass housing construction, of dormitories and of preschool institutions as well as the widest possible use of already extant and to-be-reconstructed slab factories".

The system was brought into building regulations in 1975 which were to be followed by architects and planners. The series was a fully integrated building system; it contained bearing elements, façade elements, internal finishing, staircases, prefabricated bathrooms etc. The construction time for one team was about 4.5 dwellings per day.

The plan below shows a typical WBS 70 apartment. Notable are

The buildings are characterised by their repetitive pattern of concrete loggias to one side and by the flat and unimaginative representations on the other side.

the prefabricated bathrooms and wide loggias that span 6 metres.
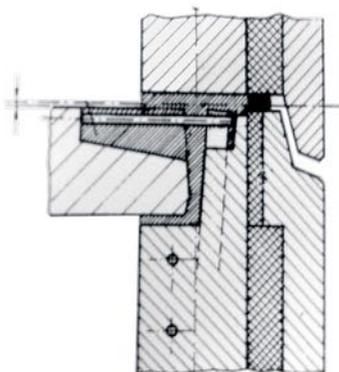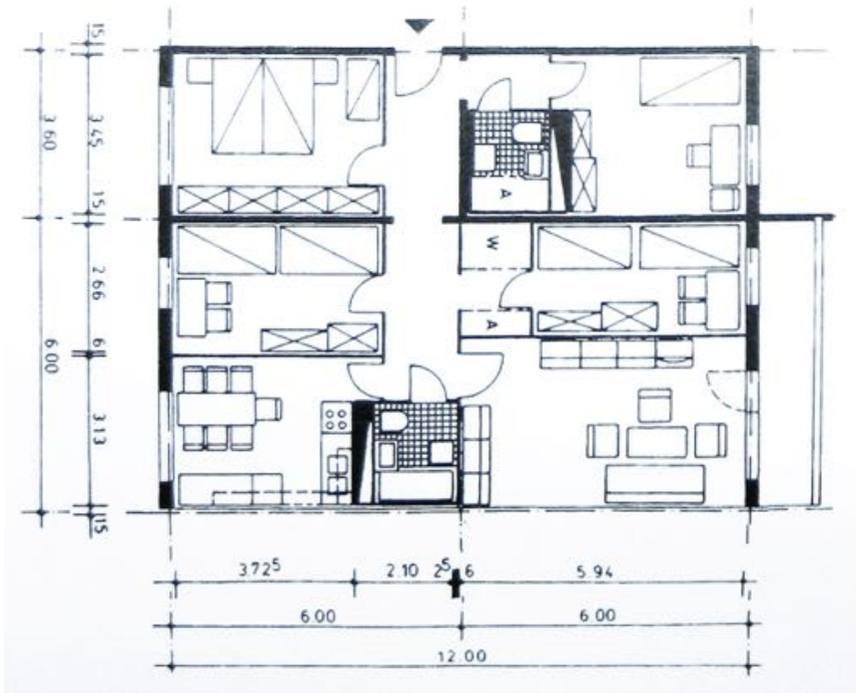
 The isometric drawing below shows the building construction in general. Prefabricated concrete panels are placed on top of each other. The reinforcement is welded together to create a stiff and stable construction. The typical span is 6 metres and the maximum weight of each panel is 63kN.

 The introduction of the WBS 70 series established a typology in
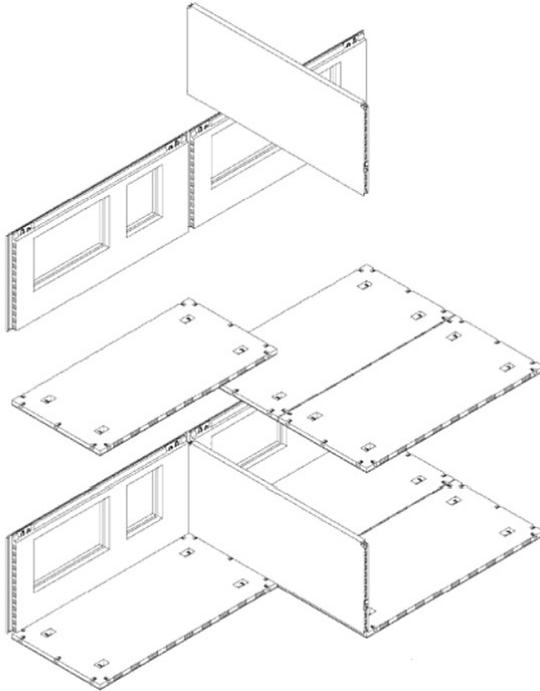
socialist urban planning and architecture that lasted for the next thirty years. This typology was that of a 'stacked' housing type, with the layout of each apartment identical and visible on each level.

> "The standardization of the WBS 70 meant: one to four rooms, a hall way, a kitchen and a bath (a cell without win dows), as well as a matching order among rooms and

functions. This 'classical' apartment type was reproduced about 1,5 million times. The largest room of an apartment was conceived as the living room. The middle-sized room which was usually located on the quieter side of the house was to be used as the parents' bedroom, and the smallest rooms were to be used as the children's bedrooms"

The entire complexes and developments were based on the concept of the nuclear family in a nuclear apartment multiplied and reproduced in socialist housing areas; a cell of private family life conducive to a healthy socialist lifestyle.

The second new socialist city (after Eisenhüttenstadt), was planned

WBS 70 AND THE BUILT LANDSCAPE

as a residential development for the coal mining industry – Schwarze Pumpe. The settlement was designed around the utilisation of plattenbau construction. A special event marked the year of 1957 – the establishment of the first fully mechanized housing factory for the production of concrete panels. The annual capacity was 70,000 units

It was at this stage that the technological advantages and limitations began to determine the form and planning of new settlements. In this instance, the urban form and design of Hoyerswerda-Neustadt (New Town – Neustadt) was dictated by the requirements of construction technology.

> "In this first phase architects, planners and engineers tried to combine the demands of new industrial building techniques with a friendly garden-city layout of a closed building block with several public facilities on the enclosed greenery. However, during the planning phase of the first housing block in Hoyerswerda, planners came to realize that it was impossible to create small-scale urban structures with modern industrial building techniques. Thus, open structures became the dominating form of building with the building crane as its main architect."t

Whilst the maximum size of the elements was largely determined by the building crane; transport to the building site also plays a role. For example, one thousand dwellings built according to the Dura-Coignet system (a similar system to the WBS 70 series used in the Netherlands) not far from the factory in Schiedam have a storey height of 2.6 metres instead of the usual 2.8 metres because the panels would not have otherwise been able to fit beneath the local viaducts

The maximum distance between factory and building site was usually not much more than 50km. Ideally dwellings as far as possible were built within this radius.

The type or crane used also affected the spatial layout of the blocks. For instance, the radius of action of a crane capable of building on two

sides simultaneously determines the distance between the blocks of housing. The height of the blocks also is determined by the limitations of the crane.

The production speed of WBS 70 buildings was consequently determined by both the factory and the crane. In the structural phase one crane can assemble two dwellings a day. The daily output of the factory does not have to equal the combined output of all cranes on a project because factory production was not hampered by bad weather. Nevertheless, factories often had a large storage area which acted as a buffer when construction was halted for a long period of time, for example by frost.

It is an interesting contradiction to note that by utilising the WBS 70 series and large scale prefabrication of housing, the GDR government effectively killed the craft of individual trades people such as plasterers, tilers and painters. The behemoth of the factory producing endlessly repetitive and monotonous housing was the brand and result of the construction policy in the GDR.

In a society that was supposedly devoted to the common man and the effort one puts into society, a glaring paradox became evident. In order to justify industrialization of housing, passages from Karl Marx's Das Kapital about the "machinery and the large industry" were cited, even though he never wrote about socialist industrialization. For the government, the savings were huge. In 1950 the number of man hours needed for a system built dwelling varied between 500 and 800, compared to 2000 for a traditionally built dwelling .

On an urban planning scale, the transition to an industrialised housing construction in the 1950's required a departure from existing socialist planning principles. The earlier socialist realist period of the 1950's utilised perimeter blocks with a central courtyard (Wohnkomplex), industrialised modernism from the mid 1950's onwards used open rows of stacked apartments. The courtyards that featured in early Wohnkomplex developments belonged to an existing architecture:

"Courtyards belong to the ideal of the 'closed' city

composed to classical urban design principals of courtyards, boulevards and squared. The individual dwelling is subordinated to a grand monumentality. The emphasis lies on the public, collective life that is supported with a wealth of amenities located mainly in the residential and shopping estates between the estates".

Plattenbau developments largely disregarded any underlying spatial or urban strategy. In effect, the building crane constructed rows of apartment blocks in a green field. The amenities necessary to create a functioning housing estate largely didn't manifest; dustbins and untended green spaces took the place of community or sports facilities in many cases.

What was successful in the construction policies of the GDR undoubtedly was the flexibility of the WBS 70 and other prefabrication systems and the speed apartments could be constructed. The industry was highly streamlined and efficient, providing modern apartments for hundreds of thousands of people in the GDR.

The largest development was that of the Marzahn area in Berlin. Here the WBS 70 system was used to construct dwellings for 142,000 inhabitants.

"It became one of the most important areas for the realization of the "housing program of the GDR" approved by the Eighth Congress of the Socialist Party in 1971. The program implemented by the new regime under Erich Honnecker promised to solve the East German housing problem up to the year 1990. It planned to complete 250,000 dwellings in the Berlin region by 1990. The first 60,000 dwellings were to be built around the old village of Marzahn; they were to house 150,000 people."

The development constrasts with the rural location of Schwedt and Eisenhüttenstadt, with a shift in planning strategy that occurred

in the 1970's towards concentrating on urban peripheries. Whilst the development had again been planned in tandem with a new industrial centre in northeast Berlin that in 1987 provided 21,000 jobs , the area was anchored in a relationship to the centre of Berlin. An extension of the S-Bahn to the area was completed during the construction of the residential blocks, and the area is within the desirable 30-minute commuting radius from the city centre.

Berlin-Marzahn was the single largest built development of the GDR. At the time when the district was founded in 1979 the combined villages of Biesdorf, Marzahn, Hellersdorf, Kaulsdorf, Mahlsdorf and the smaller surrounding settlements constituted some 50,000 inhabitants. Between 18th December 1978 and January 1979 alone, 15,000 new inhabitants took up residence

As of 2001, 100,000 plattenbau apartments existed in Marzahn. However, the policy of developing the urban periphery eventually drew criticism to the city planners.

> "During the 1980s, the system of peripheral urban development that had been established around 1970 met with sharp criticism from the Marzahn population, who attacked the monotony of the new quarters.51 Planners were critical because of the high costs of the new infrastructure.52 Experts from the East German Building Academy stated in 1989 that in 88 East German cities, the surface of the residential areas had been considerably increased while the number of inhabitants per hectare declined between 1980 and 1990. They called the type of urbanism realized in the 1970s and 1980s in Marzahn and elsewhere extensive urbanism, which in practice meant giving up the inner city, creating serious traffic problems, producing housing with very high costs."

In total terms, plattenbau developments and in particular the WBS

70 series created huge amounts of housing for the citizens of the GDR.

> "By 1990 over 644,000 residential units were built using this same building system and a total of 1,200,000 manufactured units in all. In East Berlin there are over 270,000 industrially produced residential units, representing 40% of the entire housing stock. Of these 100,000 apartments were produced using one particular model, the apartment construction series 70 (WBS 70)."

The construction policies of the GDR transformed the countries housing stock. Nearly 50 percent of housing in the former state was constructed using industrialised prefabrication processes. Plattenbau developments exist throughout the country and surround the major urban cores. They are firmly imprinted on the minds and experiences of citizens of the former state, and continue to leave a physical and emotional imprint.

The feat of constructing such a number of dwellings for the citizens of the GDR demonstrates the application of a successful construction process. The ease and speed in which plattenbau developments were constructed is a credit to the architects and engineers who developed the systems used for over thirty years.

However, the primary function of these construction processes was to provide a housing cell for the typical, working, socialist family unit. The industry was a successful one but how did this type of construction translate to the human scale? How did the average person feel living in one box surrounded by thousands of identical boxes?

Was the monotony and blandness of the typography something that translated into the experience of living in a plattenbau development?

INHABITATION OF THE PRIVATE CELL

The image today of plattenbau developments is stigmatised, 'due to the appalling monotony and uniformity of the buildings and lack of public facilities or valuable green space'. The housing estates speak of a bleak and withdrawn existence, one cell in an identical collection of thousands. Since the fall of the Berlin wall in 1989, the population of East Berlin has continuously fallen, a statistic highlighted in the fate of plattenbau housing estates.

In the GDR's day Marzahn boasted a highly differentiated population with labourers and professors living next door to one another. After the fall of the Berlin wall Marzahn suffered a severe loss of image. The area's residential profile has since changed dramatically. Many former residents have departed for the better suburbs of Berlin or to other parts of the country in search of work. In addition, the area attracts a lot of immigrants from other post-communist countries. Like many areas in the GDR, Marzahn has to contend with shrinkage. In 1992 Marzahn still had 164,907 inhabitants; by 1998 this had dropped to 142,000, a decline of 14 percent. By way of comparison: the population of the city of Berlin declined by 3 percent in the same period.

 However, this outlook on the plattenbau developments must be put into a political and economic context. The capitalist economy of Germany today is at odds with the climate in which the developments were constructed.

Plattenbau developments were conceived as socially-equal housing. The repetitive patterns of uniform housing complexes, constructed independently of the existing site context led inevitably to spatial and architectural monotony. The mono-functional and uniform layout of the living environment of plattenbau developments was a manifestation and result of the socialist concept of society. The crucial element of this concept was the formula of 'die sozialistische Lebensweise'. To follow official GDR and socialist ideology, people were supposed to follow and realise their identity as a socialist human being in all dimensions of collective life: that is the nuclear family, the orientation towards "Hausgemeinschaft" (households that shared the same

staircase in the same building), the political activities of the GDR and all other clubs and societies for sport, leisure, culture and consumption.

In terms of urban planning, architects and engineers were supposed to materialise the essence of socialist-realism into the built environment. In other words; the impetus was to design a clear relationship between the individual cell (the family), the housing block and of that to the housing estate (neighbourhood).

Siegfried Grundmann, an urban sociologist practicing at the scientific research institute of the SED – the Academy of Social Sciences by the central committee of the SED – described the housing ideology as interpreted by socialism: "Not the existence of class struggles and the deepening of social differences, but rather the convergence of class and stratification and the step by step decrease of social differences is from now on the basic rule for the social structure of cities". Implementing this claim meant that equal and decent housing had to be created for everybody: 'A general director and delivery man from the chemical plant, live side by side in the same building, and a town mayor lives in the same housing block as a janitor from the energy plant and an urban planner, who planned the town.'

If such societies existed as constructed by socialist ideology, how did the residents feel living amongst each other? How did the private cell fare in socially-equal neighbourhoods?

The answer to this lies in an analysis of media that has been produced about or as inspired by the experience of plattenbau housing. From the foundation of the GDR in 1949 up until today, architects, historians, filmmakers and writers have been examining the appearance of architecture in a genuinely existing socialism.

Plattenbauten in Media

Filled with ideological conviction, in 1958 novelist Brigitte Reimann moved to Hoyerswerda, the 'second socialist city on German soil'. There in 1963 she began work on Franziska Linkerhand, a realistic novel about the heroine of bourgeois origins who, as an architect in Hoyerswerda-Neustadt, unconditionally ties her personal fate to the 'life and death of the great socialist novel'. Here architecture as a utopian programme informs both the structure and storyline of the novel, and the author 'did not regard the writing as a freewheeling, literary-aesthetic affair but as a form of social engagement aimed at exploring and revealing the reality of the city and city life in the socialist context'.

The city was nominated by the SED as an urban planning testing ground for modern social ideas about the city and city life. Initially, discussions had a strong ideological conviction but in its manifestation, the construction was dominated by the limitations of the building crane; the result was a 'complete loss of spatial connection between the individual apartment blocks'. Atmosphere and intimacy had been sacrificed to production figures and innovations in construction technology. Eventually the focus of political interest moved to a new "model project" at the expense of the inhabitants of Hoyerswerda, who remained saddled with the unresolved question of socialism manifesting in a provisional new city. It was precisely this drama that the author made the subject of her novel.

The novel is about a young architect who, after graduating from architecture in Berlin and suffering the traumas of rape within marriage and divorce, relocates to Hoyerswerda where she becomes a draughtswoman in a design office. The story is interwoven with a systematic coupling of architectural images to events and characters. Initially the protagonist, Franziska, has great difficulty adapting to the Spartan living and working conditions of Hoyerswerda that have her constantly desiring the idyllic scenes of her youth. In Hoyerswerda Franziska 'literally lives in two worlds; that of the dead straight Magistrale where there is no sign yet of shops or department stores, just the occasional bus stop' and that of the earlier Wohnkomplex socialist courtyards,

with their views of 'garbage bins and trampled soccer pitches'. This is an image of the city that initially repels her but she gradually begins to understand and starts to experience as the 'socialist counterpart of the historical city of aristocracy and bourgeoisie'.

According to the novel, the city is doomed to failure because of the 'disregard to the non-production related ambience of domestic life'. A rape in a housing block and the suicide of a construction office secretary begin to demonstrate the urban disintegration of the city as seen "from below" through the eyes of Franziska. This "amputated town", according to the partner of Franziska, represents 'an opportunity missed, a settlement of television coves, a town planning disaster…in that it prevents rather than promotes communication, separates rather than mixes the lives and activities of its inhabitants'.

This novel represents an ultimately dismal view of the author's experience of living in Hoyerswerda, an 'accurate and uncomfortable mirror of the state of desperation in which individuals, state and society in the GDR had ended up – twenty years before the fall of the Berlin wall'

The novel, although not a historical or architectural output, is an invaluable source which documents the experience of living in a plattenbau development.

A number of the early short films of Chantal Ankerman were attempts at analysing the solitude of domestic life. Saute ma Ville (Blow up my Town), 1968, deals with the claustrophobia and loneliness of a young woman, living on her own in a Belgian plattenbau housing block.

The thirteen minute film provides an ultimately despondent and frightening view of living in a typical plattenbau apartment. The initial scenes set the context of the location; an apartment block with a broken lift, decayed stairs, and the ascent of Ankerman up to her domestic cell. As if to demonstrate the detachment of the apartment from any sense of community or activity, the front door is immediately and frantically taped up and a chair set against the handle.

The only background noise is the interior monologue of the female character. She echoes her actions through noise and humming – making the noise of striking a match as she carries out the action. Constantly fretting and humming, an unsettled and quietly frantic atmosphere is established. The fixed camera, focused on the cramped kitchen creates a sense of the dwelling being a claustrophobic space.

The setting and irrational activities of the woman make her domestic life seem like a crushing prison with no hope of redemption. Halfway through the short film and we see how the kitchen has descended into chaos; with the woman trying to clean the mess she has caused on the floor with a broken and unusable broom, dancing and laughing maniacally with herself and starting a fire on the hob.

The scene unexpectedly cuts to black, with the sounds of explosions accompanying the lack of visuals. Whether this the explosion and destruction of the apartment block or the girls mind is irrelevant, as the film shows how the solitude of domesticity in such apartments, ultimately the experience of living in them, could interfere with and break down the human mind.

This short film can be analysed as demonstrating the potentially negative effects of living in a 'modern' apartment block, where production processes took precedence over a desire to create a functioning society. These sorts of worlds are here shown to be extremely lonely and withdrawn and have such a negative influence that they can be the cause of breakdown in not only a society, but also the human mind.

Elsewhere during the period of socialism in Eastern Europe, other filmmakers and artists were producing work that used plattenbau equivalents as a backdrop and context to the narrative. In the case of the Polish filmmaker Krzysztof Kieslowski, his *Decalogue* series uses a plattenbau development in Warsaw as the backdrop for his ten-part mini series.

Filmed in the late 1980's for airing on Polish television, each of the ten one-hour episodes deals with one of the Ten Commandments and explores the possible meanings of each – often ambiguous or contra-

dictory – within a fictional story set in Poland.

The interpretations of some of the episodes can be read as a comment on the socialist backdrop of the film or the experience of living in the huge housing complex in which the series is set. For example, in episode 1 *'Thou shall have no other gods before me'*, a university professor trains his son in the use of reason and scientific method, but is confronted with the unpredictability of fate. Upon calculating the depth of the ice on a frozen lake and judging it safe for his son to walk across, reason is defied when the ice breaks and his son drowns. The socialist cities and plattenbau developments were ones of method and ultimate predictability, the very dominance of which was to be criticised for killing any sense of atmosphere or mystery in the developments. Does the episode critique the sense of ultimate order and functional separation created by socialist ideology in architecture?

In episode 6 '*Thou shalt not commit adultery'*, a naïve young man spies on a stranger through her window and falls in love with her. This episode speaks of the withdrawn and lonely existence encouraged by plattenbau developments, where there was no opportunity for the man to come into contact with the woman he loves other than visually and from a distance.

Die Architekten is an East German film about the fate a young architect suffers who sacrifices all that is dear to him in order to see his vision for a community facility fulfilled and constructed. The protagonist and his family live in a plattenbau apartment in Marzahn, having moved from an old apartment in the centre of Berlin. Although the move to Marzahn was made as the old apartment was the cause of illness for the children and wife of the family due to its inadequate heating, a sense of permeating numbness is quickly established as a result of living in the development.

The backdrop of the film here is again central to the storyline of the film. The architect eventually loses his wife and children partly due to his work commitments, but also to the wife's eventual inability to live in the apartment any longer. Spending her days living a repeat-

edly monotonous existence as a housewife devoid of and community contact or activities, she eventually turns to another man as a source of stimulus for her life and escapes from the apartment and the country with her children.

The main character is appointed to be the head architect of the development of a new community and shopping centre, and assembles his own team of architects, engineers and artists to develop the scheme. However, from this initial high the fate of the architect becomes increasingly destined for hopelessness and despair. His grand plans and ideologies are repeatedly pared back by GDR officials and planners, until the development loses all sense of the initial community driven and ecological concept.

As perhaps the strongest critique of both GDR political and construction policy found, the final scene of the film shows the architect, having lost his family and with the development eventually cancelled, having a breakdown on the green field site of the prospective development. The film demonstrates again the affect on the personal self that living in plattenbau developments had, along with the conflicting and contradictory practices of the SED.

These works all deal with the experience of 'self' in an un-human, industrially produced context. The experience of living in these developments seems to have had a profound affect on people, and it can be argued that the monotony and oppressive nature of the housing estates makes you more aware of self and more vulnerable. The knowledge of your existence being no better or worse than anyone who surrounds you is a result of the belief in the socialist order. In the GDR, children read Karl Marx and Friedrich Engels in school and were exposed to the socialist ideology in every area of life. Architecture and urban planning were one of the main areas of focus for the GDR in manifesting its social concepts.

In the example once again of Hoyerswerda, the early design phase

was dominated by the 'dilemma between ideological dreams and economic reality.' The superb courtyards of the earlier Wohnkomplex development in Stalinstadt were supposed to be an inspiration for the green space between the rows of apartments, creating 'clearly perceptible and arranged spatial relations'. In reality the greater radius of the building determined the spatial situation; the result being a complete loss in the spatial conversation and relationship between the blocks.

The experiment of representing socialist-realism and socialist ideology in architecture has and continues to be the subject of much literature, discussion and other media. With plattenbau developments and the WBS 70 building system, industrial processes took precedence over the design of a socialist lifestyle. There is no better example of this than the power the building crane wielded in spatial and urban planning.

This dissertation came about after a first-hand experience of a plat-

CONCLUSIONS

tenbau development. A sense of being over-awed by the scale of the housing blocks, the space between them and the grander scale of the urban plan resulted in a desire to understand how they came to be and what they were like to inhabit.

Ultimately, the feat of transforming the countries housing stock through a prefabricated, industrialised process was a success of the government of the GDR. Eventually, 40 percent of the total housing stock was modernised and provided citizens with, according to an former inhabitant 'coming from living in a city centre tenant, a situation where you might not have had heating or an adequate bathroom, to being provided with a modern apartment with central heating, properly serviced and relatively spacious in comparison'. In this context, the socialist system took care of and provided for its citizens.

However, overwhelming evidence exists to suggest that as socialist planning and an architectural endeavour, the systems failed. Living in a plattenbau development meant the habitation of an industrial scale that was ultimately incapable of incorporating a functioning society. The repetitiveness and monotony of plattenbau developments manifested itself in the mindset of the inhabitants. The literature and films discussed here that demonstrated the experience of living in a plattenbau development show this failure of architectural and urban planning to provide a functioning socialist lifestyle.

The inhabitants of plattenbau developments lived in an impersonal, monotonous and dysfunctional society that was incapable of providing for the personal, human scale. As the heroine in Franziska Linkerhand thinks to herself;

"Ich bin. Wer?"

BIBLIOGRAPHY

Socialist Planning and the Rediscovery of the Old City in the German Democratic Republic, Brian Ladd, Journal of Urban History 2001; 27; 584

Planning Urbanization and Urban Growth in the Socialist Period: The Case of East German New Towns, 1945–1989, Christoph Bernhardt, Journal of Urban History 2005; 32; 104

Journal of Architectural Education (1984-), Vol. 50, No. 2 (Nov., 1996), pp. 104-114

Architecture and Ideology in Eastern Europe during the Stalin Era by Anders man
Source: Journal of Design History, Vol. 7, No. 1 (1994), pp. 65-67

Building the World Anew: Design in Stalinist and Post–Stalinist Poland, Author(s): David Crowley, Source: Journal of Design History, Vol. 7, No. 3 (1994), pp. 187-203

People's Warsaw / Popular Warsaw, Author(s): David Crowley, Source: Journal of Design History, Vol. 10, No. 2, Design, Stalin and the Thaw (1997), pp. 203-223

Author(s): David Crowley, Reviewed work(s): *Stalinist Architecture* by Alexei Tarkhanov ; Sergei Kavtaradze
Source: Journal of Design History, Vol. 6, No. 2 (1993), pp. 141-143

East Central Europe: The Unhappy Heritage of Communist Mass Housing, Author(s): Peter Lizon, Source: Journal of Architectural Education (1984-), Vol. 50, No. 2 (Nov., 1996), pp. 104-114

IBA's "Models for a City": Housing and the Image of Cold-War Berlin, Author(s): Wallis Miller, Source: Journal of Architectural Education (1984-), Vol. 46, No. 4 (May, 1993), pp. 202-216

Sako Musterd, In Post-war Housing Estates in Europe. Residents' Views on Social Mix: Social Mix, Social Networks and Stigmatisation Urban Stud 2008; 45; 897

Ideals in Concrete, Jorn Duwel (Author), Wolfgang Kil (Author), Gy rgy Konrad (Author), Anna Tilroe (Author), Bohadan Tscherkes (Author), Mieke Dings (Editor), Cor Wagenaar (Editor), NAi Publishers

Architecture as Ideology:Industrialization of Housing in the GDR, Christine Hannemann

Architektur der DDR, pg.209-215 (secondary referenced from the Ideals in Concrete book)

D. S. Pensley, *"The Socialist City? A Critical Analysis of Neubaugebiet Hellersdorf,"* Journal of Urban History 24, no. 5 (July 1998): 563-602.

Brigitte Reimann, *'Franziska Linkerhand'* (Novel), 1974, Aufbau Tb

Chantal Ankerman, '*Saute Ma Ville'* (Film), 1968. '*Jeanne Dielman* (Film), '*Lá Bas'* (Film), '*La Chambre'* (Film)

Krzysztof Kieslowski, '*Decalogue'* series, (Film), 1987

Peter Kahane, '*Die Architekten'*, (Film), 1990

http://www.germannotes.com/archive/economy-of-the-gdr-p-113.

http://www.germannotes.com/archive/history-germany-since-1945-p-946.html

http://www.polarinertia.com/july04/prefab01.htm

http://news.scotsman.com/latestnews/New-kids-on-the-Soviet.2326190.jp, 'New Kids on the Soviet Block'

http://www.nytimes.com/2002/01/24/garden/in-chic-new-berlin-ugly-is-way-cool.html?sec=&spon=&pagewanted=3, 'In Chic Berlin, Ugly is Way Cool'

Briain Moriarty
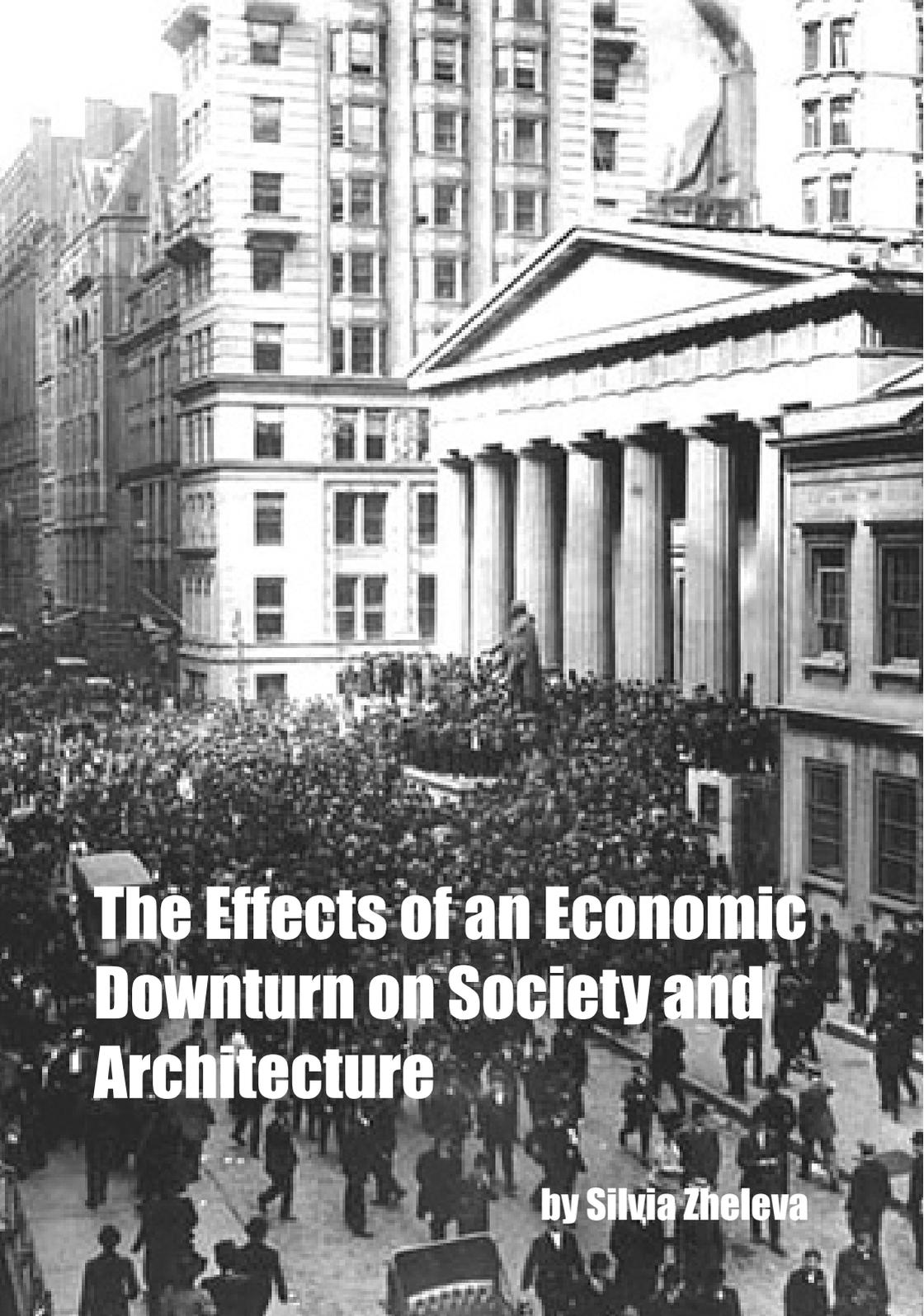
The Effects of an Economic Downturn on Society and Architecture

by Silvia Zheleva

Introduction

The purpose of this paper is to create a comprehensive study of the influence of economy on society and architecture. With the current precarious situation in the world market, one wonders where the ordinary individual is left in terms of lifestyle, finance, culture etc.
The increasing decay of the economy, the property market and in turn the construction industry, undoubtedly one of the largest industries in the world, leads to the question of what is to be expected?
In order to attempt to answer some of these questions it is essential to create a thorough investigation and understanding of previous such events and circumstances.

Historically, one of the greatest economic recessions to have been experienced globally was the Great Depression of the 1930's. Precipitated by the 1929 Wall Street Crash, a collapse of the largest market in the world at the time, severe repercussions were suffered by millions of people.
Thus with this dissertation an examination shall be made of how the stunted growth of the economy in the 30's affected the architecture of the era, which mirrored the standards of its society. Furthermore a study shall be made of incentives made by the American government to generate recovery and to alleviate the difficulties which much of the population experienced during those trying years.
In order to create such an investigation, however, it is imperative to understand the speculative economic climate and the profit based architecture of the 'Roaring 20's,' as this will lead to clues about the occurrences which formed a basis for the astringent downturn in world economy, such that full resurgence did not ensue until the Second World War.

In conclusion parallels and comparisons shall be drawn between the present turbulent economic epoch and the events and experiences of the 20's and 30's, with the intention of creating a greater understanding of the basis for catastrophic economic downturns and thus attempting to comprehend today's precarious predicament in preparation of the future.

Architecture and Society in the 1920's

The 1920's were an era of booming economy in the United States, a time where stock market growth seemed limitless, possibilities endless and speculation though lacking solid credibility- soared. It was also the time of new inventions such as the radio, of exciting pastimes such as film and was also known as the Age of Jazz. People wanted to believe that in an era where the opportunities couldn't be better, the economic growth would continue on perpetually. This speculation was fuelled with a speech made by American President Coolige on 4 December 1928, in which he assured the nation, "*No Congress of the United States of America ever assembled, on surveying the state of the Union, has met with a more pleasing prospect than that which appears at the present time[1]*"

Within the human being optimism and dissolution sometimes go hand in hand, as Walter Bagehot famously stated, "*All people, are most credulous when they are most happy[2].*"

The Architecture of Capitalism

Architecture is a discipline which reflects on society, its wealth, its tastes, at times its fashion and even its politics.

The architecture of 1920s New York and Chicago is a clear echo of a speculative epoch. Speculative structures are derived primarily for monetary purposes[3]. It is logical that in a time of economic growth the most extravagant and magnificent examples of any discipline are fashioned. Architecture in the 20s was a clear example of this with lavish skyscrapers such as the Chrysler building dominating the skyline.

With salient financial provision and an astringent ascent of wealth, boom behaviour was inevitable. Factors in boom behaviour were instigated initially by large proceeds for buildings early in the period. This enticed great numbers of investors and developers into the market. Sucked in by the fever of profit, the magnitude of momentum increased and speculation rose, taking little regard for net needs or the possibility of overbuilding[4]. Skyscrapers

---

1   Galbraith, 1988, p1
2   Bagehot, 2004, p72
3   Willis, 1995, p 157
4   Willis, 1995, 159

were the definitive architecture of an era of enterprise and capitalism. According to Cass Gilbert, the architect of the Woolworth Building (the highest building in New York in 1913) the skyscraper was a, *"Machine that makes the land pay [5]."*

In New York sites were compact and building heights were relatively unrestricted, thus the most economic method of construction was a narrow typology which soared in elevation.
In Chicago however, height restrictions existed and sites were larger, thus the most profitable technique was to construct plans which filled the entire area of the lot, with extrusions creating courtyards to allow light into their depths[6].

Light And Site
Key words in skyscraper architecture were light and site. A top down approach was always taken in the design of these structures. They were conceived from interior to exterior, with the dimensions of the smallest office unit reproduced to form the most efficient floor plan around a central elevator and service shaft. These plans were then multiplied by the desired amount of stories, which depended on market rents and fiscal prescriptions[7].

With the passing of the zoning law in 1916 known as, 'The Zoning Envelope,' the design of skyscrapers in New York became slightly more complex.
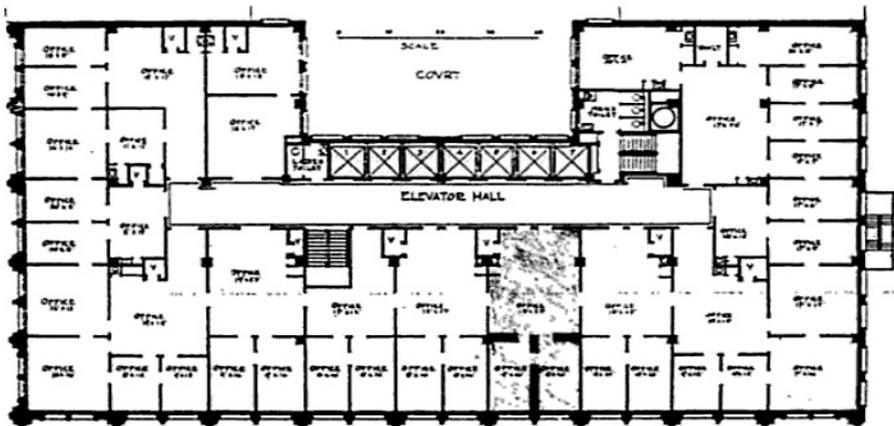
Fig 1. Typical plan of skyscraper structure, with offices located on perimiter, in order to gain maximum light. Cervice core placed in center of plan.

5   Gilbert, 1900, p 653
6   Willis, 1995, p23
7   Willis, 1995, p24

Figure 2. Top and bottom Left- Drawings made by Hugh Ferris of the New York the Zoning Laws
Top right- French Building, (completed in 1927)
Bottom right-City bank Farmers Trust Building (completed 1931)

Before this law, buildings of unlimited height began to overshadow other structures, causing the quality of office space to deteriorate and preventing any light from reaching streets and side walks. Thus this new law allowed unlimited heights of structure on solely a quarter of the site. After a maximum height (100-125Ft.), a building was required to step back as it rose, in accordance to a fixed angle set in section from the centre of the street or avenue. This legislation was reflected in the wedding cake or stepped pyramidal typology of the high rise architecture which followed[1].

Although indirect light from ceiling lamps existed, it was inadequate as a sole source of light in a working environment, therefore office space with proximity to fenestration was imperative for rentability. Windows and ceiling heights were large, in order to allow for as much light as possible to enter a building, making it a more desirable location for companies to situate to[2].
It was also vital, however, to ensure that windows were easy to open and weren't too heavy, as they were the main supply of ventilation in buildings, central air conditioning systems had not yet been invented.
The depth of offices was also affected by this need for proximity to windows. Shallow, light offices gained higher rental income than darker, deeper offices, as stated by architect Wiley Corbett, "*It is better business to construct less building, and have shallow offices well lighted, than to have more building with deep spaces poorly lighted.*"
The accepted depth of an office ranged from 20 to 25 ft. Status was also underscored by the proximity to fenestration. Management commanded corner offices whilst lower ranking staff was situated in deeper and dimmer spaces[3].

Art Deco and the Chrysler Building: Case Study
The art deco movement was the leading art and craft movement of the 1920s.The name Art Deco came from an international exposition held in Paris, known as the, '*Exposition Internationalle des Arts Decoratifs Industriels et Modernes.*'
It was a decorative, elegant style which followed the Art Nouveau scene and was more directly linked to mass production. It was recognized as an international style of conglomeration. Influences included the Orient, ex-Colonial styles, Roman, Greek and Mayan Historical motifs and modern elements including stylized patterns from automobile construction such as spokes and wheels. In architecture Art Deco elements were highly ornamental and non-structural. The style was described as being both innovative and traditional. The Chrysler Building, a skyscraper designed by William Van Alen, con-

---

2   Willis, 1996, p25
3   Willis, 1996,,p 29

Fig. 3 Image of the Chrysler Building (completed 1930)

structed between the years of 1929 and 1930, is one of Art Deco's shining exemplars. It is the tallest brick building in the world and furthermore held the title of tallest building in the world for eleven months before the construction of the Empire State Building.

The exterior of the building is a stylization of the Chrysler vehicle. The building's spire is clad in exposed stainless steel with an art deco motif which imitates giant sun beams and was inspired by a car radiator grill. The structure cost 15 million to construct and included a private lounge area on the top floors, an observation deck with triangular windows and walls inscribed with lights in a star motif. The edifice emanates the crux of corporate opulence.

Since the Chrysler building was built after the zoning laws, it is a perfect example of a typical 1920s skyscraper with the necessary set backs in its silhouette. Due to this, its design is more complex, with the need of at least three plans taken at different segments to explain its design. The challenge in conceiving such buildings was one of finding the most economic plans for both the base and narrower segments of the tower structure as it stepped in, allowing for adequate provision of natural light in both. This was achieved by Van Alen by adopting an H shaped plan in the deeper base stories with the inscription of light courts at the front and rear, allowing for all offices to receive sufficient light. The higher, shallower levels are rectangular in shape, with offices following the old typology of circling the central core, thus

Fig 4. Art Deco details of elevator door and staircase within Chrysler Building

creating plan efficiency[4].

The Chrysler Building encompassed 71 floors and is an ideal example of the rapid increase in the height of the prominent structures in New York through the twenties, with the tallest buildings in 1925 averaging 40-45 floors.

It is imperative to note that the occupation of colossal towers, such as the Chrysler building, was only fractionally by the company who owned and utilized them as a method of advertising prominence, power and importance. It was much more economically viable to rent out as many individual office spaces within the building to clientele (such as law and finance practices) in order to gain the greatest profit, with only a small portion of offices utilized by the owner company or corporation[5].

Economics and Architecture

Architecture is a discipline which is a direct reflectance of economic situations as it is financed through the economy. The growths in the stock market can be linked with the growth of the property market and vice versa.

In 1929 although the stock exchange plummeted, on seldom occasion, it would recover and quickly sky rocket once more. Trading on margin was one of the most significant reasons for this climb. People's sole interest in ownership was the increase of values. Thus banks would supply capital to brokers who would in turn loan money to customers and the security guarantee or collateral would go straight back to the banks in an efficient loop. The money could be retrieved on demand. Margin trading allowed for and created new and vital trading channels which would ameliorate a weak market and make it strong and active[6]. Resultantly, people began to buy stocks on margin at an exceptional rate, obtaining their whish for an increase in profit without the expenditure and responsibility of ownership.

Many companies at the time even found Wall Street more profitable for the use of working capital than further production, detaining themselves to the stock exchange.

Thus debt was substituted for equity[7]. The construction industry too followed suit, with the most ambitious projects occurring at the end of the economic boom, where developers and lenders alike got caught up in the hype of attaining greater and greater profits[8].

Regrettably, at the end of the decade investors began to take on such great amounts of risk, buying too great quantities of stock on margin, such that the profit which was made on their investments could not quench their acquisitional debts, as NAOBM President Lee Smith affirmed when he credited

4   Willis, 1995, p85
5   Wilis, 1995, p147-148
6   Galbraith, 1998, p20
7   Galbraith, 1998, p21
8   Willis, 1995, p 155

overproduction to speculative builders, "*Who borrow the full cost of construction regardless of return…then sell the building at a profit and proceed to erect another somewhere else.*"

The Empire State Building was a prime example of the over enthusiasm of speculation leading to cataclysmic over exertion. After its completion in 1931, merely a quarter of the building remained occupied for most of the decade, with it only commencing to make profit in the 50's.

Thus it can be said that architecture in the financial centres of the United States in the 20's was an architecture derived from economic and programmatic formulas for quality of space. However, the opulence of the interiors of some of the edifices mentioned above is reflective of the affluence experienced by the wealthy of the epoch, allowing for creative movements, such as the Art Deco movement, to flourish.

Light and fenestration were central to the skyscraper and a thirst for efficiency in plan leading to greater returns was key. As George Hill, writer in Architectural Record stated, "*An office building's prime and only objective is to earn the greatest possible return for its owners, which means that it must present the maximum of rentable space possible on the lot, with every portion of it fully lit.*" It is unfortunate that this very thirst and over exertion in speculation led to the calamity of mass over construction which prevented the letting of many structures at the conclusion of the decade and for most of the next.

Fig. 5 Above - Photograph of the New York Stock Exchange 1929
        Below - Photograph the Panic which ensued in the American nation
        during the Wall Street Crasg

The Crash and the Depression

The 1929 Wall Street Crash

As stated in chapter one, the Crash was precipitated by a decade of rapid growth in speculation, margin trading and a credit based economy. Rising share prices encouraged further investments to be made. At the time over 8.5 billion U.S. dollars were on loan. [1]

In accordance with Columbia University professor of History, Mr. John A. Garraty, "*The market had run up so high because of the easy-money policies of the Federal Reserve…they had kept interest rates low as a way of protecting the British pound, but that set off a wave of speculative borrowing.*" [2] Wealth and trade were on an almost continual up rise and people became caught up in the zeal of the markets. By the end of the twenties too great speculative risks were undertaken and inevitably all trading channels collapsed. The 1929 Wall Street Crash transpired on Black Thursday (October 24), Black Monday (28 October) and Black Tuesday (October 29), with astringent share price declines in financial markets world wide continuing for a full month.[3]

Agreeably there are several reasons for the Crash. It occurred at a time when due to overproduction, inflated property prices and real estate costs began to drop.

Investors in all the markets at the time took on such great amounts of risks that the returns on their investments began to be insufficient in dousing purchasing debts, due to Market over supply. Thus with banks and brokers alike pursuing loan repayment, investors were forced to attempt to speedily sell off their stock. The plummet of the prices in shares created mass panic; about 12,894,650 shares were placed on the market in merely a day. [4] Hence normal lending and borrowing channels were interrupted and compromised, "The combination of high levels of debt and falling prices can be very dangerous,"[5] Commercial banks were faulted for jeopardizing deposits in the stock market; others felt that utility holding companies shared the blame.[6] The plunge in the values of stock created widespread bankrupt-

---

1 Finantial Times 2008
2 Scardino, 1987, para 4
3 Wikipedia, 2009, para1
4 Shriller, 2005
5 Smith, 2008, p2
6 Brockman, 2009, para4

cies nationwide. This in turn created economic difficulties and foreclosures within a majority of business, generating mass unemployment and chaos within the American nation as well as in many other countries around the world. An article in the New York times states that, "*Most academic experts agree on one aspect of the crash: It wiped out billions of dollars of wealth in one day, and this immediately depressed consumer buying.*"[7] (Scardino, 1987, The Business pages)

One thing is certain; the Crash of the Great Bull Market was sudden and completely unexpected to everyone. Just several days before the Crash, world famous American economist Irving Fisher asserted, "*Stock prices have reached what looks like a permanently high plateau.*" Optimism was fuelled with more optimism and disillusion. It is truly deplorable that as economist Richard M. Salsman famously stated, "*Anyone who bought stocks in mid-1929 and held onto them saw most of his or her adult life pass by before getting back to even.*"
It is widely agreed that although the Crash was not by any means the sole reason for the Great Depression of the 30's, it was most certainly a grave signal post for the difficult period to ensue. According to J. K. Galbraith, an economics professor at Harvard University, "*The crash had the impact of glass shattering, and while other more essential factors took over as the Depression wore on - universal fear, the slump in agricultural production because of drought, the decline in business investment - it is hard to argue that the collapse of the market did not start things in motion.*"

The 1930's Great Depression and New Deal Policy
In the year 1930 people whished to believe that the worst of the economic upheaval was over and American President Herbert Hoover attempted to balance the National Budget, much to America's detriment. With more and more banks collapsing in a domino effect, the nation was gripped by fear. Unfortunately Hoover felt that the task and duty of welfare should be undertaken at local rather than governmental levels. Finances were given to impoverished farmers to buy seed, but not for food. [8] The president's beliefs were those of the old order of thought, where it was felt that each person's duty was to work hard and to compete with equal opportunity in earning a living. He could not quite fully comprehend that to many in those times the opportunities to support themselves and their families were becoming completely extinct.

Thus the nation brought in a new leader in the next elections, hoping in

---

7   Scardario, 1987
8   Scardario, 1987

their disparity that prosperity could come about once again. The most sig-
nificant ingredients that this new president, Franklin Roosevelt, brought to
the table, despite of his unsystematic and dishevelled methods of leadership,
were belief and hope. [9]His policies were vague at the best of times and were
unmethodical, however his personality and care for the individual won over
a nation desperately in need of aid.

Between the Wall Street Crash in October 1929 and 1933, 9000 American
Banks collapsed; the economy shrank by 33%. Unemployment and poverty
were rife, leading to an endemic development of
slums in which starvation was rampant. People became refugees in their
own country. [10]

The New Deal was legislation brought in by Roosevelt, mainly between
the years 1933 and 1935 in order to alleviate the difficulties created by the
depression. Although New Deal policy never brought about full recovery, it
did ameliorate some of the economic structure of the country. The creation
of a welfare state alleviated the starvation and most desperate of disparities
experienced by individuals who were excluded by their circumstances from
the ability to compete in the capitalist machine. [11] According to Raymond

Fig.6 Photographs of members of the American population who suffered most
in the depression years

---
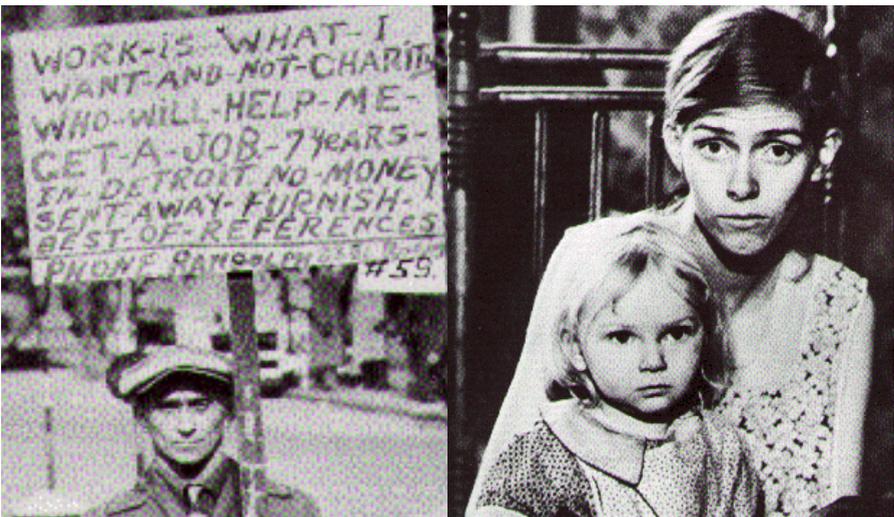
9   Conkin, 1968, p2
10 Smith, 2008, p2
11 Conkin, 1968, p23

Moley, one of Roosevelt's advisors, the president's interests were, *"Restoring confidence in the American people, confidence in their banks, in their industrial system and in their Government."*[12]

One of the first things that Roosevelt did as president was to hold a kind of 'Bank Holiday' in order to introduce Federal Deposit Insurance.[13] As Moley stated,
"The bank rescue of 1933 was probably the turning point of the Depression. When people were able to survive the shock of having the all the banks closed, and then see the banks open up, with their money protected, there began to be confidence…the public helped itself after it got confidence."

One of the most integral pieces of New Deal legislation was the National Industrial Recovery Act (N.I.R.A). It contained instruments such as the Public Works Administration (P.W.A.) and the National Recovery Agency (N.R.A). The first was headed by Harold Ickes, who worked and planned projects strenuously to secure the utmost advantages for people with an always restricted budget.
The latter, the N.R.A. was a bohemia of ideals aiming at bringing about not solely recuperation but also amelioration in economic policy, creating equality in opportunity and a democratic allotment of resources which would not be dependant on the decisions of groups of elitist minorities.[14] Rexford Tugwell was the man pushing such ideals forward into legislative measures in the hopes of creating what he called a collective, *"Concert of interests."* Tugwell, however, faced the difficulties of overcoming the force of the powerful minority who would lose out on substantial amounts of wealth if the economy became more regulated, broadening the prospective for the majority of the nation.[15] (Conkin, 1968, p39)

In 1933, as part of the New Deal Roosevelt took The U.S. off the gold standard and raised the price of gold in dollars creating price inflation. By devaluating the dollar, Roosevelt attempted to rectify discrepancies in international trade, making pricing less capricious. Roosevelt also threw out American prohibition policy by passing a Beer Bill and also reduced Federal Salaries and Veterans' bonuses.
He set up the Federal Emergency Relief Administration (F.E.R.A.), headed by Harry Hopkins, with the intention of administering controlled relief grants to all of the states. Furthermore Hopkins set up the Civil Works Administration which created work in construction and other areas for approximately

---

12 Terkel, 1971, p 288
13 Smith, 2008, p2
14 Conkin, 1968, p 37
15 Conkin, 1968, p 39

four million people, aiding the families worst effected by the depression. According to C.B. Baldwin, assistant to Secretary of Agriculture at the time, "*Leaf racking, cleaning up libraries, painting the town hall…Within a period of sixty days, four million people were put to work.*"[16]

A National Resource planning agency was also established in order to guide the country's public works and resources. Many architects, economists and planners were involved in this agency in order to co-ordinate projects, efficiently utilizing resources and in turn creating more employment.
Parallel to this the Home Owners Loan Corporation was established aiding home owners with mortgages by suspending payments or spreading out payments, allowing people to hold onto their properties. The agency itself would suffer the losses, fully subsidizing banks. Moreover loan extension programs for farmers were fashioned aiding those in most urgent need.[17]

It is important to note that many of the economic ailments experienced during the Great Depression were due to overproduction and under consumption. Farming was America's greatest industry and yet was its most impoverished. Since farmers were the ones at greatest risk of under consumption in turn affecting the purchasing tendency of the entire nation, it was imperative to bring about recovery in the country's agricultural system. Thus the Agricultural Adjustment Act (A.A.A.) was passed which relied on such policies as the condensement of agricultural land to prevent further over production, create more efficient use of terrain and thus raise prices, the replacement of excess agricultural land with National Parks and forestry and price support. However it is important to note that with new technologies being utilized on reduced parcels of agricultural land, many farm laborers lost work and thus suffered in the process.[18]

Roosevelt backed any program and initiative which involved conservation and the advancement of bucolic life. The Tennessee Valley Authority (T.V.A.) was one of the most significant of these, creating employment for rural dwellers in its process. Navigational channels and flood control systems were built for river towns, fertilizers were produced for the prevention of soil erosion and recreational services were designed and established. Thus a wide range of recruitment for both a skilled and unskilled task force was initiated, creating various benefits.
One of the major procedures undertaken by the T.V.A was the fabrication of electricity, bringing in with it industry and elevating the poor living stan-

16 Terkel, 1971, p 295
17 Conkin, 1968, p 49
18 Conkin, 1968, p 42

dards of the community that resided in the area.[19]

There were many operations similar to the T.V.A. undertaken around the world during the 20's and 30's in the hopes of creating employment and much needed services for rural dwellers. One such procedure was the construction of the Shannon Hydro-Electric Scheme in Ardnacrusha, Co. Clare, Ireland, instigated by Thomas MacLaughlin, an engineer working for a German firm called Siemens Schukert. The Irish government hired this firm to produce a hydroelectric station which would create sufficient electricity for a national grid, powering both cities and rural areas. The river Shannon was to be diverted into a canal where a sufficient fall would be created to power turbines which could generate electricity. This was a vast operation which included the building of a rail line between Limerick Docks and Ardnacrusha in order to transport imported German machinery for the building of the plant. Thus much employment was created for the Shannon region, in a time when it was desperately needed. [20]

Roosevelt, during his presidential terms, attempted to aid the struggling individual, the one most deprived and affected by the recession whilst also attempting to ameliorate America's economic system in the long term. He implemented a kind of moral stand against 'selfish' corporations, against purely profit driven businesses, with a concern for smaller enterprise, for those which were exploited. According to Paul K. Conkin Roosevelt, "*Stimulated righteous indignation and the atmosphere of a moral crusade. But the crusade could do nothing except take punitive action: divide a holding company, threaten but never collect progressive taxes, or use welfare measures to uplift the downtrodden victims of evil men. The crusade always ended up in some degree of futility.*"
Nonetheless others, such as James A. Farley, Postmaster General during two of Roosevelt's terms as president, felt that he saved America's, "*Free enterprise system, he saved the banks and insurance companies.*"
Despite such mixed opinions on the success of the Roosevelt Administration and the New Deal, on thing is certain, as C.B. Baldwin stated in his accounts, "*The Depression lessened, but it never really ended until the war. The New deal was never enough.*"

---

19 Conkin, 1968, p 50
20 C.L.S.P., 2005

Art and Architecture in the Depression years

Due to the economic and political climate of the 30's which re-enforced a kind of aversion and distrust of large corporations, industries and businesses in the wake of the stock market crash, there was a movement towards the rural, the countryside and the environment. People were hard done by the city and were also financially stripped of much of the income necessary to survive in a city environment. Undeniably during the depression years there was very little work for architects and designers as funding was greatly limited. However this led to new methods of thought, efficiency and care in planning which were much different to the 20's. The basis in design shifted from profit driven construction to a greater consideration of individual needs.

An important programme set up in the 30's by the Roosevelt Administration was the Federal Theatre, Federal Writers' and Federal Art project. Substantial subsidy was given over to this scheme in order to involve communities of all classes in participation, giving people positive outlets for the struggles that they were experiencing. Thousands were presented with the opportunity for the first time to undertake such creative ventures, before the theatre and arts were generally resigned for the entertainment of the wealthy. Scholarships were given to people who had left school early for work on such art based projects. Neighbourhood amateur arts and crafts classes, symphonies and theatres were set up, murals were painted on the walls of public buildings, thus allowing creative expression to be amalgamated into people's daily lives.[21]

Another agency set up by Roosevelt as part of the New Deal was the Re-settlement Administration, which was autonomous of the Dept. of Agriculture Headed by Rexford Tugwell, it received a large portion of governmental relief funding. The purpose of this organisation was to re-appropriate the populations of disprivileged urban areas such as ghettos and slums into independent garden cities and to resettle farmers living below the poverty line into co-operative farming villages and communities.
Taking inspiration from the original 'Garden City,' concept, designed by Ebenezer Howard in 1902, three Greenbelt Cities and several farm commu-

---

21 Conkin, 1968, p 59

nities were built under the Resettlement Administration.[22]

Garden cities were to be surrounded by pastoral countryside, with collectives of towns and residences grouped around a central city. Each town's services and population would be pre-planned, thus preventing the generation of urban sprawl and slums. In this method there would be sufficient goods and services provided for each resident, and even the economy would be more regulated, preventing large contrasts to occur between classes. Undeniably the model was quite utopian in its nature; however practicality played a key role in its design. Furthermore, the building of the Greenbelt provided crucial employment and thus aided in fuelling the revitalization of the nation. The 'Green' cities were situated in Maryland, Ohio and Wisconsin. The idea was that these would consist of co-operative, self sufficient communities.

Greenbelt cities were surrounded by countryside; city expansion was only to take place by developing new garden towns on the opposing side of a green area. The result would be clusters of cities grouped around a central city, with green areas in between. Residences consisted of apartments and town houses placed together in blocks. Each block contained a front service

Fig. 7 Model of city of Greenbelt, Maryland, U.S.A.

22 Conkin, 1968, p 59

area and a back garden area, with the garden side
facing onto another garden

side and service side onto service side, similarly to modern day suburban
estate housing. The service region made provision for driveways, post boxes
and garbage collection whilst the garden area existed for aesthetic reasons,
as well as to provide an outdoor living space. There were no walls divid-
ing the different blocks of housing, a path would separate the garden space
of one residence and the garden space of another, thus creating a sense of
community. The routes which children would utilise to walk to school or to
kindergarten were designed so as not to cross any roads and car traffic.
Garden city dwellings were completely practical and utilitarian in design,
providing for the basic needs of those worst effected by the Depression.

The work of world renowned architect Frank Lloyd Wright also took on a
similar direction in the years between 1932 and World War 2. During this
time he worked to find solutions in the provision of affordable housing for
the standard, middle class American family and also to alleviate city dwell-
ing, with a move back to the countryside. Thus he developed the model of
the Usonian house and Broadacre City as resolutions.[23]

As mentioned earlier in this chapter, there were very few commissions at
the time for architects with the recent economic collapse. However, since
Wright was never one to allow anything to curb his productive nature he
decided to establish the Taliesin Fellowship in 1932, an architectural educa-
tion programme. He involved his new students in the design of the model
of Broadacre City, which was based on the collective principles of his Uso-
nian housing.

Usonia was the term he used for the conception of dwellings that would
augment and improve the lives of its residents whilst also becoming part
of the natural, surrounding context. The idea was to move the significant
elements of swarming, cramped city living into a more serene, peaceful
environment. Furthermore, Wright recognised the need to modify methods
of construction in order to make middle-income housing more affordable.
Where in the 20's his clientele had consisted of wealthy businessman, it had
transformed into the ranks of journalists and teachers. Thus his method of
designing changed also, all that did not have a basis in necessity was re-
moved, practicality was key. [24]

Wright felt that it was, ”*Necessary to get rid of all unnecessary materials in*

23 Pfeiffer and Larkin, 1993, p 143
24 Pfeiffer and Larkin, 1993, p 144

STANDARD DETAIL SHEET
FOR "USONIAN TYPE" HOUSES

construction, necessary to eliminate, so far as possible, field labour which is always expensive." It was imperative to, "*Consolidate and simplify the three appurtenance systems-heating, lighting and sanitation.*"

In his very own words Wright stated the following solutions:

- *Visible roofs are expensive and unnecessary*
- *A garage is no longer necessary as cars are made. A carport will do, with liberal overhead shelter and walls on two sides.*
- *The old fashioned basement, except for a fuel and heater space was always a plague spot. A steam- warmed concrete mat four inches thick laid directly on the ground over a gravel filling, the walls set upon that, is better.*
- *We need no radiators, no light fixtures. We will heat the house the Roman way-that is to say-in or beneath the floors and make the wiring system itself be the light fixtures, throwing light upon the ceiling.*
- *Light will thus be indirect except for a few outlets for floor lamps.*
- *No painting at all. Wood best preserves itself. Only the floor mat need be waxed.*

As portrayed above, the method of construction of the Usonian houses was based on a specific scheme, therefore Wright created a 'Standard Detail

Fig. 8 Left - Segment of Wright's standard detail sheets.
 Below-L-sheped plan of Herbert Jackobs House

Sheet,' which acted as a template to be modified for the various needs of each individual family. Window sashes, board and batten walls, junctures between roofs, masonry and fireplace chimneys all became standardised. These systems also became adjusted to factory fabrication, which as a technology had recently emerged. [25]

These principles are clearly displayed in the design of Herbert Jacobs House, built in 1936. Following the Usonian model, the house was L-shaped in plan with the living room in one arm and the more private bedroom spaces in the other. Where both wings merged there was a central kitchen and work space. The roof was higher in this central area for aeration purposes and furthermore to provide roof lighting in the windowless quarter of the abode. In order to keep plumbing costs at a minimum the bathroom and kitchen were placed backing one another. Moreover, instead of a basement, a very small portion of land was exhumed beneath the kitchen in order to create space for the furnace.

Wright felt that by placing the kitchen in the central portion of the house, the position of the house wife would also be centralised making her, "*Attractive as a hostess. She was no longer a cook in the kitchen; we made her a feature of her establishment.*"

The placement of the house was integral. The L-shaped plan was positioned in the far angle of the plot of land, thus allowing the living spaces and bedrooms to open out into the terraced exterior gardens, whilst the front would face onto the street with provision made for services. (Pfeiffer and Larkin, p 165)

The walls of the house were made up resembling a sandwich consisting of poly-wood core providing waterproofing and insulation with boards and

Fig 9. The board and baten method of construction is visible in this photograph of Herbert Jacobs House

25 Pfeiffer and Larkin, 1993, p 170

batons on each side. Such walls were non structural and bent in moments, providing a leaf between inside and outside
and separating the various functions within the house. They were bent in such a method that it would provide them with rigidity, allowing them to stand upright. The structural elements of Usonian housing consisted of masonry-concrete block, brick or stone-which also provided support for the non structural screen walls. As demonstrated in his designs, Wright felt that, "*Form and Function are one.*" [26]

Hence, due to finances being severely limited during the Depression years, a new type of design and architecture arose, such that was well thought out, economical, with a concern for individual needs and such that had no time for waste or frivolity. It was an architecture that was sincere in attempting to improve the lives of its inhabitants who suffered through much difficulty with the Crash in the economy and world markets. The provision of creative outlets such as the Federal arts projects allowed people to express their frustrations in a constructive method, through community interaction.

26 Pfeiffer and Larkin, 1993, p 166

Conclusion- Drawing Parallels

Similarly to the 20's, in the 1990's Global stock markets were on the rise and seemed too strong when paralleled to principal economic developments at the time, in accordance to Bill White, economic advisor to the Bank of International Settlements [1].

In Ireland the Celtic Tiger boom was manifesting itself in full. This was a time of ascending optimism, as in the twenties, the epoch was even dubbed the 'Roaring 90's.' Speculation was rife and was mirrored in the architecture of the time which was driven by profit. Similarly to the events of the 20's discussed in chapter one, the sharp incline in the market was unable to sustain itself, leading to the bank closures, losses of jobs and general decay in economy experienced presently.

As stated in chapter two, The Roosevelt Administration in the 30's held a kind of 'Bank Holiday' in order to introduce Federal Deposit Insurance. Equally, in September of 2008 all of Ireland's bank deposits were guaranteed. In both cases this allowed for the restructuring of the banking system with the use of tax payers funds.[2]

Currently in Ireland the number of new mortgages has dropped by 70%, in accordance to government figures. People are faced with decreasing incomes, feeble profits, the closure of important investment companies such as Dell causing unemployment and the bringing in of fees for college students. The questions on everyone's minds are weather the recession could reach the caliber of that which was experienced in the 30's and what methods can be generated for recovery.

As investigated by this paper, a modern depression wouldn't be as dramatic as its fore runner, however slower economic growth is inevitable. As J.K. Galbraith stated in his book, The Great Crash, 1929, "*It can be said with some assurance that in economic, social and political matters, if the controlling circumstances are the same or similar, then so will be at least some of the consequences.*"

Presently there are safety nets in place in prevention of such a crisis, consisting of old-age pensions, compensation, farm income support, minimum wage, workers unions, social welfare. All of these didn't exist and were only

1   Smith, 2008, p 2
2   Smith, 2008, p2

commencing to germinate for the premier time in the 30's within the New Deal policies of the Roosevelt Administration, as discussed in chapter two. Nonetheless, if such measures are to be severely relied upon currently, much strain would be placed on government finance.

However disorganized and motley the Roosevelt Administration might have been, beyond anything else it was humane. There are many lessons to be learned and adopted from the New Deal Policy, investigated in this paper. Examples of these are the importance of public works in regenerating employment, the restoration of confidence within a nation through concern for individual needs and in the adaptation of various industries.

In architecture lessons can be taken from architects such as Frank Lloyd Wright, who despite experiencing great difficulty in gaining commissions pushed through those challenges by utilizing his knowledge for the training of others into the architectural profession and by transforming his designs into practical, cost- effective and innovative resolutions which were suitable for the ordinary middle class family. Taking great care in the provision for individual needs, each element of his architecture was pushed to fulfill the maximum in terms of economy, functionality and aesthetics.

Furthermore, inspiration can be taken from the Federal public arts projects discussed in chapter two, for creating programs that provide people with a creative, expressive outlet, one which is made affordable to all classes, and which could carry possibilities in generating community interaction and employment as a result.

Thus, with this paper an investigation has been made upon the effects of an economic downturn on society and architecture. Although economic recessions are complex and have shown a tendency in re occurrence as part of the economic cycles of boom and bust, one thing is undeniable: their effects are far reaching and tragic for all.

As conveyed in chapters one and two, amelioration in government policy is necessary. However it is also imperative in such times for all to adapt former methods of thinking, in order to meet the needs of individuals of all classes by efficient and financially viable means.

After all similarly to the 20's, as Dirsken said, "*Our society was not sick, it was mismaanged*," with reform being the sole step forward.

Bibliography

- Smith, D. (2008) 'Enjoy it while you can: Hard times are coming', The Sunday Times, 5 October, p 2.
- Galbraith, J.K. (1988) 'Vision and Boundless Hope and Optimism,' 'The Great Crash 1929,'ed. 5, United States of America: Houghton Mifflin Company.
- Premier Dalton Mc Guinty (2008) Great Depression 1930s [online image], available: http://www.onzone.ca/images/timeline/1930s_great_depression.jpg [accessed 22 Nov 08]
- Drake Marin [online image], available: http://drake.marin.k12.ca.us/academics/ comacad/decades%2000/1930s/the%greatdepression.html [accessed 22 Nov 08]
- Hub Pages (2008) The Day The bubble Burst [online image], available: http://2.hubpages.com/hub/the_day_the_bubble_burst [accessed 21 Nov 08]
- Peter J. Cooper (2008) [online image], available: http://clioemquestao. wordpress.com/feed/ [accessed 21Nov 08]
- Richard Lancaster (2002) [online image], available: www.depression2.tv/ chronicles/blacktuesday.html [accessed 21Nov 08]
- BBC News Downward Trend [online image], available: http://news.bbc.co.uk/.../ html/5.stm [accessed 21 Nov 08]
- Book Rags (2003) [online image], available: www. bookrags.com/essay- 2003/5/30/94341/4203 [accessed 21 Nov 08]
- Christian M. Wall Street Wail [online image], available: http://flickrcom/photos/ cristian_m/278998464/ [accessed 22 Nov 08]
- Bagehot, W. (2004)'Lombard Street: A Description of the Money Market, Kessinger Publishing
- Gilbert, C.(1900)'The Financial importance of rapid building,'Engineering Record 41, 30 June
- Willis, C. (1995)'Form Follows Finance', ed. 1,United States of America: Princeton Architectural Press
- Conkin, P.K. (1968)'The New Deal',ed.1, Great Britain: Lowe and Brydone Press Ltd.
- Terkel, S. (1971)'Hard Times', ed 9. United States of America: Avon Books
- Pfeiffer and Larkin (1993)'Flank Lloyd Wright The Masterworks', ed. 1, United Stated of America: Rizzoli International Publications Inc
- Brockman, J. 'Death of the Brokerage: The Future of Wall Street' available: http://www.npr.org/templates/story/story.php?storyid=94894707 [accessed 10 April 2009]

- (2008) 'Crashes, Bangs and Wallops', The Financial Times'(30/09)
- Shriller, R. (2005)'Irrational Exuberance' ed. 2, Princeton University Press
- Scandario, A. (1987)'The Market Turmoil: Past Lessons, Present Advice: Did the '29 Crash Spark the Depression?' ,The New York Times Business Pages(21/10)
- Library of Congress [online image], available: http://media-2.web.britannica.com/eb-media/56/71256-004-0692912A.Jpg&imgrefurl [accessed 15/04/09]
- (2009), 'Wall Street Crash 1929-Effects and Academic Debate',Wikipedia available: www.wikipedia.com [accessed 10 April 2009]
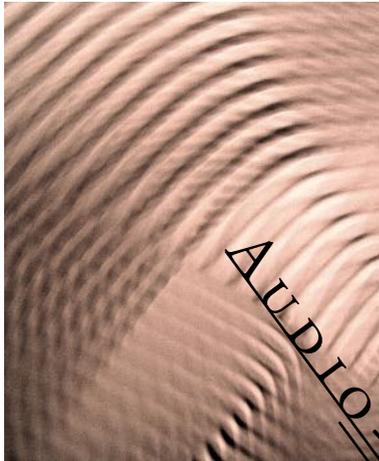
James O' Donovan

Audio-Spatiality

Understanding Aural Architecture

Introduction

"Architecture does not produce sound, it cannot be heard. But neither does it radiate light and yet it can be seen"

Steen Eiler Rassmussen, Experiencing Architecture

Since the dawn of time we have understood sound. We learned that if we do anything and it makes a noise. Quickly we discovered that certain noises could be combined to make a louder or different noise and music was born. Since then we have progressed to understanding how pitches work, how harmonies can be created and what we can do to make our noises sound louder. However since the industrial revolution we have begun concentrating on how to make ourselves louder than everything else with little care to how sound affects us psychologically. For us if we want to listen to something, we drown out that which we do not want to hear, rather than listening to what is around us.

To understand the effects a sound has on us, we must first understand how sound works, a fundamental method of investigation. There are many essays and books on how sound works, in a technical way. How sound is a longitudinal wave. How sound travels is by the compression and rarefaction of air molecules. How sound can be easily analysed by mathematical formulae. Yet we do not have a mathematical formula that analyses what sounds good and what grates on our nerves like a saw.

I intend to make an investigation into the way that certain sounds can be beautiful in the right place and time, yet be harsh and grating on our ears in a different atmosphere.
This investigation will strive to bring us a little more understanding of the atmosphere sound creates. Sound has beauty and sound has ugliness and it is part of human nature to judge and appreciate beauty and ugliness.

Much of what we experience in the world creates sound, from me sitting here, tapping away at my laptop to my classmate tapping on the table in frustration as he tries to work something out. My laptop whirrs and buzzes along with the keys clicking, creating an atmosphere of work, whilst his tapping has an edgy energy to it, showing intentions and thoughts.

The atmosphere of sound is something I intend to be seminal in my dissertation, showing how we think of sound and how it affects us in different ways. Also I intend to try and show the link between seeing and hearing, and how important sound is to us in everyday life. Much of sound goes unnoticed and it woul d be nice to get a detailed picture of what sounds go past unconsidered.

Nature of Sound

What is sound?

First things first, sound is a vibration caused by the movement of anything, be it our vocal cords, the strings on a violin or a stone scraping along a floor. This vibration is passed through whatever medium it is immersed in, be it air, liquid or solid via the phenomenon known as transmission. Also sound, like light, has the capacity to be reflected and refracted, reflection being caused by hard surfaces.

All sound we hear is a combination of reflected, refraction and direct transmission. Once the sound has reached your ear, you will hear a range of pitches, from high to low. This is known as the "audible range", when the frequency is so high pitched that you cannot hear it, it becomes what is called Ultrasonic, and when it is so low pitched that you cannot hear it, it is called Subsonic. However, just because you cannot hear it does not mean you cannot sense it. Subsonics can be felt at high volumes as actual bodily vibrations, whilst ultrasonics can still pain the ear, even though they are not quite within earshot.

Direct sound is where there is no obstacle between you and the sound source, such as a violinist directly in front of you, transmitting his vibrations directly to your ear.

Reflection is where the vibrations from the violinist bounce off the walls and strike your eardrum, moments later.

Refraction (solid transmission as I think of it) is where some of the energy of the violinist is absorbed a material i.e. a floor, and retransmitted to your ear. This tends to happen more in the low frequencies which is why we tend to feel drum beats as well as hear them.

Every sound we hear is a combination of these three, therefore if we were to remove one or more of these, we are left with a sound that is not as full or correct. Imagine you are in a concert hall, with a full orchestra in front of you and whilst the sound is clear, it has no body, when the cello sounds, there is no rumble, when the flutes are played they don't ring out, but sound flat and dull. Many people have begun to expect sound to be this dull, flat sound, with no reverberations of sound, with the sound taking on the character of the space it is in.

However what must be decided is, is the way we listen to sound today a habit of listening to sounds in acoustically treated environments, or is it simply our natural preference to listen to music in spaces that don't place any inflections on the sound? Much of what we listen to tends to be of the same vein as what we have listened to before, heard in our acoustically dead living rooms, so that when we go to a concert or an opera and hear the reflections and refractions of a specially designed concert hall and it is off-put-

Nature of Sound

ting to our ears. However, much music, especially orchestral and choral music, is improved by the quality of the space it is performed in.

It is not my aim to get into a discussion of music in concert halls as I feel this has been covered in great depth by many authors, yet they serve as an ideal example to explain some of the more technical issues that concern sound.

*"We are seldom aware of how much we can hear."* [1]

When we receive an impression of something, we perceive it without giving too much thought to what senses we use. When we open a book, we don't think of the sound it makes, we just open it and understand that it is a book, but if we take away the sound, would it still be the same experience when we read it?

As I talked in the paragraph above, is it the same music when it sounds different?

Many of the spaces we frequent are the acoustical antithesis of each other, from the noisy room where I sit typing this essay, to the reverberant and echoic studio, to the vibrant and chaotic outdoors. What effect does this have on our psyche, does being in the studio make me want to work more or less? Does being outside make me feel freer? And if so, why?
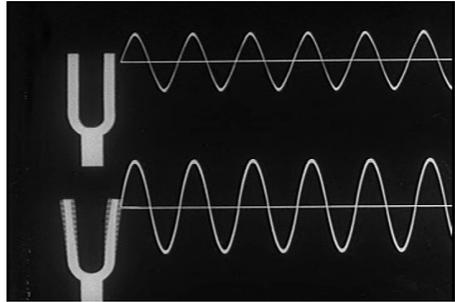
A tuning fork generating its frequency

Visual representation of a sound wave

1: *Experiencing Architecture, Steen Eiler Rassmussen, 1959, hearing architecture*

Noise

Noise is:
Sound of any kind, especially unintelligible or dissonant sound

The auditory experience of sound that lacks musical quality; sound that is a disagreeable auditory experience

These definitions capture the essence of noise as I see it in an aural environment, a sound which interferes in some way with what you wish to hear. Much of what we hear can be defined as noise in this way, sonic interferences that encroach on our silence or conversations, be these conversation with another person or the space which surrounds us.

Noise however can be difficult to pin down as an exact item. One quite accurate way of understanding noise is to look at the clichéd saying,
 "Beauty is in the eye of the beholder" Similarly different people understand and perceive sounds differently, to take as an example, a busker is playing a djembe drum in the street. The till-woman in the shop across the way will be irritated by the drumming, yet an African teen working in the same shop enjoys the beat for the reason that it has positive links with his childhood. For this reason it is impossible to eliminate noise for each individual has different understandings of the same sound.

Noise can also be considered as an encroachment on our personal aural arena. We place quite a large amount of emphasis on visual privacy, we tend to be much less cautious, speaking in loud tones in inappropriate spaces is an example of this. The area which we create with our sound is often overlapping with other aural arenas, for instance, a phone ringing in the middle of a lecture could be considered to be competing with the acoustic area of the lecture and would be considered as noise.

Initial studies into noise and the propagation of noise began to understand risks to hearing from occupational activities, such as drilling or pile-driving. This began around the 1920's [2] from here it progressed through refination of its definition towards "sound that is undesired by the recipient" as opposed to simply a sonic signal. This narrowing of definition has, for me, led to a lack of terms or specifications on what the word noise means. You could say "Turn down that noise" to a child talking about a television, or to quote bar managers in a few gigs I've been to "that's a terrible noise!" , when referring to a band being loud. People seldom stop to wonder "what is this noise I'm listening to?" With training many musicians and sound engineers are able to break down the sonic event falling upon their ears separating the different aural arenas, picking one out of a cacophony and turning the others into background sounds.

2: *Music, Sensation and Sensuality, edited by Linda Austern, 2002, Musicology and the problem of sonic abuse*

Noise

A typical selection of noise

Anechoic chamber in McIntosh Labratories, New York

Understanding Aural Architecture

Historically, to communicate the artistic, social, emotional and historical context of a space, architects tend to exclusively examine the visual aspects of a building/space. Practically 100 per cent of all architectural design is concerned how it is lit, how the materials look and how they reflect light, how much glazing can we put in to get natural daylight in, etc. Very rarely is the human ability to sense space recognised by architects. Whilst it is true that sound-proofing materials and sound deadening panels are often incorporated into designs as a last minute effort to make the space isolated, it is rarely considered that reverberation is a natural thing, giving each space its own unique character. In my opinion, this lack of consideration towards spatial design shows both a lack of understanding and a gaping hole in current architectural education. It is considered "good" practice to have a space that does not audibly respond to you being in it, with acoustic panels on every surface. While I do consider the minimalisation of sound transmission to be a good thing, it can often be achieved through design which does not adversely affect the space it is trying to isolate, for the sound our feet make when we walk gives us information about the space we are in[3]. It is noticeable for instance when we walk from a corridor with a low ceiling into a stairwell. We perceive the difference but we tend not to pay much attention.

There are a range of situations where acoustic damping is necessary, most often in musical venues or recording studios, occasionally in areas where speeches are often made. However, acoustic design for these spaces are highly technical, and many simulations are run before a design is considered. This is on the opposite end to the spectrum to standard design, where books like Neufert and AJ Metric are taken as gospel. Personally I believe that a set rule cannot be applied to each space for the same reason that we don't visually design each building to be exactly like the next – because variety is the spice of life!

In his book[3], Barry Blesser talks about the use of sound to locate oneself in a space. This process has become known as echolocation. It works on the same principle as bats, which emit high pitched squeals or screeches and wait for the echo or reverberation from this to arrive back to them. This works because sound travels at a noticeable speed (340 m/s)[4], so reverberation times are noticeable. Also the quality of the signal received in return tells the bat what texture the item is. If the signal is weak and unfocused, it means that the surface is rough or irregular. If the sound returns with some frequencies more powerful than the signal the bat sent out, it means that the surface is sonorous, indicating hollowness. Whilst humans tend to

3: Spaces speak, are you listening, Barry Blesser and Linda-Ruth Salter, 2007
4: Introduction to the Physics and Pscyophysics of Music, Juan G. Roederer, 1973

Understanding Aural Architecture

use this technique unknowingly, it has been proven that people that have been blind or severely visually impaired for a long period of time have developed a better auditory spatial awareness, due to the necessity to sense items in their path. Famously, Ray Charles is said to have been so good at this technique of echolocation, which every human with hearing senses to different degrees, that he never had a white cane, preferring instead to hum constantly. Indeed today the technique is becoming more popular and many investigations are ongoing, even here in the University of Limerick, where work is being done on *"a series of experiments with blind and sighted people in a "thinking-aloud" study, attempting to identify our ability to describe the properties and their own location"* [5]

However "auditory spatial awareness is more than just the ability to detect that space has changed sounds; it includes as well the emotional and behavioural experience of space". This is basically the difference between detecting and responding to a space. Aural architecture can stimulate different feelings in at least four separate ways. Firstly it influences our social behaviour in the way that small spaces enhance privacy, yet large spaces create a sense of loneliness, whilst another large space may enhance social cohesion. Secondly, we use it as a navigational tool, to aid us in finding our way around a room. We

often see that people in large open areas such as squares tend to walk near the boundary walls. In darkness or blindness this can become the echolocation spoken about earlier in this chapter. Thirdly, aural architecture affects the aesthetics of a space. A space which is devoid of aural embellishments can be compared to a space without visual embellishments – boring and dull. Fourthly, auditory spatial awareness augments the experience of voice and music in a space, where the sound merges with the acoustics of the room and becomes more than simply the sum of the two parts.

These four aspects of aural architecture can be simply named as social, navigational, aesthetical and musical. Generally a space is dominated by one of these aspects, for example, a long hallway in an institutional building is conductive to navigational aural architecture, having little aesthetic, social or musical bearing, whereas a concert hall has immense musical spatiality and a good auditory aesthetic, yet has little social or navigational auditory features.

Winston Churchill once said "we shape our buildings, and afterwards our buildings shape us".[3] This is a very good vocalisation of how we understand buildings to be what they are. We understand the long hallway mentioned above to be a long narrow space, designed for movement.
What if humans had never designed

3: Spaces speak, are you listening, Barry Blesser and Linda-Ruth Salter, 2007

5: Listening to rooms and objects, Richard McGrath, Thomas Waldmann, Mikael Fernstrom, AES 16th International conference on Spatial Sound Reproduction

Understanding Aural Architecture

hallways? Would we still perceive long narrow spaces to be for movement, or would we interpret them, say, as spaces designed for sleeping? Or close social interaction? In this sense be begin to comprehend the bearing that cultural knowledge has on our understanding of aural spaces. Social and cultural factors have huge bearing on how we listen and react to the space we inhabit. Unfortunately modern cultures that have done investigations on sound tend to be remarkably similar. This, I feel, is because of the widespread use of loudspeakers. We have become unaccustomed to constant listening; instead we listen on demand or pay attention to certain trigger sounds. For instance, your friend may be talking to you, but you are unfocused so absorb nothing of what he is saying, until he says you name, a definite trigger sound, whence you pay attention. Headphones have helped elevate the problem of this social withdrawal, basically using a masking noise to separate oneself from your surroundings.

However other (what we sometimes call "less developed" cultures) often place more emphasis on aural emphasis than us, for example "the Hausa people only recognise two senses; seeing and experience". [3] In past times, our culture was less visually based, often being very musical. Therefore, I am forced to finish this chapter with a question; Are we less experienced with aural architecture than our ancestors?

3: Spaces speak, are you listening, Barry Blesser and Linda-Ruth Salter, 2007

Understanding Aural Architecture

Blind Mountain bikers in California, practicing echoloaction

Boston Symphony Hall, designed using traditional materials

Design of Aural Architecture

"Architecture begins where engineering ends"
Walter Gropius[3]

As per the comment by Walter Gropius, as architects we are meant to consider all aspects of a design. However when we take out the mathematical aspect of design, we are cast into a sea of uncertain design reasoning, often relying on previous successes in design and replicating them to a certain degree. These designs that we create tend not to be of the same culture or time and are therefore not suitable for the functions we adapt them to. We also never take care of the aural architecture of these spaces. Perhaps it is not the visual or organisational qualities that we should be looking at in the building we take ideas from, but the audio spatial and other sensory by-products of that space.

The problem of aural architecture is that it is lamentably difficult to design; most opera houses and theatres are replicas of old opera houses or theatres, not new designs. Because aural architecture cannot be designed without the people that will inhabit and create the audio-spatial atmosphere within. We are at a catch-22 situation, where we cannot design it without it already existing. In reality anyone that uses a space is an aural architect, creating the acoustic atmosphere they exist in. However, it is possible, with an understanding of spaces and sounds, to create a mental aural image of a space. We know that a large hall has a spacious aural character; we understand if the hall has hard surfaces and a metal roof, it will be quite sonorous. What is lacking, really, is a way of teaching this knowledge to others. To be able to aurally imagine oneself in a space is a technique natural to some people, yet completely foreign to others. Similar to the technique of echolocation it seems to be more of an in-built ability than a teachable skill. This ability of aural imagery seems to be mostly based on memory rather than imagination. When I imagine the aural picture of a space, it tends to be a combination of spaces that I have already experienced. When designing aural architecture, everything must be analysed, every sound that will be made in the space, every material used, every different reflection and echo you get. Imagine a rock band at one end, imagine a girl skipping all around the room, every combination that is possible, including outside sources of noise, a truck outside. These are not things which can be easily analysed or applied.

We must also consider the emotional, social and cultural aspects of the people who will inhabit the space, how do they react to their aural understanding of the space?

Often spaces we find which are enormously successful are designed for another use but by accident the

3: Spaces speak, are you listening, Barry Blesser and Linda-Ruth Salter, 2007

Design of Aural Architecture

design suits a purpose perfectly. As an example, there is a narrow side alley in Galway city which is favoured by musicians for its excellent tonal quality, especially for flute players. As an alley it quite poor, being extremely narrow and poorly lit, yet as for a musician it is perfect!

Whilst I realise this essay does not aid designing, I believe I had to include it so people understand that to comprehend aural architecture, they must get out and experience every different space they can and listen. It is not something which can be achieved by sitting in a studio, working each equation out, or in frequent lectures, it is an experience bought talent. We will never be able to write an equation to apply to a space which tells us the right way to design a piece of aural architecture as no two pieces will be the same. Therefore all design is just an approximation of what sounds good to us.

Referring back to my introduction, I hope I have shown how to go about experiencing aural architecture. Having read much on the technical side of this subject, there is still no way to quantify aural spaces. There is much on how a space reverberates, how certain frequencies diminish in certain areas yet all are explained in a difficult manner to understand, often using complex mathematics. This is possible for a space which is already built and

the calculations are nearly exclusive to concert halls and recording studios.

Not only does everything we do make a sound, it also creates our own personal aural sphere which we inhabit. This sphere of consciousness interacts with other spheres, be they man-made or natural. We are not solo artists in aural architecture, we are part of a symphony.

Bibliography

Music, Acoustics and Architecture – Leo Beranek

Concert and Opera Halls: How they sound – Leo Beranek

Visible Deeds of Music: Art and Music from Wagner to Cage – Simon Shaw-Miller

Introduction to the Physics and Psychophysics of Music - Juan G. Roederer

Experiencing architecture - Steen Eiler Rasmussen

Neufert: Architects' Data – Ernst and Peter Neufert

Concert Halls and Opera Houses – Leo Beranek

Rupert Neve: The Father of Mixing Console Design – David Mellor

An Introduction to Live Sound Monitoring – David Mellor

Pro Recording Studio – David Mellor

Background Noise: Perspectives on Sound and Art – Brandon laBelle

Audio Masterclass - Diploma in Sound Engineering – David Mellor

Spaces Speak, are you listening? - Barry Blesser and Linda-Ruth Salter

Music, Sensation and Sensuality - Linda Phyllis Austern

Handbook for Acoustic Ecology - Barry Truax

Constructing Architecture, materials processes structures - Andrea DePlazes

Sydney Opera House - Philip Drew

House building Manual - HomeBond

Acoustic communication - Barry Truax

The Tuning of the World - R.Murray Schafer

Listening to rooms and objects - Richard McGrath, Thomas Waldmann, Mikael Fernstrom

Aural Architecture

FASHION

Hussein Chalyan
'Afterwords',
'Before Minus Now'

ISSEY MIYAKE
A-POC, Pleats
Please and a style
based on life...

SYNERGIES;
A discussion on the
over-lapping of two
vocabularies

AND ARCHITECTURE

Sinead Mac Mahon

"Clothing, as an extension of the skin, can be seen as a heat-control mechanism, and as a means of defining the self socially. In these respects, clothing and housing are near twins, though clothing is both nearer and elder; for housing extends the inner heat-control mechanisms of our organism, while clothing is a more direct extension of the outer surface of the body" [2]

INTRODUCTION

Fashion and architecture are two practices which in recent times have seemingly become more and more parallel. Each has become more permeable to the other, there has been a blurring of boundaries and cross overs between the two have never been more evident. Architects design structures and landscapes, things which house the human and create environment. Clothes are designed to house the body, to protect and shelter it. Both are designed with human comfort in mind, each concerned with comfort and the space between the body and their design. The only difference is in scale. "The body is a perfect small-scale exercise in spatial design, a testing ground for ideas and techniques to apply to buildings."[3] Both disciplines feed off each other, borrowing and adapting various ideas with both rooted to the basic task of enclosing space around the human form.

Fashion has not always been so distant from architecture. Since the very beginning of human existence, clothing was the primary source of shelter, it being wearable. Architecture then became evident as a framework to support the protective animal skins that then became walls and roofs. Not only did this protect people but also introduced ideas of public and private space.

So it seems that architecture and spatial awareness began with clothing. Architecture originating in fashion is something Adolf Loos acknowledged in his 1898 essay 'The Principle of Dressing'. He identified architecture with clothing and encouraged architects to first explore textiles in order to understand the meaning of dwelling, then architecture would become a tool

---

2   Marshall McLuhan 1987

3   The Fashion of Architecture

to sustain these principles in built form. "This is the correct and logical path to be followed in architecture", Loos wrote. "It was in this sequence that mankind learned how to build. In the beginning was dressing"[4] .

While architecture certainly has an influence on fashion, architecture also feeds off the fashion industry. Architects are attracted to fashion's association with style, and the sensitivity of the public with regard to fashion. The speed with which fashion can adapt to new circumstances often fascinates them. Every now and then a project may be planned and built in a record period of a single year, in the same length of time at least two haute couture collections will have stepped onto the catwalk, not to mention the weekly turnaround in fashions offered in Zara and H&M. Obviously there are examples of long lasting fashion trends; Coco Chanel's classic black dress being a perfect example, as popular today as it ever was. Architecture is not always as long-lasting.

On the other hand the permanence of architecture is attractive to fashion designers. As many of them fight against the triviality of fashion and style they envy the intellectual qualities of architecture. When developing an idea there is a time limit of six months or so, the system of

two collections a year cannot be challenged or reformed. In order to develop an idea as an architect would they are forced to take these ideas and concepts to another project in their own time. What an architect may envy is the opposite. The fame, the huge number of designs, the glamour and excitement are all things which architects don't usually tend to experience. The difference between the electricity and excitement of an audience sitting looking at a piece of white MDF awaiting a fashions show and a visitor who walks in, has a look and walks out again is something an architect may long for and a fashion designer may take for granted. While both practices envy the permanence or transience of the other they will never be able to adapt to it. As Val K. Warke wrote in 1994 "The capacity for an object type (a piece of costume, jewellery, a pair of shoes, a car, an office building) to undergo formal change as a result of a fashion shift is related directly to the size of the object, its cost, the time lag between its initial design and the final act of its consumption." [5]

Each discipline envies qualities of the other and so begins to take what they can from each other. Fashion certainly plays a role in shaping modern architecture. Many architects such as Le Corbusier can see a tailored men's suit as a model for modern architecture and because of

---

4 Adolf Loos 1898 Essay

5 Quoted in Absolutely Fabulous

the fleeting nature of fashion, different styles inform architects of the current

Metapolis Ballet

nature of economy and society. However it is architecture within

fashion that will be explored here. The boundaries really have become permeable, enabling fashion designers to bring architecture into their designs and for architects to step into the fashion world. Yohji Yamamoto designs structures rather than clothing; his designs leave the fashion world bemused yet they are immediately grasped by architects. Hussein Chalayan has more in common with architects than fashion designers and collaborates with them to realise his fashion innovations.

Architects within fashion include Zaha Hadid who designed costumes and sets for Metapolis Ballet performance, infusing garments with symbolic and allusive values that transformed

142

SYNERGIES

Architects and interior designers are borrowing the techniques such as pleating and draping from traditional tailoring to design buildings that are interactive, dynamic, inflatable and even portable. However at the same time architecture is making its presence felt in fashion as the pliable metals, membrane structures, lightweight glasses and flexible plastics used in building construction are creeping onto the catwalks.

Architects and fashion designers produce environments defined through spatial awareness – the structures they create are based on volume, function, proportion and material. Both disciplines address themes such as shelter, identity, tectonic strategies, creative process and other parallel stylistic tendencies. The contemporary vocabularies of both the architect and fashion designer have in recent years begun to overlap, seamlessly merging into a single language. Terms and techniques such as shelter, skin, structure, volume, construction, identity, pleating, draping, weaving, cantilever and suspension are common to both.

Shelter is something which is quite obviously an essential consideration within each discipline.

The primary function of both clothing and buildings has always been to provide the body with shelter and protection. The clothes protect the body; the building in turn houses the body. In recent years this fundamental aspect has been reinvented, reflecting changes in environment and society. Fashion designers are reassessing the potential of clothing to address the needs of modern people, using high-performance fabrics and considering notions of mobility and identity in a fast moving and ever changing society. Meanwhile architects are rethinking the traditional mortar and brick structure with new materials and techniques creating new structures that are environmentally friendly, versatile and adaptable.

Vexed Generation are a design partnership who produces clothing and accessories informed by the urban environment. This is typified by the Vexed Parka, a garment designed for cycling in the city. It addresses personal safety and practical protection when cycling, by including padding that protects vital organs, a cowl hood to cover the cyclist's head, and a respirator mask for the face. The garment is the product of research into urban mobility, so not only does it promote the use of the bicycle over the car but it also offers protection against air pollution and armour for the very common modern day battle that is commuting.

Geometry is another technique employed by both architect and fashion designer.
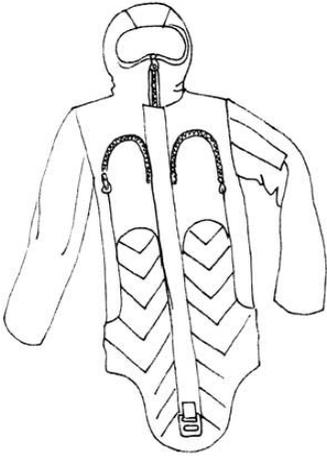
Vexed Parka

This technique is often used to generate form or system. In architecture it may be used regarding interior spaces or to shape the structure physically. While in fashion, although it may be used to generate a design, it is often lost in the end once the clothing sits on the body.

Isabel Toledo's Spring/Summer 1988 collection included a 'Packing Dress'. It was made from two circles of fabric sewn together with holes cut for head, arms, and legs, collapse flat for easy travel and storage. When laid flat the straightforward geometry of the dress is visible but when on the body gravity causes its form to become more complex.

Packing Dress

Structural skin refers to the combination of structure and skin into one, resulting in structure and facade in a single surface. Recently this had been done by two infamous architects; Rem Koolhass and Toyo Ito. In Koolhaas's Seattle Library the building is wrapped in a mesh of diamond shaped glass panes set into a steel grid that acts as both a transparent curtain wall and part of the structural system. In Toyo Ito's Tod's Omotesando building then pattern of a tree serves a decorative function and also a structural one with the surface supporting the floor slabs.

Within fashion design this joining of structure and skin is also evident.

Inside Out 2Way Dress

Yoshiki Hishinuma's Spring/Summer 2004 designs included 'The Inside Out 2Way Dress'. This dress is graphic and sheer, it is made of what appear to be random strips of opaque tape which hold the dress together and also strategically conceal parts of the body.

Both designers of building and clothing have volume in common. Both practices, although working with very different scales, deal with creating shape and volume out of flat two-dimensional materials. Recent years have shown that each world is constantly producing new and intriguing forms and volumes. In architecture this may be seen in Foreign Office Architect's Yokohama International Port or in Ito's competition entry for the Forum for Music, Dance and Visual Culture

in Belgium.

Vivienne Westwood created voluminous shapes and undulating movement with bell-shaped crinolines in her Autumn/Winter 1987 collection. The jacket curves at the waist, smoothly outlines the hips and sits poised on top of the bell-shaped skirt. Alexander McQueen is known for his clothing construction. His dress from It's Only a Game Collection is an example of excellent tailoring and precise execution of architectonic forms. The volume is seen in a mould

Alexander Mc Queen

ed leather bustier sitting above a soft bell-like formed skirt with a fringe of metal pins and quilted and embroidered surface.

Both fashion and architecture have always been used to express ideas of personal, cultural and social identity. In recent time there has been strong expression of more complex and provocative issues surrounding identity. There are many examples of identity in architecture, one being Daniel Libeskind's design for the Jewish Museum, Berlin which is extremely expressive.

In fashion however the identity or notions expressed may not be as clear. Inspired by nature, culture, and technology, Hussein Chalayan's work reveals an ongoing preoccupation with issues related to his experiences as a Turkish Cypriot living abroad and to the wider realms of religion, cultural identity, and migration. Although not clearly evident to one immediately, 'Afterwords' of 2000 explores the idea of having to flee one's home in times of strife and illustrates the potential precariousness and fragility of both shelter and identity. Once the work of Chalayan's work has been explored his symbolism and identity can be understood more clearly.

Jewish Museum

Afterwords

Cantilevering is another technique fashion designers have borrowed from architecture. Cantilevers are of course used by many architects, some to more dramatic and exciting effect than others. Adapted by the fashion world, cantilevers and clothing is an intriguing combination. A good example would be the 'Ice blue coat dress' by Victor and Rolf in 2003. This coat dress was custom-made for a Vogue magazine fashion shoot and is based on pieces from the One Woman Show collection of Autumn/ Winter 2003- 04. This collection, Viktor & Rolf's tenth-anniversary presentation, included one-of-a-kind sculptural shirts and coats made of multiple tiers of collars and plackets

that fanned from the models' necks to their shoulders, pushing ideas of layering and stacking to their limit to achieve extreme cantilevered forms.

There are many more examples of techniques and terms shared between these two industries. All of the above techniques are primarily thought of as architectural terms that have been borrowed by the fashion world. There are however many that would be thought of as belonging to clothing design; wrapping, pleating, printing, draping, folding, and weaving. In turn these techniques have been adopted by many architects. With this blurring of two worlds of design there is indeed a potential that can be gained from a continuation of the relationship between these two creative disciplines. The very nature of buildings and clothing can be transformed.

ISSEY MIYAKE

ISSEY MIYAKE

The Spring/Summer 2009 collections have been called a 'New Frontier' by Vogue. Within these collections there are influences and inspirations that may certainly be architectural. "The spring collections dazzled with architectural cuts (in sheer, feminine organza), new fringing (harnessed into provocative loops) and surprising gowns (the train is back), all stacked upon gleaming platforms. The future's bright..." [2] It's evident in some of the star pieces of various designer collections.

Balenciaga's Nicolas Ghesquiere took inspiration from the reflection and the absorption of light, seen in his shining stretch-georgette minidress. Costa of Calvin Klein focused on sculpting his shift, which he then sets alight with a reflective chrome collar. MaxMara's platforms may be seen as a structure in themselves, with a copper finish. Alexander McQueen, known for a consciousness of the structure of clothing has a carefully sculpted short-cut bell-shaped dress, decorated in porcelain flowers. Marc Jacobs's trophy jacket has sculpted wide shoulders in a glistening metallic while Chanel's classic skirt has an abbreviated cut with geometric strikes of silver and gold.

Architecture is currently cropping up in almost all aspects and names of the fashion industry. However amongst all designers that we currently recognise and also amongst those that have been, no names stand out more than Issey Miyake and Hussein Chalayan.

Issey Miyake, a Japanese designer is recognised worldwide and admired by many architects through his exploration of space between the human body and the material that covers it. It's not about creating "a fashionable aesthetic",[3] he creates "a style based on life." Issey Miyake INC's basic philosophy is the continuing focus on both the importance of imagination and the development of new technology in which to make clothing. The design concept challenges the everyday way of tailoring and aims to enhance the relationship between body and cloth. [4]

Miyake was born in Hiroshima, Japan in 1938 and studied graphic design in Tama Art University in Tokyo. After graduation he worked in both Paris and New York before returning to Tokyo where he set up the Miyake Design Studio in 1970. In 1971 the first Issey Miyake brand collection was launched and in 1973 he made his first appearance in Paris and has shown a collection every season since. He has also opened hundreds of boutiques worldwide including flagships in Paris, London, Aoyama

---

2 Vogue Magazine, Feb 2009 edition

3 Issey Miyake, quoted in Fashion Memoir

4 www.isseymiyake.co.jp

and New York. "In Miyake's work, lines move and flow freely in and indeterminate space, somewhere between East and West, art and fashion, the fleeting and the eternal"[5] . Miyake believed the Western tradition to be too rigid. He aimed to create things that could exist more freely. "Western clothes are cut and shaped with the body as the starting point; Japanese clothes start with the fabric", says the designer himself. Instead of choosing one or the other of these approaches, Miyake wanted one to meet the other, East to meet West. Body and fabric would both act as starting points together, linked by movement.

After a collaboration with Makiko Minagawa, a designer obsessed with bringing out the true qualities of a fabric through its various possibilities of movement and surface texture, Miyake began to explore. It was here that he seriously became involved with the space he was created when a garment he designed met the body. He made cape dresses for giants, cage-like smocks of rattan stems, square coats made of Japanese wrapping cloth all with volume and adaptability in mind. All this exploration and discovery of course produced seasonal collections but it eventually culminated in Pleats Please, one of Miyake's most famous projects. Pleats Please was innovative, revolutionary and showed how Miyake's clothes have such an unusual amount of design in their design. It

5   Issey Miyake, Fashion Memoir

explored a new clothes-making technique wrapping a three-dimensional object, like the body using a two-dimensional material, such as cloth or fabric. Each piece is first cut and sewn. The cloth is the folded by pressing it between layers of rice paper to create hundreds of perfect creases. This process allows both texture and form to be created at the same time in a manner that is unique to each garment. Geometric renderings are made wearable. Its folded structural aesthetic appealed to many buyers and many architects alike. The pleats captured the essence of free material, body and movement that Miyake was interested in with the pleats seemingly dancing as they

Spring/Summer 2002

stand.

More recently architects have admired a second Miyake exploration for its process, concept and the potential it may have it their own world. A-POC, standing for 'A Piece of Cloth' was another process experiment he began in the mid 1990's, turning into an independent line by 1999. The A-POC method doesn't involve any sewing. Thread enters a loom and an item of clothing emerges. A flattened tube of material comes out which contains the specific item. All that needs to be done now is to cut along a faint outline already woven into the material. No unravelling will occur anywhere allowing for complete customization. This aspect of A-POC becomes particularly exciting in the boutique. The system allows the customer to choose from several different versions that can be extracted from the tube of material in an almost miraculous fashion.[6] This means that the design process is immediately connected to the manufacturing yet both move rightinto the sales area, with the sales outlet and clothes collection having structural similarities.

More so than Pleats Please, A-POC appeals to architects. It can be seen as a prototype for the future of design and fabrication. This technique is economical and offers many design possibilities, and could be used for building components. A-POC has the potential to transform many design disciplines. A few years ago the Miyake Design Studio were exploring designs in furniture and architecture when they were approached about the Iso Truss, a "patented grid structure... which looks like a woven helix, has a remarkably high strength-to-weight ratio, offering a light-weight, low-cost alternative to traditional building components. The Miyake designers see the Iso Truss as a way to take A-POC to the architectural scale. The studio hopes the results can be used

6 'Absolutely Fabulous

in the construction of pillars, walls and furniture".[7]

Moving off process and back to clothes, the Issey Miyake Spring/Summer 2008 collection designed by Dai Fujiwara takes wind as inspiration featuring unique forms with an emphasis on ventilation. The set itself was designed by James Dyson and some of the clothes actually incorporated discarded vacuum cleaner parts. There were six series in the launch show, each slightly varying to the next, all

relating back to wind and ventilation. Involving how the clothes deal with sudden gusts of air and how the air moves into and through the fabric creating billowing, voluminous and transformative shapes. 'Dune' with "oscillating delicate fabrics", was obvious Miyake with delicate pleats being the give-away.

'Cyclone' was where the collection became real. Discarded Dyson parts made interesting wearable pieces and with these parts on the catwalk, the huge yellow pieces that

7   'Seamless' www.wired.com

made up the set were let bellow out air. The model's hair was thrown into disarray and the fabric was inspired into movement.

This particular collection shows how Miyake, like architects, choose inspiration from the environment. His processes and concept are ones which have the potential to cross over to an architectural scale. A-POC in particular is a method which should be considered especially in current economic times. Its efficiency and low cost is something which is certainly appealing and with the process successful at this scale it should now be time to take another step away from

Spring/Summer 2008

HUSSEIN CHALAYAN

When fashion designers explore their ideas for a collection they often find that they have more in common with architects than with their fashion contemporaries. This is certainly true when it comes to Hussein Chalayan. Born in Cyprus in 1970, the highly regarded fashion designer is known for innovative designs, concepts and meticulous detail, admired by professionals in all fields of design. Graduating from Central St.Martins, London was when Chalayan first caused a stir. His sensational graduate collection involved decomposed silk dresses he buried and exhumed in a representation of burial and resurrection, referencing life, death and urban decay. Every move Chalayan made from here on was watched carefully by all those in the design world, especially those in fashion seeing as sometimes it can be difficult to place a Chalayan design in the fashion industry. He uses "fashion as a site of exploration and as expressions of concepts.. . He challenges preconceived notions of what clothing can mean, rather than as garments with only functionality in mind".[2]

Hussein Chalayan combines clothes that are beautiful, wearable and contain an intriguing insight into the thoughts of Chalayan and also into the future. He takes his inspiration from architectural theories, technology and from the built environment and how the body relates with it. Architectural influence is evident in his spatial awareness directing the relationship between his garments and the body, and his use of architectural proportions to amplify their interplay with surroundings. One of Chalayan's most renowned collections is 'Afterwords'. The Autumn/ Winter 2000/01 collection is one of his most relevant when discussing Chalayan's architectural interests and inspirations, also

'Afterwords'

showing concepts typical of a Hussein Chalayan design.

Chalayan has been criticised that his clothes are clothes that cannot be worn. Although several high-concept pieces are shown, these are the anchors of his collection. With these pieces there are always seemingly simple, immaculately cut, wearable garments. 'Afterwords' also shows this side to a Chalayan collection quite clearly. Inspired by personal experience and thinking on "wartime impermanence that finds homes raided and families forced to flee or be killed"[2] , this collection refers to the reality of the refugee. The show began with a white catwalk and a living room set up. The models show a range of clothes varying from finely tailored coats, elegant dresses and full layered skirts and tops with cut outs at the hems exposing a hidden layer of ruffles. All of these are undeniably wearable. At the end of the show four models step out to the living room, removing the seat covers and turning them into dresses and suitcases. Finally the last model arrives on stage only to step into the centre of the table and turn it into a tiered skirt. The models walk off stage with their homes and belongings on their backs. With this show Chalayan presents garments which represent his exploration into wearable, portable architecture and show concepts and ideas of identity, bodily form and

Afterwords

transportable environment. This was the culmination in an exploration into the relationship between space and identity.

Previous collections like 'Before Minus Now' of Spring/Summer 2000 and the Spring/Summer 1999 collection 'Geotrophics' make up part of this exploration and again show an architectural theme. 'Geotrophics' shows the adaption of a chair to fit the body and become wearable. The 'chair dresses' represent the idea of a nomadic existence and completely transportable environment. Chalayan explored the meaning of geographical places[3] and politicised spaces that cannot easily be defined

3   Quoted in 'Deconstructing Hussein

architecturally. With this collection the designer intended to enhance individual identity in defiance of a notion that geographical borders alone define homeland.

'Before Minus Now' is the predecessor to 'Afterwords' showcasing a collaboration with 'b consultants', a London-based architect firm. The collection involved wire-frame architectural prints and pieces relating to aerodynamic and planes. Computer generated architectural

Before Minus Now

landscapes were printed against white static backgrounds. Once set against the organic curves of the body, these representations of inhabitable spaces

reinforce the truism that the body inhabits its clothes.[4]

The collection also featured a dress made of materials used in aircraft construction which changes shape by remote control. Other collections by Chalayan explore aerodynamics in

Before Minus Now

greater detail, technology and light, with his most recent collections including stunning laser installations and dresses covered in Swarovski crystals and over 15,000 flickering LED lights.

Hussein Chalayan's work represents a congruity of ideas that indicate fashion and architecture are coming closer together than ever

4   The Fashion of Architecture

before .[5] His strategy is to integrate clothing with its environment – not just by giving an architectural appearance to garments but by representing an understanding of different environments and diverse factors that create them. "The fashion audience doesn't really know about technology or architecture," Chalayan explained, "But they soon will". [6]

Hussein Chalayan
Spring/Summer 2000 Collecion

5   'Techno Fashion'
6   Quoted in 'Techno Fashion'

ARCHITECTURE FOR FASHION

The line between fashion and architecture is blurring constantly. Examples of both disciplines have been seen to cross the border from one world to the next. Architectural terms are making their way into catwalk reports and fashion designers are designing in a way that is grabbing the attention of an architectural audience. Architecture indeed has planted a foot in the fashion industry, however the most obvious hold it has on the world of fashion design is it's in role in 'making space for fashion'.[2] The shop space is something which every designer pays a lot of thought and attention to. It is in this space that the public come face to face with their designs and so it is essential that the correct environment is created in which to display and offer their work. The shop is a statement by the designer about their label. The exterior architecture and interior design are carefully chosen to amplify image and status of the label. Fashion showrooms and flagship shops create an important message about a label's image. Many fashion boutiques are being designed with the same considerations given to an art gallery,

using architecture to maximise the impact of the clothing.

TriBeCa, the worldwide flagship store for Issey Miyake, was designed by Gordon Kipping with Frank Gehry commissioned to fill the space. It houses all the Issey Miyake collections under one roof for the first time, principally the Issey Miyake women's and men's collections, Issey Miyake Fete, A-POC, HaaT, Me and Pleats Please. Miyake chose his downtown location for its industrial aesthetic, 'which he reconfigured to amplify his fashion ethos, attempting to collapse the structure and surface of his garments into an architectural milieu'.[3] In this landmark cast-iron building Gehry made what he calls "an intervention".

---

2   Irene Scalbert

3   The Fashion of Architecture

The rest of the architectural design was carried out by Gordon Kipping. The store design restored the historic cast-iron exterior of the 1888 warehouse, retaining the aged windows and interior timber beams. Inside a combination of murals by Gehry's son and the sculpture by Gehry animate and enliven the space, echoing the Miyake ethos of movement and freedom of material. The store design was created with this free movement and need for flexibility in mind. The whole space was made flexible apart from the structure and cashwrap. Everthing else can be

moved with ease allowing for a varied display.

Kipping opened up the basement space with reinforced glass allowing for a heightened experience and a view from the street level down into the showroom below. Gehry fills the interior with a rippling titanium sculpture. The fractals and wave formations throughout the shop not only breaks and reflects the flow of light but has a powerful resemblance to a classic pleated Miyake design. In order to keep the costs down the seemingly floating and free titanium pieces are fasten to the retail landscape by rubber-footed steel tubes attached to columns with Velcro and industrial strength double-sided tape. 'Tornado' interacts with the whole room, both engaging the shopper and enlivening the atmosphere.

Another of Miyake's shop is his A-POC Boutique in Paris, designed by Ronan and Erwan Bouroullec. What's interesting here and also in the second A-POC store in Japan is that the A-POC philosophy must be integrated into the architecture of their interiors. As discussed previously A-POC is an innovative yet particular way of making clothes involving tubes of fabric which contains both shape and pattern. So when designing, the Bouroullec brothers kept this essential aspect of the A-POC philosophy in mind and aimed to create continuity in their architecture.

The interior design seamlessly mimics the structure of the clothing itself.[4] A support system was designed to facilitate a constantly changing and varying collection.

4   www.findarticles.com

A-POC Store, Paris

The elements on which to hang the clothes were first designed. After this the support system for the hangers came. Through their design of the hanger system the brothers aimed to achieve flexibility so that there was always room for further possibilities, in the same way A-POC itself is as the essence of possibility and variation. Although the rails themselves are rigid and fixed, the continuous track system establishes a system that every point in the space can be used to present clothes. Display is not confined to those tracks which run along the wall or the window front. Vertical and horizontal boards make up the rest of the display support, used for smaller objects, again with a possibility of taking up any space in the store. The display is constantly moving around the space, animating it and again reflecting the philosophy of A-POC.

"*The wish is to utilise architecture as an advertising instrument for the label",*

says David McNulty, head of the architecture department at Louis Vuitton.[5] In recent years it has become increasingly common for big name architects to be commissioned by the big fashion labels. Not only are they hired and consulted to design luxurious and extravagant environments for collections but also to give the fashion houses an architectural image. By using

5   Absolutely Fabulous

big name 'star' architects the hope is that these buildings will then act as "top-class advertising" and attract attention within the media and also from the people within the busy city it's located. [6] No other fashion house has used branding through architecture as successfully as Prada. Prada has thousands of stores all over the world, including two 'epicentres'. For these Prada chose carefully. Herzog and de Meuron were commissioned to design the Tokyo one, while the design of the L.A epicentre was left to Rem Koolhaas and OMA .

Prada and OMA have had a strong relationship for many years and may be seen as one of the most successful collaborations between architecture and fashion. OMA has been behind over eight Prada store designs in New York, San Francisco and L.A, including the legendary New York flagship completed in 2001. This project is an interior conversion of a former Guggenheim store in SoHo, New York. It was designed as a public space with zones for fashion shows and performances Retail space is distributed over the first floor and basement. In order to connect the two floors visually and to guide customers to the more hidden parts of the store, Koolhaas has created a big 'wave'. The entire width of the floor steps down to the basement level and sweeps upwards again to reconnect with the

6   Quoted in 'Absolutely Fabulous
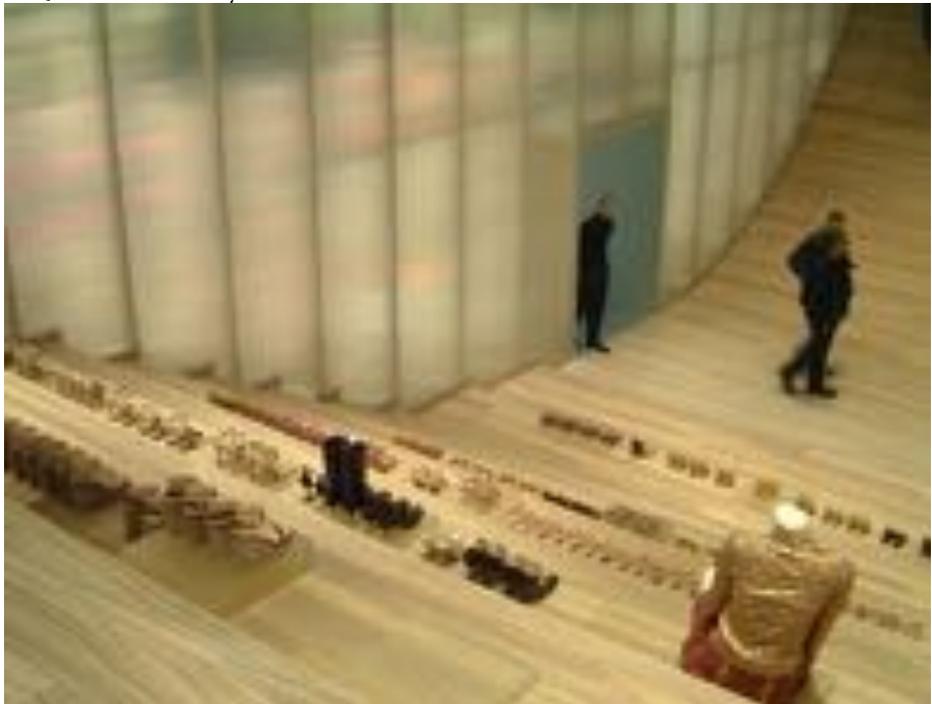
first floor. The resulting over-sized stair made of zebra wood is then used as an informal display area. The interior becomes a stage on which customers can see and be seen. A similar idea is seen in the epicentre in L.A. The "hill" – a double flight staircase- fills the space which is used for both

circulation and presentation. Various pieces of clothes lie casually on podiums or directly on the steps. This staircase of display, circulation and fashion becomes the centre. These stores are an attempt by Koolhaas to investigate different ways of experiencing retail.

The Tokyo epicentre was Miuccia Prada's second radical approach to fashion store architecture after the New York design by Koolhass. Located on the city's best known fashion mile this building had to measure up to the existing competition including Dior by SANAA, Louis Vuitton by Jun Aoki and Toyo Ito's Tod's. The intent behind this building was to redefine the concept of shopping, pleasure and to mesh consumption and culture. The architects began to play with the form of the building, resulting in a six storey glass crystal. They then moved the mass around the site, aiming to leave some of the site to the public in the form of a square. The crystal shape escapes any sharpness due to its five sides, smooth interior and diamond shaped glass panels which vary between flat, concave, convex and are occasionally opaque.

The facades of the building being transparent allow for the building to become like "an interactive optical device", describes Herzog. " Because some of the glass is curved, it seems to move as you walk around it. That creates an awareness of both the merchandise and city." The facades are also load-bearing. The glass panels are set into a lozenge shaped steel frame which carry all the load and allow for an completely open-plan interior. The relationship between interior, facade and shop window is explored, everything is everything.

The main entrance breaks the facade at ground level, extending the public square into the store interior. Various spaces and elements like vertical cores and horizontal tubes are placed so that the space is seen to be continuous. Changing rooms and display spaces are contained in hexagonal steel tubes. Lights are fitted into indented holes in

a perforated metal ceiling while display shelving grows out from the vertical shafts. This Prada epicentre questions facade, structure, wall and at the same time shop, window and display." The result is an innovative solution whereby shopping becomes a hybrid and diffused experience where consumerism and culture fuse together." [7]

The successful architectural branding of Prada is brought on by a willingness to engage in architectural experiment that makes this brand seems stronger than others. Other labels rely on the same type of architecture in all of their stores around the world with an intention of fixation in the customer's mind. The role of architecture for Miuccia Prada is to enhance the strength and dramatics of her brand. In general the role of the architect is to channel the ideas and concepts of the designer into something solid. A fashion house should echo the ethos of the brand and shelter the collections maybe in a similar manner to how the clothes enclose the body. Issey Miyake's interiors are a perfect example of design reflecting philosophy. Meanwhile, Prada shows just how architectural branding has helped in reinforcing the strength of the label.

Section through Prada Epicentre, Tokyo

7Article on www.studio-international.co.uk

BOUNDARY

So the line between architecture and fashion has been crossed. The boundaries have become permeable and the move of architecture into fashion is evident whenever a designer announces a new store or flagship or when models pace the catwalk during fashion weeks all over the world. As discussed the disciplines never have been very far off each other from the beginning. The congruency between fashion and architecture did not appear suddenly, they have always shared a mutual existence. They evolved simultaneously as they both organised and demanded space in the form of clothing and building. Space and how it relates to the human has always been at the essence of both.

Although still separate disciplines, there are names like Miyake, Chalayan, Kawakubo, and Zaha Hadid who are trying to incorporate ideas from both industries into their designs. One name in particular has bridged clothing and architecture more so than others. Artist Lucy Orta, in recent years, has explored crucial themes of contemporary society and eliminated what boundaries there were left between architecture, fashion and art. Orta's works rid boundaries by becoming "metaphors

for shelter, dress, mobility and social space".[2] 'Refuge Wear' and 'Body Architecture' are portable minimum habitats which combine architecture and dress.
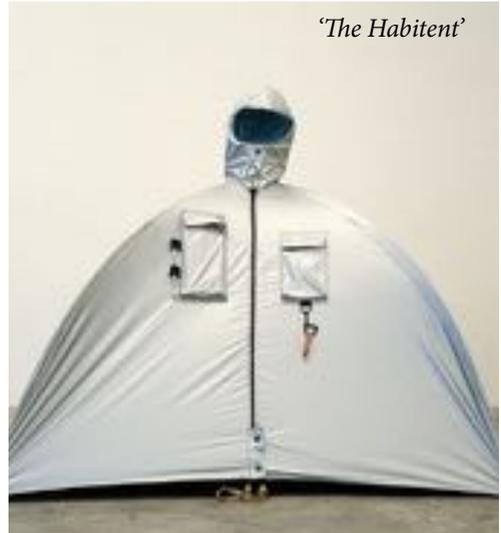
'The Habitent'

In comparison with the obvious beauty of designs by people like Alexander McQueen, Vivienne Westwood, and the discussed Miyake and Chalayan, Orta's garments are designed with function and necessity in mind, along with social issues. Multi-functionality aiis a central feature in her clothing, which convert froma parkas, anoraks and ponchos into tents, sleeping bags or furniture. Refuge Wear is more likened to a combat wardrobe than anything else. The inspiration, again, is the human form and the need for protection against the elements. 'The Habitent'

2 Intimate Architecture, The Fashion of Architecture

'Refuge Wear'

was the first Refuge Wear prototype. It's a portable mini-environment with a certain amount of personal comfort and an efficiency to relocate easily. With ideas of social regeneration and homelessness in mind, this was also to send out a message of resistance and independence.

'Body Architecture' came about in response to the Gulf War. Orta designed a series of multipurpose clothing that doubled as temporary shelters. Weather-proof clothing that could be transformed into simple pod or tent-like structures. These were again for individual shelter and protection but more importantly within a camp or emergency zone

they were to clearly define the boundary between public and private, while the "space inside is symbolic of intimate dwellings"[3] Orta furthered Body Architecture by investigating interdependency rather that individual isolation. A community of temporary modular shelters was organised. 'Modular Architecture' combines the communal principles of Body Architecture and the protective function of Refuge Wear. "Modular Architecture consists of temporary, portable dwellings made up of individual sections, panels or units that can be combined to make a number of different forms or simply

worn as protective clothing"[4] The system usually works in multiples of four. So if four people were travelling, each would be wearing their own protective, weatherproof outfit with food and water storage. When they stop to rest each suit is taken off and can be zipped together to make a four person tent.

According to Orta, "to inhabit a space means to consider it as part of one's body, clothes are fully entitled to become architectural dwellings". The work of Lucy Orta investigates the dynamics between architecture and fashion. The structures created by Orta contain the essence of fashion

and architecture, considering the principles of both in her design process. Whatever boundary there had been between fashion and architecture has been broken down by this designer.

Lucy Orta - 'Intimate Dwellings'

CONCLUSION

Evidently architecture and fashion are two very closely related design worlds. It can be said that they evolved in tandem. The fact that they are so parallel with one another has led to the cross-overs that have occurred in recent years. Both disciplines envy qualities of the other seeing as they run alongside each other and begin to adopt.

Kawakubo

Fashion designers long for the permanence, respect and time of an architect. Is it this envy, or ability to adapt to such ways, that led designers like Kawakubo and Issey Miyake to begin to design clothes with architecture in mind. They're way of incorporating architecture ideologies into fashion design inspired another generation of designers to think in this way, including Hussein Chalayan and Alexander McQueen. In designers like Miyake and Chalayan there is a similar exploration of space and it's relation to the body. Both see all objects including clothes and architecture as externalizations of the body. With the border between the industries so permeable Lucy Orta had been able to break down whatever was left so that she could explore clothing as architecture and architecture as clothing.

Architect's envy of the glamour and excitement of the fashion industry has led to them treating flagship commissions as they once would have treated gallery ones. Lending their name, design and time to a fashion label allows them into the world for a time. They collaborate with top fashion designers and try to think of a building to emulate and enhance clothes. Upon the opening of the label's new store, the architect gets to experience the excitement and allure of the industry. Along with the concept of architectural branding, this too may be a reason for the architect's foot in the door of the world of fashion. Now on a street in Tokyo while brands like DIOR, Louis Vuitton, Tod's and Prada line up alongside each other, so do SANAA, Jun Aoki, Toyo Ito and Herzog and d

Hussein Chalayan

de Meuron.

The presence of architecture in fashion has been made possible by brilliant fashion designers in the last fifty years. Not only is this of benefit to the fashion industry where these innovations are becoming more and more common but in time it will benefit the world of architecture. The architecture within fashion is clearly evident on catwalks and street fronts worldwide. Fashion designers are currently exploring architectural techniques. It may now be time for the architect to grasp fashion. It is after all ,presently, a time of change.

A-POC Issey Miyake

BIBLIOGRAPHY

Bradley Quinn, *The Fashion of Architecture*, Oxford: Berg Publishers 2004

Laurence Bénaïm, *Issey Miyake; Fashion Memoir,* Thames and Hudson Ltd, London 1997

Ruth Hanisch, *Absolutely Fabulous! Architecture and Fashion,* Prestel Publishers 2006

Vogue Magazine, Conde Nast Publications, various editions

Issey Miyake, *Making Things,* Zurich, Scalo Verlag 1999

Bradley Quinn, *Techno Fashion,* Berg Publishers 2002

Dolly Jones, *Hussein Chalayan Catwalk Reports,* www.vogue.com

Jessie Scanlon, *Seamless,* www.wired.com

Nonie Niesewand, *Architecture: A masterpiece of the light touch,* The Independent, Dec 1999

Marshall Mc Luhan, *Understanding Media,* Cambridge, MA, MIT Press 1994

Elena Manferdini, www.thefreelibrary.com

www.findarticles.com

www.isseymiyake.co.jp

www.groningermuseum.nl

www.fashionencycolpedia.com

www.studio-international.co.uk

www.designindamag.com

All Hail Frankie P. Toronto - Palladio is dead!

Objects of Alternating Architectures (in Alternating Architectural Dimensions)
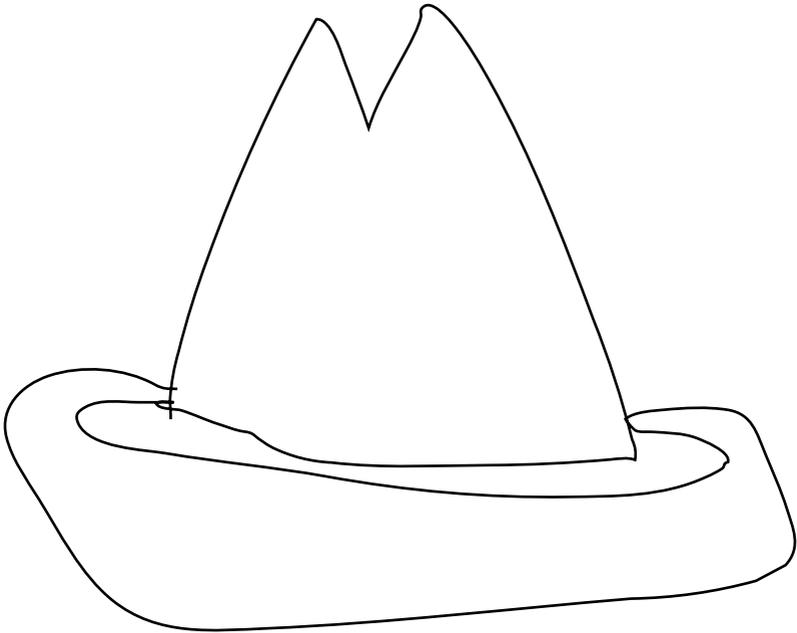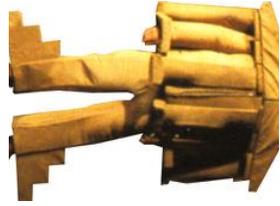
Ben Mullen
SUPERSTRUCTURELOVEFUNCTION

Prologue

I was looking back at work by British artist Tracy Emin recently and underwent a moment of satori in doing so, experiencing the very essence of what change can be. The particular work was entitled Psycho Slut (2003) and presented a clumsily crafted appliqué quilt composed of fragments of new or discarded plain and patterned materials. On top of these conjoined bits of material, fragments of sentences and slogans had been stitched in lettering. "Yea I know nothing stays in my body…" accompanied (in much smaller lettering) by a list of primordial human fluids: 'vomit, tears, babies, eggs, shit, teeth, spunk, bile, blood, cum, pus, thoughts' was the one that caught my eye.

The satori was a moving experience, one in which the relationship between ideas and the materials selected to represent them was intuitively present. The apparent exchange of energy between the subtle and gross bodies (ideas and correlating materials) was overwhelming. Simultaneously I understood that the processes of rejection was not a type of deterioration but became a type of renewal. The displacement of the named materials and liquids (the fragments of information) alchemically transformed them into new substances. The rejected substances suddenly became pregnant with new life and meaning, and the syntactical organization of the list became a taxonomical exercise of the cultural associations that the substances formerly carried. The work established a new myth about the body for the artist, within the cultural framework she operated from and for the collective body in history. The natural, biological change in the body was a destructive force with a positive outcome. For example the act of crying (tears) releasing a trapped emotional state becomes a cathartic expression, purging the body of any unnecessary sadness. This was a form of repair via rejection, which symbolized transcendence from the body through the body via its mechanical processes. This list of bodily substances contained a marvelous secret.

Evidently we are as likely to find an apt metaphor for the condition of life in anything (fragments, spills and rejected materials) as we are to find in objects of high design, those of meticulous planning, purpose and intent[1] . 'Never forget the little things in life', Beckett reminds us while we are Waiting for Godot or John Cage similarly imploring us that 'beauty is underfoot wherever we care to look'.

---

1 I am reminded here of the work of Richard Wentworth who also deals with the re-purposing of discarded materials and how these fragments become a cohesive criticaly aware language in themselves.

The subject of this essay is the protean system of growth, destruction and repair that happens parallel to the body in the practice of architecture. The continual shift in thinking, the repurposing of forms and substances, of ideas and philosophies into new languages with new meanings[2] .

---

2 A popular but fraught argument of the 1970's, led by Charles Jencks concerning the nature of meaning in architecture will be lampooned in this work. Post-Modernism has constructed new meaning in architecture with 'fragments' or scraps of architectural and cultural history.
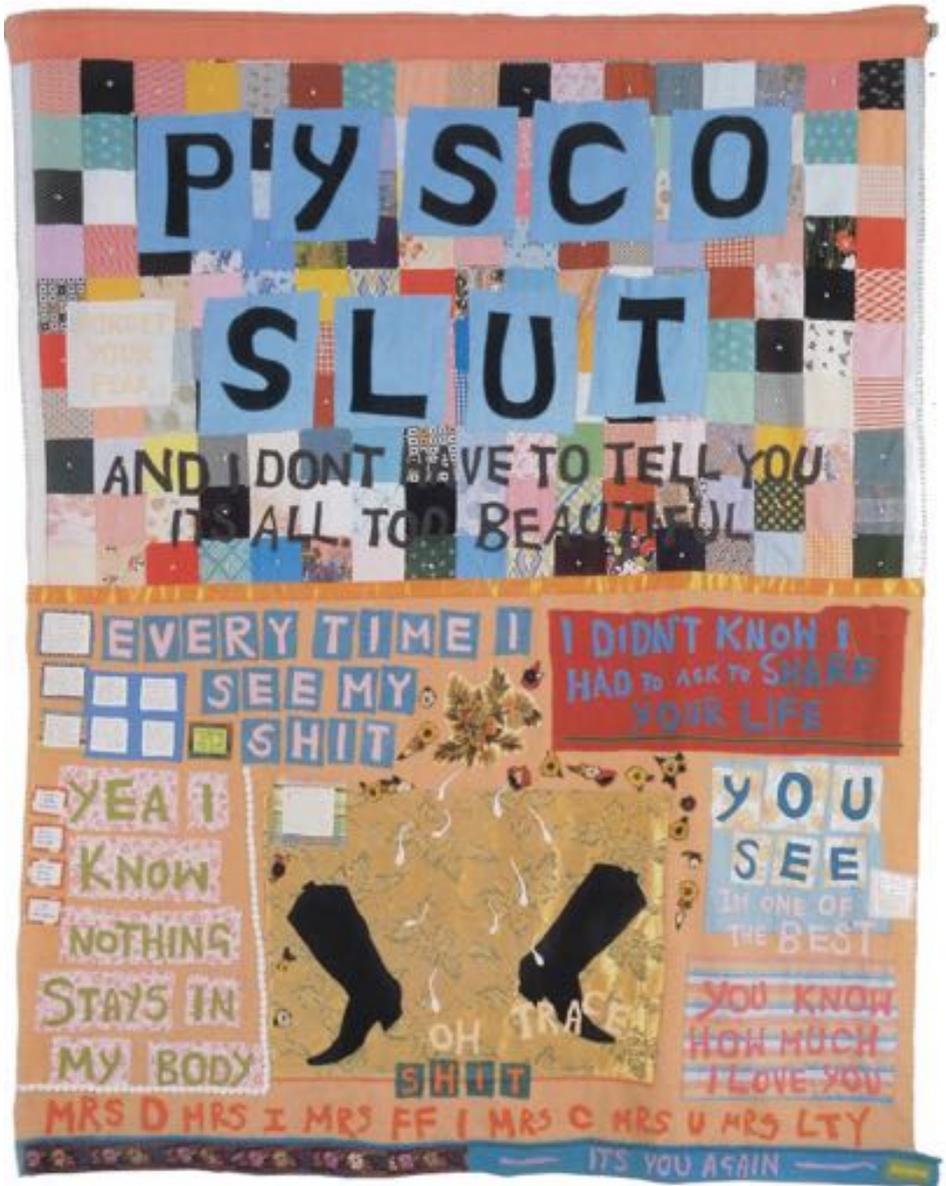
Tracy Emin, Psyco Slut, 2003, Apliqué quilt and stitching, dimensions variable
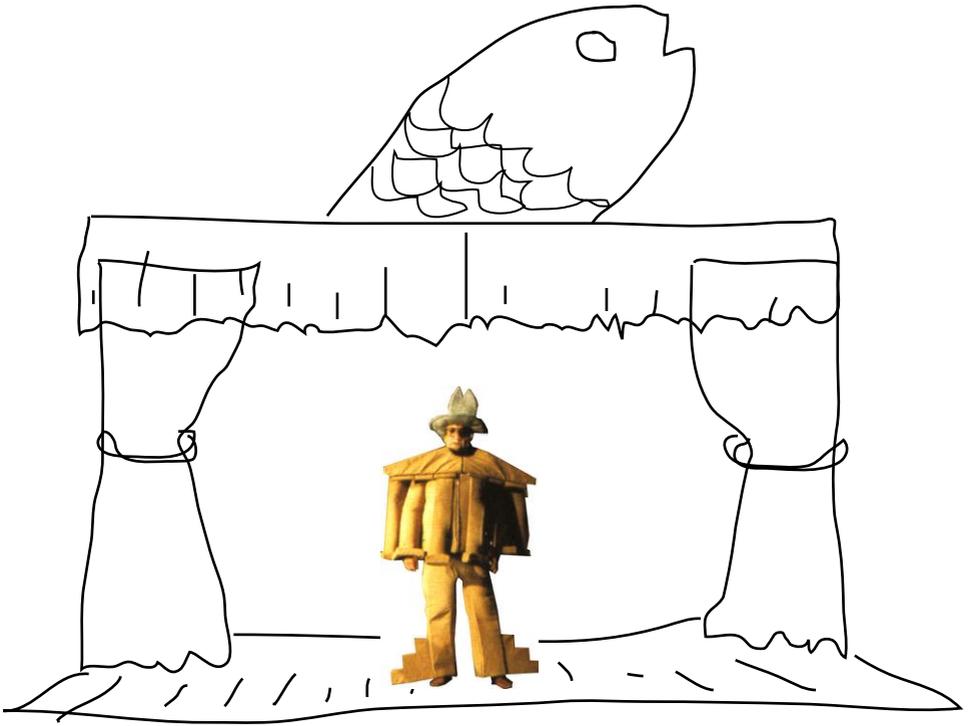
All Hail Frankie P. Toronto - Palladio is dead!

Objects of Alternating Architectures (in Alternating Architectural Dimensions)

A Play in II Acts (with an Accompanying Essay)

Cast

THE FUTURE'S PAST - Narrator
FALSE
SYMMETRY
FRANKIE P. TORONTO - Frank Gehry
THE GHOST - Andrea Palladio
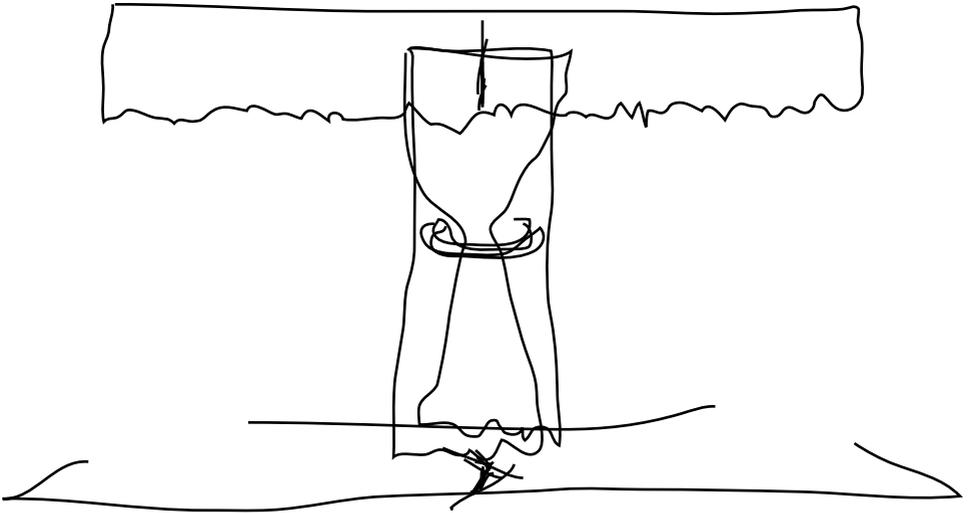
Act I

Begin, April 2009.

THE FUTURE'S PAST: [Enter stage right, shuffling toward centre stage, opens scroll to read.] We investigate the development of the building as an object of [Hiccup] architectural interest in two specific moments of 'history'. [Clears throat] In so doing we attempt to disrupt the flow of history [Laughs] in its traditional form of linear narration by presenting [Emphasizing triumphantly] the new thesis for architectural telepresence[1]! . Henceforth or … here now we will begin with… or we were now…[Pauses.] … again, soon…? [Confused, scratches head, deliberates, continues]. Further, we explode the concept of the building [Hiccup] as an intellectual artifact or idea in respect of: A) the architecture of 'objects' per se i.e. buildings - which we consider to be moments of design in the fabric of history[2] cleverly disguised as ideas on the plain of interconnect-edness and B) the rise of the building as the publisher of truth and the new dominant symbol of power in society. [Coughs violently.] The two moments of interest we cite are selected firstly because they are of pressing interest to what we have come to call 'architectural history'. And secondly they are selected for their importance as objects of representation, [He pauses, waves his hands madly (doing the representation dance), stops, smoothes back hair, continues] representing to us - history past (or history perfect) and to those in the present at the time of their creation, which is the continuous present, now, then… (or history imperfect). [Dryly, disinterested] By reason of chance or by extension of curiosity for the subject, a new narrative will today be constructed from these fragments of history and blah de blah de blah, [sighs, exasperating] subjective interpretations of canonical thought etc. etc. etc. [losing interest more and more, rushing now] contextualizing the Renaissance and [waving hand as if brushing over text] recon-structing meaning in architecture blah de blah blah blah. [Regains former composure.] Our hope is simple and clear: to sketch an idea of how absurdity has come to replace logic as a genesis for design. Thank you and enjoy the show! [Exits stage left, lighting cigarette and muttering to himself as he leaves.]

[Curtain draws back, (to September 1985), jazz music is faintly heard over the sounds of an

1 This term will be elaborated in the following two chapters.
2 Presenting the 'fabric' of history as a metaphor to express the relationship between time past, time present and time future all belonging to the same continuum or 'fabric'. An interesting existential argument concerning the interconnectedness of beings through time is illustrated by a similar 'Blanket theory' in David O. Russel's film 'I heart Huckabees', 2004.

orchestraclumsilypracticingarpeggioscales,peoplewalkaboutthesetaimlesslyincircles,a large neon sign stage right reads:]
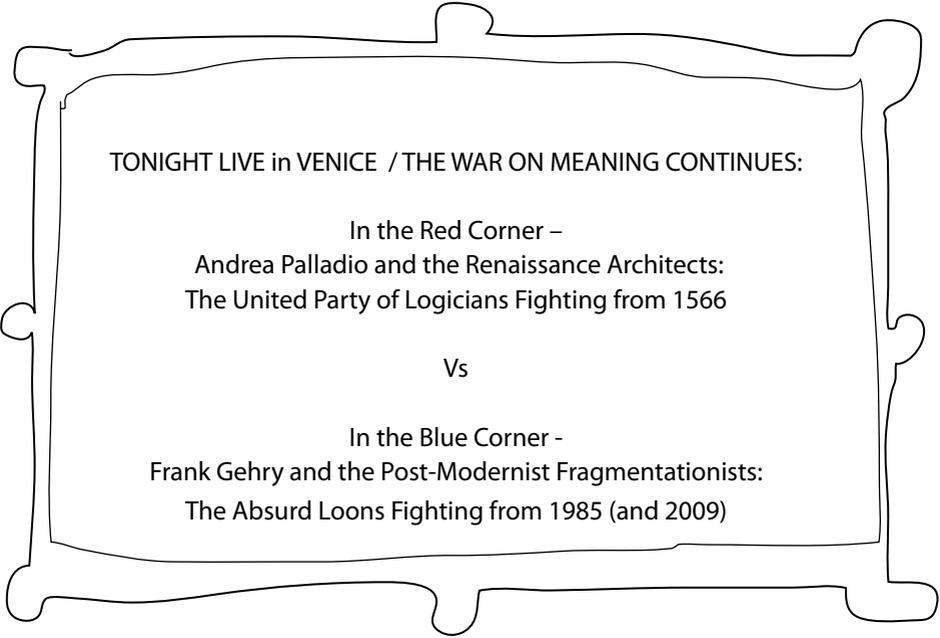
TONIGHT LIVE in VENICE / THE WAR ON MEANING CONTINUES:

In the Red Corner –
Andrea Palladio and the Renaissance Architects:
The United Party of Logicians Fighting from 1566

Vs

In the Blue Corner -
Frank Gehry and the Post-Modernist Fragmentationists:
The Absurd Loons Fighting from 1985 (and 2009)

[Enter stage left, FALSE, his accomplice SYMMETRY and FRANKIE P. TORONTO walking toward centre stage and the large neon sign.]

SYMMETRY: [Distractedly, to himself, singing] 'They try to make me go to rehab, I said No, No, No…'

FALSE: [To FRANKIE, ignoring SYMMETRY] No, no, no…rather we should attempt to search for an alternative truth, one counter to the absolutism of those terrible logicians, should we not? [stopping, points to the sign.] Mark my words Frankie, tonight we shall change history and the building, albeit though we look through the wonky looking glass of time! And we will not claim Gehry to successfully represent the entire Post-Modernist canon – (I dare say he is too consistently idiosyncratic for that!) But he will suitably address the argument as our chosen puppet. Let him re-enact this rather fanciful interpretation of Post-Modernist architecture and ideology for us! What harm?

SYMMETRY: [Excited, turns to face the other two, now walking backward awkwardly.] Yes and equally our interest in Palladio is not to reconstruct the image of his genius as an architect or [sarcastically] 'harmonizer of volumes in space', but rather to form a caricature of Renaissance thought by illustrating the senselessness of his tiresome reasoning.

FRANKIE P. TORONTO: [nonchalantly, to himself] Palladio faced a fork in the road, and he took the wrong turn. He should have recognized that there's chaos, he should have gone ahead and done what Borromini did. He would have been a pioneer!

SYMMETRY: Palladio is dead for 429 years Frankie – why are we to resurrect him now? And for what purpose? Why do we care! What do they have in common that so deserves our attention?

FALSE: [Eschewing his enthusiasm.] The knife! The knife, the cut and the resulting fragment – imagine it! I think it is quite possible that Frank Gehry is in fact the physical re-incarnation of Andrea Palladio, returning to life in the 20th Century to re-examine his previous life's work by cutting it to pieces and rebuilding from the fragments he regains. Volumes in space indeed!

FRANKIE P. TORONTO: It is a way of refocusing history, reinterpreting what has gone before in order to arrive at something new. Destruction is not always a negative force you see. To be in the middle of Venice, so close to Palladio – and so much architecture today refers to Palladio…to be talking about disorder, which is another kind of order, is a bit irreverent. Western culture just thinks of one kind of order…of symmetry, classicism, and the idea of central focus. But the whole world can't be built on central axes alone. We would fall into madness over night were the world to be structured so

uniformly.

SYMMETRY: Why Borromini, what has he to do with any of this?

FRANKIE P. TORONTO: Borromini is not so unlike Gehry you know. Each was hopelessly misunderstood in his time. They were too unruly for most, and were written off as the villains of architectural culture. The resemblance is uncanny when I think of it! Each operated his architecture almost entirely in what could be called 'the theatre of private struggles' relating more to some sort of interior conflict than the zeitgeist of their age – Narcissists you might say!

SYMMETRY: Thespians you might think!

FALSE: [Mockingly swoons.] Lunatics you could surmise!

FRANKIE P. TORONTO: They terrify people! Perhaps only those prudes who eek out their existence by remaining exclusively within the safe constraints of normality. Those who care to know nothing of what might lie beyond the bounds of sense and reason, especially if it could upset the applecart even a little. Forms in space, volumes safely set by the axis of reason. Logic is such a putrid beast.

FALSE: Oh come now, cranky little Frankie. Time for a pint.

SYMMETRY: The play begins!

FRANKIE P. TORONTO: [Determinantly.] Fetch me my sword.

[The neon sign flickers and goes out. All players begin to play the scene in complete reverse, talking and moving backwards seamlessly as if we were watching a film being rewound from its end to its beginning. The curtain begins to draw and the lights fade to black.]

<div align="center">End Act I</div>

Frankie P. Toronto, Il Corso del Coltello, Venice, Italy, 1985

Frankie P. Toronto, performance detail, Venice, Italy, 1985

Chapter 1

Il Corso del Coltello

In Venice, in1985, on an assuredly hot day in September, the architect Frank O. Gehry costumes himself as a parody of classical design and performs Il corso del Coltello, (trans. The Course of The Knife) at the XI International Venice Biennial. The performance prescribes the systematic destruction of classical architecture and presents a public attack on Palladio and the regime of classical design in a commedia dell'architectura. What has happened? Somehow, a small man in costume wielding a large rubber knife has changed the way we design, build and think forever. The profane has surmounted the sacred. Incredibly, the Holy cow of architecture has been publicly slain. What next? What does this mean for architecture in a postmodern world and how are we to continue building and thinking on this uncertain and historically barren new ground?

Pause. Let us define this action. Isolated (as an ahistorical fragment) it becomes an instance of pure insanity, a digestable fiction or polemically a story of the fragmentation of architecture. It describes the death of the Reanniasance through the Post-Modern and the rebirth (pardon the pun) of representation in architecture as we know it. Contextually (appearing at the Venice Biennale in 1985) it could be categorized as performance art or an artistically motivated type of theatre, requiring costumes, props, a cast[1] and scripting. And presumably it is good theatre, being amply surreal, engaging, ambitious (in scale and design) and presents a grounded historical polemic. What seizes the imagination though is not the specifics of the performance (although it must be said it is rather interesting!) but how an act of this kind has come to be included in history as an important event (men dressed up as things) and how it has assumed a certain currency as an architectural situation . So how has this performance made a relevant contribution to architectural discourse? I must stress that this essay is a subjective interpretation of these events and is written from a position of conjecture alone. I suggest that by piercing the fabric of history, to connect Andrea Palladio and Frank Gehry in this way, requires a metaphysical leap into the unknown in order to understand this unusual architectural indictment or what I call the first instance of 'architectural telepresence'[2] .

1 While the performance was played by a twenty something strong cast the three primary figures were artist Claes Oldenburgh, his wife and collaborator Coosje Van Bruggen and their architect friend Frank Gehry.
2 The term 'architectural telepresenc'e is my own. It refers to the phenomena whereby an action performed in one location in one moment of time can appear to be equally relevant and/or polemic in another place simultaneously across history, time, space and memory. Architectural telepresence therefore cuts time and space in two and negates the passage of time (or history) as a separating factor in dividing events. The theory suggests the pos-

Consider Frank Gehry[3], entering a model of classical architecture (a temple or pavilion, a single perfect emblem of architecture in the whole) and cutting his way out, emerging triumphantly as the structure collapses emphatically behind him. In destroying this primordial space, which represents the original sanctum of architectural heritage, Gehry simultaneously constructs a new space, and lays a foundation for the becoming of his future self. It is the future of a new method of proceeding for architecture – and the beginning (perhaps tragically) of the architect himself becoming the subject of his design. Gehry's work becomes continually more personalized (or egocentric) and ambitious from this moment on, fearlessly drawing inspiration from unusual sources in the natural world such as the structure of fish, serpents and horse's skulls. This extrapolation of obscure symbols from a private mythological reservoir is highly unusual in the practice of architecture. The model suggests a more artistic temperament and an approach to design that is far more sensitive to forms operating as symbols than tectonic functions of the architecture.

Lets return to an explanation of what architectural telepresence might mean. This requires that we dissect Gerhy's polemic, the abstract, one directional (or asymmetrical) conversation, before we look in detail at the symbolism behind his architecture in itself. An absurd dialectic is staged between Gehry and Palladio. Gehry costumed as his mythical avatar[4] 'Frankie P. Toronto' revoking the life work of Andrea Palladio, whose voice in this exchange finds

---

sibility of an existential dislocation. For a more focused discussion of this topic consult Heidegger's Being and Time, particularly the section on Dasien and the destructuring of metaphysics.
3 (b. Ephraim Owen Goldberg, February 28, 1929, Ontario, Canada)
4 An 'avatar' is a Sanskrit word meaning the manifestation of a deity or soul in bodily form on earth; an incarnation of a divine messenger or teacher. The term is also used in Virtual Reality Programming to denote the constructed or 'virtual' self in the exterior (virtual) world. Interpreting the word in this way helps to describe the situation of Gehry's costume aiding his temporal dislocation in Venice from 1985 to the middle of the 16th Century Renaissance
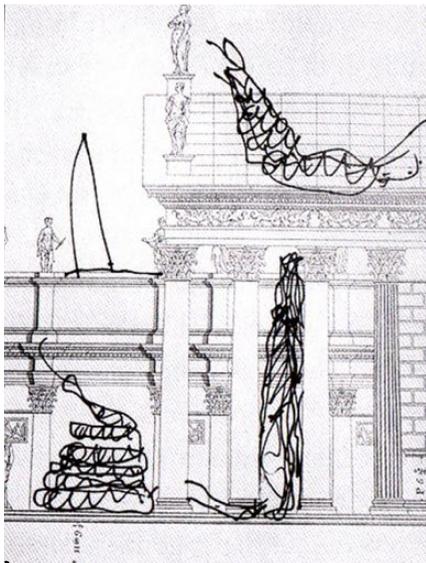
Frankie P. Toronto, Drawing, Venice, Italy, 1985

The Knife Ship - Il Corso del Coltello, Venice, Italy, 1985

the limited expression of his ~~(mute)~~[1] buildings in Venice. The conversation is itself asymmetrical or seemingly chaotic like many of Gehry's constructions. The attack summons a challenge on symmetry and order in architecture, but Palladio cannot reply and through his silence, his intentions for an absolute architecture remain absolute, unscathed by the chaos surrounding them. Ruskin in The Stones of Venice has said that 'Where canonical images of order stand in splendid isolation, the chaos surrounding them only undermines their purpose and drains them of their substance'. Is this the case with Palladio's symmetrically ordered architecture? Does the surrounding chaos and entropy drain their purpose and substance? Or is their order only perceivable for the chaos surrounding them.

Gehry's assault on Palladio's work is a calculated, didactic gesture - he mockingly scribbles coiled snakes and doodles of leaping fish over the finely measured facades of Palladio's Venetian buildings (fig. 1.3). This simple act of drawing becomes the tool by which Gehry creates his metaphysic theatre. Space and time appear to bend and collapse under his pen, folding the universe in two, establishing a new space in which order and chaos can meet, flirt and wrestle for the governance of the cosmos. The resultant play of this theatre is a temporal void, one that enables the dialogue across or through the fabric of time. The line or axis through which this universal fold occurs is the essential space of telepresent activity. Gehry creates and enters this space of temporary dislocation. It is a space where the perceivable division between objects or events in time disappears irrespective of where or when we observe them from. Time is no longer the familiar linear, chronological progression but becomes an axis of asymmetry, an invisible line with the ability to unite or divide objects through an imaginary border, pushing into a non-dimensional space objects and ideas which usually occupy a definite dimension in space at a fixed location in time. This theoretical line or imagined space has seldom been excavated in architecture but perhaps presents us with a new lens through which to re-examine history.

This prostitution of time has a number of consequent advantages. If we imagine time to be an invisible axis of asymmetrical division (a loose description of what Gehry's subjugation of history might look like) with the power to unite or divide objects, people, places or ideas and ushering them into the said non-dimensional space. Objects and buildings become liberated from their context of history and become pure or essential 'monads' for a freely associative mode of contemplation. It is an exciting and liberating thought to conceive of objects and ideas (the essence of buildings) which usually occupy a definite dimension in space and a fixed location in time to be suddenly free and co-existent in a new

1 The use of the strike through (Sous Rature) here implies that the word should remain present but may not be an entirely adequate description. The buildings are mute in that they don't respond to questioning however they still express ideas through the design of their facades and the relationship with their context. Sous Rature - trans. 'under erasure', is a concept introduced by Heidegger and frequently used by Derrida to signify that a word is an inadequate description but remains present to portray the limits of language.

dimension of thought: one in which the building appears as the set of ideas it represents rather than the stone and mortar by which it stands. We become aware of the value of architectural ideas as universal ideas, not ideas bound in some way to set objects. Gehry's performing knife has cut them free from the axis of time and architectural history.

SYMMETRY - VILLA ROTUNDA'S ATEMPORALITY

Palladio's Villa Rotunda (c. 1566) forces these difficult questions upon us and answers them succinctly if we examine how it behaves under the microscope of architectural telepresence. I was struck by the sheer power and strength of its monstrous symmetry and its allusion to the absolute or universal essence Palladio sought it emulate. The axis of symmetry dividing La Rotunda behaves in an entirely unprecedented metaphysical manner. The plan is a quadrilateral symmetrical device with two dividing axes North/South and East/West. Its decisive symmetry and harmonious volumetrics offer us a microcosm of the universe and a total union of man and the cosmos, but in the most unlikely and unnatural way. In the rigid, muscular and taught progression of its volumes and eloquently spaced columns we approach infinity through an almost obvious plainness. Its symmetry is almost dumb for its level of its simplicity. But hidden amongst this simple grandeur we also find the first instance of simulation, otherness, the first architectural lie. La Rotunda offers itself as an interpretation or representation of Palladio's natural word and simultaneously of the classical architecture of antiquity. It is the first time the building presents itself as something it is not. The first architectural 'fiction' of history. Looking at La Rotunda we intuitively understand its method. It resonates with an a priori knowledge of building, seemingly endemic in the post-Euclidean world of geometry.

Symmetry may initially be understood as a simple trick of reflection, but upon further inspection it reveals an enigmatic problem deeply engraved in its pattern. There is something almost mystical about its undemanding, almost ignorant expression. This quasi-mystical aura emanates from a profoundly more abstract quality embedded in the disguise of its intrepid simplicity. Brazilian artist Gabriel Orozco's work deals with similar states of symmetrical expansion and collapse through the symmetrical disruption of objects and the alterations of their position in history. In particular his work La DS (1993) offers insights to this method of intervention and defines Orozco's identification of symmetry as not only the axial division of the object but also as a tool for re-imagining the latent potential an object or building conceals within itself through history. Orozco forces his sculpture to exist in two different time frames simultaneously thereby alternating or shifting the cultural context the object is perceived in. The knife is once again the agent of symmetrical division when Orozco cuts a Citreon DS into three pieces and removes the central segment

of the vehicle to conjoin the remaining parts into a squashed version of its original self. The most defining characteristic of symmetry is then not the impressive quality of its reflected sameness but in fact the space inside the axis through which this sameness is achieved. It is a liminal space, (similar to Gehry's metaphysical conversation with himself where by pitting himself against history and the status quo of architectural discourse he re-positions or displaces his actions from 1985 to the Renaissance). Orozco treats the idea of symmetry as if it were an opening in a closed system of thought, furthering the potential meaning of the object's symmetry by inviting a soft interpretation of time onto the socio-cultural historicism the object has created around itslef. It is this suspension of meaning, pausing all former preconceptions of the object in a limbo (where they are reflected onto themselves for eternity) that makes the new interpretation of the object possible. The suspension is not a negative arrest but rather a opportunity for continual renewal (like Tracy Emin's body). Inhabiting the space inside the axis of symmetry enables this constant becoming, the transmutation of form into new meaning. The formation of new myths.

The Renaissance performed the same axial inscision through history. It was about looking backward and projecting forward, suspending time another words. The same axis of symmetry or temporal dislocation operates between the Renaissance and Antiquity and between the Pos-Modern and the Renaissance. Nothing new can be created in a world where the past is the object of desire for the future. It is as if we progressed forward only to find our way blocked by a mirror infinitely reflecting the way back. The mirror is in fact the perfect symbol of the retardation of creative energy that arises from the simulation of a past culture. This is why Palladio should have done what Borromini did. Pioneer the future, imagine a new way by accepting chaos and working within this chaos.

History (Imperfect)

Fish

Axis of Symmetry

1985

1566

Collapsed time

History (Perfect)

Antiquity

194
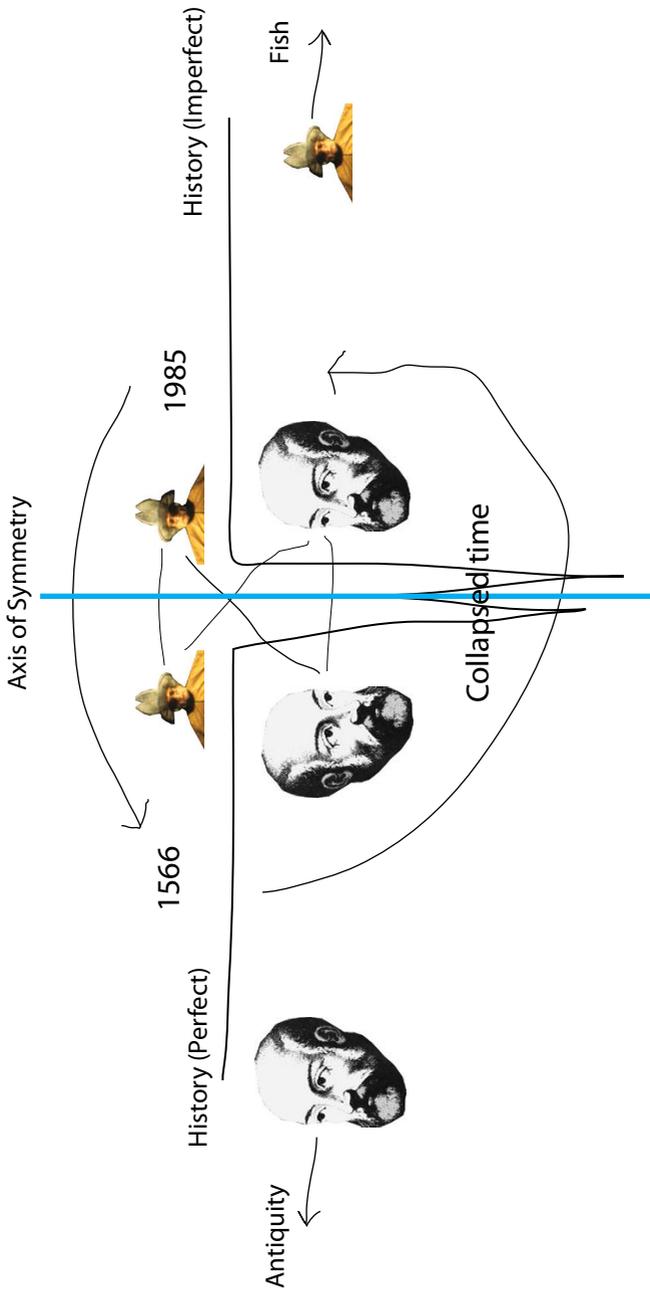
Gabriel Orozco, La DS, 1993, altered Citreon DS, dimensions variable
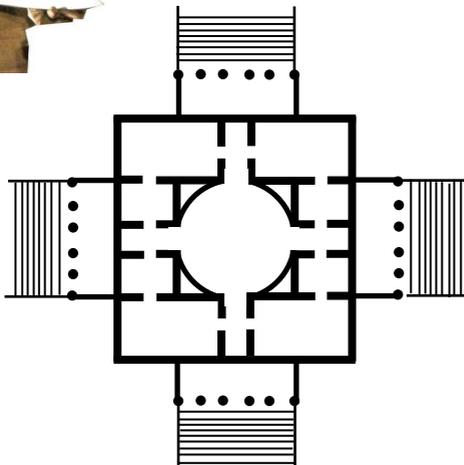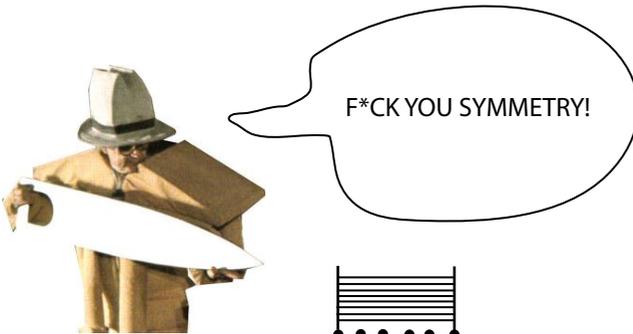
Andrea Palladio, Villa Rotunda, Verona, Italy, c. 1566

Chapter 2

GEHRY'S STUDIO - ARCHITECTURAL BRICOLAGE

Looking in a more literal way at the implicit order of nature than Palladio perhaps did, Gehry has pursued the fish as a symbol[1] and as a precedent for technical structures in his architecture for over 30 years now. The 'naturalism' Gehry follows is not akin to the dreamy detailing of Rococo relief nor is there anything particularly romantic about his forms. It is more Mannerist or Baroque possibly in its making and temperament, which Robert Harbison has defined as 'a mode of distortion, where recognizable cultural references are wrenched from their context and recombined in a cartoon or caricature of Gothic or whatever else' (Harbison, p.226). The disorder of the Baroque for Harbison is 'both sought after and loathed', which holds true in the case of Gehry whose bulging shapes are spectacular but equally easy to hate.

The spontaneous floral decorations and bizarrely elaborate inflections of the Rococo are replaced for the moderne crisp edge (from the dorsal fin of the fish perhaps?), and the ornamentation in Gehry, if we can assume it as such, is expressed in the structure and the sequencing of those violently irrational volumetrics. They seem to fly off in every direction at once, like Juste-Auréle Meissonnier's fantastical etchings from the late1800's in which architectural elements dissolve entirely and morph into superbly exaggerated ornamental forms. There is a comparison to be made here I think. Gehry's shapes surrvive as a paired back futuristic version of these splendid etchings, ludicrous, informative and poetic all at once (fig. 1.4). And Gehry's imagination could not have been so wild were it not for the contribution made to architecture by the recklessness of the Rococo.

Gehry's recklessness is not just 'sheer brilliant brainlessness[2]', as has been assumed of much Rococo architecture, whose frivolity failed to establish any enduring style but whose senseless decorations certainly succeeded in undermining the universal value of classicism. Gehry's forms are more Baroque than romantic, or possibly even Gothic, displaying a certain grotesqueness at times, a crassness, or perhaps simply a brutish (dare I say American) temperament. The resultant shapes are dumb things, which nonetheless speak with a certain lyrical clarity. Gehry's shapes do not attempt to simulate a revision of the cabinet of Classical, Rococo or Baroque forms, they simply are themselves. In being themselves so obnoxiously they conduct a lyricism that is forceful, cohesive, convincing and surprisingly

1 British architect Presten Scott Cohen similarly observes fish and other sea creatures and employs their ability to adapt and evolve to difficult situations in resolving what he calls 'architectural predicaments' in the 'postproblematic age'.
2 Michael Levey coined this brilliant phrase in - Rococo to Revolution: Major Trends in 18th Century Painting, I have boldly lifted it from Irenée Scalbert's insightful essay on the Rococo Revolution, AA Files, London, 1999

charming.

The shapes, although they are seemingly infinite in variety, share a set of properties that allow them belong to the same morphological lexicon as the three-dimensional motifs of Meissonnier. Liberating this infinity of forms from their origin (where they are randomn) Gehry, like Orozco, performs an alchemy of the latent, potential energy within each shape, investing his objects with new meaning and purpose where before there was none. Walter Benjamin describes the opposite of this process - 'All things, in a relentless process of mingling and contamination, lose their natural physiognomy, and the ambiguous takes the place of the authentic'.

The buildings in the whole and the fragments they are composed of are unstable objects, contaminated by the relational order of other architectures. They represent the decay of natural physiognomy (the destructuring of Modern Architecture) and in this decay they forge an identity for themselves, adopting an autonomy or authenticity, allowing them to exist without precedent. They bear no recognizable reference to the natural or actual world of forms (exceptional cases aside - Fish Dance Restaurant in Kobe, Japan) but still remain believable as contingent, plausible shapes simply because they are. They summon an existential or phenomenological force in this way.
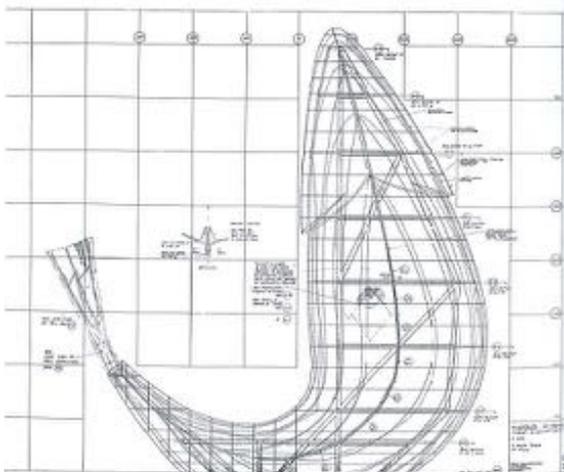
Clockwise from top:

Meissonnier, Juste-Auréle, etching, c. 1750

Meissonnier, Juste-Auréle, Silver Trinket Box, c. 1730

DisneyOperanTheatre,GehryAssociates,LosAngeles,California, 2003

Meissonnier, Juste-Auréle, etching, c. 1750

Technical Drawing, Fish Dance Restaraunt, Kobe, Japan, 1986

Fish Dance Restaraunt, Kobe, Japan, 1987

To be always working with fragments, bits of this and that, to be tinkering with things, working toward an (unknown) outcome. This is the song of the bricoleur, a profession (or habit) described by Levi-Strauss in the first chapter of The Savage Mind ironically entitled The Science of the Concrete. Gehry's studio could be said to resemble the bricoleur's scrap heap. He designs in a way that resembles the physical collage of Kurt Schwitter's Merzbau, constructed of found or salvaged bits of driftwood. The Merzbau once again presents the model of the commonplace material inheriting new meanings, languages and histories. in a scrapheap of card, metals, plastics and wood. This design method - a type of architectural bricolage, presents an interesting design scenario. Adding bits of this and that until he arrives at a unified whole (a sheer brilliant brainlessness) Gehry produces architecture from a phenomenal engagement with the materials in hand rather than working to a pre-designed ideal . Unity must here be understood as a system of assembled miss-matched pieces and odd-fits, haphazardly arrived at rather than designed or planned per se. The architect wrestles the flying forms and lunging shapes into position. Quite the opposite to the Palladian ideal of beauty in which classical unity is a priori. Symmetry, or any version of a rigid order is all but forgotten in Gehry, and a more dynamic, protean architecture grows and mutates from the odds and ends of materials.

These expressive shapes do not operate exclusively within Gehry's own dimension of aesthetic judgment and personal expression (what we have called the theatre of private struggle) but go out seeking to challenge the history of architecture by publishing their own temporary truth. This truth is self-evidently a myth. Just like Palladio's buildings published the prevailing truths of his time, Gehry's buildings tell us where we are in history. Truth is always unknowingly conditional, however strong its fortress of persuasion it remains temporally bound to its creators and believers. The Renaissance truth has transgressed into myth, it has become fiction.

Fish Dance Restaraunt, Kobe, Japan, 1987

Act II

Some time later (or before), Venice, 1985.

[Bravo Pour Le Clown (Edith Piaf) begins to play as the curtains draw back. A magnificent celebration is taking place in the streets of Venice. THE GHOST sits by himself at the front of the stage, unaware of what is going on behind him....Bravo, Bravo, Bravo! the music continues. Enter FRANKIE P. TORONTO followed by THE CHORUS. All are arm in arm cheering and singing.]

THE GHOST: [Sitting solemnly stage left, sobbing into his tunic.] Truth is fleeting, who would have thought?

SYMMETRY: [Walking in a perfect figure of eight across the stage over and back again and again.] Lost, lost. It has all been lost. Where has it gone? Where do lost things go?

[Walking jubilantly FRANKIE & THE CHORUS come stage front. The chorus singing.]

THE CHORUS: Ding Dong the Ghost is dead, chip chop off with his head! Pip Pap histroy broke, Fip Fop it was all a joke...

FRANKIE P. TORONTO: [Marching in front with his knife held aloft before him, followed by a group of lunatics all dressed as Classical buildings in various stages of decay, still cheering and singing. All quiet as he speaks.] I hereby declare this age the Renaissance of Chaos! [Cheers from the chorus.] We have arrived here friends, through a series of architectural transformations and misdemeanors. Traveling further and further from the origin of meaning in architecture - we have finally slain Palladio's filthy sacred cow - the universal principle of order. The absolute essence of truth he so fervently sought has been ridiculed by this: [Holding up the knife.] A rubber knife. [Cheers from the chorus.]

THE CHORUS: Huzzah! Yippee!

FALSE: What next our leader? [Bowing in respect.]

FRANKIE P. TORONTO: Architectural fiction: we are fated to pretend for eternity. [More cheers from the chorus.] It is time to pretend to be pretending to be real! What else can come of these jokes we make into our buildings. The representational value of buildings has distracted us from the (relative) truth long enough. The oracle (in her dashing bowtie and spectacles) warned us that this situation would come to pass. The collapse of architectural semiology, resulting in architectural uncertainty, indeterminability, and an existential crisis for the architect everywhere and everywhen.

FALSE: The beauty of things which are not signatures of other things is very special. Alas, these very words are so regretfully unreal. Damn the eternal curse of language! Babel whore. The mute condition of the natural world is heaven. Frankie please tell us what

can be real from now on?

FRANKIE P. TORONTO: The three primal fictions (or sins) of architecture are as real as the nose on your foolish face. First - representation. [He holds one hand above his head and makes a fist, then draws the other hand up slowly to make another fist beside the first.] Palladio showed his weakest hand by merely simulating the Classical style. He blindly reconstructed a redundant myth and on shaking foundations he recomposed the out-moded realities of antiquity. [Spits in disgust.] No longer in operation, this simulated reality became its own undoing. The origin of these myths being redundant, his simula-tion stood alone, isolated as an ahistorical fragment without any anchoring reality. His building (which he conveniently called truth) was but a sign, signifying nothing but itself in a detrimental loop destined for implosion. [Laughs an evil satirical laugh.] His eyes have been blackened by his building which became the hieroglyph of its own ridicule.

SYMMETRY: How terribly true. [Begins to sob himself, resuming his pattern of movement across the stage.]

FRANKIE P. TORONTO: The Renaissance we have triumphed gave us the first fictional-ization of the building. Permission to abuse history for better or for worse. This was Borromini's triumph.

FALSE: He stood alone.

THE GHOST: [Having stopped weeping begins to reflect to himself.] Resemblance never remains stable within itself; it can be fixed only if it refers back to another similitude, which then, in turn, refers to others; each resemblance therefore, has value only from the accumulation of all the others and the whole world must be explored if even the slightest of analogies is to be justified and finally take on the appearance of certainty[1].

THE GHOST: [Turning his head and answering himself as if he were mad.] But the building is an object of mind. And of history - the most precious mind of all. Alas, what has become important is no longer resemblances, but identities and differences. History tells truth shifts, impossibly so. Architecture bifurcates from its course. What star are we to follow now? [Looks up.]

[Music begins to play sadly, 'Death of a Clown' (The Kinks). A giagantic saw slowly descends from the fly-tower in cutting motion. FRANKIE P. TORONTO is seen to mount a giant fish and (is hoisted up into the fly-tower), sailing off into the sky waving his knife with glee. The curtains draw to a close. The play is finished, go home.]

<div align="center">END</div>

---

1 Michel Foucault in The Order of Things.

Claes Oldenburgh, Saw, Sawing, Tokyo, 1996

Claes Oldenburgh, Knife Slicing Through Wall, Margo Leavan Gallery, Los Angeles, California, 1989
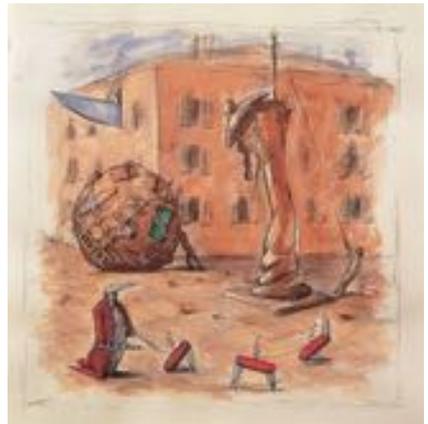
Claes Oldenburgh, Prepratory Sketches for Il Corso del Coltello,
Venice, Italy, 1985

Kurt Schwitters, Merzbau Hannover, Germany, 1933
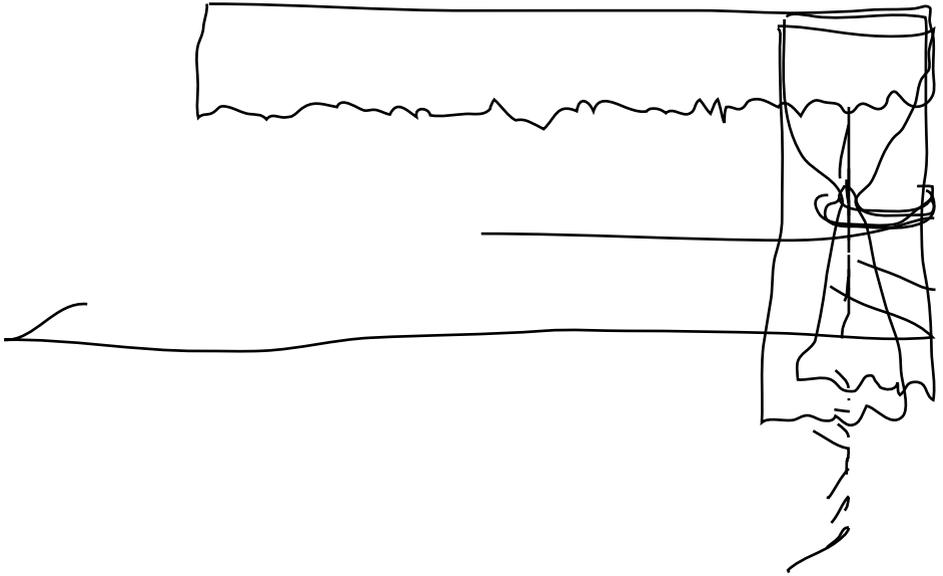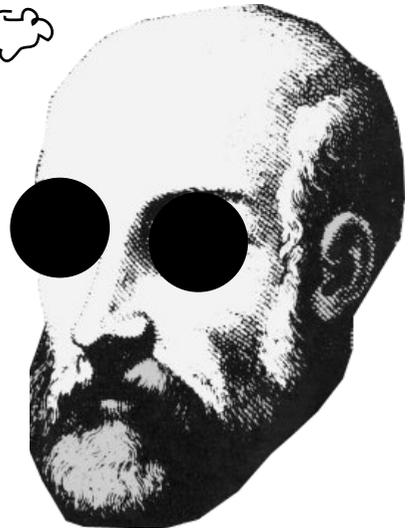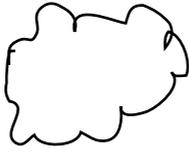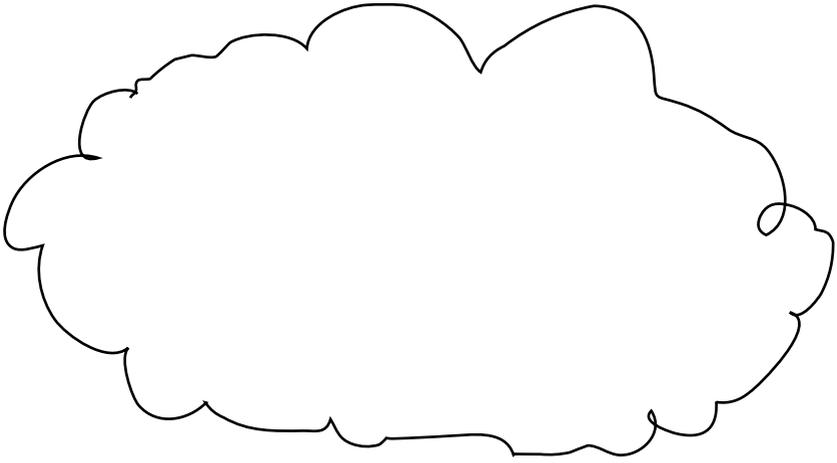
Bibliography

Books

Ackerman, James S, Palladio, 1991, London, Penguin

Baudrillard, Jean, Simulations, 1983, USA, Semiotext(e) and Jean Baudrillard

Beckett, Samuel, The Complete Dramatic Works, 2006, London, Faber & Faber

Berger, John, Ways of Seeing, 1977, London, BBC & Penguin Books

Borges, Jorge Luis, The Aleph and Other Stories, 1978 New York, E.P. Dutton

Bredekamp, Horst, Frank Gehry and the Art of Drawing, in Gehry Draws, 2004, MA, USA, : The MIT Press

Brook, Peter, The Empty Space, A Book About Theatre: Deadly, Holy, Rough, Immediate, 1968, New York, Touchstone

Daalder, Rene, Frank Gehry: Foreshadowing the Twenty-First Century, in Gehry Draws, 2004, MA, USA, The MIT Press

Dawkins, Richard, The Blind Watchmaker, 2006, London, Penguin

DeLanda, Manuel, Intensive Science and Virtual Philosophy, 2002, New York, Continuum

Delueze, Gilles, The Fold – Leibniz and the Baroque, 2004, MN, USA, University Press of Minnesota

Eisenman, Peter, Inside Out, Selected Writings 1963 – 1988, 2004, Yale University Press

Fisher, Jean, Vampire in the Text: Narratives of Contemporary Art, 2003, London, inIVA (Institute for International Visual Arts)

Foucault, Michel, The Order of Things: An Archeology of the Human Sciences, 1974, London, Tavistock Publications

Francesco, Dal Co & Forster, Kurt, Frank O. Gehry, The Complete Works, 2003, Milan, Electaarchitecture

Gombrich, E.H, The Story of Art, 1998, London, Phaidon

Gonzaléz Virgin, Miguel, Of Games, The Infinite and Worlds; The Work of Gabriel Orozco, 2003, Dublin, Douglas Hyde Gallery & Merz

Grosenick, Uta, ed. Women Artists in the 20th & 21st Century, 2005, Koln, Taschen

Harbison, Robert, Eccentric Spaces, 2000, Cambridge, MA, MIT Press

Harbison, Robert, Reflections on Baroque, 2000, London, Reaktion Books

Harrison, Charles & Woods, Paul, ed. Art in Theory: 1900 – 1990 An Anthology of Changing Ideas, 1992, London, Blackwell

Hays, K. Michael, ed. Architecture Theory since 1968, 2000, New York, MIT Press

Heidegger, Martin, Being And Time, 1962, London, SCM Press

Jencks, Charles, ed. Meaning in Architecture, 1970, London, Barrie & Jenkins

Jencks, Charles, Post-Modern Classicism, 1980, London, Architectural Design Profile

Kocur, Zoya & Leung, Simon, Theory in Contemporary Art since 1985, 2005, MA, USA, Blackwell

Krausse, Anna C. The Story of Painting: From Renaissance to the Present, 1995, London Konemann Publishing

Krishnamurti, J, Truth and Actuality, 1977, Chennai, KFI Publications

Lang, Peter & Menking, William, Superstudio; Life Without Objects, 2003, Skira, Italy,

Levi-Strauss, Claude, The Savage Mind, 1974, London, Wiedenfeld & Nicolson

Moneo, Rafael, fwrd. Contested Symmetries: The Architecture and Writings of Preston Scott Cohen, 2001, London, LaurenceKing Publishing

Murakami, Takashi, Superflat, 2000 Tokyo, MADRA Publishing

Ruskin, John, The Seven Lamps of Architecture, 1989, New York, Dover Publications

Ruskin, John, The Stones of Venice, 2001 edition, London, Penguin

Sennet, Richard, The Uses of Disorder: Personal Identity and City Life, 1971, London, Penguin

Sumrell & Varnelis, Blue Monday: Stories of Absurd Realities and Natural Philosphies, 2007, Barcellona, Actar

Ward, Glenn, Post-Modernism, 2003, London, Hodder Education

Warner, Marina, Richard Wentworth: A Sense of Things, 1993, London, Thames and Hudson & Serpentine Gallery

Journals

Koolhaas, Rem, Dali & Le Corbusier: The Paranoid Critical Method, in Architectural Design Vol. 48, pp. 152–164, 1978, London

Lynch, Patrick, 'Design as Translation and Typicality: On Autonomy and Contingeny in Architecture' in Building Material - Issue 16, Autumn 2007, AAI, Dublin

Scalbert, Ireneé, 'The Rococo Revolution', AA files 39, pp 10–20,

Tschumi, Bernard, Architecture and It's Double, in Architectural Design Vol. 48, pp. 111-116, 1978, London

Vesily, Dalibor, Surrealism And Architecture: Surrealism, Myth & Modernity, in Architectural Design Vol. 48, pp. 87-95, 1978, London

Internet

A full list of internet bibliographical sources is available on request. As the list is quite long I have chosen not to print it here.

SYMBOLS

Introduction

Architecture is a collection of symbols. There are symbols that surround architecture, symbols that make up the architecture and symbols that adorn and fill architecture. One can not ignore these and one has to take a holistic view of them. All these symbols can only be read in relation to one another. A building can be read as an object in an environment or an environment full of objects or both, like Frank Gehry's house in Santa Monica California which, will be discussed later.

Charles Jencks did not coin the term Postmodernism, but his book The Language of Post-modern Architecture is widely regarded to have popularised its use in relation to architecture. Jencks argued that Post modernists were dissatisfied with the shortcomings of functionalist modern architecture and wanted architecture to become Pluralist, drawn from historical context, have ornament, achieve a communicating of meaning through their buildings to the public and use the modern materials and building techniques of the time. Symbolism was very important to the Post-modernist architects.

"The Hedgehog and the Fox" is an essay written by Izaiah Berlin regarding author Leo Tolstoy's theory of history. Based on ancient greek poet Archilochus' idea that a fox knows many things but the hedgehog knows one big thing. Izaiah Berlin expands upon this idea to divide writers and thinkers into two categories: hedgehogs, who view the world through the lens of a single defining idea (examples given include Plato, Lucretius, Dante, Pascal, Hegel, Dostoevsky, Nietzsche, Ibsen, and Proust) and foxes who draw on a wide variety of experiences and for whom the world cannot be boiled down to a single idea (examples given include Herodotus, Aristotle, Erasmus, Shakespeare, Montaigne, Molière, Goethe, Pushkini, Balzac, Joyce and Anderson).

Barthes's many monthly contributions that made up Mythologies (1957) would often interrogate pieces of cultural material to expose how bourgeois society used them to assert its values upon others. For instance, portrayal of wine in French society as a robust and healthy habit would be a bourgeois ideal perception contradicted by certain realities (i.e. that wine can be unhealthy and inebriating). He found semiotics, the study of signs, useful in these interrogations. Barthes explained that these bourgeois cultural myths were second-order signs, or connotations. A picture of a full, dark bottle is a sign, a signifier relating to a signified: a fermented, alcoholic beverage - wine. However, the bourgeois take this signified and apply their own emphasis to it, making 'wine' a new signifier, this time relating to a new signified: the idea of healthy, robust, relaxing wine. Motivations for such manipulations vary from a desire to sell products to a simple desire to maintain the status quo. Similarly architectural symbology may demark something but can also connote.

Many Post-modernist architects

wanted to understand architecture as a collection of symbols. Robert Venturi was at the forefront of the Post-modern movement. His book, Complexity and Contradiction in Architecture was instrumental in the post-modernist movement in architecture and was fiercely critical of the dominant Functional Modernism. The move away from Modernism's functionalism is well illustrated by Venturi's witty adaptation of Mies van der Rohe's famous maxim "Less is more". Venturi instead said "less is a bore". Along with the rest of the Postmodernists, he sought to bring back ornament because of its necessity. He explains this and his criticism of Modernism in his Complexity and Contradiction in Architecture by saying that:

> "Architects can bemoan or try to ignore [ornamental and decorative elements in buildings] or even try to abolish them, but they will not go away. Or they will not go away for a long time, because architects do not have the power to replace them (nor do they know what to replace them with)".

Learning from Las Vegas highlights an aim that ornamental and decorative elements "accommodate existing needs for variety and communication". Here Venturi stresses the importance of the building communicating a meaning to the public (which necessitates non-functional elements of the building). The Postmodernists in general strive to achieve this communication through their buildings. This communication is not intended to a direct narrating of the meaning. Venturi goes on to explain that it is rather intended to be a communication that could be interpreted in many ways. Each interpretation is more or less true for its moment because work of such quality will have many dimensions and layers of meaning. This pluralism of meaning is intended to mirror the similar nature of contemporary society.
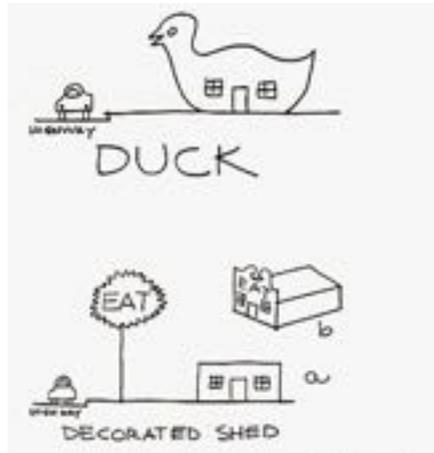
(Above - illustration from Learning From Los Vegas showing how symbols can communicate a buildings use)

The historical symbols that Venturi talks about are basically a contextual source book for architects to draw on so as their work can be informed by these symbols. Franz Boas writes that there is a limited number of Greek gods but the possibility of an unlimited number of stories. This style of thinking was shared with Flann O'Brien. A Post-modern writer, in his book *At Swim-Two Birds* he states that there is already too many characters, so it is unnecessary to invent new ones. He continues to include a number of borrowed characters in his novel. Architects can be influenced by symbols in designing.

Take the column, If one takes history as one's context and all the meanings therein, Mies Van Der Rohe's columns in the Barcelona Pavilion are abstracted beyond recognition from a Greek Doric column, but they both symbolise the same things. The second thing you can do is take individual symbols within this book of symbols and alter their meaning by changing the context, such as Adolf loos' column building.
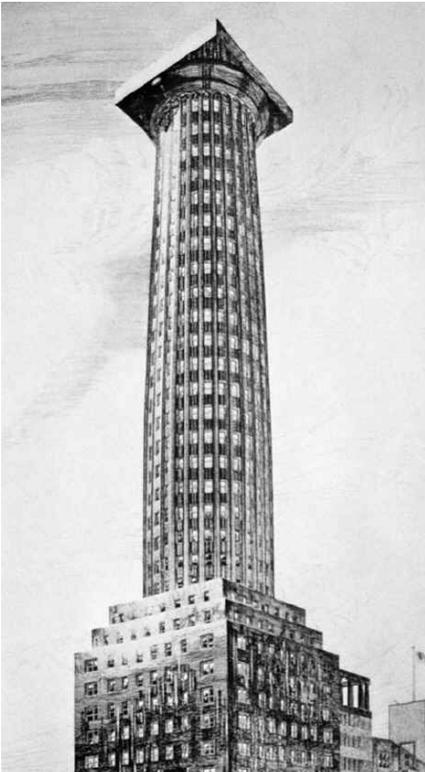
Part One: Architecture Informed by its Environment

'Translations' is a play by playwright Brian Friel. It is set in Baile Beag (Ballybeg), a small village at the heart of pre-famine 19th century agricultural Ireland where an English expedition to anglicise all Irish place names into English has just arrived. The concern with the meaning of the new names in the play is similar to which the Post-modernists had with the meaning of architecture. The new language of architecture was driven by function and completely lacked in historical conext.

Maps are a central tool of colonisation. You need a map to find your way, record property rights, enforce law and plan infrastructure. Naming peoples and places is a key way to exercise ownership. It is unlikely that the natives of the Hudson River estuary were interested in Amsterdam.

> Conquerors in every age have attempted to lessen the character of the conquered. English propagandists argued that successful colonisation depended on eradication of Irish ways and customs, and segregation of Irish and settler communities.
> Page 52 of Gillian M. Doherty's "the Irish Ordinace Survey: History, Culture and Memory.

It is important to remember what a map is for. A political reason in this case. What is a map but a conceptualised two-dimensional visual representation of an area. In a map, some

points are exaggerated and others underplayed or ignored in order to show what needs to be seen. If one turns a map upside down, it loses its illusion and simply becomes a picture (See the Tom Friedman map of America below). Maps are thought of as absolute reference but in fact they are subjective. One has to decide what to leave in and omit from a map. They are an abstracted collection of symbols which tell a single story.

James Corner states in his essay, "The Agency of Mapping: Speculation, Critique and Invention", that "… Mappings discover new worlds within past and present ones; they inaugurate new grounds upon the living traces of a living context. The capacity to reformulate what already exists is the important step, And what already exists is more than just the physical attributes of terrain (topography, rivers, roads, buildings) but includes also the various hidden forces that underline the workings of a given place. These include, natural processes, such as wind and sun; historical events and local stories; economic and legislative conditions; even political interests, regulatory mechanisms and programmatic structures."

Songlines, also called Dreaming tracks by Indigenous Australians, are an ancient cultural concept, meme and motif perpetuated through oral lore and singing and other storytelling modalites such as dance and painting. Songlines are an intricate series of song cycles that identify landmarks and subtle tracking mechanisms for navigation. For the Aborigines all land is sacred and alive. Their ancestors gave life in singing, gave them life through

song, and dwell in the land still. The songs must be continually sung to keep the land "alive". In singing they preserve the land/story/dreaming of their ancestors, and recreate it in their oneness of past, present and future. A simple topographical map of a place will not show this type of information despite being more sensitive information. Bruce Chatwin was a proponent of post-modern writing, challenging traditional forms of linear narrative. In his nook *The Songlines* he describes this behaviour.

> *'Sometimes,' said Arkady, 'I'll be driving my "old men" throught the desert, and we'll come to a ridge of sandhills, and suddenly they'll all start singing. "What are you mob singing?" I'll ask, and they'll say, "Singing up the country, boss. Makes the country come up quicker."'*
>
> *Aboriginals could not believe the country existed until they could see and sing it – just as, in the dreamtime, the country had not existed until the ancestors sang it.*
>
> *'So the land', I said, 'must first exist as a concept in the mind? Then it must be sung? Only then can it exist?'*
>
> *'True.'*
>
> *'In other words, "to exist" is "to be perceived"?'*
>
> *'Yes.'*
>
> *'Sounds suspiciously like Bishop Berkley's Refutation of matter.'*
>
> *'Or Pure Mind Buddhism,' said Arkady, 'which also sees the world as an illusion.'*
>
> *'Then I suppose these three hundred miles of steel, slicing through innumerable songs, are bound to upset your "old men's balance?'*
>
> *'Yes and no,' he said. 'They're very tough, emotionally and very pragmatic. Besides, they have seen far worse than a railway.'*
>
> *Aboriginals believed that all the 'living things' had been made in secret beneath the earth's crust, as well as all the white man's gear – his aeroplanes, his guns, his Toyota Land Cruisers – and every invention that will ever be invented; slumbering below the surface, waiting their turn to be called.*
>
> *'Perhaps,' I suggested, 'they could sing the railroad back into the created world of God?'*
>
> *'You bet,' said Arkady.*
>
> Quotes from Bruck Chatwins, "The Songlines" Pages 14 and 15.

This acceptance of something one is uncomfortable with has been seen within post-modernism with the singing of parts of the International Style into its repertoire. The reinterpretation of Corbusier's the Villa Savoy for Aboriginal culture in Australia by Post-modernist Australian practice ARM. In their National Museum of Australia the architects identify the meanings behind the unusual form - a rainbow serpent from an Aboriginal Dream-Time story. In the garden one finds fragments of an Australian map, a Mercator grid

juxtaposing memories in white, red and grey. The garden designed by landscape architects Richard Weller and vladimir Sitta, combines both idylic images and disturbing signs, a stepping stone map and the sites of massacres. This sets an opposition of themes to which one continually returns. History is seen as a contrast of desire and repression, hope and horror. for instance a lucious palm hints at a tropical paradise, while a row of Italian Alders tilted north at an angle of 20 degrees signify immagrent longings for the European homeland.These architects have to be able to pull from their surroundings and incorporate the environment (physical, mental, social, spiritual) into their work in the same way that aborigines incorporated the new things into their songs.

(Below - photographs of ARM's National Museum of Australia, Canberra)
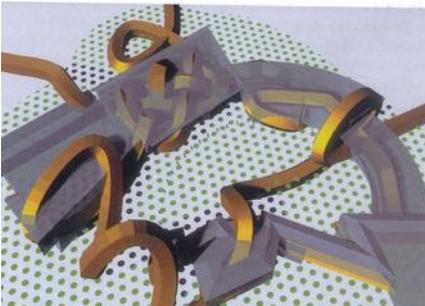
Part Two: Architects Defining Context

Dadaism was a cultural movement primarily involved in visual arts, literature—poetry, art manifestoes, art theory—theatre, and graphic design, which concentrated its anti-war politics through a rejection of the prevailing standards in art through anti-art cultural works. Dada gave the groundwork of a prelude to post-modernism embraced for anarcho-political uses in the 1960s

Marcel Duchamp was the artist whose work is most often associated with the Dada movement. Duchamp's output influenced the development of post-World War I Western art. He advised modern art collectors, such as Peggy Guggenheim and other prominent figures, thereby helping to shape the tastes of Western art during this period. A playful man, Duchamp challenged conventional thought about artistic processes and art marketing, not so much by writing, but through subversive actions such as dubbing a urinal "art" and naming it Fountain. He produced relatively few artworks.

This work had a massive influence on the Neo-Dada movement in the middle of the 20th century. Neo-Dada is a label applied primarily to the visual arts describing pieces which have similarities in method or intent to earlier Dada artwork. Neo-Dada is exemplified by its use of modern materials, popular imagery, and absurdist contrast. It also patently denies traditional concepts of aesthetics.

Artists linked with the term include Jasper Johns, Yves Klein, Robert Rauschenberg, Claes Oldenburg, and Jim Dine.

Much in line with this way of thinking, the artist Richard Wentworth's work centres on the idea of transformation, of subtly altering and juxtaposing everyday objects which, in turn, fundamentally change the way we perceive the world around us. "As a sculptor, I am interested in the objects that surround us in out everyday lives". He believes that "Everything has a sign, everything has meaning, everything is a readymade."

Yet the real object, Wentworth then finds, will not remain stable; even the most common place bucket, broom, chair or table, will conduct meanings that lie beyond appearance.

In his ongoing series, Making Do and Getting By, Wentworth also uses photography as a means of documenting what might be called 'the sculpture of the everyday': a cigarette packet jammed under a wonky table leg; a makeshift construction to reserve parking space; a bucket jammed on to the side of a dented car so that the headlight can still operate. 'I live in a ready-made landscape', he remarked early in his career, 'and I want to put it to use'. This use of the ready made environment is bricolage.

In "The Savage Mind" by Claude Levi-Strauss he makes a comparison between a bricoleur - a person who starts without any preconceived ideas about what they will do and works with what material they have around them – and the engineer. This was at a time when engineering was thought to be the best way to go about things in the west. Le Corbusier was pontificating that the engineer was the most important profession.

The engineer actually questions the universe, but the bricoleur accepts it. The engineer creates new concepts, to invent a new architecture. Then engineering opens a new set of tools and sometimes materials. The bricoleur is happy to recognise everything around them. The engineer wants to break the constraints on them, make a bigger building, etc. The bricoleur is not interested in this.

This work had a big effect on Colin Rowe and Charles Jencks in the 1970's. They didn't want the status of the architect to be that of emulating that of the engineer. They wanted an architecture which is not about the work of the engineer, but is about the Jack of all trades approach.

Jacques Tati uses bricolage in films, such as "Playtime". Bricolage does not have any pre-made set of tools or materials. The bricoleur makes do. It is a constant recycling process with the tools. He was interested in mythical thought. The set of thoughts that are available in a myth are limited like, Greek gods. There is a limited number of Greek gods. The Bricoleur is limited by the means surrounding him. Everything the Bricoleur surrounds himself with is a sign of possibility. Strauss believed that everything had the potential to

be recycled. The bricoleur is a protest against the idea that anything can be meaningless.

Frank O. Gehry is arguably the most, if not only, popularly recognisable architect in the world today. He is the only architect to have been on the Simpons. Working in the 1960's with pragmatic Modernists such as Victor Gruen and William Pereira, he developed a skill at commercial realism, something that was transformed by contact with artists, in particular Robert Rauschenberg, Jasper Johns and others in LA.

Oldenburg, Rauschenberg and Johns built their art with existing symbols. How the symbols affected each other and how they were read was dictated by the context. In this case the artists had defined their own context and (most basically defined as 'art') had inserted ready made symbols.

Jasper Johns is best known for his Flag (1954-55). His early works were composed using simple schema such as flags, maps, targets, letters and numbers. Johns played with and presented opposites, contradictions, paradoxes, and ironies, much like Marcel Duchamp Neo-Dadaists seemed preoccupied with a lessening of the reliance of their art on indexical qualities, seeking instead to create meaning solely through the use of conventional symbols. Their works also imply symbols existing outside of any referential context. Johns' Flag, for instance, is primarily a visual object, divorced from its symbolic connotations and reduced to something in its self.

Rauschenberg picked up trash and found objects that interested him on the streets of New York City and brought these back to his studio where they could become integrated into his work.So the artists put ready made symbols (Oldenburgs soft sandwich was not already made, but the symbol existed, the symbol was the ready made) into a context defined by them, the artists.

Perhaps Gehrys three friends made him aware that he had to assess the full context of his work. Not necessarily the physical landscape, but the less tangible aspects of the greater environment around it and that he could also manipulate peoples reading of things within the building.

From them he learned that throwaway objects could be beautiful, or at least interesting and evocative. Using detritus and the disregarded as his material, he fashioned an ad hoc aesthetic in his own house in Santa Monica, 1978-79. For the next ten years he produced one inventive bricolage after another, from cheap materials such as chain-link fence, and turned Dirty Realism into clean poetry. He has manipulated out reading of his buildings by using aircraft building technology and materials to make and construct buildings concerthalls and using chainlink fencing as a guardrail on his own house. Rem Koolhaas' does this too by using galvanised steel grating in the Kunsthall, in Rotterdam.

Hans Hollein, in his renova-

tion of the Perchtolsdorf Town Hall, near Vienna, produced a grand, ornamental use of chrome and furniture elements to intensify the existing ornament. His problem was to keep the portraits of the previous mayors, some of whom had been slaughtered by the Turks, and keep their heraldic emblems, while letting his audience know that he knew that they knew he was not a revivalist. He achieves this balancing act with an undulating blue line edged in chrome. This divides the wall in two basic parts: above is the traditional dada line that accentuates the portraits of the previous mayors while below are his rippling panels. Over the side entrance doors, otherwise unarticulated except for handles, the waves invert and allow headroom and signal a change of function. This contextual use of ornament (reminiscent of Viennese Rococo) signifies a positive functional choice for Hollein made when confronted with the difficult requirements of adding to the size of the council chamber. He decided that rather than build a new chamber, he would crowd all the councillors into the old one and thereby preserve their historic link, because the room had great emotional overtones. The crowded ornament not only half frames the elders, but also half frames the crowded councillors seated below, and thus acts as a metaphorical link between the two groups. The latter are squashed tight against each other in thin, Art Deco chairs that just fit into the places allotted to the table. On the floor in the centre of the oval is a stylised vine and bunch of grapes. This, Hollein said, is to entertain councillors when debate becomes dull, and symbolise the main product of their town, wine. The fact that the grapes are gold is one more sign that he knows that they know that he knows it is embarrassing to speak about money. But he must, in an age of lost innocence.

The New Paradigm in Architecture, Page 104, 105

Hollein creates the context for the intervention to be analysed against.

Conclusion

The history of architecture makes a vast symbolic book which informs the work of virtually every contempory architect. This basic, this contect, this history is unavoidable and inescapeable. No matter how much an architect trys to wipe clean their building history there will always be smudges. The dirty fingerprints of their antecedents.

As stated at the beginning of this essay a building can be read as an object in an environment or an environment full of objects. Frank Gehry's home in Santa Monica exemplifies this. After many years of neglect, ornimentation returned in the abstract as high art. The house is litered with small ornimental details that modernists would have believed to have

been needless. The logs on top do have a minor purpose of holding up the window covers. However, the mere fact that they could have been replaced with a practically invisible nail, makes their exaggerated existence largely ornamental.

The house and its inexpencive materials, like corrugated steel and chainlink fencing are so drastically divorced from its original context, and, in such a manner, as to subvert its original spatial intention.

He said on the BBC: "I am not the great architect for the ages. I am nothing – I am just an architect. I go to work everyday, I listen to the clients and I try to the best work." Some of this may be false modesty but, at the same time he seeks to be the number one architect and get the best jobs, he steps back hesitantly in self-doubt, and seems to say, "I'm not an intellectual, nor a leader, nor a perfectionist, nor any of that. I'm simpler than you think, I'm a Bricoleur, a backwoodsman, just call me Daniel Boone."

Frank Gehry on The Simpsons drawn outside his house in Santa Monica.

Bibliography

Songlines, the book by Bruce Chatwin

No Logo" by Naomi Klein

J. H. Andrews, "A Parerw Landscape". Dublin : Four Courts Press, 2002.

Gillian M. Doherty, "The Irish Ordinance Survey: History, Culture and Memory". Dublin : Four Courts Press, 2006.

Gillian M. Doherty, "Recovering Ireland: the ordnance survey, history, culture and memory. Dublin : Four Courts, 2004.

Roland Barthes, "Mythologies". London : Cape, 1972. de Saussure's classic Course in General Linguistics

"Translations" by Brian Friel

"The Necessity for Ruins" J. B. Jackson

"Atlas of Irish Place Names" Patrick J. O'Connor

"Connemara" Tim Robinson

The Ordinance Survey of Ireland

Department of Community, Rural and Gaeltacht Affairs Offices

Robert Hughes, "Shock of the new".

Saul Kripke "Naming and Necessity".

"Future shock" by Alvin Toffler. London : Bodley Head, 1970.

William J. Symth, "Map-making, Landscapes and Memory: A Geography of Colonial and Early Modern Ireland c.1530-1730. Notre Dame, Ind. :University of Notre Dame Press in Association with Field Day, 2006

Steven Spencer, "Race and Ethnicity: Culture, Identity and Representation". Abingdon, Oxon; New York: Routlege.

Charles Jencks, "The New Paradigm in Architecture: The Language of Post-modernism". New Haven; London: Yale University Press, 2002.

Charles Jencks, "What is Post-modernism?". London: Acedemy Editions,1996.

The Concise Oxford English Dictionary. Oxford: Oxford University Press, 2002.

Robert Harbison, "Eccentric Spaces". Cambridge, Mass.; London: MT, 2000.

Modern Landscape Architecture
in Post War America

———

Clare Reidy

Introduction

The topic which I have chosen to discuss in my dissertation under the general theme of landscape architecture is architectural landscape design during the post war modernist period. Modernist landscape architecture is was a movement which was mainly focused in America and thus I will narrow my study to that of Modernist post war American landscape architecture. This study will cover the development of modern landscape design, the principles of modern landscape design, the major landscape architects of this period and how landscape architecture has progressed from modernism.

I have always been very interested in the landscape architecture, the design of spaces around buildings and in the achievement of landscape design where "left over space" becomes a whole living working element in itself. I aim to answer all these questions about landscape design through studying the modern landscape design period. What influenced the development of the modern landscape period? What are the axioms of modern architecture? How does one achieve this modern concept of an outdoor space? What are the benefits of modern landscape design concepts? Can modern landscape design ideas improve architectural concepts today?

Within my dissertation I propose to introduce the development of landscape architecture into a modernist typology in terms of the important influences which lead to the development of this movement and its significance in the history of the progression of landscape architecture and architecture itself.

Following this, I would like to discuss, in detail, the fundamental concepts of modern landscape architecture in order to highlight the

principles and intentions which emerged from Eckbo and others projects and writings.

Then I will discuss the work of Thomas Church, one the most famous landscape architects of this period and his iconic design, the Donnell Garden.

Finally, on the basis of the research outline above I propose to compare the ideas implemented in postwar America and those implemented in landscape architecture today. I hope to conclude with the finding that the landscape architecture of today reflects the concepts and developments of the modernist period. That they do reflect the 'organic form in the humanized landscape', that is to say that landscapes today are designed for people, with a similar concern for space that architects share.

Influences that began modern land-scape architecture in post-war America

The most important lesson passed on to Frank Lloyd Wright by Louis Sullivan was that since disharmony with nature was at the root of most of the ills of the modern world, the architect is called to serve as nature's instrument of reconciliation"[1]

This reconciliation is achieved by the architect/ landscape designer through the form of landscape architecture. Concepts of landscape architecture and how it can be most effectively achieved have transformed throughout time with one of the most dramatic influxes of ideas occurring at what we now refer to as the modern period.

Modern landscape architecture began rather slowly in the 1930s, lagging behind developments in other disciplines. It began when few landscape designers notably Fletcher Steele, Thomas Church, Christopher Tunnard, Garrett Eckbo, James Rose and Dan Kiley wrote articles about the need to adapt design to the conditions of modern life. Christopher Tunnards 1938 '*Gardens in the Modern Landscape'*, for example, reinstated that the old values and old forms could no longer satisfy contemporary artistic and planning needs. He offered three possible approaches for designing the new landscape: the functional, the artistic, and the empathetic each of which would appear in the periods most prominent designers.

Landscape architecture was still slow to respond however. There were many reasons for this. There was "no perceived widespread need, no technological revolution in the landscape industry, no political or social terms to direct the immediate prewar and postwar

work in landscape design. Thus early American designers struggled self consciously to define a style or styles appropriate to there time and culture."[2]

There also seems to have been a "ignorance or cavalier disregard of the history of the profession"[3] with some going as far as to refer to it as 'a discipline in intellectual disarray'[4]. "It was a lack of knowledge in historical matters and in overall explanatory skills which have made landscape architecture a particularly impossible field for modernism."[5]. Even the 'make it new' motto of modernism could not out run the fact that "if you wish to make it new you have to know a deal about the old."[6]

During the turn of the century Beaux- Arts Orthodoxy landscapes with their rigid and classical axis and the naturalistic yearnings of Frederick Law Olmsted (or a formal humanized landscape and informal naturalized landscape according to Hubbard and Kimball) were the landscape typologies available to landscape architecture. This battle of styles, however, was chiefly phrased in terms of 'the look' of geometric order verses 'the look' of pastorial scenery.

There was however greater depth to some of the arguments. Olmsted for example criticized formal architectural landscapes believing they were lacking in visual experience. The calming and restorative effect of seeing 'broad ranges of space' within a predominantly natural environment was profound and wholesome upon the human psyche. "Landscapes, painted or real were considered a vehicle for identifying with the indwelling divine."[7].

Frank Lloyd Wright was no less obsessed than Olmsted with the central importance of engagement with the natural world for modern men and women desiring to lead happy, healthy and productive lives. Wrights' challenge was to conceive an American building of the "here and now" that was itself a "part of nature, not separate

from it."[8] Wrights buildings deny the possibility of an architecture whose formal language or material details can be conceived separately from the site with which it forms a single, cohesive environment.

He sought to discover the essential character of the regional landscape in order to generate an appropriate architectural style.
La Miniatura for example was to be a building that started fresh in the Californian landscape, searching for all that was missing in the sterile, sentimental copies of historical styles. In his design of Fallingwater, Wright pressed the organic metaphor with so much daring that what Kenneth Frampton has described as the " Fundamentalist Assimilation of the building...to the processes of nature".[9]
For Wright it was a necessity for Americans to live in a way that allowed close contact with nature in spite of accelerating urbanization.
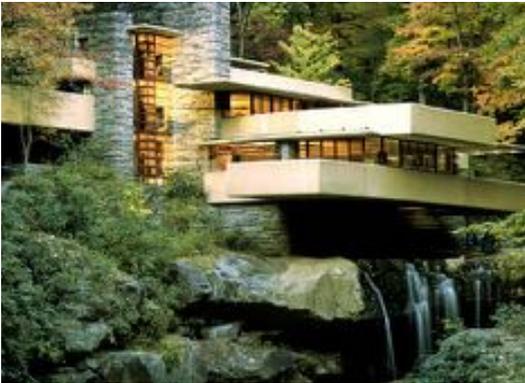
Fallingwater By Frank Lloyd Wright 1935

A key landscape architect of this regional movement and one of the first to move against the Beaux-Arts designs was Jens Jensen. Like Wright, Jensen had a growing appreciation for the way that indigenous communities of trees and shrubs imposed a unique character

on the native landscape. He too was against the bland, predictable refinement of traditional ornamental gardening based on reproductions of historical style.

The vision of a new urban future that Antonio Sant'elia and the Italian futurists proposed during the same period could not have been more different. It is in the radical manifesto of 1914 that we see "the essential foundation of European modernism in an acceptance of urbanism and the iconography of machine technology."[10]

Landscape architecture and engagement with nature for these modernists was a foreign concept, In fact the European aesthetic was "to express a separateness between man and nature."[11]

Le Corbusier's architecture aims, not to expand into or with its surrounding landscape but rather to confront it, declaring that the inhabitants "survey their whole domain from the height of the roof garden or from the four aspects of the ribbon windows"[12]

Mies Van der Rohe also takes the position that an essential feature of the aesthetic response to nature is segregation. In the Farnsworth house we see him use glass walls to frame carefully controlled vies of nature that were meant to be perceived as remote, idealized and separate from the architectural event that takes place within it.

The Villa Savoye, Poissy-Sur-Seine, 1929 By Le Corbusier

As new concepts and different ways to perceive the surrounding landscape began to arise new ideas and possibilities began to emerge for landscape architecture. The dissatisfaction with these two strict types, formal and informal, soon began a further development and a belief that landscape architecture should evolve in accordance with the social, cultural and technological conditions of contemporized life as architecture was beginning too.

New concepts of landscape design began with 'The Exposition Internationale des Arts Decoratifs et Industriels Modernes' in 1925 where designers such as Gabriel Guevrekian with his "Garden of Water and Light' followed by 'The garden for the Villa Noailles', began to bring fine and applied arts outdoors and suggested with true formal development a substantial overall of garden making ideas. "The Garden of Water and Light utilized the triangle as its principal motif. The geometric figure appeared in the overall plan, the shape of the principle pool, the glass tiles of the surrounding walls and the shapes of the angled panels of lawn. A sphere of Faceted glass revolved by day and night, catching and throwing the light cast upon its mirrored surfaces."[13]

Guevrekians intention in both of these garden designs was to create an art object. Their 'free' plan and use of modern materials linked them to modernism and yet there is a emphasis on the dazzling visual effects of colour, light and perspective rather than volumetric space of the modernist architecture.

The Villa Noailles, Hyeres, France, 1927

Fletcher Steele and Thomas Church were other great landscape architects of this period who toured frequently and widely and were an important link between the modern landscape architecture in Europe and America. Both were very stimulated by what they saw and absorbed certain values from European modernism particularly its liberation from academic styles.

One of Steele's most noted works is that of Naumkeag in western Massachusetts. The Blue Steps were constructed in 1938 and is one his most memorable pieces. "Curious in form, intriguing in its play of wispy handrails against solid masonry bases, with water spilling trough the flight of steps, the architecture of the stairs was designed to contrast with the white birches planted with a studied eye for disorder."[14]

The Blue Steps, Naumkeag, 1938 By Fletcher Steele

Michael Laurie has said of Thomas Church's designs " the central axis was abandoned in favour of multiplicity of viewpoints, simple planes and flowing lines. Texture and colour, space and form were manipulated in a manner reminiscent of the cubist painters".[15]

Donnell Garden, Sonoma county, California, 1948

New landscape architects also began to emerge with new and interesting concepts of landscape architecture, these included James Rose, Dan Kiley and Garrett Eckbo. Inspired by the writings of Fletcher Steele and the work of other disciplines, foremost among them architecture. Subtle though pervasive changes in American society began to encourage a new degree of experimentation. In effect the next wave in postwar American modern landscape design was not so much a revolution but a evolution due to the gradual

profound changes occurring in the American middle class such as increasing affluence and greater informality. The suburban garden and neighbourhood park became the primary focus of the revived postwar profession of landscape architecture.

New designs began to be developed by James Rose, Dan Kiley and Garrett Eckbo in search for a new appropriate vision grounded in philosophical, aesthetic, psychological and ecological values.

Notes

1. Donald Hoffman, "Meeting Nature Face to Face," in *The Nature of Frank Lloyd Wright*, ed. Carol R. pages 88-89

2.Peter Walker: *'The practise of landscape architecture in postwar United States'*

3. Steven R. Krog: *"The Language of modern," landscape Architecture* 75, page 56

4. John Dixion Hunt: *The Dialogue of modern landscape architecture with its past,* page1
Ibid 2

6. *Ezra Pound*

7. *Barbara Novak, Nature and Culture: American Landscape and Painting, 1825-1875 page 15*

8. Frank Lloyd Wright *'Frank Lloyd Wright: Writings and Buildings'* page 28-33

9.Kenneth Frampton *'Modern Architecture: A Critical History'* page 188-189

10. Antonio Sant'elia, Messagio, *cited in Frampton, Modern Architecture, page* 87-88

11. Vincent Scully, *Modern Architecture,* page 15-16.

12. Le Corbusier, *Precisions sur un etat de l'architecture et de l'urbanisme)* page 158

13. Marc Treib: *Axioms for a Modern Landscape Architecture.* page 2

14. Marc Treib: *Axioms for a Modern Landscape Architecture* page 4

15. Michael Laurie, *An introduction to Landscape Architecture 1976* page 46

Hypothesis for modern landscape architecture.

In early schemes and writings by the great landscape designers of the post modern period one begins to discover the fundamental ideals of new landscape design, an 'almost' manifesto. Garrett Eckbo's "*Landscape for living*" is the closest thing to a manifesto to emerge from this period. Within this piece of writing one begins to see fundamental ideals of modern landscape architecture.

A rejection of historical styles. Garrett Eckbo wrote "why must we be naturalistic or formal? What about graduations in between?"[1] The modern movement strove to reject the historical typologies. Designers spurned the formal axiality of the French and Italian traditions, and dismissed the 'naturalism' of the English garden tradition. Instead the designers of this period stated that modern landscape design must originate and develop from a logical approach to the conditions created by the site, program and societies needs. It must reveal new ideas of space and movement. Only through this method could one create landscapes appropriate to the current social needs.

The destruction of the axis. James Rose wrote "if you wish to consider any line of sight as an axis, then you have an infinite number of axes in a garden or anywhere else, and so it should be. By selecting one or two axes and developing a picture from a given station point, we are losing an infinity of opportunities."[2]

The restricted view of linear perspective expands and becomes versatile and complex with the removal of the axis in the modern landscape. Here is the clearest connection between landscape

architecture and painting. Of the twentieth-century art movements, cubism provided the most productive source for both shapes and structure in landscape architecture. Cubism was a form of representation in which reality is constructed through synchronized views, multiple foci taken from a single vantage point. It was the 'amoeba-like' shapes of artists such as Miro and Arp which seemed to have a particular appropriateness for landscape because as a formal motif it looked 'natural,' far more natural than the axis of traditional gardens.

Eckbo stated, "let there be life and action and gayety. Let there be nothing static, balanced, carefully set."[3] It was by considering movement within the garden that the designers energized the space and made it more dynamic.

The emergence of the concept of space rather than plane's within landscape design. James Rose stated "we cannot live in pictures, and therefore a landscape designed as a series of pictures robs use of an opportunity to use the area for animated living."[4]
Garrett Eckbo wrote; "Design should be three dimensional" and declared "People live in volumes, not planes."[5] Thus one of the main drives of modern landscape design was to discover a new form of space that moved away from the archaic of previous landscape types.

According to James Rose; "architects probably have the most to offer (landscape) design because their work deals with space relation in volume. The sense of transparency and of invisibility broken by a succession of planes, as found in their constructions, if translated into terms of outdoor material, would be an approach sufficient in Itself to free us from the limitations imposed by the axial system."[6] For Rose, the free plan and interspersing spaces of modern architecture provided an important model for rethinking landscape architecture.

In 'Freedom in the Garden' Rose compared a garden he designed with a plan of Mies van der Rohe's brick country villa to demonstrate that space within the garden should be fluid and three-dimensional. Rose stated: "In reality, landscape design is outdoor sculpture, not to be looked at as an object, but designed to surround us in a pleasant sense of space relations."[7] Thus space rather than style was to become the principle factor in landscape design.

Some great examples of spatial garden designs in tight metropolitan conditions were done by Garrett Eckbo. In these projects, Eckbo applied some modern architectural concepts to model spaces for distinctively allocated purposes, from creating private areas for individual families to discreetly disguising service zones. Each of the designs exploit the properties of plants to transform spaces vertically as well as horizontally reflecting how simple schemes can be ordered in complex ways. His drawings are filled with fresh ideas which reflect his didactic thoughtfulness. Eckbo's work always considered the expansive as well as the restrictive nature of the sites he was designing. The site planning including "the total space organization for a specific construction project on a specific site,"[8] was crucial . Each project, whether large or small, needs organized site planning, "which is the arrangement of environments for people."[9]

Structural skeleton

Completed with planting

Garden design by Garrett Eckbo

"Gardens are for people." James C. Rose wrote "when we consider people and circulation first, instead of clinging to the imitation of classic ornament, we develop an animated landscape expressive of contemporary life; and catch words like symmetry, axis, and informal will be known for their true significance... practically nothing"[10]

Garrett Eckbo wrote "People, not plants, are the important things in the gardens. Every garden is a stage, ever occupant a player."[11] Through this statement Eckbo's democratic viewpoint of what a landscape should be is revealed. He believed that while landscape design could be used for a variety of purposes its primary intension was for human use, all human use, servicing each layer of human social and economic society.

Modern landscape architects began to investigate landscape design as an instrument of democratic and social reform- a Bauhaus ideal that was welcomed and adopted. Designs embodying democratic values are scaled to the needs of humans, "simple" and "practical" in detail, and "flexible" in plan.

The incorporation of house and garden. Dean Joseph Hudnut in the second edition of 'Gardens in the modern landscape' (1948) concluded, "we did not see, until the architect threw down his walls that the space of the house and that of the garden are parts of the same organism: that the secret of unity lies in a unity of spatial sequences. The new vision has dissolved the ancient boundary between architecture and landscape architecture"[11] Richard Neaura, an Austrian architect, produced houses in which the line between inside and outside was seriously blurred. The Moore house (1952) in O jai and the Goldman house(1951) in Encino (landscape design by Garrett Eckbo) are other examples.

In Mies' work we often see is the complete integration of interior and exterior spaces. It was his German Pavilion that became the

true modernist spatial composition, and a source of inspiration for landscape architects. Mies designed a building in which wall and ceiling planes shift and slide past one another producing spaces which are perceived as continuums'. The boundary of inside and outside becomes almost impossible to distinguish; most of the wall planes overlap in space, and no intersections divide distinct rooms within the building.

The German Pavillion, Mies Van Der Rohe.

Thomas Church's 1948 Donnell garden clearly expresses these ideas. It renounced the axis as it renounced enclosed spaces. The space is fluid. Constructed on a site loved by the family for picnicking, the gardens was built before the house. The garden and the building work together to break down boundaries between interior and exterior space. Church wrote in House Beautiful in 1948, "A good garden is like a really beautiful woman. It is the distinction of her bone structure that sets her apart." He carries on, "Architectural pattern is the bone structure of the garden." [12]

Plants are used for their individual qualities as botanical entities and sculpture. James Rose declared "plants are to the (garden) designer what words are to the conversationalist. Anyone can use words. Anyone can use plants; but the fastidious will make them sparkle with aptness."[13]

To the modern movement theorists plants were not only a matter of form and colour. As with materials, they possessed inherent characteristics and qualities of their own. Eckbo, Kiley and Rose wrote "plants have inherent quality, as do brick, wood, concrete and other building materials, but their quality is infinitely more complex. To use plants intelligently, one must know, for every plant, its form, height, rate of growth, soil requirements, deciduous, colour, texture, and time of bloom. To express this complex of inherent quality, it is necessary to separate the individual from the mass, and arrange different types in organic relation to use, circulation, topography, and existing elements in the landscape." [14]

This represents a 'scientific' and 'economical' use of plants within the garden. Modernist writers reacted against two particular aspects of plant selection and use.

 The first was the specimen used for aesthetic rather than a structural interest. There was a concern that plants could regarded as mere ornament, a 'crime' according to Adolf Loos. The modernists instead chose plants in accordance to 'biotechnics' which, as Tunnard argued, used vegetation in accordance to their "structural" qualities, a term borrowed from architecture. This concept of 'architectural forms', of plants with personality and characteristics for design purposes, was adopted swiftly by modern landscape architects with people like Eckbo using plants primarily to define space. They are "structural", not "plastic" elements.

 "Mass" planting was another key formalist idea which the modernist were against, with Tunnard rejecting "great waves of vegetation... barbaric massing of colour" and stating "plants need freedom, sometimes complete isolation, to take their place in the scheme. Selection, not massing for picturesque effect, is the requirement of the modern garden."[15]
 The modernist believed that In separating a plant from the 'masses'

one is treating it intelligently; James Rose stated "it is only by the isolation of specimens that plants can be controlled scientifically, developed to the ultimate of their potential characteristics, and used with elastic tension...when we lift plants out of their little niches in an eclectic ground pattern and use them as organic, structural parts of the landscape, forms will appear which are expressive of plants as material."[16]

A modern landscape then was produced both by the rigour of scientific analysis and the "intuition" of the artist. Throughout Rose's various articles, he describes this rational yet artistic method as the 'scientific' use of vegetation. He outlines some of the suitable plants for modern landscape architecture in "Plant Forms and Space" by creating a catalogue of 'structural' plant species classifying them into Columnar, Horizontal, Pendulous, Round or Oval etc. No one plant is more important than another, each can be used in its own 'scientific way'.

 In 'landscape for living', Eckbo more accurately establishes the input made by every plant to determining liveable spaces. He writes that the spatial concerns of planting design are the outdoor equivalent of that of architecture, "Every plant, no matter how low, how prostrate, how massive, matted or solidly bushy, how fastigiated or billowing, is nevertheless a construction in space and an enclosure of space." [17]

For the modernist landscape designers the purpose of colour was also of crucial importance. It was used to emphasize and enhance the assembly of the garden and the human uses that generated its design. Colour, according to Eckbo, must contribute to the spatial honesty of the design: "We advocate the use of colour, but we advocate its use in a disciplined and controlled fashion which strengthen, rather than disrupt, the spatial concept of garden or park."[18] Thus here we see that Eckbo took issue with what he considered

their over use of colour. Contrasts in colour were used by Eckbo to produce "vision in motion", a concept whereby our eye is persuaded to roam freely about the design as if scanning a cubist painting. For Eckbo green to must be considered a colour, and not just background; "foliage and structure likewise have colour, of considerable range: in foliage from gray, blue-gray, and brown-gray through gray-green , light, medium, and dark green, to various purple and red shades, not to mention variegations of silver, yellow and red." [19]

Notes

1. Walker And Simo, *Invisible Gardens,* page 123

2. James Rose, *Freedom in the Garden* 642

3. Eckbo, *Small Gardens in the city* 573.

4. James C. Rose, *Plants dicatae Garden forms*

5. Garrett Eckbo,*Small Gardens in the City; A study of their Design Possibilities,* 573

6. James C. Rose, *Freedom in the Garden* 639

7.ibid

8. Garrett Eckbo, *Small Gardend in the city,* 573

9. ibid

10. James C. Rose, *Articulate form in Landscape Design*

11. Eckbo, *Small Gardens in the City,* 573

12. Thomas Church, *House Beautiful,* 1948

13. James C. Rose, *Freedom in the Garden* 1938

14.Eckbo, Kiley and Rose, *Landscape Design for Urban Living, Architectural Record,* may 1939 page 82

15. Tunnard, *Modern Gardens for Modern houses,* page 60.

16. James C. Rose, *Why not try science? some technics for landscape production,* 778

17. Eckbo, *Landscape for living* page 95

18. ibid 100-101

19.ibid 100-101

Thomas Church (1902-78)
The Donnell Garden

Dolliver 'Tommy' Church was born in Boston in 1902. His parents were successful but on deciding to separate, Mrs. Church took her son and daughter to live in California, where her father was retired Supreme Court Judge and a keen gardener. It was in California that Thomas Church learnt to love the local setting and began to understand and value the advantages and limitations of the climate and its great possibilities for outdoor living. From a relatively early age he seemed to have a keen interest in landscape design, being accredited with making a garden in Berkeley for his mother before he even attended college.

Church began studying law at Berkeley in the University of California, but however, changed to landscape architecture after becoming fascinated by an elective course he took in the history of garden design. He graduated from Berkeley in 1923 and in 1926 he took an MLA form Harvard, firmly rooted in the historical traditions of landscape architecture.

In 1926-27 Church won a Sheldon Travel Scholarship and toured Europe for around a year, separating his time between developing

his thesis- which drew parallels between the climates and landscapes of the Mediterranean region and California- and visiting the sites that were part of landscape architecture's grand tour. "I find the most interesting parallel the fact that conditions of life and the demands and existence of a class with intelligence to know beauty and the money to pay for it existed at the time the Italian villa developed, and is coming into existence in California today. Who knows what we might do out there yet?"[1]

Church wrote about Italy and Spain. The paper tried to rationalize the concept of the 'Spanish Colonial Revival style' that had already begun to be developed in southern California. Church noted the parallels of the two environments from the climate and latitude to the topography and flora.

Returning to the United States in the autumn of 1927, he began two years of teaching at Ohio State University, an achievement for a graduate with such narrow professional background. In 1929 Church was enticed back to California to the Bay Area to begin his own garden design practice. It was around this point that Church met the architect William Wilson Wurster. They became close friends and collaborated often together. Like Church, "Wurster looked at the vernacular as well as the high styles, striving to balance the new waves of international modernism with the local traditions."[2]

Church had plenty of work in private garden design at this early point in his career and made mainly 'formalistic' layouts comprised of neat proportion and geometry. Thanks to Wurster, Church was appointed the landscape architect for the design of Pasatiempo. Church in an article to 'California Arts and Architecture' summarized his main ideas in the Pasatiempo landscape design and suggested a new model for Californian gardens:

"Unity, which is the consideration of the scheme as a whole, both house and garden. Function, which is the relation of the practical

service area to the needs of the household and the relation of the decorative areas to the desires and pleasure of those who use it. Simplicity, upon which may rest both the economic and aesthetic successes of the layout, and scale, which gives us a pleasant relation of parts to one another."[3]

"His contribution to Pasatiempo was the siting of individual houses in the natural landscape and the design of patio gardens suited to the Spanish rancho-style architecture. The gardens were carefully separated from the surrounding landscape by clipped hedges. Distant views were created or maintained by selective pruning of the Coast Live Oaks and Madrones, within which the houses were set for shade and wind protection. The simplicity of these outdoor rooms, the use of paved surfaces and low maintenance planting, and the careful preservation of existing mature trees characterize Church's early style and much of his later work."[4]

In 1932 Church's practice began to develop at quite a rapid pace despite the American economic climate. His designs, however, remained quite traditional and were still based on formalist principles.

It was in 1937, after reading about the Bauhaus and Cubism, he returned to Europe to study the work of the new modernists such as

Painting 1933. Joan Miro.

Le Corbusier and Finnish architect Alvar Aalto. After the end of the war real developments in Church's work began to emerge as he went through a period of experimentation. After acquiring this knowledge Church went on and developed his own modern theories, a set of personal philosophies based on functionalism, that is to say the needs of his clients and the people using the garden; on the use of modern materials, and finally, the concept of spatial expression within a garden. "Church developed a theory based on cubism, that the garden should have no beginnings and no end and that it should be pleasing when seen from any angle, not only from the house.'" [5]

This change in Church's designs towards modernity occurred for several reasons. Firstly during the post-war era there was a great feeling of unrest in the lack of contemporary and vibrant expression. This was coupled with the fact that many of the typical post-war gardens were now small suburban lots as greater numbers of dwellings became affordable to greater numbers of people. This resulted in insufficient space to develop any grand formal features. The use of modern materials was also now considered. Fiberglass, aluminium, plastics and various cement asbestos panels were now readily available to Church and he began to incorporate them into his designs. Finally the new garden types were all designed to be utilized by people. An 'outdoor living area' extended the living area of the house adding a layer of practicality to the garden by taking full advantage of the space. "It was a living space in which one could relax, entertain the neighbours over a barbecue; a space where the kids could play his or her green thumb."[6] Each of these new ideals produced new and interesting garden typologies.

In his 'Gardens are for People' Church put forward his idea that gardens should be designed by people for people. No two gardens then would look alike as form was derived by the reaction of the clients to the space. However it is still easy to find a great number of similarities in the many gardens that he designed and built dur-

ing his long career. Most of them are closely planned gardens with paving or grass serving a functional purpose in the direct surrounds of the house, developing into a freer plan with a smaller amount of intervention.

The Donnell Kidney shaped pool.

DONNELL GARDEN:

Of all California gardens of the modern period Thomas Church's 1948 Donnell garden in Sonoma County has become the ultimate icon. All of Church's new modernist concepts are clearly demonstrated in the garden. It utilizes modern biomorphic forms and is designed with the intention of use, where the garden is an outdoor living room. This provision for outdoor living is executed beautifully through the "careful siting and the orientation of the garden with regard to sun, views, exposure, existing trees, and topography."[7]

In the Donnell garden example, all the contributing factors could not have been more ideal. The site was beautiful, Mr. and Mrs. Dewey Donnell had enough money to finance exactly what they wanted, and the architect, Austen Pierpont, and Thomas Church worked very well together.

"Is there one particular spot on the property that seems just right in every way? Have you picnicked there and found it idyllic? Have you spent long winter evenings planning a house there? Has it occurred to you that if you built your house there the spot will be gone? Maybe that's where your garden should be."[8]

Surrounding rocky landscape.

The site was located high within a rocky landscape which over looked the meandering Sonoma River. There is a distinct sequence of arrival. You are brought from the main road via a lengthy twisting

Arrival space with generous parking.

drive to a spacious parking area sheltered by trees near the top of the hill.

The garden is subdivided into three different paved areas. A lawn and south edge of the garden are bordered on one side by a low Juniper hedge. One follows this up to the top of the hill and arrives at the iconic swimming pool.

On arrival to the front of the house one is greeted by a concrete terrace which is angled diagonally and runs from the front door straight through the main room of the house and out through sliding doors to the garden. Through the use of widespread wall planes which slip past one another and extensive glass areas, the boundaries between indoor and exterior dissolve and a blurring of building and garden is almost complete.

The meanders of the Sonoma River are incorporated into the curves of the swimming pool, which is set against the ground-plane of the redwood decking. The land for the terrace and decking was cleared and was positioned in places above and around the natural land-form, leaving the native plant life intact and preserving as many of the live oaks on the site as possible. Church often quoted Steele's advice "to take the wall around the tree."[9] The wooden deck protrudes out from the hillside, as if floating.

"To Thomas Church, the swimming pool was a consequential element of the post-war Californian garden. The spatial composition of the Donnell pool and its accompanying structures is dynamic, with its elements perceived in constantly new relationships, like electrons within an atom."[10]

Church wrote: "Being the largest single design element in the composition, the pool cannot be hidden or disregarded on properties of less than an acre. Its success or failure, aesthetically, will depend on where it is placed, what forms are chosen as being the most sympathetic to the site, what materials will do the most to heighten possible dramatic effects and blend most harmoniously with the house and the distant landscapes."[11]

Church claimed that the kidney shaped pool was "inspired by the winding creeks of the salt marshes below,"[12] however it has also been said that the shape could also be compared with the biomor-

phic shapes, or "free forms," created by surrealist painters such as Joan Miro, Salvador Dali, and Yves Tanguy. These modernists discarded standard geometry and invented irregular shapes and forms. The biomorphic shape allowed modern landscape architects to find a type of equilibrium between designed forms that could also be perceived as naturalistic. The kidney shape has also been said to have been inspired by the designs of Churches close friend Alvar Aalto, the Finnish architect, who produced a series of chairs and glassware that relied upon the biomorphic curve.

The kidney shaped pool and a vase designed by Alvar Aalto.

Adaline Kent's central sculpture is a major factor in the success of the pool and adds another layer of modernity to the garden space while providing a location for sunbathers as well as aesthetic curiosity. To Kent space was "the constant medium of sculpture, as surface is of painting."[13] The endlessly winding surfaces and voids give power and vigor to the Donnell sculpture and captures Kent's beliefs that "Space can be rich in content; its shape can contain the secret of the form it embraces."[14] The sculpture is far taller than it appears as like an iceberg, the part of the sculpture above the surface is only about one third of the total work.

A strong aspect of the Donnell landscape is the delicate balance

between the 'indigenous ecology' and 'horticultural importation'. "Church first acknowledged the existing pattern of grass-covered hillsides with their stands of California live oaks in structuring the layout. To these elements he added a line of Monterey cypresses, juniper hedges, bougainvillea, festuca, and simple lawns."[15]

The composition is dynamic, and the planting, while selected for their horticultural suitability, are used as well for their own sculptural properties. The California live oaks that already existed on site were encircled with brick at their bases and incorporated fully into the design. This skilful understanding and utilization of the existing landscape and its live Oaks ensured a look of completion even when the work was still incomplete. The Live Oak's branches could have been regarded as 'sculptural' forms worthy of appreciation themselves, and Church never underestimated their beauty: "The shape of the trunk, the curve of a branch, the texture of the foliage, the pattern of the shade, may influence your whole design and may determine the shape of your terrace, where you locate your house, or whether you even buy the property."[16] "There trunks, quirky and irregular, casting long shadows, were transformed into abstract sculptures."[17]

The wooden deck area had no formal boundaries' but rather provided a liner seat that served both functions. "Permanently built seats can accommodate large groups in a garden with a minimum amount of movable furniture. Visually the seats become part of the overall design, cutting sharp shadows and creating strong patterns,"[18]

"Much of the modern movement in landscape design discounted historical precedent. The routes by which one may travel in the Donnell garden are many, a far more modern structuring of garden space than the preferred axis of the French baroque or the meandering route of the English landscape garden. Denying the influence of historical styles and eschewing the influence of the classical axis, the new garden accepts the influence of modern art, not as patterns but as parts of a unified space and must reveal these new ideas of space and movement, offering an infinite number of views, paths, shapes and alignments. "It is fundamentally wrong to begin with axes or shapes in plan," James Rose stated in 1938, "ground forms evolve from a division of space." [19]

"The complex relations of elements in the Donnell garden, bathhouse, lanai, swimming pool, paving, planting beds, and sculpture, constituted a near perfect balance of parts. The curving and skewed forms visually encouraged movement."[20] The space was energetic and fluid as it was no longer

controlled by pathways or constrained by circulation.

The garden is a viewing podium as well as a leisure setting. It looks out to a succession of panoramic views of the natural and refined landscapes. Church expanded the apparent boundaries of the garden, gathering in the distant landscape as part of the experience. "This is an old Japanese gardening technique called 'Shakkei' or 'borrowed scenery,' essentially creating a foreground, middle ground, and background that blur the distinction between what is possessed and what is visually acquired." [21]

Finally the garden has been designed to be used. It exists for people; "it achieves the human scale without artificial contrivances. People fit in naturally. They are neither dwarfed to insignificance, nor do they seem to crowd the scene. Because they are 'in scale,' they feel relaxed at ease." [22] The human and the natural fuse together to make the garden a single entity. The garden also "must go to work for us, solving our living problems while it also pleases our eyes and our emotional psychological needs." [23] Thus the Donnell garden did not arise from an artistic impulse; it developed inevitably from the needs of the people who used the garden. Garrett Eckbo agreed with this mentality in garden design and wrote in 1939; "Gardens are settings and backgrounds for the activities of people...more im-

portant than the enumeration of specific functions is the development of three-dimensional volumes of outdoor space, to pleasantly environ these wilfully and unpredictably motile beings"[23]

The Donnell garden in Sonoma stands as the icon of modernity. In its design we see a rejection of both the symmetry and axes of the formal typologies and contrived naturalism of the English landscape garden. Instead, the garden was developed in accordance to the site and the family that would utilise it. It drew upon the concept of space within a garden from studies of modern architecture and developed biomorphic shapes and forms inspired by contemporary painting and sculpture. Finally, the entire garden is unified and balanced proving Church's declaration that "to succeed (the) plan must show simplicity of layout, integrity in the use of plant and structural materials, and sure sense of proportion and form."[24] In no other garden have all of the modernist ideas been used in such a complete way.

"Beneath Church's vital aesthetic experimentation was his Californian zest for living outdoors and using structures that all but erased the boundaries between inside and out. Here would be a garden design that maximized the times during which the Donnell family and their guests could enjoys patio living, swimming, and spectacular views over the golden Sonoma hillsides and shimmering waters of San Francisco Bay."[25]

Notes

1.Thomas Church to J. S. Pray 6 June 1927, Havard University Archieves

2.Marc Treib, *The Donnell and Eckbo Gardens,* Thomas Church: Formation page 21

3.Thomas Church, *The Small Californa Garden,* Californa Arts and Architecture, May 1933, page 16-17

4.Michael Laurie: *Thomas Church, California Gardens, and Public Landscapes.* page 4

5.Laurie, *An Introduction to Landscape Architecture,* page 46

6.John B. Jackson, *The Popular Yard,* in the American Lawn 1987 page 27-32

7.Michael Laurie: *Thomas Church, California Gardens, and Public Landscapes.* page 7

8.Church, *Gardens are for people,* page 17

9. Walker and Simo, Invisible Gardens, page 99

10. Marc Treib, *The Donnell and Eckbo Gardens,* Thomas Church page 51

11.Church, Gardens are for people, page 142

12. ibid page 226

13.Adeline Kent page 32

14. Adeline Kent page 38

15. Marc Treib, *Axioms for a Modern Landscape Architecture,* page 29

16. Churchs, Gardens are for people, page 43

17.Church, Gardens are for people, page 43

18. ibid page 78

19.Marc Treib, *The Donnell and Eckbo Gardens,* Thomas Church page 59

21. Marc Treib, *The Donnell and Eckbo Gardens,* Thomas Church page 73

22. Mary Roche, *How to use nature in your life,* April 1951 page 111
23.
24.Church, Transition 1937-1948 in Landscape Architecture page 15

25.

Conclusion

Over the last hundred years landscape architecture has produced a small collection of designers such as Garrett Eckbo, Thomas Church, Lawrence Halprin and Dan Kiley who, using new modern theories broke free from the constraints of historical typologies. These designers believed that landscape architecture was an art form to could be considered as a 'cultural artefact', expressive of contemporary society through a number of different means including modern materials.

Many aspects of modernism such as social equality, use of modern materials and belief in landscapes design for human use still hold promise today for the Irish landscape. To date, however, Irish development has not been kind to our landscape. In my opinion the is a great divide in the ideals of the modernist landscape architect in America and the types of landscapes we, in Ireland are producing today. There has been a remarkable lack of interest in issues of collective space in Ireland, almost purely focusing instead on the built landscape. When exterior spaces are in fact designed, I have seen very few that try to create a landscape based on modern principles. They are all too often designed to be viewed aesthetically rather than be physically experienced as a space or be expressive in some way of our contemporary culture.

The lack of a modernist vision for our Irish landscape has had a devastating effect on our urban and suburban environments. Very few Irish urban landscapes function environmentally and socially. The fact that little to no notable work has been produced in landscape design during the booming economic climate of the Celtic Tiger reflects the Irish's disinterest in landscape design ideas.

I find it uncomprehendable that in recent generations we have displayed such a lack of interest with our landscape. As a nation used we pride ourselves on our 'green fields' and our agricultural roots. How have we become so alienated from our landscape? It was only in the last hundred years that the majority of Irish people began to move away from a mainly agricultural means of living, and within that period we seem to have lost our connection to the landscape. We need to start living with gardens that we can connect to and thus honor our relationship with our landscape.

In my opinion Irish landscape architecture as a field has barely touched upon the wealth of knowledge one could learn form the modern principles. Yet we shake our heads in collective disgust at the ugliness of our recent urban and suburban environments, never fully considering the problem of our landscape or its possible solution. We need to rediscover a belief in our contemporary situation and express it within our landscape.

In conclusion, the modernist architect's break from the great debate of formal or informal was an important event for landscape architecture. It allowed the landscape designers to shed the old constraints and restrictions to develop new typologies to deal with the social needs and reflect contemporary culture. We too must strive to find our own vocabulary to resolve the issues we face if we are to deal with them effectively. Only then will we be able to reconnect on a deeper level with our environment and as Catherine Howett put it "live more fulfilling lives, knowing ourselves and places we inhabit more profoundly, more intimately and joyfully."

INFLUENCES OF LANDSCAPE ARCHITECTURE IN ARCHITECTURE

Michael Mc Laughlin

Mankind have developed the ability to understand and relate to the environment around them. Therefore in many cases, we adapt the environment or landscape we live in, rather than adapting to it. Through knowledge and the intervention of tools we have grasped a way to design the interior and exterior spaces we live in. This notion of 'design' is often known as 'architecture'. Landscape architecture is the term used specifically for exterior spaces. The term 'architecture' alone is most widely used when describing covered spaces. In my opinion these phenomena go hand in hand and have large influences on each other.

Landscape architecture is the discipline devoted to understanding and shaping the landscape. Improvement in landscape results in human benefit. However is the landscape purest when untouched and in its naked form? The perfect landscape creates and sustains useful, healthful, and enjoyable urban, suburban and regional environments. It protects and enhances their intrinsic physical, cultural and ecological quali-

ties. Practitioners need to be well educated to understand the landscape and the ways people interact with it. The overarching goal of landscape architecture is to create harmony in our relations with the environment. What affects does this have on architecture?

Although architecture and landscape architecture combat the world through a common design paradigm, and both tackle design in a similar way, what they actually design, the knowledge they use and the values they hold are very different. Some would say that landscape architecture is borrowed from its ancient mother 'architecture'. Originally the process and principles of architecture were applied to landscape architecture, but architecture is principally about the design of buildings. Architecture is a design discipline concerned with the formation of physical structures to shelter, shape and facilitate human activities. Landscape architecture is likewise concerned with facilitating human activities, but in a way, I believe, that tries to create harmony between the built environment and the natural environment.

ITALIAN LANDSCAPE ARCHITECTURE
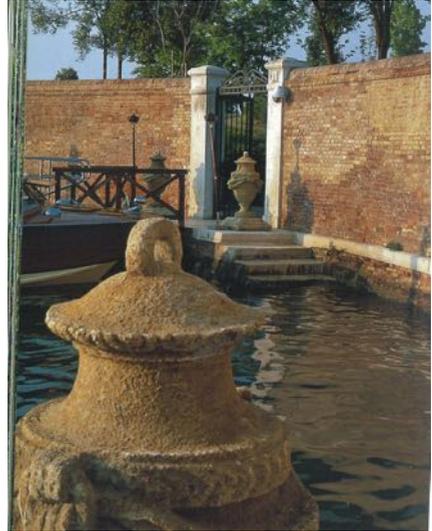
As everybody knows, roman architecture was pioneering in many ways. Everybody can adhere to the great architecture of the aqueducts, basilicas and villas of Italy. However what about the landscape architecture? Italy definitely has a great climate for growing all sorts in the garden but has it been utilised? Rome didn't really begin to develop in this way until the termination of the Papal Schism (1417). The Belvedere Court of the Vatican, designed by Bramante, was probably the only great piece of landscape architecture until Cardinal Giuliano de Medici began the Villa Madama.

When love of air brought the Italians from town to country, they realised that civilisation had destroyed "the garden of Eden" that might have been theirs. They then set out to be sympathetic to the countryside. They, however, did not try and naturalise their gardens like other parts of the world. They instead planned it in a much more formal way so that it wasn't considered as much a garden but as an extra room for the house. It was no more than a salon with limited light and air. In Rome the vast grand gardens were designed in a formal fashion to bring a controlled feeling to nature in the city. The gardens were planned so meticulously that sometimes the house became of second importance.

"Formality" when applied to the garden can often be misread as being cold and stiff. Everyone would agree that the informality of nature can be beautiful and serene in itself and the formality of a built structure can also be quite pleasing. Although, Italians believe, that if the two come into immediate contact and neither compromise their characteristics, then the appeal of both could be lost. There are two ways of dealing with this problem. Either the buildings

must become more organic or the garden be formalised. With architects such as Palladio forerunning architecture in Italy, it certainly wasn't of an organic nature and therefore the gardens often were designed in a formal fashion. The idea was that the garden could become less formal the further away from the building it went. In a way the garden was like the ripples of a pond dissipating away from the building. The lines of the garden could grow less and less as they furthered from the house.

The formal plan of The Villa Garzoni, Collodi (1652).

The Italian garden was often designed with the same precision used to design their buildings. The essence of these gardens was allowing the use of only three elements: evergreens, stonework and water. An unlimited number of designs could be created with these elements. The gardens could be thought of as being plans for small cities or large open air buildings. They were developed on the concept of a series of rooms of varying shapes, connected by vistas and approaches. There were long avenues and walks interrupted with open squares and cross avenues leading to carefully places climaxes. The evergreens were used to create rich and elaborate forms. They were also used to create shade which was one of the most important ingredients to making them enjoyable spaces. Box, yew, ilex, privet, beech and lemon trees and grass were among the popular varieties used for the topiary. The sun in Italy is so light and dazzling that the lack of bright colours from flowers isn't really missed and the shade from trees and hedges is welcomed. Water was also a way of suggesting coolness both by sight and sound in the garden.

One specific area of Italy which has a very interesting garden history and which has been preserved quite well is Venice. Here although designed in a very formal fashion too, its main aim was to be a productive garden rather than a pleasure space, if one could be so bold as to say they are different spaces. There are over five hundred secret gardens in Venice. They include the splendid gardens of the aristocratic palaces, the cloisters of ancient convents, the si-

lent vegetable gardens of the monasteries and orchards of vines or fruits. Many of the public spaces in Venice were often used for festivities and parties. They were also prone to criminal acts as well as all of its normal public duties. However these spaces were also used for growing rare botanical species and plants for medicinal purposes.

Because Venice is basically at sea level, sea water often threatens the life of its plants but the sea also has many advantages. It provides warm air and shelter from the cold. This creates micro climates within Venetian walls and means that more rare botanical varieties could be grown. We have garden documents of Venice that dates back to the fourteenth century. Gardens were more plentiful back then mainly because there was a large religious community. They were able to keep themselves self sufficient in terms of water, vegetables and salt pans.

Gardens in Venice were very well looked after because space and fresh water was in short supply. The only source of fresh water in Venice was rain and therefore it was a precious commodity. Any plants that received this commodity were then looked after to the highest degree in every other way to yield the highest returns from it. The returns included flowers, fruit, vegetables and oils and leaves for medicinal purposes. The gardens took their places in many different shapes and forms. It could be a narrow strip of land, a tiny square, a terrace shaded by pergola, a sunny roof garden, a balcony protected by a curling wrought-iron railing or a narrow windowsill of Istrian stone. Roses, Jasmine,

aromatic herbs, clematis, geraniums, wisteria, ivy and magnolias were among the many scented and aesthetically pleasing varieties often displayed in the venetian gardens.

A formal planned private garden in Venice.

Although there are large differences between the landscape architecture of mainland Italy and Venice, there is one common thread and that is the garden designed in a formal way as part of the building. Here the landscape design becomes part of the architecture itself and one could question whether the landscape design has any affect on the architecture of the buildings. I believe that the two design phenomenon come together quite well in Italy and that the

landscape architecture does have an effect on the architecture but in a very integrated and subtle fashion. The idea that the garden could be a room or a series of rooms, within the building obviously has a great impact on the design of the building. This is an idea that is only really able to be conceivable in climates such as the Italian climate but is very useful in terms of creating a light filled house and a more natural and open feeling which is otherwise difficult to achieve in a formal style building.

CHINESE LANDSCAPE ARCHITECTURE

Chinese private gardens emerged after the imperial gardens and during the Han Dynasty (206BC – 220AD). Many of the nobility began to have pleasure gardens built for them. They were modelled on imperial gardens but smaller. Later in 420AD there was a rise in "mountain and water" or landscape paintings, which, began to eradicate the influences of the imperial palaces and gardens. Painting and poetry were both very much integrated into Chinese gardens. These poets and painters practised purely for enjoyment and never to show or to sell.

Many painters painted to record their travels. These could be hung in their private houses and thus when they would get too old to travel any longer they will still be able to enjoy all the beauty and natural scenery of China condensed between their for walls. This way of thinking had an important impact on the development of Chinese architecture.

One of the most famous travelling groups that influenced Chinese garden architecture was a group of forty-two, headed by Wang Xizhi in the third century. To celebrate a traditional holiday while on travels, they placed delicate blue chinaware cups on a winding stream and let them flow with the current. Whomever a cup should stop in front of, that person would have to drink the wine and compose a poem. This actually became known as "flowing cups on a winding stream" and was kept up as a tradition in garden architecture by building "a flowing cup pavilion". These consisted of a pavilion with water conducted through grooves in the floor slabs. People gathered around the grooves placing their cups on the water and just like the original idea, if a cup stopped at you, you would drink its contents and compose a poem.

A flowing cup pavillion floor slab.

Many men became hermits and went travelling and living in the beautiful wilderness of China. They usually drew from society because of social and political upheaval in order to retain their morals. As said before, while travelling they turned to painting and composing poetry of nature. During the fifth and sixth centuries the idea of hermitage became transformed. Instead of hiding away in the wilderness, they began to withdraw from the world by building their own hills and lakes to create a personal environment, similar to the wilderness, where they could be alone. They now had a landscape or garden that was much smaller and easier to work with. This was the first of many steps to simulate natural scenery in a private garden.

Practically all gardens in the north of China were in Beijing. Aristocratic families and rich merchants owned these gardens. They were smaller in size because of the large population but natural beauty still remained the theme. The gardens were planted with trees, bamboos, shrubs and flowers and had countless rare stones. The lakes and rockeries were much smaller in area compared with gardens of previous eras. The layout was extremely well thought out and based on simple criteria that had big influences on the architecture. The lake was situated in the centre, with the rockeries to its north and the buildings to its south. This enabled all the scenery to be enjoyed and all the plants to receive southern light. The rockeries consisted of gentle contours built with a mixture of stones and earth to facilitate rigidity and the insertion of plants. The small lakes had many nooks

and crannies to give off the impression that they were natural. All of this greatly influenced and advanced the architecture of the buildings. A huge variety of buildings were now being built such as waterside pavilions, halls, studios, guest houses, storied buildings, terraces and roofed walkways. The binding of landscape architecture and the architecture of the buildings became very apparent with transitional spaces such as roofed walkways and exterior stone tables and stools.

Storied Chinese Building.

Private gardens were commonly located to the rear or the side of the living quarters. In feudal society, the female living quarters were located in the inner most courtyards of the residence and so it was more convenient to have the gardens at the back. In ancient times

people didn't have a scientific concept of space, but when the Chinese built in the way that paintings were painted or essays written, the results were spectacular. Private gardens were broken up into a series of spatial units, each with their own functions and characteristics. They were divided using trees, flowers, stones, buildings or walls. On the one hand these "dividers" created a spatial division but on the other hand, they provided a spatial linkage. They concealed and opened a variety of views that would entice and invite people into other parts of the garden. This "art of concealment" was often used in both the architecture and landscape architecture of these gardens. Between spaces there were often no more than glimpses of other spaces. This, however, arose the imagination and curiosity of the occupier. This affect was often realised using perforated or flowery windows; maybe decorated with latticework or tracery or moon or vase shaped doors.

Flowery windows arousing curiousity.

The borrowing of scenery is one of the most important artistic techniques in Chinese gardens. Views could be borrowed from afar, nearby, above or below. As well as scenery being borrowed, sounds colours and fragrances could be used in many ways. The sound of bells from distant temples could be channelled to a particular spot in the garden. The sound of running water and singing birds are both very soothing to the mind. Colours are abundant in Chinese gardens. Moonlight could be borrowed to enhance a scenic spot. Other, seasonal colours include many shades of green and crimson trees and pink and white blossoming flowers. Borrowing fragrances through openings and walkways is a great way of breaking the boundary between inside and outside.

Buildings in private Chinese gardens were not strictly confined to traditional regulations like the traditional buildings elsewhere and therefore there is a large variety of form and style. The roofs of these buildings were particularly fascinating. The corners of the eaves were often turned up so high that, together with the trees they performed a beautiful skyline. The buildings had two functions: they satisfied the needs of their occupants while also adding to the scenery of the garden. "Lou" or "ge" buildings were buildings of more than one storey in height. They are generally placed at the periphery so as to not obstruct the spatial integrity of the garden. They were also used for panoramic views and enjoying the scenery in the distance. The "ting" or pavilion is the most important type of building in the Chinese garden. They are generally

open on all sides but can be constructed of practically any shape in plan. They become great "windows" from which to view the gardens from but are always in perfect harmony with the surrounding environment. Many pavilions had full length doors or windows that could be dismantled in the summer time, to break the barrier between building and landscape, and reinstalled in the cold season when necessary.

Buildings and walls in gardens were often used as backgrounds. Like the paper in landscape paintings, whitewashed walls often became a background for which trees, flowers and rockeries could be arranged to make up picture like scenes. The walls were often pierced by open tracery windows and doors. They broke the monotony while adding another layer of interest to the scenery in the garden.

Winding Bridge

Bridges played an important role in Chinese garden architecture. They, of course, were used to cross water but had many less obvious uses too. They casted fascinating reflections onto the water and made the water look deeper.

Many zigzag bridges were used to force its occupants to change direction, creating the illusion that the water surface is much larger than it actually is.

Plants obviously play a large role in gardens all over the world. In Chinese gardens they were important too, however not as prominent as one might expect. They were often integrated with the buildings into the "scene" of a Chinese garden. Dwarf shrubs and trees were often used to make the rockeries and mounds feel bigger, like a scene from the wild. Plants however have that unique quality of reflecting the seasons through blossoms, colour changes, fruits and leaves. Even though Chinese gardens had a lot of built elements in such a small area, they all took pride in having a great variety of plants. Trees such as lacebark pines, pines, cypresses, maples, phoenix trees and ginkgo trees were planted by the side of the lakes, on the slope of the hills and in the courtyards. Flowers of all sorts were planted in the rockeries and the ponds. There were plums, peaches and peonies blossoming in the spring, lotus flowers, pomegranates, lilies and myrtles in the summer, chrysanthemums and osmanthus in the autumn and winter jasmine in the winter. The trees and flowers were planted to look natural and to harmonise with the rocks and buildings. Even though they were never planted in a formal fashion they were planned. Weeping willows were planted by the water because they thrive in wet ground and they could touch the water weeping more dramatically. Bamboos were planted in front of the windows to provide shading while plum trees were planted in the outskirts

of the plot to gain the most sun. Plants were also planted together because of their contrasting qualities. For example

Weeping willow over hanging a lake.

tall sturdy pines create a great contrast with slender bamboo, while pink peach blossom contrast the large green leaves of the banana plants.

I think it is clear that Chinese people take great pride in their gardens and because of this their architecture has been affected. Their love of viewing the natural beauty of the wilderness began with hanging paintings in their houses but soon they began to build personal landscapes to simulate these natural scenes. The architecture then became about viewing these scenes and breaking down the barriers between inside and outside. Also, because the buildings were seen to be "garden buildings" they weren't confined to traditional regulations and therefore they were more experimental. The positioning and style of the buildings were greatly controlled by the architecture of the landscape.

JAPANESE LANDSCAPE ARCHITECTURE

The Japanese word "niwa" is special because of its double meaning as both "garden" and "place". This would denote to me that the Japanese consider their garden to be more than just an area to cultivate a few herbs or have a nice green lawn. To them it is a special place and an indigenous part of their lives. They believe that the more you put into the garden, in terms of labour and knowledge, the more the garden will return to you in personal satisfaction.

Fences play a large role in the Japanese garden. They control the boundaries and routes via which the occupants move. They are, however, unobtrusive in the way they are usually low, hugged by plants and often made of untreated raw wood and bamboos. In this way, throughout Japanese gardens, strong efforts are made to naturalise and harmonise all aspects of construction and plantation. Details of how materials are joined are done in a very traditional manner, trying to make sturdy constructions without obstructing views and creating distractions. A more solid way of enclosing a space is the use of a wall. Japanese garden walls are usually built out of natural stone. A common trait used in the building of these walls is the way they slope inwards the higher they go. This makes them more structurally stable but more importantly it makes the occupant feel much safer when a wall is sloping away from them.

Japanese have great respect for the passage of time which is shown in their patients waiting on certain plants to grow and be shaped. They believe that passing through a garden gate marks a moment in your life when you leave the cares of the day and enter a peaceful place. Here the rocks and stones form the skeletal structure of the garden and the soil provides the body. The water, on the other hand, is like the lifeblood of the Japanese garden. Whether it's a roaring waterfall, a trickling stream or a still pond, for the Japanese, water represents purity and cleanliness, both of body and spirit.

Like the Chinese gardens, there are many buildings and structures that are built in, and influenced by, the Japanese garden. Many of these structures are specifically built for interaction with the garden. The pavilion is the most prominent building within the Japanese garden. It is a meeting hall, a gathering space, a shelter and a symbol of the gardens grandeur. They are built with great skill and precision by some of the world's best carpenters. The very best

types of timber are selected, including western red cedar, Alaskan yellow cedar or redwood. These all have natural preservatives built in and therefore are very durable. A lot of the Japanese structures are painted in bright Chinese colours such as matt red and metallic gold.

Drinking tea is a big tradition in Japan. So much so, that a free standing tea house is usually built into and disguised by the garden. It often has very carefully placed windows to frame certain views in the garden such as a waterfall, bridge, or specimen tree. Another building that is often integrated into the Japanese garden is the moon viewing structure. This consists of a pavilion type building that looks out onto still water. At night time the reflection of the moon can be enjoyed shimmering on the water.
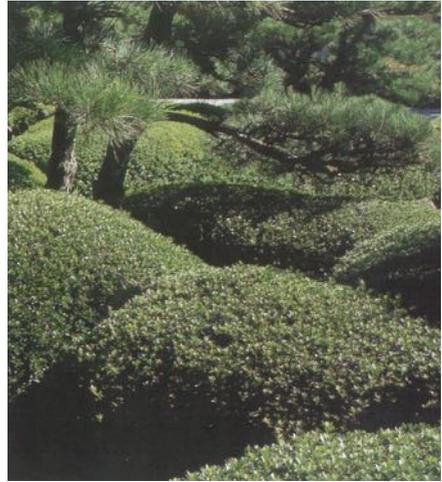
Shaped azalea shrubs
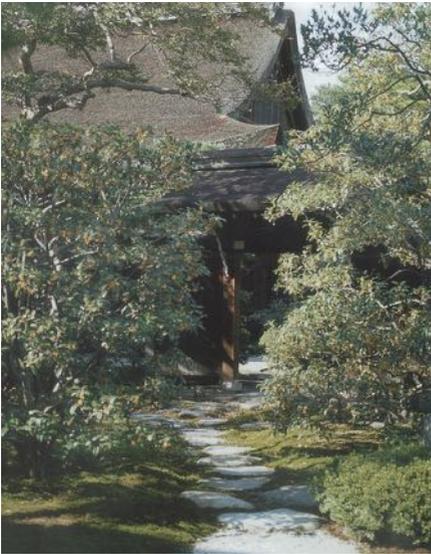
Camouflaged tea drinking pavilion

The Japanese garden abhors symmetry and prefers the gentle skewed arrangements of rocks and trees in odd numbers. It tries to create a natural flow or organic feeling by having very little straight lines. It's not simply just an assortment of curved paths and randomly placed rocks and plants. The gardens are carefully planned with both practical and spiritual reasons behind them. They are laid out to create many areas of different interests. There is a lot of symbolism used in these layouts. The stones might look randomly placed but often they tell the tale of an ancient battle or small stones representing worshipers to a large stone representing Buddha. The plants are carefully placed too. Even though the gardens are designed in an organic fashion, unlike the Chinese gardens, most of the shrubs and trees are trained into shapes and not let grow naturally. This creates a controlled feeling to the naturalness of the gardens.

There is an obvious special feeling about Japanese gardens. The way they are totally planned but feel very natural is unique. The spiritual reasoning behind the garden that manifests itself in a physical manner gives the garden a much deeper meaning which often rubs off on the buildings based within it. In my opinion this spiritual feeling could not be achieved with the buildings alone or the garden alone. The pavilions, tea houses and moon viewing structures belong in the garden and are often designed to be camouflaged by the garden. In this way the spiritual feeling of the garden has great influences on the architectural structures.

FRENCH LANDSCAPE ARCHITECTURE

For French landscape architecture I have decided to look at one particular example. Le Désert de Retz is a fine example of how Chinese landscape architecture influenced French landscape architecture in an indirect way. This style of French garden was a take on the English irregular garden which was an heir of the ancient Chinese gardens.

Le Désert de Retz is a late eighteenth century French Folly Garden. It is an artful landscape of architecture fantasy created by its proprietor Monsieur de Monville. Built as a private pleasure garden situated twelve miles from the heart of Paris, it inspired many after it, including Queen Marie Antoinette's English gardens at Versailles. There are a long number of folly gardens that still exist from eighteenth century France: Lunéville, Ermenonville, Cessan, Chantilly, Bagatelle, Raincy, Rambouillet, Chanteloup, Bonnelles, Menars, La Folie Saint James, Monceau, Méréville, and Betz. However, Retz is one of the best adjudicator of an original folly garden because it was neglected by a series of absentee owners after M. de Monville sold it, and therefore was untouched for many years until its restoration in 1980's. As a result

of this, the eighteenth century artificial ruin became a twentieth century literal ruin. It was let go, like the architect intended, and nature took its course.
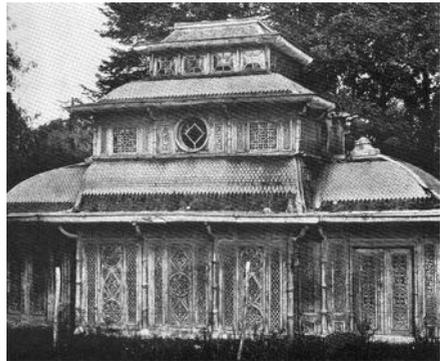
The Chinese pavilion (1928)

Folly originally came from the meaning any building in a painting. There are twenty follies in the landscape of the Désert de Retz: Two classical ruins - the temple of pan and the broken column, A medieval ruin - the gothic church, A classical temple - the temple of repose, A Chinese pavilion, a tartar tent, an obelisk, a pyramid, a tomb, a rustic bridge, a thatched roof cottage, a dairy, an open air theatre and a grotto.

French gardens differed in the way that they made use of their garden architecture instead of just looking at it as a realm of art. Many of the 'ruins' in Retz are built to create a certain image of a landscape that is in ruin and disused, however, this image is deceiving because some of the follies are used and inhabited.

M. de Monville wanted to use the landscape to influence his buildings/ruins and visa versa. From his inhabited 'broken column' much of the landscape could be observed. The oval windows of the column framed the pyramid and gothic ruin and, across the valley, the little altar and temple of pan. These views of the landscape were brought into the building by being reflected in the oval mirrors over the mantles. Monville wanted to create the perfect landscape images and 'hang' them on his walls to be observed. However unlike an English garden, they were much more than just pretty images.

The Broken Column

Monville created his fantasy landscape with some of the best species of plants from all corners of the world. He used native sycamores, chestnuts and lindens along with blue cedars and Virginia tulips imported from America. However, the choicest of these specimens were confiscated in 1792 and placed in the former Jardin du Roi in Paris, the present Jardin des Plantes.

Monville has been a mysterious figure in the history of landscape art. In 1780's he inherited a fortune from his grandfather. Therefore by the age of thirty he was able to relinquish his duties for the forests and waterworks. As one of the most handsome men in Paris he embarked on a new career as an ornament of society, enjoying his life with many noble and beautiful women by his side. When he set out to create The Désert de Retz he bought several farms encircling a valley outside Paris, which formed like a natural amphitheatre looking out towards the meadows and the forests.

Monville had his reasons for calling the landscape a désert. Désert is another term used for wilderness. There is irony in this because his landscape wasn't 'wild' but actually a precise creation of art. However, there is also truth in the use of this term because although it was precisely planned, it was planned to feel natural and wild. At that time it was also customary to have a désert as part of any grand French park. Therefore Monville was implying that his garden was part of a larger French landscape and maybe implying that the neighbouring part of Marly and Versailles were part of his garden.
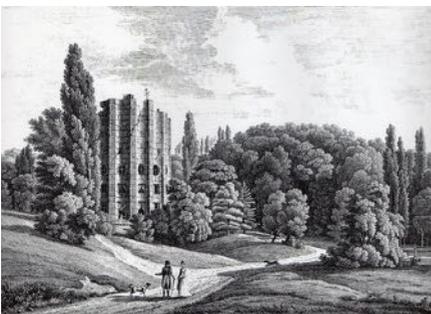
In the 1730's there was a historic revolt against formal landscaping in France. This revolution banishes the use of right angles and straight lines in landscaping. French architects began to turn to the more free style of the English garden. Many estates owned by intellectual milieu such as aristocratic landowners, architects, horticulturalists, philosophers and painters, took up garden building in the 1760's and 1770's. One of the most prominent problems with this change was how to architecturally fit a curvy organic English garden around the asymmetrical straight-lined square or rectangle of the French house or chateau. This space, the theoretical meeting of architecture to landscape architecture, was rarely handled successfully.

Broken Column section and plans.

Monville corrected the flaw of the organic meeting the rigid by creating his main residence within a ruin of a round structure. This 'broken column' is the architectural focus of the gardens. Constructed around 1781, it was built of stone, with a ragged roof line to create the illusion of an old and broken building. Its proportions (55ft high by50ft in diameter), along with the rhythm of the exterior bays, gave the building the resemblance of a huge severed, fluted classical column. The column was in scale with the countryside as a site rather than at human scale. The building consisted of five storeys, which was M. de Monvilles main residence; basement, ground floor with rectangular windows, first floor with square windows, second floor with round windows and forth floor lit by secret windows in cracks and a skylight. The floors were connected by a spiral staircase in the centre of the house with geraniums, heliotropes, arum lilies, carnations and periwinkles lining it. Along with the mirrors reflecting the views, the plants help to merge the landscape architecture with the architecture of the building.

The column acted as a viewing device. Monville did not depend on visual tricks for his landscape. There was no forced perspectives, no paths concealed as ha-has, no buildings screened with shrubs or masqueraded with woods. The harmonious atmosphere of the valley wasn't disturbed by the follies but maybe even improved. His Chinese pavilion was designed by observing drawings of the Chinese ornate style. It collapsed into the lake just before renovation began. However, there was

enough evidence salvaged to recreate it during the renovation. The model for Monvilles pyramid was a roman building, well known at the time, the mausoleum of Caius Cestius on the Appian Way. Monville used his pyramid to store ice that was taken down from the Alps during the winter every year.

Monville sold the property to an Englishman after being informed of shifts in the political weather. Shortly afterwards it was invaded by the duke of Brunswick. As the property of a foreigner it was stripped of furniture and valuable plants. Eventually it was handed back to the Englishman and sold on a number of times with only a handful of people living in it. It was then left to decay before a French architectural student came upon it and began a campaign to restore it. Much of it has been saved but it's still undergoing renovation so it can return to its former glory. The Désert de Retz is a fine example of how built structures can be integrated into a wild valley using landscape architecture.

Conclusion

God gave us the "Garden of Eden", not the house of Eden, to live in. In my opinion this marks one of the fundamental shortcomings of much of the architecture built today. Context is often not taken into concern, leaving random shapes and forms isolated in our countryside. I believe that landscape architecture is the key to grounding revolutionary designs into the "Garden of Eden" that we have been given. If we embrace landscape architecture with architecture then I believe a lot more structures would be integrated eloquently into their context and the facilitating of our human activities could be harmonised into our given landscape.

The Italian landscape architecture is a perfect example of how a strict style of architecture can be integrated into its surroundings using the method of the formal style dissipating the further from the building one goes. This garden is like a transitional space between the rigid built environment and the natural environment that was given to us. I think many of these gardens were great successes because they actually don't feel like the garden is filtering into the surroundings but rather the surroundings are converging into the garden, where the transition occurs so that formal and organic do not conflict.

Both of the Asian countries studied deal with this conflict in a different manner. They bring their buildings right into their gardens and manage to naturalise their buildings so that they fit in. The main aim of many of their buildings is to take advantage of the great scenery produced in their garden. They are able to integrate their buildings by naturalising their shapes and using natural materials. They are almost entirely built of wood which is, of course, a material naturally grown in all of their gardens. The Chinese are a bit more extreme than the Japanese in the way that their gardens are let go totally wild. In my opinion the Japanese style would be a very versatile style and very useful in the way it is planted in a natural way but maintained in a more formal fashion.

In the chosen French folly garden, Le Désert du Retz, I think the integration of many types of structures, into the chosen valley, is successfully dealt with by using the ability of landscape architecture. The natural amphitheatre is transformed into a natural wilderness of built structures. They are integrated using planting arrangements and plant types that were sympathetic to each folly while also naturally coming together and dispersing into the countryside.

In the last century many have forgotten about the importance of landscape architecture. Until the mid nineties some architects thought of landscape architecture as a dying discipline. Landscape is now, however, slowly becoming a leading theme in architecture and urbanism and there is hope for it to continue to do so. In my opinion context should trump objects. For buildings to become more than objects, architects

will have to recalibrate their consider-
ations beyond the limits of the walls
of the building and into the context of
their proposal. I believe that in the same
way furniture is designed along with
its room, buildings should be designed
along with their landscape.

With the rise in interest in ecology
and environment and the recent down-
turn in the economy I hope that people
will begin to slow down more and inte-
grate our architecture through the use
of landscape architecture.

BIBLIOGRAPHY

Murphy, Michael D. Landscape architecture theory : an evolving body of thought / Michael D. Mur . - Long Grove, Ill. : Waveland Press Inc, 2005 .

Cheng, Liyao. Private gardens / Liyao Cheng / [translated by Zhang Long] . - Wien : Springer, 1999 .

Heng, Li-yao. Imperial gardens / Cheng Liyao / [translated by Zhang Long] . - New York : Springer-Verlag, 1998 .

Shepherd, J. C. (John Chiene), 1896-1978 Italian gardens of the Renaissance / J. C. Shepherd and G. A. Jellicoe . - 5th ed . - New York : Princeton Architectural Press, 1993 .

Gustafson, Herb L. The art of Japanese gardens : designing and making your own peaceful space / . - New York, N.Y. : Sterling, 1999 .

Deunk, Gerritjan. 20th century garden and landscape architecture in the Netherlands / Gerritja . - Rotterdam : NAi Publishers, 2002 .

Shepherd, J. C. (John Chiene), 1896-1978 Italian gardens of the Renaissance / J. C. Shepherd and G. A. Jellicoe . - 5th ed . - New York : Princeton Architectural Press, 1993 .

Ketcham, Diana. Le Désert de Retz : a late eighteenth-century French folly garden : the art . - Cambridge, Mass.; London : MIT, 1997 .

Dammicco, Mariagrazia. Venetian gardens / Mariagrazia Dammicco / photography by Marianne Majerus . - Paris : Flammarion, 2007 .

Hunt, John Dixon. Gardens and the picturesque : studies in the history of landscape architectu . - Cambridge, Mass. : MIT Press, 1992 .

O'Kane, Finola. Landscape design in eighteenth-century Ireland : mixing foreign trees with t . - Cork : Cork University Press, 2004 .

Eclare, Melanie. Glorious gardens of Ireland / Melanie Eclare ; with a foreword by Jim Reynolds. London : Kyle Cathie, 2001.

Perceptions of the Future/ Where's my HoverBoard

By Ian MacDonald

Introduction

I am in an Internet café in an Indonesian town. There are only a few computers so I am sitting there waiting. There is a small round coffee table with various magazines and books scattered on it. I pick up the book with a space ship on it. It is an old picture book from the eighty's filled with images of space houses, cities with buildings meeting the earth like octopuses, cars pulsating around. New drilling machines to create tunnels across the world connecting societies: no conflicts or borders in this world. The moon was a place for fantasy for many, what would life be like looking down on earth. The artist tries to vision this, giving us the idea what it would be like. As a boy I am sitting in the Savoy, the biggest cinema in the city, watching 'Back To The Future 2'. Marty and Dock travel to the future in a De Lorean to save Marty's kids. The car runs on garbage, the wheels fold up and flies to the required speed of 79 miles per hour to travel into the future. In this future, 2015, there are flying cars, self drying jackets, pizza which expands in a microwave to feed the family and of course the hover-board: a flying skate board. The point that I am getting at is I was excited about this future, my friends were, in our childish minds it all seemed perfectly plausible: why wouldn't there be flying cars? Images are in my mind. I am still waiting for my hover-board.

I have all these images in my mind. Why do these images exist? Are they there just for visual pleasure to stimulate the mind? Is there any bit of truth in them at all? Surely they had to be created from some information, with some backing behind them. Film sets of the future full of fantasy: whose future is this? Now that I am studying architecture I have been introduced to a whole new world of fantasy, desire or theory. Desire for a better future: a radically different one. These new worlds shall we call them, what do they mean? In these theoretical architectural worlds,

*Back To The Future 2 Poster
1989*

*Crysler Building New York
1930*

where do the creators get their ideas? Have they influenced the worlds created in cinema, on TV and comics or vice versa. Are these architects trying to realise someone else's fantasy, maybe the ones they saw as a kid? I know there are scientists trying to create the hover-board. I want to see if any of these people have influenced each other. To me these ideas seem ridiculous: moving streets, cities that move, endless surfaces. Yes the theory sounds good but surely they knew that their ideas were impossible. Were these guys trying to fulfil one of their childhood fantasies?

Here I am the year 2008. Born in the eighties, I have seen and heard plenty of possibilities for 2000, none of which have been realised. New year 2000. Y2k! This could be the change when the technology fails the human. Drunk at a party, searching the skies to see if there are any falling planes. NO. Back to the party. The world keeps turning, the computers keep on computing.

What are the visions of the future the kids today are seeing? A world of floods, ice and disaster? Am I wrong? I hope so. Kids don't need to be bogged down with reality. I hope they still see the future as a fantasy world. For us, the adults, our minds are being tormented with these global warming affairs. Is this the real future? No flying cars or mega metropolises because their 'global footprint is too damaging'. What are my perceptions of the future? I would like to say that there are going to be teleport machines, a world with no boarders, being able to wake up in Spain, going to college in Ireland and having your morning coffee and croissant in France. But I know that won't happen, and that if they did invent a teleport machine, politics would get in the way. So what are the realistic perceptions of the future? Computers will get more powerful and smaller. Petrol prices will rise, then when dry, a new petrol to propel our precious vehicles will be released. Buildings will become 'greener'. The clock will keep on ticking. Does our generation know too much, information is at its easiest to get. Am I just being pessimistic? Are there people out there trying to make a change to make the leap into a new future? For what is the future: present +1.

Super Studio Continuous Monument 1969

Dubai Carbon Neutral City For 1 Million

Chapter 1

The Future Perceptions of the 1920s

Take yourself back in time to the 1920's at a time when industry was booming. People were fascinated with the machine and how it would change their lives. Inventors were inventing new ways to revolutionise your life! The speculations of the future were wild and outrageous: 'If the machine has evolved so much in this decade, imagine what the world will be like in the eighties!'

Of course there are many ideas or perceptions of the future, each coming from a different brain, a different analysis of life. Yes there are practical ideas and outrageous ideas, but they do share similar qualities, these qualities being the problems that were foreseen in the future of metropolis.

In the words of writer Myron M. Sterns "The population problems of every great city fall into three fields: housing, feeding and transportation."[1]. There is also work and industry, the balance of living, working and moving in a city. You can see why these were exciting times to live in. The skyline of cites were changing dramatically, "by 1913 Manhattan boasted nearly one thousand buildings of eleven to twenty stories, and fifty-one of between twenty-one and sixty stories"[2] New skyscrapers each one surpassing the next, New York being the ultimate contender in this race. "Between 1929 to 31 New York saw five new skyscrapers between sixty seven and eighty seven floors."[3]

The curious European architects were invading America to see and learn for themselves what was happening there. Adolphe Bocage wrote a review in L'Architecture commenting on the industrialism of the American people highlighted "the very real results achieved by this new, vigorous people, emancipated from servitude

Forty second street towers all completed between 1928 -1931

The Concrete jungle arial view of Manhattan

and prejudice alike, a people that could afford to indulge in fertile experiment"₄ This was the look of America, a place of dreams and innovation. But from these new metropolises problems arose, the biggest being how to transport the people and goods. A 1908 issue of Scientific America had an image of a section drawing of 6th avenue showing the five different levels of transport, which was reprinted in 1913 in the German magazine Werner Hegemann. I think that this led to Havey Wiley's drawing of 'The city of the future: a solution to the traffic problem' which was printed in Scientific America in 1913. It was about separating traffic "for pedestrians, special overhead sidewalks. Heavy transport travel underground, even below the level of the "metro" or "tubes".₅ This image I think was a big influence to other perceptions of the Future

There were many people putting down their ideas on paper from different backgrounds and professions. Let's take a look at some of these projects. We will start off with a sensible solution, usually created by people who are materialistic. It is these peoples need to create a practical solid idea and get paid for it. As Peter Hall says: "But equally, human beings- especially the most intelligent and most original among them – are almost infinitely quirksy and creative and surprising; therefore, the real interest in history, beyond the staggeringly self evident, lies in the complexity and the variability of the human reaction"₆ . Madman or genius?

America in the twenties was boom time, and with a rising population a solution, a plan had to be devised. Many people of different disciplines had the solution. A group of concerned professionals came together and called themselves the RPAA (The Regional Planning Association of America). Clarence Stein, Benton MacKaye, Lewis Mumford, Alexander Bing, and Henry Wright were the primary movers in this group, all with different backgrounds and skills. They had to deal with the very real problem of the future growth and urban spiral of America. What formation will America

The city of the future: an innovative solution to the traffic problem, Scientific America 1913

New York five superimposed traffic lanes, Scientific America 1908
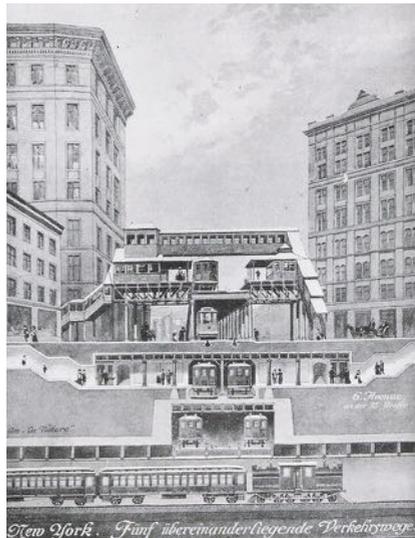
take? At the same time Le Corbusier's solution for urban growth was to wipe the slate clean and insert his 'City for three million', a type of garden city, conceived for Paris but could be used anywhere due to its disregard for context. This city was known for its 18 uniform 700 foot high cruciform towers. It had hierarchy of workers: the important people lived in luxury homes, they worked in the skyscrapers, the most important being on the top floor; the workers lived in cramped workers housing, set away from the business hub with its 'important people'. This was not received well from the Parisian people. With all its bad points, the images of this city remain strong and influential, this is what we are interested in.

Film director Fritz Lang travelled to New York accompanied by architect Erich Mendelsohn who where surly discussing the various topics of the metropolis exchanging views and ideas. "The first evening when we arrived, we were still enemy aliens so we couldn't leave the ship. It was docked somewhere on the West Side of New York. I looked at the streets- the glaring lights and tall buildings- and there I conceived Metropolis."[7] The film Metropolis[8], is set in a future where humans are divided in two groups: the workers and the thinkers. The thinkers live in luxury skyscrapers while the workers live below the ground in dingy cramped house's. Sound's a lot like Le Corbusier 'City for three million.' Visually this film is stunning: Gothic skyscrapers towering above the high-speed interconnected highway, with zeppelin's drifting above the metropolis. This world is heavily influenced by the images of the time, like Harvey Wileys 'city of the future'. The futurist movement in Italy was happening at the same time. The futurists believed in technology, speed, war: "Like many artists at the time, the Futurists believed they were witnessing the dawning of a new age of power, dynamism, and excitement. Technology was central and should not be observed with the detached air of academic, but experienced for all its compulsive sensations. Jettisoning the aesthetic and cultural conven-
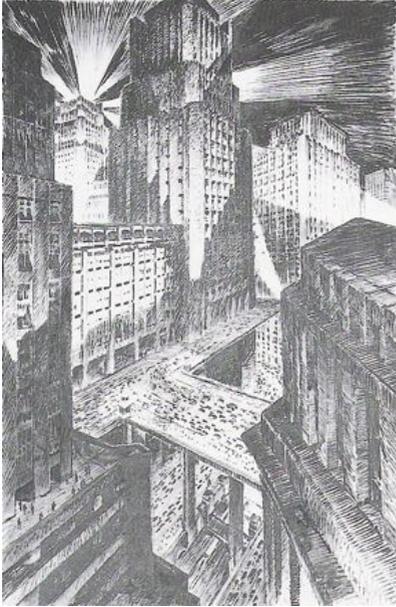
*Set design for 'Metropolis'
1929*

*Corbusier 'City
for three mil-
lion'1922*
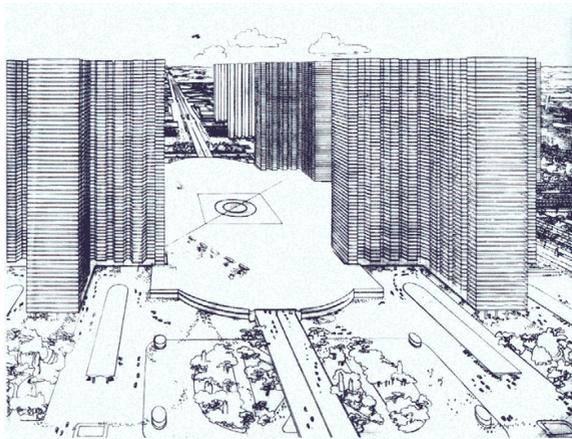
tions of the past, the Futurists embraced the radically new beauty of the twentieth century, the beauty of speed. A racing car whose hood is adorned with great pipes, like serpents of explosive breath- a roaring car that seems to ride on grapeshot is more beautiful than the Victory of Samothrace"[9] . Their images, very powerful and provocative would have and still are inspiring and influential.

Film, magazines and advertising was how the majority of general society got exposed to the exciting possibilities of the future. Advertisements reflect the desires of a place and a time. In this Greys cigarette add of the 1920s it is clear that Greys cigarettes are going to be around in the future, but they couldn't predict that cigarette advertising would not. This is one of the typical worlds portrayed of this time. These images reflect the situation of the time and multiplied them by ten for the future outlook. In this Greys Cigarettes add, the image from 'Metropolis' and the cover for Science and Mechanics, it is very clear how they solved the problems of the time, the problems being the expanding population of the cities, the invention of the motor car and the desire/need for speed.

Analysing the Greys advertisement, how did this image emanate? This is meant to be a Future London, how did the artist perceive this future? In my opinion the artist was not a famous visionary, if he was he (or she but probably he) would have put his name to it. He was probably a under appreciated under paid magazine artist getting his next buck. Now this man goes to work. His assignment for the week is to create an advert for Greys cigarettes. He decides to set it in the future because that was popular at the time. Maybe he saw Metropolis or read an article on the New York skyscrapers. From this knowledge he could only assume that skyscrapers will be everywhere. Every city needs transport so the artist, aware of the advances in transport technology liked the 'Wuppertal Schwebebahn, a hanging monorail, this was his favourite so he did a version of this. A faster more streamlined form, as this was the
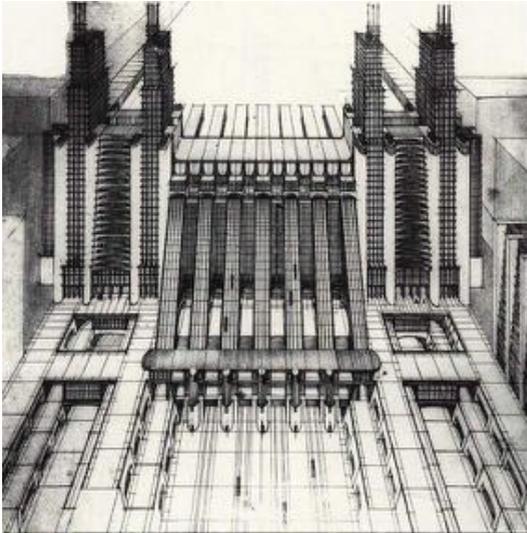
Futurists 'La Citta Nuova' 1914

*Greys cigarettes advertisement 1920s*

direction that the aeroplanes were going and they were the fastest transport machine on earth. He was nearly finished but something was missing. "aha I will put a roof on the city". Knowing about Crystal Palace he draws a light dome structure and inserts another monorail on it for good measure. I know this may be a cynical view but why does there have to be a higher philosophical meaning, for the artist is a creator interpreting what is happening around him. For him, the future is an exaggerated view of now, he wasn't an architect, he didn't have to be sensible about his images.

The same could be said about the cover for Science and Mechanics, a vision of New York a hundred years on. The Empire State building in the foreground is miniaturized. The cover was designed in early 1931 . The artist, maybe working in Manhattan was seeing how fast skyscrapers were being erected, each one surpassing the next. "Vertical expressions of corporate power"[10] was the phrase historian Oliver Zanz used to describe the skyline. The artist must have been aware of this judging from the skyscraper displaying names 'Metropolitan life' 'Singer' to name a few on the caps of these skyscrapers. He was experiencing the effects of the depression happening at the time. Maybe fearful of the failure of the Democratic system perhaps he thought   Communism would take over, hence the Communistic style of architecture in the image, the new power. Aware of the new form of skyscrapers from the 'zoning envelope'[11] a law passed to protect the measure of light and air of Manhattan, he kept this wedding cake characteristic in his vision of the future.

Corbusier states that "Architecture is in disorder now but its essential laws of Classical geometry remain. Mechanization does not threaten these laws but reinforces them, and when architecture has recovered these Classical laws and made its peace with machinery, it will be in a position to redress the wrongs of society."[12] . The reason why I include this statement is that Cor-
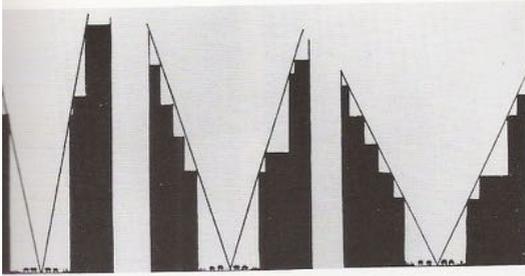
Zoning diagrams
1916

Science and Mechanics
Cover 1930
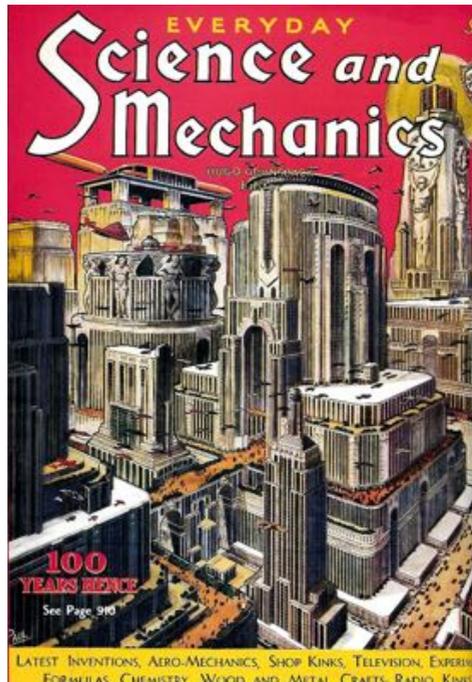
busier was one of the leading architects at the time, so the artists who would have made these advertisements, magazine covers and set designs obviously didn't just pull these ideas out of a hat, they would have done some research. Are these perceptions a response to this? The buildings in all of them are highly ordered in their geometry, incorporating the machine into them. The ground is clear of the pedestrian, dedicating itself to the speeding trains and cars. In the 1927 Popular Science Monthly magazine it was said: "As to the present level streets, the sidewalks will probably be raised to the second story level to permit a full stream of one way traffic, utilizing all the space between the buildings....A Portion of the whole city will have "dug in" or gone underground, just as is already the case in parts of the Wall Street district". So you can see why these perceptions seemed reasonable. It goes on: "Streets on five levels have been proposed. At first this seems very unlikely but if we stop to think for a moment we find that to a surprising extent the condition has already come to existence. If you stand in forty-second street, New York, for instance, in front of you is Grand Central Station, there is a viaduct over you. That is one level. Forty-Second street itself is on the second level. Go down into Grand Central Station, and you find trains below, the present level of Park Avenue". So you can see that these wild and outrageous images of the future from the 1920s that we are so familiar with are not that outrageous, they are just more of the way things were going.

Street view up the Wool worth building 1923

1 Popular Science Monthly p21 October 1927
2 Carol Willis *Form Follows Function* p9 citing *Report of the heights of building commission 1913*
3 Jean-Louis Cohen *Scenes of the world to come* p22
4 Ibid p32
5 Ibid p167
6 Peter Hall *Cites of Imagination* p4
7 Jean-Louis Cohen *Scenes of the world to come* p86
8 Fritz Lang 1927
9 Nigel Whiteley, *Reyner Banham, Historian of the Immediate Future*. P.47 citing F.T Marinetti, "The Founding and Manifesto of Futurism 1909
10 Carol Willis *Form Follows Funtion p146*
11 ibid. p67
12 Nigel Whitely *Reyner Banham Historian of the Immediate Future* p.60 citing *Theory and Design* p245

Our Future Perceptions.

The year now 2009. What is our new generations hope for the future? How do we see ourselves living in 2029? Is there an excitement for the future? In the past it seems that the future outlooks was a place of wonder and joy where anything could happen, there was no limit to what it could be. There was little sensibility to the images that were being produced. For example the 1920s images like that of the sliding pavements pedestrians been moved around on conveyor systems are all very well but what about their safety? In the 'Science and Mechanics' magazine the skyscrapers were chunky monsters at least twice the size of the empire state building. Did the people of the time laugh at this or look at it in awe.

What kind of images of the future are the general public being exposed to in this time? To start ideas, are being conveyed through new media mainly the Internet and television. Things have been digitalized. Now we can find answers to a question from our living room or toilet for that matter, pretty much anywhere. So whatever your interests, you can pursue them at ease. What does this mean? Well we are being exposed to more and more digital visualizations, people can understand them they are very clear in what they are trying to convey to the viewer. We looked at the 'buzz' of the 1920s it was about mass corporate power, industries and the skyline changed because of this. Now the one thing we can not get away from is this term 'climate change'. This seems to be the 'buzz' of the present. From what I can tell to look at the perceptions of the future you must look at the time the perceptions were made. What ever the hot topic is it is amplified for the future perceptions.

Climate change the 'buzz' of now. We see it in the papers, magazines, T.V, film and if your interested the Internet. Our kids are
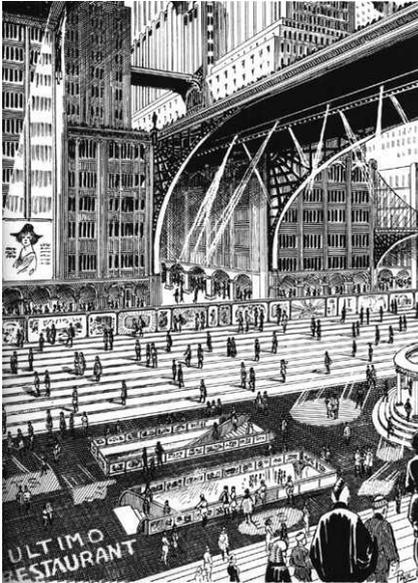
Sliding pavements

being exposed to this, it is quite frightening. The past perceptions of the future were far more pleasant, being whizzed around in a monorail of the 1920s metropolis, living on the colonised moon of the 1960s. But now we are going to be living on a cold wet flooded earth; not something to look forward to. Films are responding to this the best (or worst) with such natural disaster films like 'The day after tomorrow' and 'Minority report'. You can imagine the movie producer making the pitch: "OK you've seen the news, read the papers. The earth is changing right, the ice caps are melting, the scientists are saying that the sea levels will rise, temperatures might drop. Listen to this: New York! its today, a tidal wave hits, the streets are flooded, people are panicking, then the temperature drops. Its the dawn of a new ice age. We have shots of people trying to cope doing what they can to survive, the special effects are going to be out of this world". "Yeah, sounds like a block buster, we need a love story though and some heroes - the audience loves heroes. I will give you 20 million. I want the reel in my hands in six months . This is going to be the summer blockbuster". This is what we are being exposed to now, the hype of climate change. So how does this effect our architecture? The physical makeup of the world.

The 'green' agenda is definitely a strong force, this is to tackle 'climate change' that 'global warming' is alledgedly going to bring. Gone are the days of massive concrete structures, their carbon footprint is too damaging. In Team Zoo's theories about the principal of design they state "It is our aim to create harmony between architecture and the environment"[1] I think this sums up 'green' architecture simply and beautifully. If we look at speculative projects of today they all are about the green issue. For example lets take a look at the Abu Dhabi 'zero carbon zero waste' city. Master planned by Norman & Foster, this development was the

---

1   Charles Jencks & Karl Kropf *Theories and Manifestoes Of Contemporary Architecture p155*
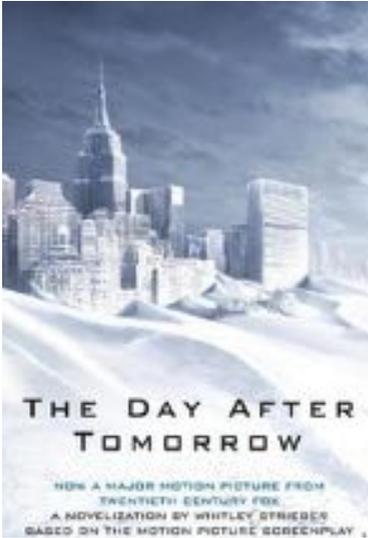
The Day After Tomorrow Poster

*Daniel Libeskind's Soaring Green Garden Tower for NYC*

cover story on 'Focus' magazine, the modern version of 'Science and Mechanics'. This development is a walled city 6 million meters square. It incorporates a solar energy farm and a wind farm to produce energy. Cars are forbidden in the city. Instead there will be a personal transport system which is electric and will take up to six people, this resembling the transport of Ernst Stavro Blofeld's underground layer in the James Bond movie 'You only live twice'. (The designers today would have grown up watching James Bond, the films may have been an influence on their architecture) The transport system promotes pedestrianisation, a transport link not further than 200 meters away from you. The streets are close together to create shade from the hot desert sun, the old technology of the Arab cooling towers are being applied to create a cool breeze along the streets[2]. Take a look at this computer generated image, the sun glistens in through the canopy of solar panels, there are ponds for cooling, people are talking, families walking, the mysterious personal transport system dominating the background; looks like a pleasant place does it not?, it leaves nothing up for the imagination though. These new computer renderings are the way that we will all be seeing architecture now and who knows in the future you might be able to stroll through the streets in a virtual model. My point being, people can easily decipher these images, not much explaining needed here. What I think this will do is promote interest in architecture now and in the future. People can relate to the images, easily decipher them and can even talk to the rest of the world about them on an Internet forum.

This is the way the Future is looking. Abu Dhabi is a good test of technology and people but what about existing cites? What are the future perceptions for suburbia that ungreen gas guzzling way of living. In J.G Ballards novel 'Kingdom Come'

2 Matthias Schuler of *Trans Solar* Lecture on *Zero Carbon Zero waste city*
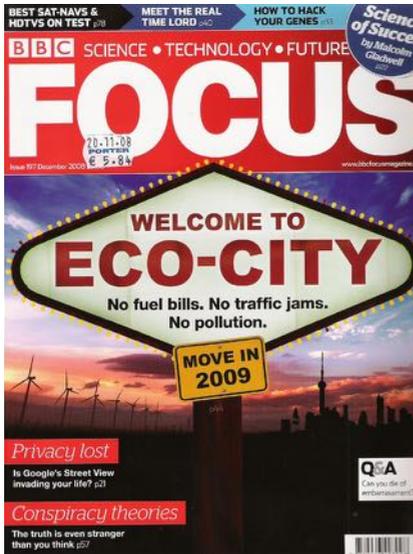
Focus Magazine cover December08

Abu Dhabi 'zero carbon zero waste' city

climate change is not his concern for the future. He fears what suburbia has become, a bored consumer driven society waiting to explode, sport, violence and the metro dome the only things to keep people entertained. Everyone drives in this world of suburbia. If the shop is only a 15 minute walk, to drive is more often the choice. Maybe because of the dry boring surroundings that make up suburbia the will to walk is not there.

Only the other day I was browsing through the Guardian online newspaper. A title read 'The Empire State Building gets a green makeover'. As part of the retro fit costing $500 million they are investing an extra $20 million for a green makeover. This makeover will mainly consist of replacing the 6500 windows with triple glazed windows filled with argon gas, which will reduce the heat loss in winter and decrease the heat gain in the summer mounths. The radiators will have insulation behind them to reflect the heat out more efficiently. The cooling system will be overhauled making it more energy efficient. For me the most innovative energy saver will be the new computer system which will be in every office displaying the amount of energy you are using. This will make people more aware of what uses and how much energy so they can adjust their way of living. The green retro fit is planned to save 40% on energy consumption.[3]

Is this the way the future is looking for our cites? Buildings retro fitted the green way, invisible to the public but preventing or prolonging the natural disasters of climate change perceived by so many. New buildings have every possible 'green' accessory built into them. Is this just to get a higher rent? A green building is a more productive building, a more rentable building. Are the corporate powers actually interested in this or just going with the 'buzz' of the time?

A group has been set up known as 'The 2030 challenge'. This organization of Architects and Scientists has been set up to

---

3   The Guardian.co.uk 7th April 2009

Green Empire State Building

New Yorks first official 'green' building: Hearst Tower

prevent "catastrophic climate change". Since buildings use 40% of the worlds carbon it an obvious place to start to reach zero carbon. This group intends to make sure every new build or renovation has at least 50% less energy used than the present standard increasing every five years by 10%. Business and individuals can purchase offset carbon credits with the money going towards carbon neutral projects, so if your feeling guilty for clocking up all those air miles you can buy these credits to put your mind at ease.[4]

This is definitely the way in which people are perceiving the future. Just to reinstate 'global warming' to the public P.B.S have done a three season series 'design e2' on our environment and economics, and just to make sure that the public will watch it they have Brad Pitt narrating! Its first episode 'The Green Apple' showed how cities are the most green way of living. A report on New York displayed how everything is convenient and walking is the biggest form of transport. It showcases the new green skyscrapers being built. From conversations with people they comfirmed this 'green' future. Gone are the perseptions of flying cars and moon living people, now people say things like "organic architecture" and "zero carbon".

The images that are being produced now are far more realistic than the twenties. There is less for the viewer to speculate about. But does that mean they are truthful? I think not. For example if you take any of these computer renderings of any project. The new design is normally draped over a facade or scaffolding of an existing building. But if you compare the actual build next to it you will see the difference from the computer rendered image. The future of compromise after compromise.

---

4   www.architecture2030.org

Design e2 Poster

Green Building Bahrain WTC

CONCLUSION

It seems that perceptions of the future are a reflection of the time in which they where produced. They seem to reflect to main concern of the time. For example the iconic images of the future in the 1920s. Are powerful, exciting images. These images all had a mega metropolis with huge skyscrapers. What was the reason for this? New York alone had over a thousand towers by 1913 between eleven and twenty storeys and fifty one between twenty one and sixty stories[1]. By the end of the twenties normal new buildings were forty to forty five stories high[2]. Not to mention the skyscrapers, in three years between 1929-31 five were built above sixty seven floors. Who was paying for all this? The corporate companies motivated by the obvious money making factor of more floors equals more rent, and by the symbolic factor - the taller your headquarters the more powerful the business. Inventors were playing with various modes of transport: Zeppelins, Monorails, Subways, Planes, and of course the Automobile. The architect and artist are not scientists so they could have any or all of them in their vision. Historians Thomas Bender and William Taylor contrasted the "civic horizontalism" of the earlier period with the "corporate verticality of the modern metropolis.

Skip forward to the sixties, another time of iconic perceptions of the future. What was the driving force this time? The space race. This captured the imagination of the public. The Magazines were releasing articles like '40 years in the future' which featured in 'Modern mechanic's. This depicted a world were all cities were in domes, air cushioned cars would self propelled over 150 miles an hour. The population of America is over 350 million. Readers Digest had a issue dedicated to what life would be like on the moon. The cover im-

---

1   report of building heights commission 1913

2   p166 Carol Willis Form Follows Function

Crysler Building 1930

40 Years in the Future
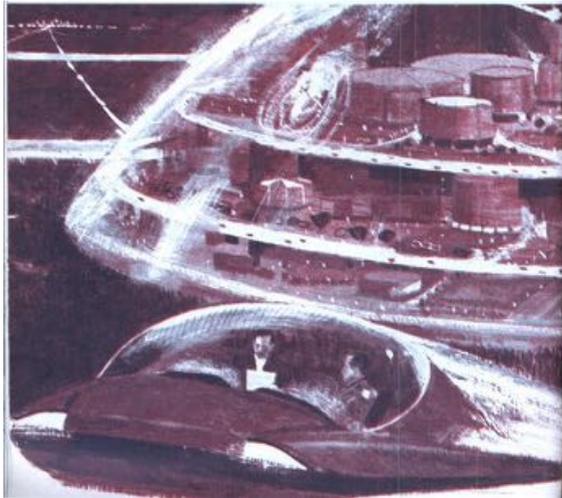
age also had everything in a dome, people floating around in their space suits, high speed trains connecting domed city to domed city. The space race also created new materials which captured the imagination of the architects. They were creating new ways of living. The plastic house was most notable for this, a showpiece in Disneyland between 1957 to 67, a house where every thing was made of plastic from the walls to furnishings. In the book 'ecstacity' a half real half imaginary city, a statement from Virilio, the cultural theorist and urbanist states "Architecture is meant to stabilize, to be solid, and to underwrite the future...Consciously or not, it always tends to be a mirror, and to reflect the way society is going"

As for the present perceptions, the 'buzz' now is not mass building and transport, and not a mention of flying cars. No. It is all about the green way of living. How can we stop the world from a catastrophic change which will equal disaster on a global scale, so we are warned. Architecture is changing its ways for this hence the look of the world is changing. The Internet is creating one linked world, well in the western world anyway, but that is also changing. Do we have too much information at our finger tips to be able to speculate? Have our imaginations been dulled by knowledge?

How are the perceptions of the future made/created? From my research it seems to break down like this. The starting point would be the time and place. The twenties America corporate power is the player in the market. From this the metropolis is booming, skyscrapers are going up at an incredible rate. This creates a buzz. The news would be reporting on how one tower has surpassed the previous tower. If you were from the country and you heard that the new tallest skyscraper at 102 floors has passed its predecessor of 77 floors, your imagination would be going wild. This in turn would trigger more imaginations. A film maker in Italy sees New York, he thinks this is how the future will look. He lives in a fascist society. The story evolves. A Hollywood movie producer sees the
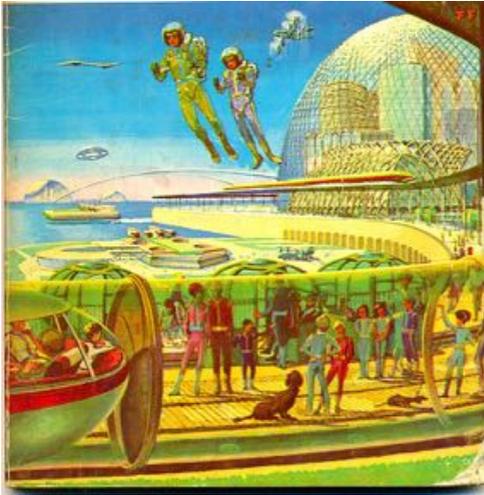
*Readers Digest
Moon issue*

*Plastic house
Disney Land
Florida*

Italian's film. He wants to do his own American version and creates 'Just imagine', a film set in New York in the 1980s. The set designer is told to build New York in the future so he builds a city which will be seen by hundreds of thousands of people. Pulp magazines are portraying what they think the future will hold, artists are depicting their versions of the future. All these various media, basically the same perception which are variations of each other. What was the role of the architect in all this? Well they were not the main concern in the conception of the skyscraper for they were hired after the decision was made to build the skyscraper. The amount of floors and size was determined by the speculators judging the best return for the cost - the higher they built the cheaper the costs, the more rentable floor area the better the return. I think that all of the media would have influenced the architecture and architecture influenced the media at the time. Maybe it was the people growing up in this time who would have been influenced the most thus affecting the design of the future in all aspects of life.

If our present perception is green and cities are the most environmentally friendly way of living, are we going to be living in a world of old cities and new super eco cities side by side the only thing separating them benig the land for use for our resources: wind farms, solar farms, natural food. I think that this image of 'Carbon neutral city for one million' in Abu Daubi suggests that. A mass identity, a node, connected by road or rail to the next node passing through the lush utilized landscape. Gone are the days of the gas guzzling suburbia in the future. They are now a museum which school tours visit, to learn lessons about the way we nearly murdered the earth.

Imagine New York 1980

Carbon Neutral city for one million

Bibliography

Susman I. Warren. *Culture as History*, Pantheon books ,New York, 1973

Whiteley Nigel, *Reyner Banham historian of the immediate future*, MIT press, 2002

Frampton Kenneth, *Modren architecture a critical history,* Thames & Hudson Ltd, London,1980

Jencks Charles & Kropf Karl, *Theories and Manifestoes of contemporary architecture,* Wiley press, England, 2006

Hall Peter, *Cities of Tomorrow,* Blackwell publishers Ltd, England ,2002

Ballard JG, *Kingdom Come,* Forth estate, England, 2006

Willis Carol, *Form Follows Finance,* Princeton Architectural Press, New York, 1995

Cohen Louis Jean, *Scenes of the World to Come,* Flammarion, Paris, 1995

Coates Nigel, *Ecstacity,* Princeton Architectual Press, 2003

Winy Maas & Jacob van Rijs, *Farmax : excursions on density,* Uitgeverij, Holland, 1998

The Internet

A Student's Guide to Venturi and Eisenman

It's easy to say with hindsight, but who really thought postmodernism was a good idea?

Eugene O' Callaghan

They spoke of "the building" and "the city" and "what it wants to be". But really, what does that even mean? When objects are abstracted like that, can their meaning continue to be applied when the specific context from which they were taken changes? Buildings can't move and think for themselves, it is us that attach significance to them. The person who does the attaching of this meaning is complicated by the intentions of the designer and the random experiences of the subjects. And then further complicated by the recording and interpretation of these phenomena.

In this crowd of possible significances, amongst a crowd of other buildings, what gets noticed?

The modernists came armed with arguably naive but honest conviction. They were followed by a pervading sense of general confusion. Neo-classical post-modernism in name itself shows a lack of coherent identity, and in practice blindly copied literature by going back to ancient forms of expression, but without a new understanding of the more complex world in which these forms would be situated.

This is a starting point of half-informed assumptions, but the lack of conviction is easy to sense. What I want to know is; who really cared?

Context (Globalisation)

As you go further back in history, time seems to become less specific. The Renaissance covered a period of a couple of hundred years and spanned several countries, yet a building by Michelangelo, which may have been considered outrageously flamboyant and revolutionary at the time, now falls into the category of "old building" alongside Gothic cathedrals. Complexity and context are filtered and boiled down to the point of meaninglessness.

Conversely, when comparing popular music from today with music fifty years ago, the levels of perceived difference are much greater. The tree of musical genres and sub-genres continues to expand and we are able to mark differences in relation to our personal path through time, rather than as a couple of dots on the horizon, nearly indistinguishable in terms of distance.

The first half of the twentieth century in architecture is a bookended "genre" the way swing music is, it will spawn no more didactic or reactionary ways of building. The works of its greatest proponents are part of architecture school tours, and are safely tucked away in books to be referenced and learned from, but rarely disputed.

Yet at the time, functionalism was a clean break from history. It used to be more like punk than swing, taking only what it found to be irreducible elements and reinventing everything else in the spirit of the times.

In the post-war period, there was a similar moment of change. The economic boom was represented by the American

MISSISSAUGA   BARCELONA   COPENHAGEN

LONDON   NEW YORK   PARIS

ROME   SAN FRANCISCO   TORONTO
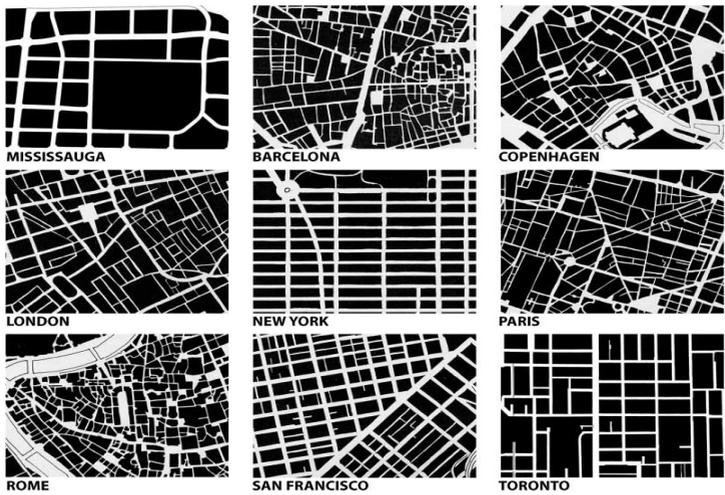
veteran living in a newly built garden suburb with his family, quietly enjoying the peace. Through the sixties he would consume greater quantities of American goods and services produced by men like him. He would watch man land on the moon on television, his children would dress funny, listen to dangerous music, and generally display questionable taste and judgement in cultural matters.

The seventies brought political and economic change like the cultural uplift of the sixties. America fought a new kind of war in Vietnam. They used to fight in defence of their own territory and freedom. Now a war was being fought so that their idea of progress and prosperity survived in someone else's territory. During the oil crisis, masses of consumers violently encountered something as abstract and uncontrollable as commodity market forces. What began as a cultural exchange now hit people where it mattered most to them, in the pocket.

A generation on, the 1970s have obtained a level of historical objectivity. Its events have been represented in popular culture, definitive biographies and judgements-in-print have been written and put away in the library. Yet the single generation gap allows everyone to have quite a personal understanding of the time, at the very least through the stories, photos and records of a parent.

In this context, the architecture of the seventies can also be bookended, it has been made and will never be repeated but is not yet a couple of dots on the horizon. Some of the names in the books are still producing buildings and have employed, educated, or generally influenced the "starchitects" of today. Some other names, like Graves, Moore or Krier, didn't survive postmodernism.

The specific set of circumstances and the contemporary global challenges should have lead to a vibrant and revolutionary brand of architecture. Functionalist architecture emerged as a response to the social forces that resulted from the fall of empires, Industrial Revolution population movement and the emergence of the alternative government theories of Marxism. In times of similar population movement and under the influence of scary and abstract global forces, post-functionalist architecture must have responded with something. There must be something exciting to learn.

A few architects made it through a dramatic part of history. The two that seem to me to have the most potential for revelation and epiphany are Peter Eisenman and Robert Venturi.

Theory (Branding)

" A brand is an idea in the minds of constituents (customers, employees, etc.) ... and that idea is created by what a company says (marketing) and does (operations)"
http://brand.blogs.com/mantra/2005/12/madison_avenue_.html

A brand is, in other words, an idea about a product in the mind of anyone who affects or is affected by it.

Both Eisenman and Venturi were faced with the problem of a global, rapidly expanding city and the collapse of the functionalist paradigm. The culture of architecture had taken off in American schools, and in doing so took Modernism away from its German functionalist origins (where the translations, Sachlichkeit and Zweckcharacter, had overtones of social collectivity) and turned it into the more politically acceptable International Style. The mandatory coat of whitewash was no longer a protector of an idea but a uniform for the old boys club.

Eisenman was taught and mentored by Colin Rowe. Rowe's analyses of Le Corbusier's buildings looked at the perceived spatial forces set up by their forms. This intellectual space, between what is physically experienced and what the mind knows from studying drawings, greatly interested Eisenman. Where Rowe looked to link these spatial forces across history by comparing Le Corbusier with Palladio in order to search for base typological forms of architecture, Eisenman was more interested in considering this intellectual space as the language specific to architecture and defining its structures. All political, social, and therefore urbanist aspects of architecture are suppressed so that it can stand alone as a discipline. On this footing
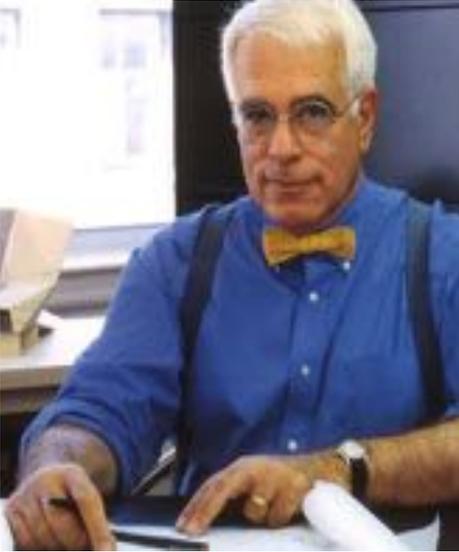
Peter Eisenman

Colin Rowe

Robert Venturi and Denise Scott Brown

architecture can then engage with the world on its own terms.

The personification of architecture as an "it" is Eisenman's as well as mine. Although buildings can't move and think, he wanted to see this in-between intellectual space as an author-less process, set in motion at a specific time and place and then stopped. Buildings would no longer be machines for living in which can be made obsolete or break down, but linguistic expressions.

Eisenman wrote extensively about this search for an architectural vocabulary in his thesis The Formal Basis Of Modern Architecture, an academic paper read and understood by those inside the profession. Books written by or about Eisenman target the same audience. But a language still communicates with everyone on some level, even if they do not speak it fluently. People occupy architecture, and that results in the other component of the Eisenman brand.

Venturi's architecture was all about significance for the man on the street. He initially tried to find a way past Modernism by looking back. Complexity and Contradiction in Architecture looked to Mannerism in particular to establish the principles of an architecture where vitality was evident in built form and not just in the theory and culture surrounding it.

He was heavily influenced by his wife and partner in his firm, Denise Scott Brown. Her background was in the sociology driven planning department of the University of Pennsylvania where Venturi taught architecture. This lead him to directly engage architecture with the modern American city.

In Learning From Las Vegas, the commercial strip was examined speculatively as the perfect form of American devel-

opment. Venturi and Scott Brown wished to make manifest its significance and meaning for people in their buildings. Architecture as a professional discipline was taken away from the first point of interaction and hidden behind its explicit sign. The conversation with the city would happen and then architecture would simply fulfil its functional role. The large scale of such a sign system is at least superficially consistent with the Mannerist ideals expressed in Complexity and Contradiction while simply addressing the suburban problem of all building types looking the same.

As an attempt to forge a unified conceptual link between the sphere of professional discourse and that of the suburban commercial strip experience, a brand is a useful but quite loose definition. This has the advantage of making it applicable across all scales and representative of both formal operations and iconic imagery. We are then left with the more specific problem of how to evaluate it. Like language or spatial forces, it exists as a mental projection between optical experience and the designed object, between a common experience and a professional theory.

The raw materials available for analysis are project drawings, photographs and writings. They allow a projection of an imagined spatial experience and an appreciation of specific context. Constructing these figures in relation to the global context and theory behind the buildings will hopefully provide a useful understanding of Venturi and Eisenman's architecture, and the insight of a different perspective.

Analysis (Buildings)

In 1972, the same year the first block of Pruitt-Igoe was demolished, Venturi and Eisenman were both in the process of designing and building single family homes in Connecticut.

Venturi was commisioned by a couple who were art dealers with a view to incorporating their collection into the design of their home. In the suburban (borderline rural) setting of Greenwich, he adapted his Las Vegas sign-and-shed strategy to separate the container for art and family from his own theoretical interest in what the facade could convey without compromising either design element.

The facade stretches horizontally across the house. Venturi wanted to allude to the "symatrical bow-fronted country houses" of the American Federal style, particularly Gore Place in Waltham, Massachusetts. A similar wall to opening ratio is maintained but Venturi condenses the windows and reverses them, the larger band is on top and the smaller band below at the ground level.

This allows a second layer of reference to be added. By reversing the window order and extending the eastward side of the facade to accomodate a garage linked entry sequence, right above which a window crosses a corner joint, Venturi tries to combine the Villa Savoye and Gore Place in one facade.

These disparate references are held together using glazed green brick and standard catalogue timber frame windows. The house is surrounded by the greenery of an extensive lawn and deciduous trees, so this seems to be an attempt to raise a com-

plex front from the immediate surroundings and traditional local materials.

As a luxury country house, Venturi has extensive amounts of space to work out to the facade with from the interior. He maintains the idea of a shed with a distinct service and circulation core which is surrounded by space adaptable to demands made by the facade and the client's requirements. The shed idea is reinforced by interlocking the garage, obviously scaled to the size of a car, into the rest of the plan. This entry sequence is more like a delivery port in an industrial warehouse than a domestic threshold.

The focal point of the plan is the kitchen, it overlooks the driveway and the children's playroom, and is directly connected to the dining room, living area, and vertical circulation through a break in the core. The break is diagonal, which allows some separation of the noise and smell of the kitchen, but doesn't isolate it.

The section contains interlocking blocks that overlap and separate to allow for the spatial politics of family life and for some double height spaces. The main stairs and a smaller staircase from the playroom lead to a common landing which gives direct access to the guest room and children's bedroom, and access by a further stairs to the couple's room at the apex of the house.

The setbacks over the three storeys give double height space in the main living/gallery area so that the room has consistent indirect light from above and plenty of wall space for displaying paintings. The wide stairways and landings are used for bookcases and storage units to compensate for the loss of such space to blank wall in the living areas.
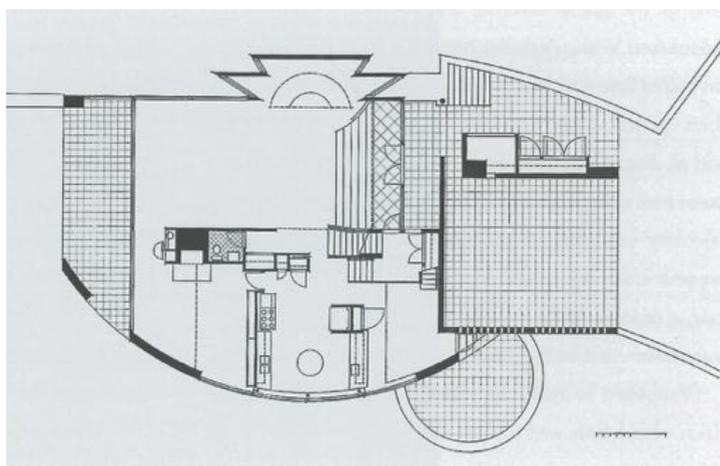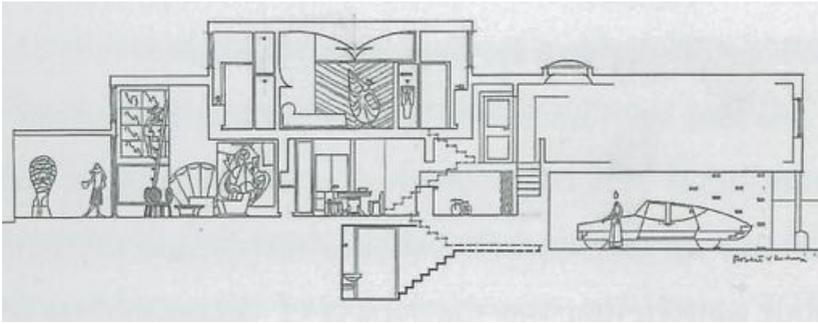
Greenwich, CT

Venturi took the generic shed with its characteristics of a large entry space, height, lighting from above, and a simple core-periphery layout and made it a useful and attractive domestic place. His skill in combining the Las Vegas scale with the micro events of family life, especially in the section, is the basis of the building's success. I think his skill is much more convincing than his ideas about the meaningfulness of sign.

In Cornwall, Connecticut, Eisenman was at House VI in his progression. After House IV, this was his second built attempt to integrate his transformational language of architecture (in this case slippage, inversion and montage) with the object as the single indexical record of these transformations.

His starting point was parallel crosswalls along two perpendicular axes. This core-periphery structure was shifted and stretched along its two axes. Both the new points of intersection and the traces of the original points were used to mark openings and project volumes. The original axis points were then remarked as breaks in the surface of the projected volumes. Finally Eisenman cut the chain of transforamtions, dug out the inconveniently sloping ground in Cornwall to a flat surface, and put House VI on it.

As a container for human life as well as architectural theory, Eisenman demands adaptation by the user. The space in between the crosswalls facilitates circulation, and the larger projected volumes can facilitate sleeping, living space, and service areas but are not dimensioned to them. The short ends of the axes are scaled down too far to be useful space for more than one person so that the "space of perception in House VI is Euclidean, that is, it has a frontal orientation". These shallow edges are placed where the house meets the sloping ground plane, but are not allowed to meet with an independant transforming

element like a differentiated datum.

The lack of empathy for anything human, or even any-thing outside of abstract is pretty breathtaking. I appreciate the amount thought that went into being so difficult, and the ques-tioning of everything down to the necessity for architecture to accomodate everyday life. Should architecture, like a language, be something we have to learn to use well or should it be craft-ed around us so we can drift through it and call on its benefits when we need them?

Eisenman created his language with Houses I through III, and tried to use it to write a speech with Houses IV and VI which ended with that question. The Cannaregio public square project of 1978 suggests that he began to look for answers outside of the universal context of architectural discourse, instead he turned to the history and topography of site.

Cannaregio created a narrative for a fictitious Venice from the extended grid of Le Corbusier's unbuilt Venice Hospital. It is intersected at the ground plane by various size manifestations of Eisenman's scaleless and also unbuilt House 11a.

At the scale of the public square, the architectural object is in a field across which the person involved can retreat, it loses its sense of enclosure. Here Eisenman can freely express the lan-guage of architecture as being something autonomous that will be reacted to and negotiated objectively from a starting point of abstraction by the person, like an art work or a piece of litera-ture. However, without the enclosure and confrontation of a challenge from within architectural discourse, Cannaregio is just another language on a cosmopolitan street, superficially engag-ing as you pass but out of sight and it's out of mind, rather like an oversized sign on the Las Vegas strip.
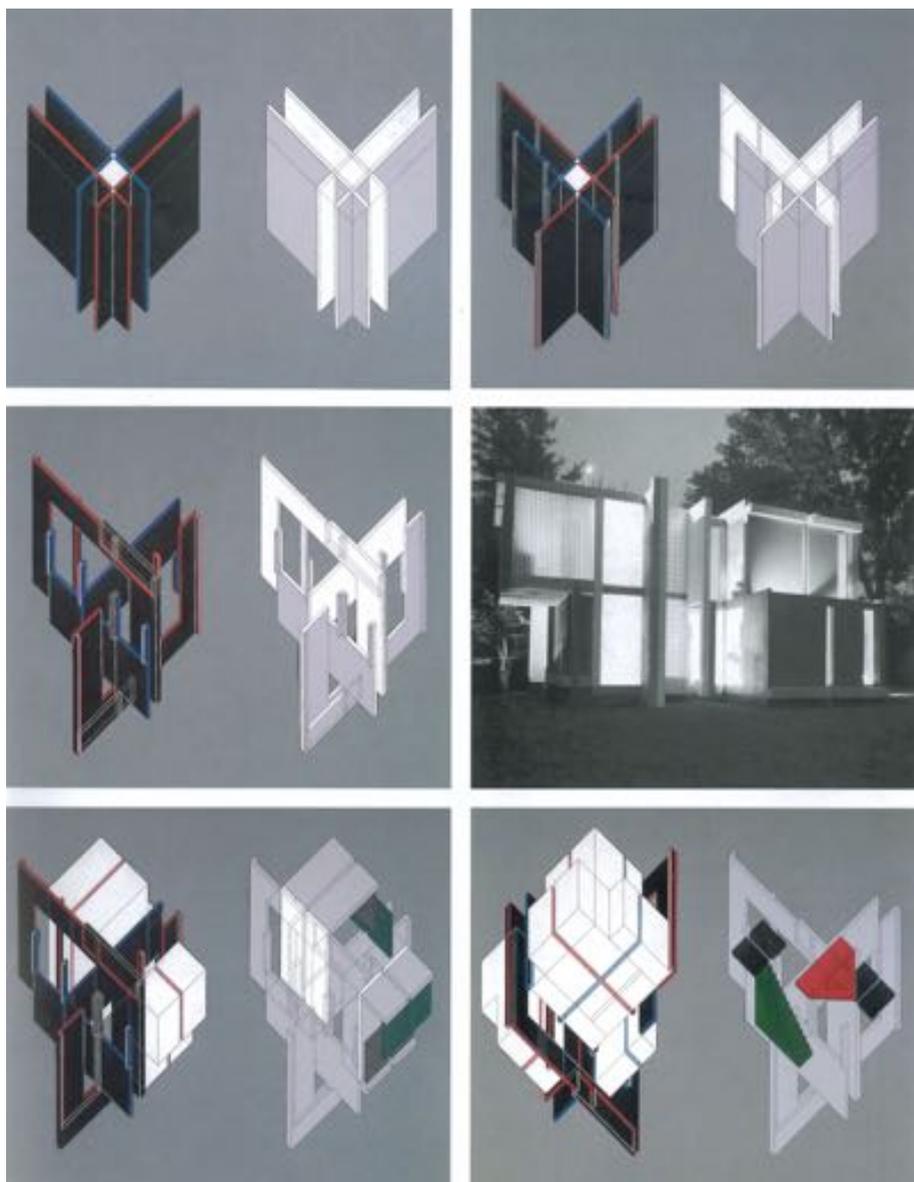
Cornwall, CT
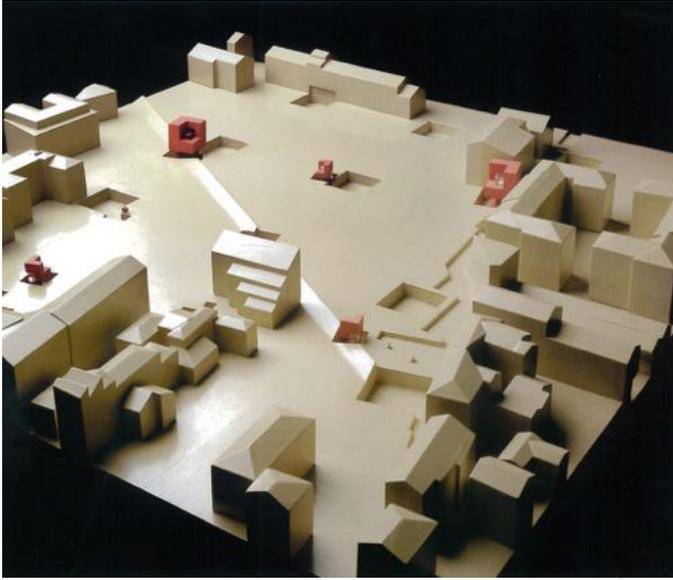
Cannaregio, Venice

Staten Island Institute for
Arts and Sciences, NY

100 LEVEL PLAN
CIRCULATION AND ACTIVITY
SCHEMATIC DESIGN

PRINCETON CAMPUS CENTER

VENTURI, SCOTT BROWN AND ASSOCIATES, INC.
JUNE 1997

Frist Campus Centre, Princeton, NJ
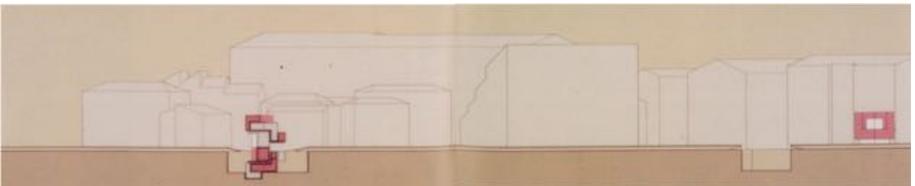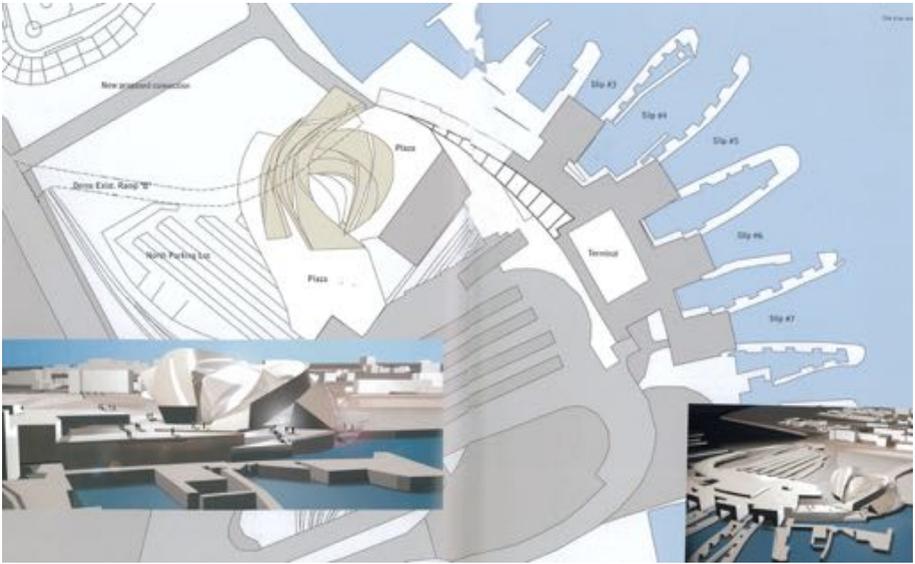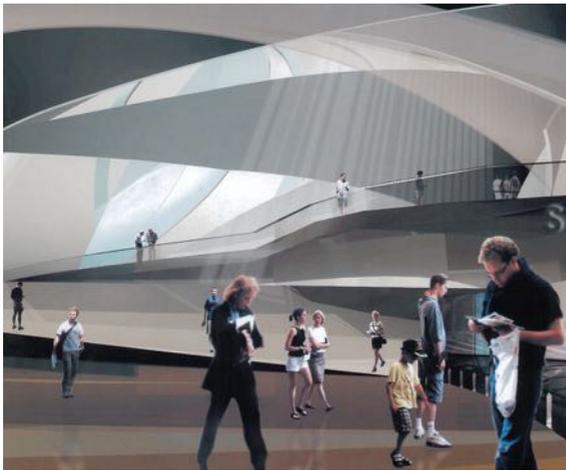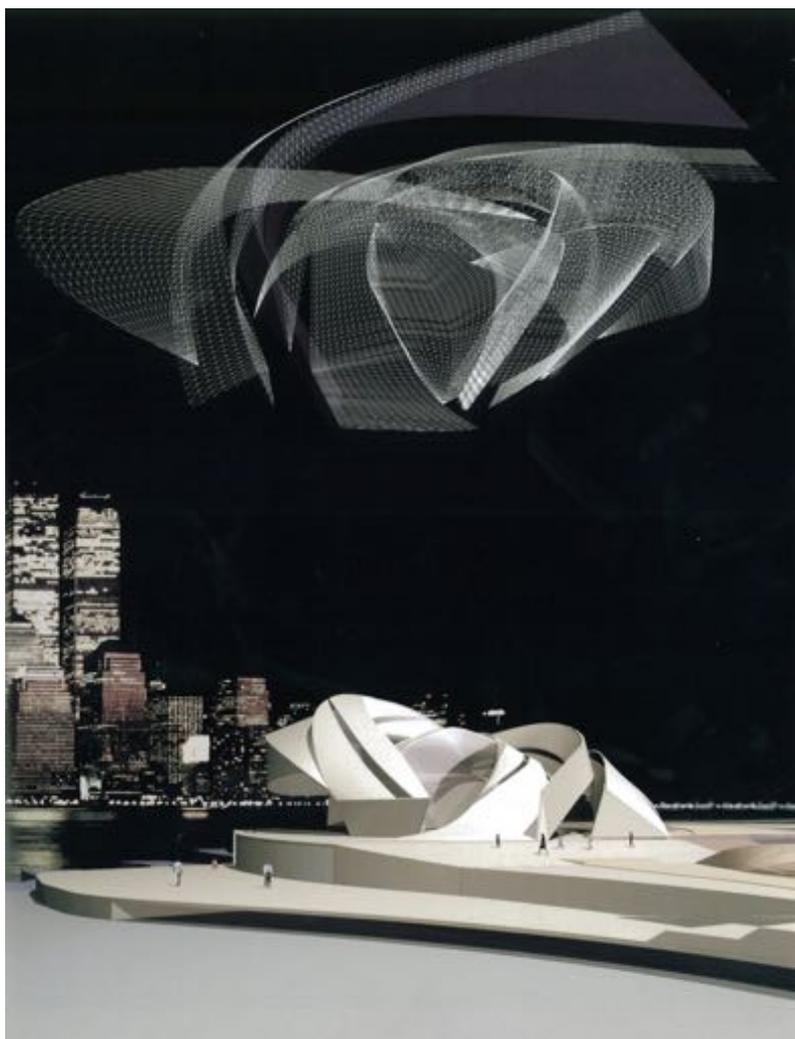
The narrative mode of Cannaregio took Eisenman away from the unresolvable conflict with the user in his House series, but the change in scale isolated him. This has resulted in House VI and Cannaregio being treated as poles between which Eisenman has searched for a balance point of interiority and exteriority.

An example of this development that I like is the Staten Island Institute for Arts and Sciences project. The programmatic object of the museum and its typical linear axes are "torqued into centroidal mass" but then differentiated from similar spaces like Wright's Guggenheim Museum by cutting the movement of people across the rotation of the form.

Their path follows an established sequence of collective space from the ferry terminal through the museum, out by the ballpark and then back along the restaurant row of Richmond Terrace, which overlooks the building and the water. Public plazas at either end of the museum sit it into the level change between the St. George Terminal and Richmond Terrace.

The building acts as an interface with a very large global city and also an extensive architectural discourse, while simultaneously engaging local use patterns and topography. I think Eisenman shows similar skill to Venturi in handling these disparate scales. An idea about the development of the form of the museum and an idea about the development of the port of entry to Staten Island are articulated by the same architectural object.

While Eisenman was working on Staten Island, Venturi was spending the same years between 1996 and 2000 building the Frist Campus Centre for Princeton University. The sign and shed motif is again the basic concept for his design.

As a self contained unit of thousands of people, the demands of campus design involve public social space and efficient circulation. These requirements form the divide between sign and shed, the sign makes an edge with the public space and the shed channels students through a layout of functional zones.

The project involved reusing Palmer Hall, an imitation Mannerist building from 1918. The three blocks of the hall were refitted, and the fourth side and courtyard were filled in with a new building. The structure is slabs on very large columns with a curtain wall facing a public space created to the south. The curtain wall is expressed as a flat plane of solid and opening. It bears a coherent relationship to the public space but sits awkwardly near the shed component without touching it. They are close enough together, and the structure is deep enough, that light doesn't penetrate into the building. Even where the structure falls to a single storey to back on to Palmer Hall, the space is too tight to allow adequate light through the rooflight and into the plan.

The distribution and layout of functional zones within the shed is represented by a plan of the existing hall and new structure which is dotted with coloured circles to show activity points. The dots have a scale relative to each other but are not linked in any way by form or dimension to the plan. The skill shown by Venturi in unifying facade motifs with the details of use in the Greenwich country house has been replaced by a system of abstract representation which has encroached from the sign component to the shed, the supposed realm of architectural discipline.

The facade fulfils an architectural function by making

a comfortable public space that is enclosed and south facing. On the westward side Venturi added an open-topped arcade. It plays compositional games with the Mannerist facade behind it, marks a path, and holds up some notice boards, but doesn't provide the shelter or complexity of space advertised by the elevation. Again, the sign component dominates an ineffective shed.

Conclusion (Punchline)

From a humanistically flawed position, Eisenman was rigorous about what he did.

Venturi began sensitively from a point of research and historical investigation. A life's work continued on should refine these ideas, but I don't think it has.

While many architects could produce the CAD-generated diagrams and the wispy flowing forms that the Staten Island museum amounted to, the fact that Eisenman spent fifteen years testing the radical edges of architectural theory lend the project weight that isn't necessarily in its images.

Venturi is a talented architect who has spent forty years putting images on buildings because that is where he believes the source of their meanng resides. From amongst the limitless possibilities for the signifance of a building, he explicitly chose one or two to be above all others every time. The theory behind his facade selections has not evolved, he never honestly critically tested it. Even the sheds that hold them up are suffering for the cause of the image. There have just been patterns, varying form the pleasant looking to the garishly ugly.

I think it is interesting that Venturi was concerned with the cultural shifts and changes in patterns of living and lifestyle that were happening around him. Eisenman went off to Cambridge to ignore them. Yet they both found themselves at a point where their architecture was all sign and no shed. Eisenman was responsive to this, Venturi accepted it.

By abstracting, in the modernist tradition, the information

that meant something to me, and by trying to take a view from somewhere between a drifter through architecture and a professional engaged with its discourse, this is how I brand Venturi and Eisenman.

Bibliography

Complexity and Contradiction in Architecture, Robert Venturi

Learning From Las Vegas, Robert Venturi, Denise Scott Brown and   Steve Izenour

Out Of The Ordinary, David B. Brownlee, David G. DeLong and Kathryn B. Hiesinger

Diagram Diaries, Peter Eisenman

Tracing Eisenman, ed. Cynthia Davidson

The Painter of Modern Life, Charles Baudelaire

White Walls Designer Dresses, Mark Wigley

Thirteen Ways, Robert Harbison

Words and Buildings, Adrian Forty

The Mathematics Of The Ideal Villa, Colin Rowe

Passing Go:
Excursions in
Irish Planning Economics

Gerard Walsh

1. Introduction,

The little mall on the prairie

This dissertation discusses numerous aspects of planning and housing in Ireland in 2009. Areas discussed are: the impact of the economic climate on housing development, with specific focus on the budget released in April 2009, and: the interrelationship between planning and the infrastructural network. Focus will be placed developments in top-down planning, regeneration schemes and in areas of new urbanism, the associated techniques and the potential benefits of such schemes.

Issues associated with planning and housing has been at the forefront of political discussion for decades and the accepted consensus is that we cannot go on living the way we are.

The world we live in today is approaching the pinnacle of innovation. We are now more advanced than many of the historical civilisations held in high esteem, but our civilisation is also defined by an overarching sense of inequality and there are yet many problems to be solved. Scientific and medical advancement have led to us having the highest life expectancy than at any other time in human history, technological advancements in communication now mean the world is much smaller place. Yet the world is still full of problems. Never has there been a greater gap between the quality of life for the rich and the poor and the world is facing a potentially catastrophic environmental crisis. Beside such problems the current economic crisis may not seem as detrimental but its effect on planning can exacerbate such socioeconomic and environmental problems. *(Rosling 2006)*

One obvious problem associated with poor planning and housing development, which can lead to an exacerbation of the problems already outlined, is urban sprawl. Urban sprawl results from the unplanned development of housing communities in the fringe of larger urban areas. The danger of urban sprawl can be overcome by making efforts to afford a change in our own circumstances and environment by following the advice of J.H. Kunstler by "living locally".

"I think it's appropriate to call this the greatest misallocation of resources in the history of the world"

-James Howard Kunstler on urban sprawl.
(Kunstler 2007)

Large areas of sprawling housing could then be reformed into independent urban. The phenomenon of urban sprawl can be compared to the natural cycle of growth in bacteria. Cells grow slowly to begin with, while the organisms adjust to their environment. In ur-

ban sprawl this "lag" phase can be compared to the initial beginnings of urban sprawl, with little house building activity. Cells quickly proceed to grow exponentially as a result of the almost limitless abundance resources and space. This period of exponential is followed by a period of stationary growth, where the number of cells dying is balanced by new cells. *(Greenwood, D., Slack, R. C. B. and Peutherer, J. F. 2002).* In urban sprawl these "exponential" and "stationary" growth phases can be compared to the quick progression of urban sprawl when large housing developments are built to take advantage of the free and available space, without much consideration being given to appropriate and conscientious planning.

After initial growth there is a period where the number of people moving into the area is balanced by the numbers moving in and therefore growth in the fringes remains stationary. After exponential growth, the bacterial colonies experience a multitude of problems - a build up of toxic by products and a lack of space and resources and resultantly cells die, slowly at first followed by a rapid progression into the death phase as dying cells release toxic products which contaminate the environment of the still viable cells. *(Greenwood, D., Slack, R. C. B. and Peutherer, J. F. 2002).* In the phenomenon of urban sprawl these "decline" and "death" phases can be compared to the socioeconomic and environmental problems which develop in these areas of urban sprawl impacting the people that live there, prompting some people to leave the area. This occurs slowly at first but the already existing problems in the area are exacerbated by the
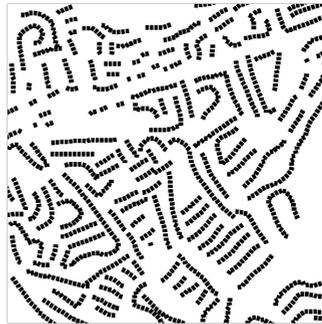
>> *The four images adjacent are diagrams of residential areas in Limerick city. They are examples of sprawl and they are, respectively, estates in Castletroy, the Ennis Road near the GAA grounds, Raheen, and Athlunkard. Each square represents 1km*1km, and an approximate density of 3000 persons per square kilometre, based on an average occupancy of 4 people per house. (Based on imagery obtained from maps.live. com)*

removal of residents from the areas lead to a steady decline in the socioeconomic situation and an exodus of residents from the area.

By correlating death and decline in bacterial colonies to the breakdown of housing communities in the fringes of urban areas it can be seen that there must be factors that contribute to our successful habitation of space and when these factors are perceived to be absent, residents feel a sense of repulsion towards their residential environment, leading them to eventually abandon it. It has been found with slums, that to the outsider such environments can be endearing and even considered things of beauty. In contrast however prolonged exposure to suburban environments does not lead to the same effect. This can be taken as an ascertain of the problems associated with Suburbia.

2. The Builders' Boom
Economics in housing

For many decades Ireland was not considered to be a very prosperous country however through the combination of a very low corporate tax rate (12%) and low labour costs Ireland began to attract multi-national corporations leading to a period of rapid economic growth in the earl 1990's. The two decades following this were characterised by prosperity but the opening of 2009 was marred by uncertainty and financial concern. By the end of January 2009 unemployment had reached 300,000, levels not seen since times prior to the economic boom in 2000. Lack of confidence in the government and uncertainty grew, leading to a rise of 43% in the complaints submitted to the Pensions Ombudsman (Thompson 2000).

It is of utmost importance to understand the circumstances leading to this economic downturn. This chapter will deal with the economic situation, the background to the housing developers gaining so much economic influence and will, in a general suggest strategies to remedy the current economic situation.

A common way to categorize the various elements that make up an economy is to separate the groups that contribute to supply and those contributing to demand. Trends in inflation, population growth and unemployment determine when and where we need housing. Associated with this demand are issues of supply: the price of materials, labour and profit. Together, in a stable relationship, these issues of supply and demand create a dynamic, healthy economy.

Firstly, I would like to examine the factors influencing demand. As already mentioned these include factors such as population trends and employment rates. An important factor to be taken into account when considering Ireland's growing population is the information gathered to establish this trend. It is found that is the people who consider themselves as town dwellers that have contributed to this increase. Graph relating to this population trend are shown to the right.

Dublin was, at one point, one of the most favourable destinations across Europe for migrant workers. The net migration figure for Ireland in 2007 reached a high of approximately 80,000 people inwards (Central Statistics Office Ireland 2008). This could be seen as indication of the economic prosperity of the country, in that people outside of the country consider the economic state of the country favourable enough to migrate there. While these factors are not directly correlated, it does hold true for this economic climate in this country and is clearly comparable in the graphs illustrated in the next pages. In 2008

5 Million People

- ⬛ Total Population Figure
- 🟦 Country Dwellers
- 🟥 Town Dwellers

^Above: Population Growth in Ireland as per the census results available from www.cso.ie showing the proportions of country and town dwellers (Central Statistics Office Ireland 2008)
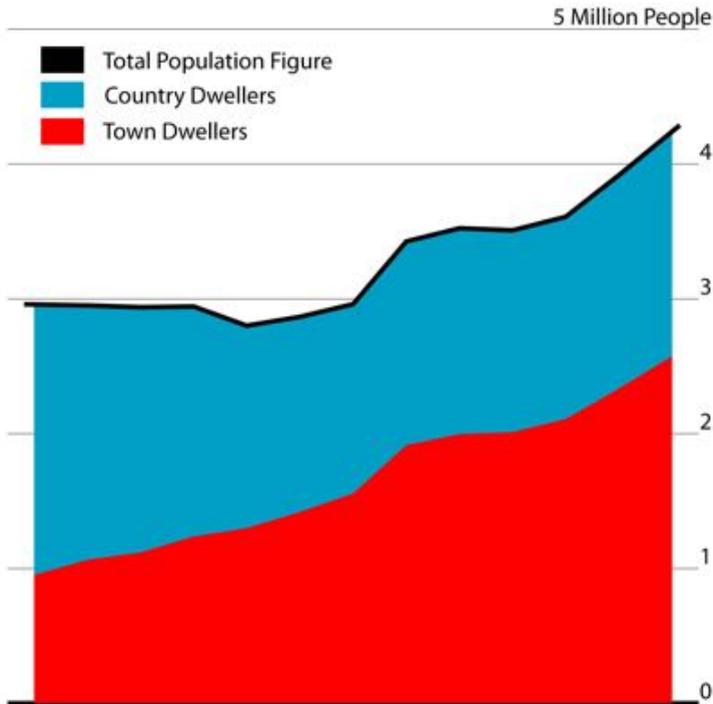
however net migration had already fallen to an average of just 300,000 inwards. The latest CPL Poll showed that 33% of Ireland's Polish population in the have declared their intents to leave the country in the next 12 months. A further 13% said they intended to leave in the following 12 months. Approximately 80% are expecting to find work in Poland within 3 months of their return.

It was the rising interest rates and high levels supply at the end of 2006 that were the first noticeable contributory factors to influence the country's current economic downturn (Lyons 2009). The main issue therefore seems to be that of market saturation and this has to do with the intrinsic way in which development happens in this country. The period of economic prosperity was therefore lead by groups of developers and building contractors.

Further investigation into these high levels

of supply leads to a questioning of how thoroughly the development methods on show in every town and country were conceived. Due to aspects of homogeneous plot ration density and construction technique, houses in Ireland have all the stylistic variation from bungalows to bungalows to McMansions. Developers purchase a Greenfield site and fill it with these aforementioned McMansions. Fields are overturned one at a time, sporadically, in randomly defined area, in most cases with very few amenities – no local corner shop, crèche, schools, community halls. There was a niche in Ireland for some brave planners willing to rewrite the Development plan. It is easy to see where this opinion might come from – the spontaneous sprawling and a shortage of amenities is much more detrimental than
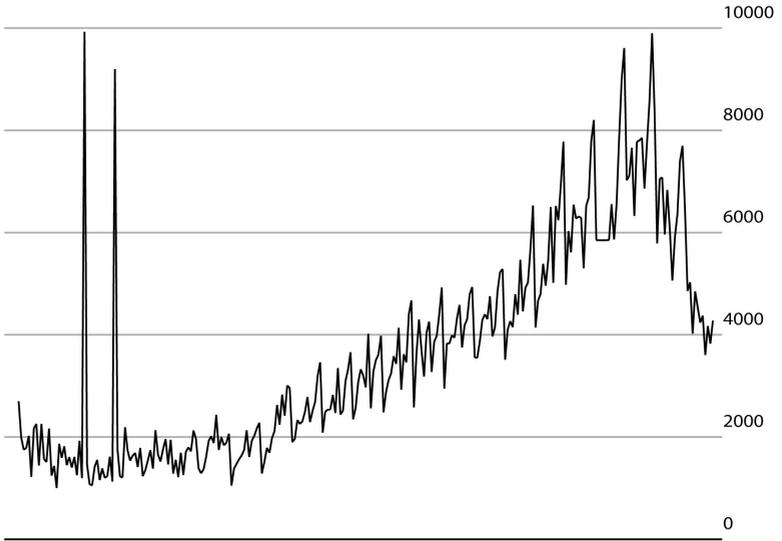
^Above: This graph shows the total number of completed housing units across the state over the 20 year period prior to 2009. (Central Statistics Office Ireland 2008) The graph below shows Ireland's net migration for the same period, with each positive unit representing 1000 inward-bound persons. (Central Statistics Office Ireland 2008)

353

2nd Hand Houses

New Houses
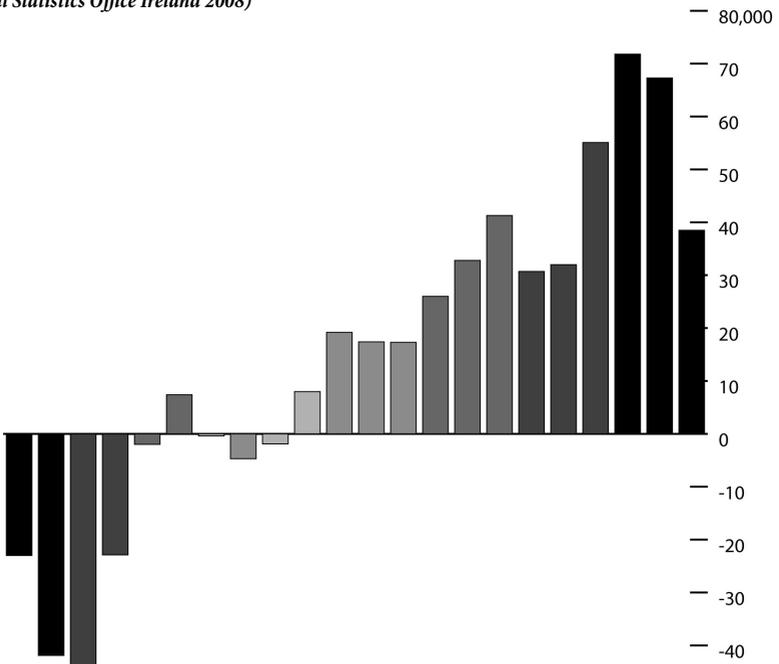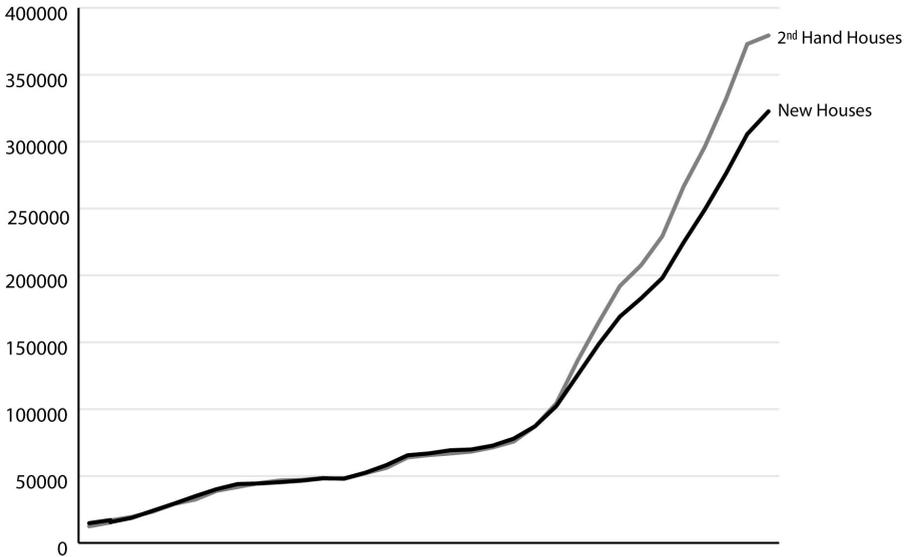
all of the stylistic issues and negative connotations with this lifestyle.

Perhaps these high levels of supply are in fact due in part to a weakness on the part of the Irish people not able to able to distinguish quality homes from the rest. An efficient economy diversifies by itself and promotes local micro-economies. In addition households that do not spend all of their income on commuting expenses, large supermarket chains and inordinate amounts of fuel expense can spend more time and money in the currently non exist communities from these areas.

Perhaps these high levels of supply are in fact due in part to a weakness on the half of the Irish people not to be able to discern quality homes from the rest. An efficient economy diversifies by itself and promotes local micro economies. And homes that don't spend all of their income on commuting expenses, large supermarket chains, and inordinate amounts of fuel expense can afford more time and money in the currently non-running commu-

^Above: This graph shows the comparative trends in prices for new and second hand housing prices. The deviation in trends may be attributed to more of the high end second hand housing being put up on the market. Or possibly, that people are more and more willing to pay more for a second hand house(perhaps a comment on descending quality in the market) (Central Statistics Office Ireland 2008)

nities from these areas.

In terms of labour and material in house-building there has been a uniform increase in cost over time. (Central Statistics Office Ireland 2008). The data given on the cso.ie web site assigns a base figure of 100 for the first month of 1991. There follows an increase of 5%, year on year reaching 200 in 2007. This represents a ten-fold increase on the value given for material and labour costs in 1975. These figures exclude portions of the build cost associated with such things as overheads and taxes.

In my opinion, changes in legislation have

lead to another important factor, is with regard to changing legislation. As of January 1st the new Building Environmental Regulations, or BER for short, come into effect. It is a clear, straightforward guide to the general running efficiency of any particular home, and supply is dependent on quality as much as a quantitative response to levels of demand. *(Sustainable Energy Ireland 2008).*

BER is then a measure of the efficiency of domestic buildings. It measures the amount of kilo watt hours required to provide space heating, water heating, ventilation, and lighting for a given floor area in square metres for a calendar year. This score is then graded, with A1 at the top of the scale for homes that require less than 25 kWh/m^2/year all the way down to a G-rating for anything above 450. *(Sustainable Energy Ireland 2008).*

The emissions of carbon dioxide is also displayed on this certificate. It is compulsory for every home, either built new, or being re-sold to apply for a certificate and to present this certificate to the potential buyer. *(Sustainable Energy Ireland 2008).*

And as always the Irish are much more willing to embrace these principles with a much greater concern for their economic values than the ecological ones. But this is largely irrelevant. With the rising rates of fuel poverty that goes with economic downturns and rising fuel prices it merely matters *that* these principles are embraced.

3. The Spring Budget
Financial projections

On Tuesday the 7th of April 2009 the Irish Government issued a revision of the nation's budget. This was an *emergency* budget, and the third *national expenditure adjustment* to be seen in the preceding ten months. This revision promised to tackle the issues with braver conviction than previously shown.

And this budget is certainly different than the last. Fianna Fail are particularly careful to avoid marginality. The price of Diesel has gone up, while Petrol has stayed the same. Cigarettes have gone up while Drink has remained the same. Ministry of Defence down €30m. And the allocation for the Ministry of the Environment was increased by 7%. *(Lenihan 2009)*

That said, the transport budget was cut in this budget to the tune of € 300 M. This threatens to hurt public transport in a big way. The proper investment in public transport could see benefits immediately. Traffic alleviation, reduced road maintenance costs. *(Lenihan 2009)*

A stable economy is a dynamic equilibrium. This is like a man that's running on a treadmill. To a stationary observer it would seem that he wasn't moving, and overall that would be correct. To keep our position we need to spend and if we start to fall back economi-

cally it's essential that we get back up to speed by increasing economic activity. We cannot freeze up and be knocked off altogether.

And, staying with this analogy, we also need to ensure that each foot meets well with the moving belt, ie each investment should, as we should have made sure all along anyway, be assuredly sound. Because the gym has quietened down at the moment, and we don't want to draw undue attention to ourselves.

And here is one important investment we should make: as the picturesque follies did for peasants centuries ago, we should build. On the contrary, perhaps folly is the incorrect word, as it conjours an image of something that's defining factor is its uselessness. For a country that invested so heavily in construction in the boom years, it is very straight forward, that all the training, expertise and investment still counts for something, and the world goes on.

And the investment would trickle through the system oiling cogs we didn't think about or otherwise couldn't reach. We should invest, as a country, in things of quality to fill the huge gaps left by inadequate planning restrictions and lapse zoning policies. My point is that it would be an incredible mistake to take all the newly generated revenue and use it up bail-

ing out the banks and clearing some of the national debt. Not that these aren't worthy causes, but if we find ourselves back at zero with no positive economic momentum then we have lost. And prosperity has to start locally after all.

Amid the post budget climate, a confident Fine Gael, the main opposition party have called for a general election. Based on transient unpopularity if, hypothetically, a general election were to be called right now there is a distinct possibility that the government may just lose their position. I would like to see them to see out the aftermath of the budget, as I'm sure no one will know better what they had in mind and, personally, as I reckon that this is part of the responsibility entailed with devising a budget. The transition would almost certainly not be a completely smooth one.

In my own opinion it's probably unwise to hand the reigns to a political party that hasn't been elected to government for over 15 years. Especially since they have to be seen by the public to hold true to their stance strongly against so many aspects of the current budget. Would this inevitably lead to yet another budget rehash to be released in such a short period again. On the other hand, however, with such a long spell in opposition they may have spent their time brooding over clever political decisions and grooming their cool heads and innovative solutions. And on the other other hand perhaps the assumption that the only government that can be pieced together from the opposition parties has to be Fine Gael is a little too hasty.

What is sure though is that this cannot become a politics of lowest common denominators, where the politicians who are the least unpopular get voted in. Are we searching for politicians whose only motivation is to do marginally better than their closest opposition and careful not to be too spectacular at the same time.

The greatest criticism of this budget in fact, is

that it actually did very little to stimulate the business sector. *(Knight Frank Dublin 2009)* It was an undeniably fair budget though, effectively nationalising the country's debt. Taxes were raised across the board by different increments according to different income brackets.

And the government have good reason to be walking as if on eggshells- As part of another national expenditure adjustment earlier this year, as a cost saving measure they made the decision to withdraw medical cards from Pensioners who had previously been entitled to state covered health care. Mass protests ensued, and obviously seeing the elderly of the country taking up pickets outside the Dáil does not make for comfortable watching on the 6 o' clock news, and one can certainly sympathise with the current generation who had to watch their elders and more infirm parents work themselves up into such a state worrying about how they can possibly to go on. Sure enough, huge pressure from all directions soon forced them to reverse this decision, and left them in their most unpopular position ever. *(Donnellan 2009b)*.

So it is my hunch that they were very intentionally playing the safe card this round. But can it turn up trumps?

Welfare and Public Health care are very important measures of a society. As is Education. And the fact of the matter is that this assumption does not show Ireland in the best light. When the country was in boom these were major problem areas. So the question is; what has changed in this regard, post budget?

The health sector, in particular, has had its problems in the past, long before the full extent of the recession was realised in this country. As part of cost saving measures in the past the HSE, the health services executive, has habitually closed smaller, less well off hospitals. *(Donnellan 2009a)*.
Instead they could have been more proactive

in tackling the inadequate resources and inefficient organisation inherent in the system, as well as an unfair distribution of wages within the health sector, consultant doctors with ridiculously high wages and nurses working for a comparative pittance. And in spite of these problems consultants are expected to receive another pay rise of up to € 95, 000 this year, and backdated as far as January. *(Rate my hospital.ie 2009).*

As a result of these actions we are now left with an inefficient, horrendously overcrowded, centralised health service. And much of the country is without the capabilities to fully treat sufferers of cancer, cystic fibrosis, and those elderly or disabled patients in need of special care. *(Irish Health.com 2008).*

Closing regional hospitals has lead to a greater dependence on collocated hospitals, many of which have yet to be built, but the abolition of the tax breaks for private hospitals may have voided this. *(Donnellan 2009a).*

The budget has however allocated € 100 million to fund additional medical cards later this year if so required. This gesture is an attempt to avoid any fiascos the likes of which they already know all too well. The full effects of the budget and the current affairs of the HSE remain to be seen. *(Donnellan 2009a).*

Social welfare payments have not been effected in the budget. *(Jones 2009).* The government have, however, been accused of stealing Christmas from many families, when they cancelled the annual December bonuses. It is thought that this action will send many of the more dependent recipients into the hands of moneylenders in order to provide for their children and other family members over the christmas season. *(O' Brien 2009a).*

Mortgage interest relief will now only apply for the first seven years of the loans lifetime. This means that those with bigger investments get the least relief. Some of these loans can last up to 35 years. Personally, I think that a better system would somehow respond to the relationship between the accumulated interest against the original value of the mortgage and thus keep the most high risk borrowers in the green. *(Mulcahy and Fagan 2009).*

And in relation to education, the government have still not made any definitive statements regarding 3rd level fees. *(Flynn and Minihan 2009).* Early preschool has now been earmarked to be implemented as the new cost saving replacement for child care benefit.

The national School Building Program has been cut. With the exception of projects that have already been signed off on. *(Cullen 2009).* This means that 40 new schools will be built as a result. When you consider that 200 Schools across the country pay more than € 100,000 per unit per annum on prefab rental, I would suggest that this is a major area for re-evaluation. *(Carroll 2009).*

On one side there is a huge demand here for new buildings, with an already expressed cash flow going to waste and on the other side, as I've described before, a rapidly deteriorating construction industry in severe need of investment. These are the kind of mutually beneficial intuitive responses that will be required in the solutions needed in time to come.

ASTI, the teachers' union have said that the full impact of the cuts in education will not be apparent until next September, but they said we could likely expect reductions in subject options, fewer staff and less funding. *(Cullen 2009).* On the other hand € 7 million additional has been given to the Department of Communication, Energy and Natural Resources, in order to roll out a pilot broadband scheme for second level schools. *(Slattery 2009).*

4. Enter the Fat Controller
Transport, networks, infrastructure

I want to talk now about the housing issue with its nearest context: transport. Not because it formed part of the natural Venn diagram of modern human existence, as thought in secondary school. Rather I genuinely think that there is something to be gained here. A few well chosen policy changes to return immediate benefits. There is an opportunity here for long term benefit to both the citizen and the state.

The rail system in this country is not cheap, and is not ubiquitous. The rail road has been in decline for a long time, and lots of it has been closed down and rolled back. Rural light rail schemes are no longer to be seen throughout the country. And the bus system is not much better in these respects, disjointed routes, and infrequent departures on secondary journeys. These are huge failures for the country's only alternatives to private transport, and this deters people from that option. And then the policy makers take low usage numbers as a vindication of their scepticism and the situation just exacerbates itself.

And this influences tourism also. Surely a tourist would be slightly more understanding of a substandard roads system, but to be made suffer such a substantial public transport system, is just intolerable. An inadequate public transport system has kept most of the country

outside the scope of the majority of tourists.

But I have to say that the biggest failure happens on a very fundamental level. For instance Limerick, Ireland's third city could be exemplary of many problems across the country. In the city there are two transport networks, the national network, consisting of trains and long distance buses, and the local network, city buses to the universities, industrial parks and large residential areas.

And there is an incredible opportunity wasted. There is no relation between the two networks, when they could be complimentary, coninciding and possibly cutting out the necessity for the majority of cars and taxis at the station, reducing traffic, but most importantly simply reducing the hassle involved with the whole thing.

The republic's largest port is in Rosslare at the southeast tip of the country, and it is linked to Dublin by rail. The frequency of trains on this route is determined by the fact that the majority of the way is a single track with no way for two opposing trains to pass each other.

A light rail commuter system localizes and decentralizes sprawl, while activating small communities and towns. Not dissimilar to the introduction of the DART rail transit system

in the costal commuter area around Dublin. The introduction in the mid 80's of the DART saw an immediate and dramatic rise in passenger rail usage after decades of decline. *(Irishrail.ie 2005)*. This is reflected in the more recent success of the LUAS. That seems to be the common solution to medium scale public transport infrastructure, well connected to the national network, with frequent departures and reasonable fares.

In the budget the government have made a very dangerous commitment. Cutbacks of more than € 300 M from the road transport fund and € 150 M is to be cut from public transport infrastructure. The Transport 21 initiative has yet to yield significant results, which is now more unlikely with the budget mess. *(O' Brien 2009b)*.

With a 60% drop in car sales this year so far. *(Motorcheck.ie 2009)*. There is genuine interest now being shown for alternative fuels and other ways of getting around, surely this is the perfect opportunity to trigger a switch. A positive trend for environmental and economic reasons.

And, on a connected note, Shai Agassi of the Better Place program has tackled a very important issue. The question: How can you run a whole country without oil? And of course the biggest issue here is the private transport system. For him, to answer this question it was necessary to look for alternative fuels for the car. Bio-Diesel simple was not a practical solution with the amount of arable land that would be needed to provide for every country. And hydrogen fuel cells consume more electrons than you could get into the car. So the solution that he settled on was that of the electric car. *(Agassi 2009)*.

There was another problem. The super car prototypes of electric cars that everyone had become accustomed to were never going to be affordable, each clocking in at around €400K, the cost of a medium large house. The fact is that, in order to give these cars the spec to match high performance petrol cars, they

This image below is a comparative illustration between two different modes of transport. As a comparison I think it's quite striking, and works quite well. (Treehugger.com 2007).

were designed to run off of the most expensive batteries on the market. The lightest, smallest, Li-Ion batteries with the longest range.

So, there had to be a solution for this issue in order for the program to work, and in fact, there are currently two solutions being developed. In either case there is the suggestion that whenever the car is parked somewhere for an extended period of time, whenever possible the car should be on charge. The first solution is a compromise: a budget electric car with a much reduced performance. The car has a top speed of 80 km/hr and a range of less than 80 kilometres, and is available right now in this country from select dealers. The REVAi car, as it is called retails for about €10 K. *(Motricity. ie 2009).*

The other option is very interesting, and very innovative. The high quality batteries which are so expensive never become full property of the car owner. A depleted battery is exchanged for a fully charged, healthy battery at a special "swap station". And the best part; the infrastructure is all already there, ideally positioned throughout the country and perfectly built to cater for automobiles.

That's the genius of this idea, and a vital part to this solution. Instead of investing in the obsolete oil drilling and refining industry, government are free to invest the same money into green energy production which covers both the automobile industry, and the country in general. Gas stations nearly without alteration become fully capable of hosting this swap station scheme entirely. Perhaps a unique situation where consumerism has had such a contribution to the cause of environmentalism.

It was also necessary for Agassi to approach car companies to manufacture the car and make the remotely possible a distinct reality. As can be expected the response was a little less than enthusiastic. Nevertheless, a persistent Agassi soon went on to secure a commitment from the Nissan company. In fact they also com-

mitted in the swap station idea as Agassi had pitched it.

And so Agassi contacted the leaders of various countries with his offer. And now he has signed contracts to electrify Israel, and parts of Australia, as well as Denmark. And in Denmark to coincide with this scheme they have introduce increased charges, a heavy tax for cars that aren't environmentally responsible.
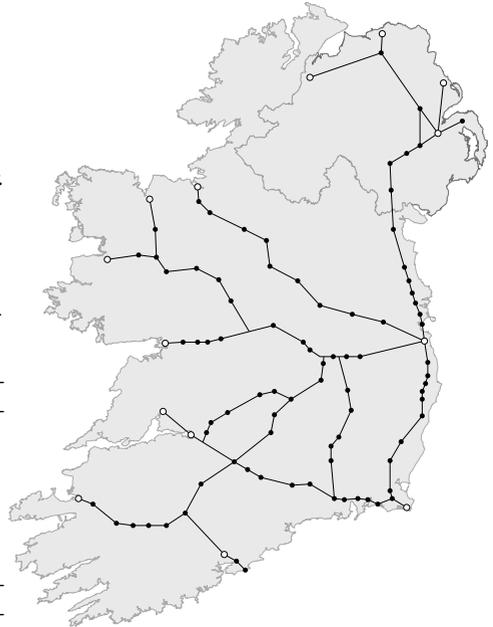
This image is a representation of the rail system in the country. Rosslare is the large station that can be seen to the very bottom right of the island. One of the rail schemes not to be cut is to open up a western rail corridor. Until this is opened the only way to travel between Galway and Limeick by train for instance is to go via Dublin, which is incredible. That is equivalent to crossing the width of the country twice with three different exchanges for what would otherwise be a one hour journey! (Irishrail.ie 2009).

>> the illustration to the right is a visual summary of a study into fuel trends. It is a clear, comprehensive analysis. The image is a pretty clear; the green represents positive result; the red, negative. The report concludes that every citizen should petition the government to raise the cost of petrol and other fuels, (Vistoria Transport Policy Institute 2008)

Options

Do nothing	Minimize price increases	Alternative Fuels	Effecient Vehicles	Mobility management
Raise taxes to account for inflation Allow prices to increase and markets to respond	Subsidize fuel production. Reduce fuel taxes.	Support alt. fuel technology development. Support alt. fuel production and consumption. Reduce taxes on alt. fuels and increase taxes on conventional fuels.	Support efficient vehicle technology development. Support efficient vehicle production and purchase. Tax or forbid inefficient vehicles. Increase fuel taxes.	Improve alternative modes. Efficient incentives (road and parking pricing, fuel taxes, commute trip reduction programs). Smart growth land use policies.

Problem

	Minimize price increases	Alternative Fuels	Effecient Vehicles	Mobility management
Fuel Inaffordability	green	green		
Transport Inaffordability	green	green	green	green
Energy Insecurity	red	green	green	green
Vehicle Inefficiency	red		green	
Transport System Ineffeciencies			red	green

Planning Objectives

	Minimize price increases	Alternative Fuels	Effecient Vehicles	Mobility management
Consumer affordability	green	green	green	green
Minimize Tax Subsidies	red			red
Energy Security	red		green	green
Pollution Reduction	red		green	green
Congestion Reduction	red		red	green
Road and Parking Cost Savings	red			green
Traffic Safety	red		red	green
Improved mobility options for nondrivers	red			green
Physical fitness & health (exercise)				green
Land use objectives (reduces sprawl)	red		red	green

5. Design Ideas and conclusion
Top Down, Regeneration, New Urbanism

Top- down planning is perhaps the collection of ideals that most people customarily associate as "planning". With its origins in military planning and palatial garden design it stops short of developing full solutions to the issues of modern planning.

It represents a traditional obsession with geometry, and in its orthogonal plan orientation it intrinsically tends to produce two dimensional solutions to design issues. Today it is the default weapon of planning authorities, it inevitably leads to discussions with local government.

Ireland is in the grip of regeneration culture. It deals primarily with the existing built context, which makes it suitable for Ireland. And this is a bad indication for the model we live by in this country. A development gets earmarked for redevelopment after it falls below a certain standard and social problems have highlighted it as a national concern. And so this method of planning is characterised as a slow response and fails to deal with intermediate issues in planning.

Ideally this approach should be the exception, as it is a very inefficient, and as I have said deals only with the most extreme cases Whatever approach is adopted it has to be able to work within the existing context. It's unrealistic to assume that we have a blank canvas to work with. One house in every two has been built in the last 15 years.( ) And as trends continue the landscape outside the city tends towards homogeneity, as everyone pursues an idyllic life for themselves. This will be the legacy of the Celtic Tiger.

New Urbanism is usually a form of regeneration. Perhaps it is slightly inappropriate to call this *new* urbanism because this school of planning theory is the closest thing to the accumulation of all planning knowledge throughout the entire of human history.

The principles of New Urbanism are more easily applied to urban areas with an extensive history, and so thrive easily in the old cities of Europe. And probably the best example of this is the Las Ramblas area in Barcelona.

One aspect of a successful new urbanist development is a large well connected urban catchment area. This usually manifests itself as a metropolitan public transport system.

These areas are also defined by active permeable street levels. They can host markets and outdoor restaurants and also create an engagement with shop fronts and other functions. This is central to the success of the scheme. They make the area pleasurable to be in and
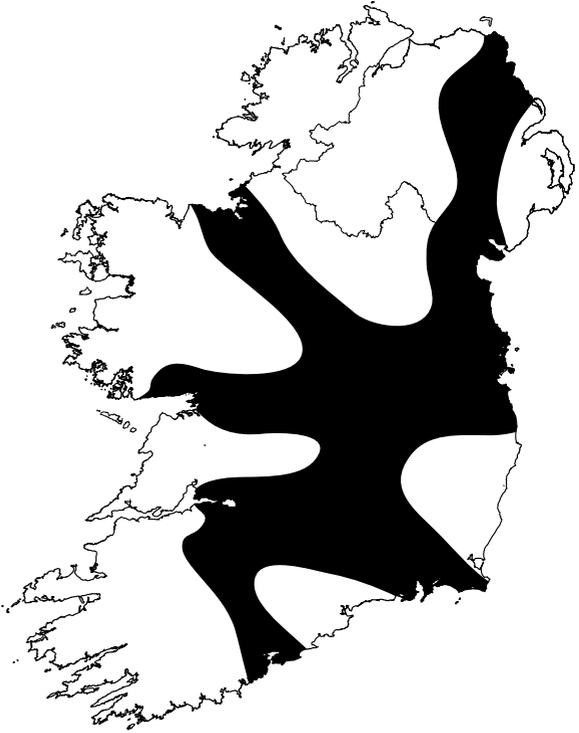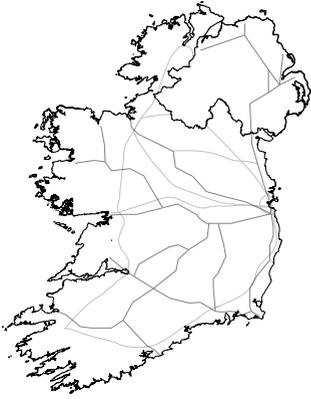
These are some examples of top down planning schemes. These particular maps are based on some schemes presented as the Irish entry for the venice biennalle. Failures of purely zoned schemes aside, striking images like these open up some fresh discourse. These are some of the kinds of discussions we need to start having.

(Irish Architecture Institute 2006)

this has proven in practise to be enough in-
centive to attract citizens into the area. This
generates incredible social and cultural ben-
efits for the entire city.

For the majority of areas discussed in this
project there is one recurring theme. I would
just like to conclude with a short discussion of
this. A common mode of failure with many of
these issues turned out to be mismanagment.
Just like in the case previously discussed
where co-operation between the Education
system and the construction sector right now
would be so mutually beneficial. And the way
that Agassi's proposed system removes the
problems associated with our car dependence
along with major new stimulous in new car
sales.

And I propose that it is failure in policies like
this that prevent the identification and benefit
from these opportunities. I strongly believe
that there is enough innovation and know-
how in the country to play a part in restart-
ing the economy. And the other part needs
to come in the form of capital investment. In
their implementation of the April Budget, the
government have taken this on themselves to
be the only ones with this opportunity. And
as I have already explained it is *essential* for
us to keep the lines of discource open. This is
the only way to ensure the best possible out-
come from our collective planning and hous-
ing efforts.

Bibliography

Agassi, S. (2009) 'A bold plan for mass adoption of electric cars', TED: Ideas worth spreading [video online], available: http://www.ted.com/index.php/talks/shai_agassi_on_electric_cars.html [accessed 17th April 2009].

Carroll, S. (2009) 'More than 200 schools spend € 100,000 on prefab rental', The Irish Times, 11th April 2009, available: http://www.irishtimes.com/newspaper/archive/2009/0411/Pg004.html# [accessed 20th April 2009].

Central Statistics Office Ireland (2008) 'Database direct' [online], available: http://www.cso.ie/px/pxeirestat/database/eirestat/eirestat.asp [accessed 18th Jan 2009].

CPL Group (2008) 'client survey December 2008' [online] availible: http://www.irishtimes.com/newspaper/finance/2008/1208/1228571631794.html [accessed 1st Feb 2009]

Cullen, P. (2009) 'School building to go ahead despite cuts', April Budget Supplement, The Irish Times, 8th April 2009, page 4.

Donnellan, E. (2009a) 'Doubts over Future of co-located hospitals', April Budget Supplement, The Irish Times, 8th April 2009, page 4.

Donnellan, E. (2009b) 'Over-70s medical card removal 'shambolic'', The Irish Times, 9th April 2009, available: http://www.irishtimes.com/newspaper/ireland/2009/0409/1224244287389.html [accessed 19th April 2009].

Flynn, S. and Minihan, M. (2009) 'O' Keefe to bring options on college fees to cabinet', The Irish Times, 11th April 2009, available: http://www.irishtimes.com/newspaper/archive/2009/0411/Pg004.html [accessed 20th April 2009].

Gleick, J. (1987) Chaos: Making a new science, 2nd ed., New York: Abacus.

Greenwood, D., Slack, R. C. B. and Peutherer, J. F. (2002) Medical microbiology: a guide to microbial infections, 16th ed.,University of Michigan: Churchill Livingstone.

Irish Architecture Institute(2006) 'Sub Urban to Super Rural', Belfast, OBG.

Irishhealth.com (2008) 'Treatment biggest complaint against HSE', 13th Feb., available: http://www.irishhealth.com/article.html?id=13063 [accessed 18th April 2009].

Irishrail.ie(2005)'Commuter and DART Fleet', available: http://www.irishrail.ie/fleet_information/commuter_and_dart_fleet.asp[accessed 20th April 2009]

Irishrail.ie (2009) 'Irish Rail - Your Journey - Routes and Maps', NTS, available: http://www.irishrail.ie/your_journey/map2.asp?box=To.

Jones, R. (2009) 'Shock at increase in income levels', April Budget Supplement, The Irish Times, 8th April 2009, page 4.

Knight Frank Dublin (2009) 'What they said', April Budget Supplement, The Irish Times, 8th April 2009, page 8.

Kunstler, J. H. (2007) 'The tragedy of suburbia', TED: Ideas worth spreading [video online], available: http://www.ted.com/index.php/talks/james_howard_kunstler_dissects_suburbia.html [accessed 15th April 2009].

Lenihan, B. (2009) 'Budget Speech Transcript', April Budget Supplement, The Irish Times, 8th April 2009, page 10 and 11.

Lyons, R. (2009) 'Ireland's Property Market: A Fallen Star?', Report [online], available: http://www.daft.ie/report/Daft-House-Price-Report-Q4-2008.pdf [accessed 20th Jan 2009]

Maas, W., Van Rijs, J. and Koek, R. (1998) FARMAX: Excursions on Density, 2nd ed., Rotterdam: 010 Publishers.

McDonald, F. and Nix, J. (2005) Chaos at the Crossroads, Dublin: Gandon Editions.

Motorcheck.ie (2009) 'New Car Sales In Ireland down 58%', 28th Jan, available: http://www.funkymotors. ie/blog/2009/01/12/new-car-sales-in-ireland-down-58/ [accessed 17th April 2009].

Motricity.ie (2009) 'REVAi Quadracycle', 20th Feb, avaiilble: http://motricity.ie/wordpress/?p=10 [accessed: 10th April 2009].

Mulcahy, O. and Fagan, J. (2009) 'Mortgage interest relief limited and property tax on the way', April Budget Supplement, The Irish Times, 8th April 2009, page 5.

O' Brien, C. (2009a) ' "Scrooge-like" move roundly criticised', April Budget Supplement, The Irish Times, 8th April 2009, page 1.

O' Brien, C. (2009b) 'Preschool to replace child supplement', April Budget Supplement, The Irish Times, 8th April 2009, page 7.

O' Brien, T. (2009) 'Regional and local roads targeted in € 315 M Cutbacks', April Budget Supplement, The Irish Times, 8th April 2009, page 8.

O' Leary, J. (2009) 'Plan for next year lacks a sense of urgency', April Budget Supplement, The Irish Times, 8th April 2009, page 8.

Ratemyhospital.ie (2009) 'Consultants say pay deferral not discussed', 25th Feb, available: http://www.ratemyhospital. ie/hosp_newsstory.html?artid=15120&sortcrit=chrono [accessed 18th April 2009].

Rosling, H. (2006) 'Debunking third-world myths with the best stats you've ever seen, TED: Ideas worth spreading [video online], available: web http://www.ted.com/index. php/talks/hans_rosling_shows_the_best_stats_you_ve_ ever_seen.html [accessed 29th March 2009].

Savage, P. (2008) 'Ireland Unemployment Rate at a 7.5 year high' [online] available: http://www.eirjobs.com/news/ire-land-unemployment-rate-at-a-75-year-high/ [accessed 26th Jan 2009]

Slattery, L. (2009) 'In short', April Budget Supplement, The Irish Times, 8th April 2009, page 5.

Sustinable Energy Ireland (2008) 'What is BER' [online], available: http://www.sei.ie/Your_Building/BER/ [accessed 23rd Jan 2009].

Thompson, S. (2009) 'Horizons', The Irish Times, 24th Jan 2009, page 44.

Treehugger.com (2007) 'Number of the Day: 52.2', available: http://www.treehugger.com/files/2007/07/number_ of_the_d.php. [accessed 19th April 2009].

Tyrrell, F. (2009) 'Price cuts up to 40 pc...', Property, The Irish Times, 22nd Jan 2009.

Victoria Transport Policy Institute (2008) 'Appropriate Response to Rising Fuel Prices', 25th Aug, availible: www. vpti.org [accessed 17th April 2009].

Whelan, S. (2008) 'Polish Exit' [online]available: http:// www.corkmedia.net/?p=787 [accessed 8th December 2008]