A CHANCE ENCOUNTER
ARCHITECTURE IN A HYBRID SOCIETY

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by
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INTRODUCTION

ARCHITECTURE IN A HYBRID SOCIETY

The nature of the contemporary city is one of disorder and disjuncture. Economics, politics, social organisation and technology have given shape to this new urban condition. The hybrid nature of the contemporary city does not comply with the traditional idealistic definitions of the city as a static element. The city is a rather complex fluid system that is continuously in flux. A successful architecture is one that responds appropriately to such a condition.

The hybrid nature of the city needs to yield a hybrid architecture that challenges the traditionally autonomous nature of program within buildings. This new application needs to recognise the importance of mutually beneficial relationships between different programs, however, disparate they might seem. These new relationships not only enhance existing physical and metaphorical connections within a specific area, but also establish new ones.

The functions of public and private space need to be carefully considered. All building types deal with these tensions to varying degrees; with public architecture as the best example. Contemporary public architecture is located within the tension between openness and surveillance; movement and reflection; chance encounter and dwelling; unexpected flow and pre-determinacy. A successful building is one that carefully mediates between these tensions.

How does public architecture respond appropriately to the nature of the contemporary city? What does the introduction of hybrid spatial programming mean for the building, its users and its context? How does the architect mediate the tension within contemporary architecture?
The recognition of the hybrid nature of the contemporary city and the architecture that responds to it is of particular importance when dealing with the physical and social fragmentation of the South African city.

Unlike other large urban centres in South Africa, Cape Town has a unique urban and social makeup. In cities like Johannesburg and Durban there has been an exchange in demographics within the city centre since the end of apartheid. Cape Town’s inner city however is still relatively white and privileged further enhancing its fragmented nature.

The aim of the research is to look at a public architecture that recognises the unpredictable nature of the contemporary city. This reality is a great opportunity to create a rich architecture that allows for multiple and varied social encounters and events to occur.
The role of architecture and power is an important topic of discussion within the realm of contemporary public architecture. This topic is even more complex in contemporary society. In the book Becoming Places Kim Dovey discusses Deleuze and Guattari's analysis of power and modernity. "Despite the identification of modernity with the open plan, they suggest modern life has introduced a more rigid segmentarity identified with bureaucracy and the state" (Dovey, 2010: 107).

Jeremy Bentham’s Panopticon plan epitomises the experimentation of architecture with power. Developed in the 18th century as a model for a prison, the plan was greatly studied by the French philosopher Michel Foucault. In Discipline and Punish Foucault discusses the effectiveness of such a power through anonymity "Bentham laid down the principle that power should be visible and unverifiable" (Foucault, 1977: 361) The diagram later applied to buildings and schools.

Architect Neil Leach discusses how it was not the plan or form of the Panopticon that had an influence on human behaviour but rather the "politics of use" (De Stefani, 2011) Leach here has an interesting view where he suggests that the success of architecture goes beyond its formal articulation but also includes the events that occur within it.
Kazys Varnelis in his article Programming after
Program: Archizooms No-Stop City points out
Manfredo Tafuri’s criticism of an emancipatory
architecture

"Tafuri proposes that the architect must abandon
any goals of changing society through
architecture(...) Tafuri outlines three limited choices
available to architects: ideology critique wielded by
the historian; fatalistic development of formalist
silence by the neo-avant-garde – as epitomised by
Aldo Rossi and Peter Eisenman or an acceptance of
architecture’s complicity with capital and the
establishment of a cordon sanitaire between radical
politics and architecture" (Varnelis, 2006:88)

Tafuri states that architecture can never have the
power to organise society. Some might say that
architecture is directly related to the current
socio-political context in which it is operating in. This
is evident in how modernism became irrelevant
once the economic system shifted from Fordism to
Post-Fordism. Tafuri believes that the slow rate at
which change happens in the spatial realm
compared to other social systems renders it as not
being able to influence change in society. He points
out that social change can happen more rapidly
than spatial change “a different kind of space can
only arrive when a systematic revolution has taken
place” (De Stefani, 2011)
Henri Lefebvre in *The Production of Space* states his belief that a revolution can never reach its full potential until there is a change in the spatial realm.

“A social transformation to be truly revolutionary in character, must manifest a creative capacity in its effects on daily life, on language and on space – though its impact need not occur at the same rate or with equal force in each of these areas” (Lefebvre, 1991:54)

Both theorists have highlighted the dependence of architecture on external factors to function successfully. Lefebvre’s argument has more resonance in that it views true social change as being collectively influenced by many different types of entities. This statement proves that architecture does have power within society, but this power is only realised when the discipline works within a collective rather than autonomous entity.
Over the past decade or so there has been a resurrection of some of the modern ideas with regards to program with the reintroduction of the "social condenser". These ideas however do not possess the idealistic naivety of the modernist period. They are in fact based on the reality of contemporary society.

Architects Bernard Tschumi and Rem Koolhaas have been at the forefront in re-establishing the importance of function in architecture. These architects are against form as expression; this is quite to the contrary as both their work is formally interesting. What the architects are calling for, however, is a contemporary re-thinking of program that is appropriate to the complex conditions of a contemporary society.

Bernard Tschumi highlights the importance of the event within architecture. In the Parc de la Villette in Paris the idea of the follies is that they are points of reassembly in a dislocated and disordered reality. Tschumi uses the technique of superimposition of systems such as points, lines and surfaces over one another. The product is a non-causal, non-hierarchical relationship between systems.
Tschumi believes that the future of the contemporary city can be seen in highly heterogeneous cities such as New York and Tokyo where various seemingly incompatible programs are situated within a single building. Here we see reference to Rem Koolhaas' analysis of the Downtown Athletic Club in Delirious New York where the private residence, the gym and the oyster club are situated under one roof. In later projects such as the competition entry for the National Library of France, Tschumi develops his theory with further juxtapositions such as the intellectual and the athlete and the Kansai International Airport with the wave, slab, double strip and the deck and their non-hierarchical relationships with the interstices between them.
Rem Koolhaas and his firm Office of Metropolitan Architecture (OMA) along with its research unit AMO is interested in the “urbanizing of architecture”. Their architecture seeks to allow for a similar social diversity that is found on the street or square within the building. Koolhaas does not want to be mistaken as trying to resurrect utopian ideas about the potential of architecture to change society. He is well aware that architecture is a discipline operating within an extremely capitalist society. Koolhaas settles for the potential to provide a level of freedoms for the users of his buildings. Koolhaas’ interest lies in treating of architecture as a field of social encounters.

Koolhaas’ architecture is “strongly ordered by the trajectories of movement through the building” (Dovey, 2010:104). Koolhaas’ work seeks to resist the constraints of rigid planning and his interiors are often designed as exteriors to maximise the probabilities of these social encounters found in the urban realm. His work is functionally open and visually transparent. Kim Dovey describes Koolhaas’ architecture as a shift toward architectural space as field relations. He describes Field Theory as “a field condition as any formal or spatial matrix capable of unifying diverse elements while respecting the identity of each” (Dovey, 2000, 105). Koolhaas’ architecture is concerned with the urban condition of the contemporary metropolis through an architecture that celebrates permeability, flexibility and fluid hierarchies.
Rem Koolhaas' innovative use of program makes a "link between spatial structure and institutional authority" (Dovey, 2000, 106). Koolhaas' design ideology presents to us a contemporary phenomenon regarding program and architecture as a whole, especially in public buildings. In contemporary society there is a dichotomy at play between the desire to render buildings more permeable, so as to reflect a less authoritarian image and, with the need for surveillance. This is quite a pertinent question, especially in post 9/11 Europe and North America. Koolhaas tries to negotiate these two extremes in his architecture through a research-based look at program in such buildings. The Utrecht Educatorium and the more recent Seattle Library attempt to deal with this modern phenomenon.

Koolhaas' treats these buildings as a "synthetic landscape" where he imports the social and spatial characteristics of the urban into the interior of both these buildings. In the Educatorium this is done through a sloped exterior entrance plaza which continues into the building to become an interior "field of encounter". The foyer, cafeteria and lecture halls are highly permeable spaces yet all movement within the building has to go through this permeable space, allowing for surveillance.
In the Seattle Library the "living room" is a permeable, light-filled space on grade with the street which houses the reception, reading lounge, café/shop and at times the auditorium. The "Living Room" is described by many critics as Koolhaas' most successful application of the idea of introducing the urban encounters of the street into the interior. The importance placed on circulation is evident in both the buildings. In the Educatorium the circulation areas allow for chance encounters as they have a dual purpose as both transitory spaces and static spaces for interactions.

In the Seattle library the circulation is treated as a route that the visitor takes and along the route the visitor can exit the on to their desired destination. An interesting observation with the library is that great importance is placed on escalators, ramps and stairs. The lift is deliberately less accessible cementing Koolhaas' idea that the circulation should be more than merely for movement, but also as a field of encounter. In the Educatorium there is a balance between freedom of movement and the intention of the building as an educational institution.

"its freedoms of movement and encounter urbanise its interior, but only to the point that it does not threaten the knowledge power/regime and the diagram that produces the building in the first place" (Dovey, 2000:115)
In the Seattle Library, there seems to be a tension between the deterministic nature of the circulation and the freedoms that these same movement systems, along with spaces such as the “living room” allow for. It seems that no matter how hard the architect tries to design spaces that allow freedom, there will be users who will be disadvantaged by such moves. A dovey point out that the Seattle Library is a successful interpretation of the library in the 21st century, but it does not cater to all tastes. Maybe some people are not ready to accept the inevitable consequences that advances in technology will have on familiar building types such as the library.

Even though Koolhaas’ claims are difficult to test, for me the Seattle Library is successful in that it attempts to maintain the relevancy of a traditional building typology in a time of rapid social change. The building attempts to find innovative ways to deal with program. This further highlights the importance of the architect as a space maker in the 21st century.
In the Dee and Charles Wyly Theatre in Dallas, U.S.A, Rex architecture has attempted to rethink the theatre in relation to both its patrons and the urban context. The design challenges the traditional idea of the theatre. This is done through vertically, placing the stage and audience on grade with the street and sinking the lobby to the basement allowing for more flexibility. All the other support functions such as rehearsal rooms, offices and classrooms being located above, resulting in a nine storey building wrapped in a sleek aluminium skin reminiscent of a curtain walls on a theatre stage.

The theatre draws inspiration from the flexibility of sports arenas and convention centres with the ability for the auditorium to be reconfigured from a proscenium stage to a flat floor in just hours. The interior is a tough-looking space, there is no padding or panelling like most auditoriums. Even though some critics and theatregoers have criticised the building, many believe that the buildings structure allows it to become a haven for experimental theatre. Besides who can resist an auditorium that can open up onto directly on to the street after a production.
CONCLUSION | COMPLEX URBAN REALITY

The economic, political and social landscape of South African cities is very complex and contradictory. Bernard Tschumi has pointed out that an in-depth understanding of the heterogeneous and unordered characters of cities such as Cape Town need to be understood. Within this context the role and limits of the public building also needs to be understood. Innovative ideas around programming in a time of hybrid typologies need to be considered. It is in the acknowledgement and embrace of such urban conditions that intelligent design decisions can be formed.

Public buildings need to facilitate for multiple and varied public encounters that are common to the street or the square. Through the creation of such freedoms, a balanced relationship between permeability and surveillance needs to be established. Issues such as the strategic use of site, which are not addressed in the paper, are also highly imperative. Designers need to create buildings that allow for mutually beneficial relationships.

Architecture cannot solve the societal problems of a city like Cape Town autonomously. A productive relationship between the discipline and pre-conditions such as economic planning and policymaking needs to be established.

Through such relationships change in the urban context of our city can take place. My belief is in line with that of Michel Foucault who states that true change and transformation within a society cannot be fully realised unless it is experienced in the spatial realm.

Architects need to understand the limits of the discipline outside the realm of design, we are not economists, we are not sociologists, yet an interest and an understanding of the influence of these disciplines on our work is imperative. Designers and other professionals can then work together to create public spaces that render the experience of our cities more accessible and pleasurable.
Programmatically the project seeks to mediate between movement and knowledge. This is made possible through the juxtaposition of educational and public transport programs. Through such juxtaposition access to quality educational resources will be made available to many of the city's marginalised communities who use public transport.

The outcome of the project is less of a building and more of a piece of urban infrastructure where there is a manipulation between building and street or building and square. The new space allows for other functions such as retail and recreation to be accommodated where appropriate. The product is a space that allows for rich and varied experiences.
The building program will consist of primary or anchor programs which would be more permanent; and secondary or support programs that are more flexible to change.

**PRIMARY PROGRAM 1:** The Mediatheque, which would be a specialised library focusing on science, technology, design and business development. The mediatheque would form part of the National Library of South Africa's Cape Town branch and also the Cape Town central library. The library will house an economic development centre.

**PRIMARY PROGRAM 2:** A series of small business incubators which link to the mediatheque. The incubators are modelled on the Hub incubators which are global network of incubators which focus on social entrepreneurship. These incubators provide workspace, support and community. A hub incubator opened in Johannesburg in 2010, and has proved to be very successful to date.

**PRIMARY PROGRAM 3:** A public transport terminus, to replace the existing Golden Arrow bus terminus. The new bus terminus will be designed in light of the City of Cape Town's plan to have the new MYCiTI bus rapid transit system as the main transport system within city. The size of the bus terminal will be smaller as less Golden Arrow busses will operate in the area. The new bus terminal needs to be flexible enough to accommodate other forms of public transport such as mini-bus taxis should Golden Arrow busses seize to operate in the city.

**PRIMARY PROGRAM 4:** Two auditoriums of different sizes which could be used by the users of the other primary programs. The auditoriums could be rented to the public for other purposes as a form of income generation for the building.

**PRIMARY PROGRAM 5:** A multi-purpose expo hall which could also be used by the other primary programs and as an income generator.

**SECONDARY PROGRAM 1:** Informal retail space along Strand Street and around the public transport terminal. This informal retail space will benefit from the large volumes of pedestrian traffic that will go through the site from the new transport terminal, the station and the Golden Acre shopping centre.

**SECONDARY PROGRAM 2:** Retail space for small scale traders also along Strand Street and around the transport terminal. The retail spaces are flexible and can accommodate varied functions such as internet cafes, hairdressers, small offices etc.

**SECONDARY PROGRAM 3:** Exhibition space to showcase innovative design and art produced by the members of the incubators. These spaces can also accommodate external exhibitions.
The precedent studies that I have chosen deal with use of different types of programs within one area or building to create mutually beneficial relationships that together form new program types. All the projects are public buildings that encourage interaction amongst their users.
The Metro Mall in Johannesburg by Urban Solutions Architects and Urban Designers is a large mixed use public transport, retail and commercial building in the inner city. The project forms part of the Gauteng Provincial Government’s attempt to invest in new public infrastructure around the city, through their partner company Blue IQ.

The project links mini-bus operators, small scale retailers and informal traders with each other and also with the public realm. The architects design attempts to challenge the stereotypical idea of the taxi rank as a light temporary structure. The Metro Mall reinvents the taxi rank as a civic building that metaphorically legitimises the place of the previously marginalised mini-bus taxis, informal and small scale traders within the contemporary city.

The Metro Mall was originally designed to house 25 buses, 2000 mini-bus taxis, and 800 traders and manages a pedestrian flow of 200 000 commuters daily. The Terminal acts as an experiment in integrating different types of trade from informal to small scale traders to retail franchises. A walk through the area shows the success of these relationships and proves that with strategic planning and good design small entrepreneurs can operate amongst established retail operators.
Warwick Triangle is a large public transport terminal within the inner-city of Durban that integrates buses, mini-bus taxis and trains. The project that intervened on the site was headed by Architect Richard Dobson and his NGO Asiye e Tafuleni. The aim of the project was to integrate small scale retailers, informal traders and a large multi market with the contemporary inner city of Durban in a meaningful way. The project was a joint venture between the city council, various architects and urban designers and the informal traders operating in the area.

Rather than a top down approach which is common in such contexts, the architects decided to rather use a participatory approach. The project consists of a series of small interventions over a large area; these include pedestrian bridges, stalls for informal traders and retail space for small scale traders. The project has proved to be very successful as it has given the traders a sense of pride for the area.
Federation Square by LAB and Bates + Smart Architects was an attempt to establish a new type of public space representative of 21st century Melbourne. My interest in the square as a precedent is less about its formal resolution and more about its performance as a valuable public space to the city.

The square is located on the edge of the inner city above a railway line that leads to the historic Flinders Street Station. The railway line previously separated the rest of the inner-city from the Yarra River and the parklands beyond. The new square stitches the station, the city, the river and the parks together. Before the existence of Federation Square, Melbourne did not have a large gathering space. This is common amongst Australian cities as they were laid out on a utilitarian grid by military surveyors. The square adopts traditional European typologies such as the piazza and the galleria to establish dynamic public spaces. The old cathedral opposite the square has become part of the urban realm of the square. Programmatically the square houses a prominent art gallery, cinemas, offices and studios for a national broadcaster, theatre and concert spaces, other offices, retail, restaurant, bars and cafes. Despite its bold and formally expressive forms the complex respects the existing urban fabric through its scale and size.
The Seattle library is the culmination of a set of theories and research by OMA into urbanising of the interior of large public and institutional buildings. Through the design the architects try to reinterpret the library in an information age. The architects initially designed the library for time where books will no longer be needed. They have, however found that years after the library has been completed it is full of them and getting each year.

One of the problems that OMA/LMN sought to solve was how to design a library that was flexible enough to accommodate the ever-changing volumes of books without reinterpreting the Dewey decimal system. In a traditional library whenever a volume outgrew its floor it had to be continued on another level causing confusion for both the staff and patron. The OMA/LMN solution was to have one continuous level. This was achieved by what we know today as the “spiral” which is a gentle sloping ramp going from one level to another. The ramp is like a street within a city.
This site is situated along the western edge of the city centre within the historic Bo-Kaap neighbourhood on the intersection of Buitengraght and Riebeeck roads. The site is close to public transport routes and presents the opportunity for a new building to be stitched within a historic urban area.
This site is situated within the East City precinct, located just south of the Cape Town Castle, and is part of the historic District Six area. Besides being strategically located, the site has been earmarked as a design and technology precinct by many organisations. At present the area is under-developed, but has huge potential to be developed into a dense mixed-use residential area. Inclusionary housing could be introduced in the area for a balance socio-economic demographic.
This is the site that I decided was the most appropriate out of the three for a design intervention. This is the site of the current Cape Town bus terminal. The location of the site is of major importance to the city of Cape Town due to its historic significance. The site is bounded to the north by the Cape Town Station; to the west by the Golden Acre shopping centre; to the south by the Grand Parade; and to the east by the Cape Town Castle. Although the bulk of my intervention will be on the bus terminal site, any intervention will have a significant impact on the Grand Parade. I therefore have decided to treat the Grand Parade as part of my site.

Before land was reclaimed from the sea for the Foreshore, the site was on the beach front. The adjacent site where the Golden Acre Shopping centre is situated was the original railway station. The bus terminal site was the area where the tracks heading to the rest of the city began.
SITE INVESTIGATION
The Grand Parade is a historically rich public space and was the original site of Jan Van Ribeeck’s Fort De Goede Hoop. The Fort was a structure that was built by the Dutch East India Company when they set up a refreshment point in the Cape of Good Hope. The first meeting between the Europeans and the Khoi-San was on the site. The site has a long history as a military parade ground and public gathering space, witnessing big events in the country’s history such as Nelson Mandela speech after his release from imprisonment. A large bi-weekly flea-market has been operating on the Grand Parade site for almost a century. The current state of the square is rather unfortunate. On most days the square is usually empty apart from the cars parked on weekdays. It is clear that the Grand Parade in its current state does not work well as public space.
The Fort de Goede Hop was the first fortification structure on the site of what today is known as the Grand Parade, the Golden Acre and the Cape Town bus terminal. The fort was built under the direction of Jan Van Riebeeck, who was a leader of a group of workers of the Dutch East India Company who were set up to build a temporary stop for ships en-route between the Netherlands and Asia.

Remains of the fort were initially discovered when a postal tunnel connecting the General Post Office with the station was constructed. The reconstruction of the trading stalls by the city council was also another time where remains of the fort were discovered. The exact positioning of the fort was identified after overlays of historical maps. It is believed that the fort once occupied the west end of the fort. The main square and northern horn work occupied the site of the Golden Acre parking garage and parts of the bus terminal.
Archaeological excavations were conducted in 1983 and 1990/91. The 1983 excavations were done on the north eastern side of the fort and were used as test trenches for future excavation. The 1990/91 excavation was done in the area to the east of the trading stalls where remains of the structure and various artefacts were discovered.

The presence of the Fort De Goede Hoop needs to be acknowledged. The north east bastion and part of the northern horn work are located within the area of my intervention. The fact that the fort was built of clay and brushwood means that it would not be as well-preserved as a stone structure. Homage in the form of a memorial on the memory of this structure will be accommodated in the project.
The Grand Parade and City hall has for decades been seen as one end of a monumental link with the sea. Initially, the city authorities had envisaged a link from the Parade to a marine terminal at the harbour. This, however, was not viable with the availability of air travel.

The new main MYCITI bus station at the Civic Centre could have resurrected some of these ideas. The impact of an important link between the Parade and the new station will be undermined by the other new MYCITI stations in the area. These stations are located on Adderley Street and Darling Street.
The design concept for the project is largely influenced by the current state of the contemporary South African city, the theoretical exploration and the Grand Parade site. The transient nature of the site prompted me to envisage a building that acts as a piece of urban infrastructure, more specifically a bridge or a set of bridges. The bridges would either be transitory, inhabitable or both.

These bridges would not only connect to each other but with the surrounding context. The result is a building that acts like an "urban transistor" that not only maximises the strengths of existing connections, but forms new ones both physical and metaphorical. The area receives some of the highest volumes of pedestrian movement in the city. When one couples this fact with the concept of the inhabitable and transitory bridge; it is only natural that the boundary between the public interior and the street or square would be blurred.
The aim of the design project is to produce a building that performs the function of a gateway or terminal for pedestrians and public transport users. The design concept develops further with the idea of these bridges penetrating into the Grand Parade site. This act has functional and metaphoric reasons. The bold gesture breaks down the large and unusable space of the square into something more intimate and usable. More importantly it becomes a space that is suited to the density of a city like Cape Town. Metaphorically the gesture represents a departure from an unusable colonial space into a functional 21st century public space. Careful consideration needs to be taken with regard to scale and size in order to respect the historic urban fabric. The building attempts to literally act as a bridge between the station, the parade and the city centre beyond. Ultimately the building seeks to re-orientate the Grand Parade as a centre of civic life in city, through a series of both bold and subtle gestures.
The design developed further with the scaling of the form of the building. The introduction of a beacon such as a viewing tower restores the monumentality that the Parade had lacked. The Parade can now have varied and manageable public spaces, but can also operate as one entity at certain times.
In many societies in the 21st century the issue of identity and expression in architecture is becoming an extremely important area of discourse. The heterogeneous nature of most contemporary societies makes universal ideas of architectural expression ineffective. These conditions call for strategies of expression that are specific to individual physical and social contexts. The realm of building skins or façade is an effective tool in architecture to fulfil such demands. Projects which successfully abstract the iconographies associated with their sites, take the articulation of the building skin beyond the realm of superficiality. Building skins or facades fulfil more than just the function of enclosure; they also mediate between the building and society. They function in this way both physically and metaphorically.

Advancements in technology in the realm of fabrication, manufacturing and material sciences have had profound effects on building skins over the past decade. There has been a re-emergence of a debate surrounding ornament in contemporary buildings. The new close relationship between design and fabrication has been influential to the return of craft within the realm of contemporary architecture. These technological advancements have not only changed our preconceived notions surrounding materiality, but also form, structure and space.
THE SKIN AS METAPHOR

Of particular importance within the topic of skin is the theoretical work of Gottfried Semper and his "four elements of architecture". Semper believed that the earliest built form comprised of a hearth, an earthwork, a framework/roof and an enclosing structure such as a textile. These categorizations were contrary to the ideas of his contemporaries on the subject. They would later have profound influence on the early 20th century rationalists and beyond. In What is Architecture?

Kenneth Frampton discusses Semper's opposing ideas to other philosophers such as Laugier. "While challenging the authority of Laugier's primitive hut, Semper gave primacy to the tensile frame and its infill as opposed to the compressive earthwork or load bearing mass" (Ballantyne, 2002: 142)

His insistence of the fact that the earliest form of structure being that of the knot further emphasises the importance he places on the textile fabric. In Semper's metabolic theory or the Stoffwechseltheorie Frampton discusses the "theory of symbolic conservation, in which the mythical-cum-spiritual values attaching to certain structural elements cause them to be translated into petrified compressive forms, even when they were originally of tensile construction" (Ballantyne, 2002: 142)

Evidence of this is seen in the motifs found in sacred Greek architecture, which Semper believes to have originated from primitive timber framework and textile architecture.
In the book *The Function of Ornament* Farshid Moussavi and Michael Kubo distinguish between the representations of “invisible forces” i.e. social or historical (metaphoric) and visible forces i.e. environmental (physical) on the façade. Consideration of these forces is important in the design of contemporary building skins. This includes the basic requirements for enclosure and comfort, but goes on further to environmental requirements such as regulation of the interior environment in relation to the exterior in an ecologically sustainable way. Of equal importance are the metaphoric requirements that the building skin should fulfil. These are usually influenced by the context that the building is situated in.

My interest in this topic is specifically the role of skin in contemporary public buildings. I am not just merely interested in the technical function of skin, but also its ability to communicate and express abstractly a particular socio-cultural or physical landscape. My area of interest in building skins is the creativity and ingenuity employed by architects to respond to their context through the composition of the facade. I am interested in how such architects have abstracted the imagery associated with these contexts, while still fulfilling the technical requirements of the buildings.
ORNAMENTATION IN A GLOBALISED SOCIETY

In The Function of Ornament Farshid Moussavi discusses a new phenomenon amongst most complex contemporary buildings, that of “hybrid” or layered skins. These skins have become predominant largely to voluntary and sometimes involuntary requirements for environmental regulation. These skins, unlike their transparent modern counterparts, do not immediately reveal what is within their walls; instead they have become tools of communication and expression. So what do these new skins communicate and express? As the effects of globalisation are now being felt, complex issues of identity have arisen. Architecture as a discipline is very much influenced by this. Architects are being challenged to abstractly communicate physical and social ideals in their designs.

This new condition has set new demands on the profession, and has resulted in new professions specialising in this field, new professions such as the Façade Engineer have surfaced as a result of this phenomenon. Moussavi discusses the possibility of the building relating “to culture by creating sensations and affects” (Kubo, Moussavi, 2008:7) “affects may start with found imagery or iconography as raw cultural material” (Kubo, Moussavi, 2008:7) Affect is part of the process of how we interact with our environment, emotionally. Architecture has the potential to illicit such emotion through the abstraction of our physical and social contexts. Projects that employ such a strategy successfully move beyond surface imitations and show depth and resonance.
Branko Kolarevic and Kevin Klinger in their book Manufacturing Material Effects: Rethinking design and making in architecture discuss E.H. Gombrich's evolutionary argument for the need for ornament in society. Gombrich views ornament "a result of a biological need to operate underlying structure in the surrounding environments" (Klinger, Kolarevic, 2008: 20) they go on further by stating that "Gombrich argues that a careful balance between these two conditions i.e. between monotony and complexity, is what the mind looks for in its constant processing of the surrounding environment" (Klinger, Kolarevic, 2008: 20) Whether the re-emergence of ornament in architecture is an inevitable survival tactic or not is debatable, what is definite is that such shifts in society challenge contemporary architects to deal with each project in an unique and individual way.
Technology has played a major role in the advancement of building skins in contemporary architecture. There is a link between advances in technology in this realm and the re-emergence of ornament in buildings. This phenomenon has had a profound influence on the design of building skins. These technologies have opened many windows of opportunity for architects and have allowed for more “freedoms” in the design of building envelopes.

There have been different types of experimental approaches. The first one being the preoccupation with fluid and smooth forms as seen in the work of firms such as Future Systems, which employed material and structural ideas from the aerospace and shipbuilding industries. Another approach has been linked with the re-emergence of the craft in contemporary architecture as seen in the highly detailed skins of buildings by Herzog and de Meuron and Lab Architecture. The third preoccupation is more recent and more technological, through the emergence of composite building skins that include envelope and structure into one independent envelope. These types of skins pursue the most lightweight and sustainable solutions possible. The introduction of digital fabrication and parametric design has pushed the limits of what was previously seen as impossible.
There has been a rediscovery of the innovative potential of traditional materials such as concrete and brickwork owed largely to these technologies. Increasing awareness of the environmental consequences that the built environment has on the earth has brought about the introduction of materials, such as Ethylene tetrafluoroethylene (ETFE); which respond to external environmental conditions better than traditional materials.

The return to craft is quite ironic as the architects of the modern movement associated advanced technology with mass production; yet this same technology has contradicted this ideology and design thinking back to pre-20th century beliefs. Another interesting development has been the change in the way the profession works in relation to other disciplines. Apart from the introduction of new professions such as Facade Engineers and Software Developers, there has been the emergence of new multi-disciplinary firms such which integrate professionals such as architects, engineers, construction managers, software developers etc. This has had profound effects on how the industry is being viewed, and how it also views itself.

The current interest in Material Science and Manufacturing Technologies may be seen, by some as superficial. But the truth is that its influence has gone beyond surface treatment into the realm of tectonics and phenomenology, to me these results are extremely profound and rich. These advancement also have relevance to contemporary public architecture in South Africa, especially in Cape Town, where we are grappling with ways of expressing our unique and heterogeneous society.
The current concern on the ecological impact of the built environment requires buildings to fulfil various environmental requirements. Building skins have played an important role in the response to such requirements. This has resulted in varied architectonic responses. These responses can be divided into two categories: one being low-tech or passive and the other being high-tech or active, otherwise known as "intelligent skins". Passive environmental control methods are more appropriate to the context of a developing society such as Cape Town, due to their cost effectiveness. Buildings that use complex technological mechanisms and environmental control devices require high maintenance and most inevitably malfunction even in highly industrialised economies. Issues such as optimisation of daylight, screening for glare, regulation of interior/exterior temperatures are the backbone of passive design. My interest is in the building skins that use passive devices for environmental control in a highly expressive way, merging function and aesthetic requirements.
The Contemporary world presents many challenges and opportunities for the architect. Issues such as urbanisation, globalisation and advancing technology are rapidly changing both society and the built environment. Architecture is in a good place to mediate between these extremes. The state of contemporary culture is to be viewed as an opportunity to challenge traditional modes of social reproduction, if there is ever a time to be innovative it is now.
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Outline: Your essay must have a clear and organized structure. Start by developing an outline. Break the essay down into the following categories:

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