

STAY HUNGRY. STAY FOOLISH.

STEVE JOBS





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[R]²

THE RISE OF PRETORIA'S URBAN VANGUARD

[R]ECALIBRATING A SERIES OF URBAN VOIDS AND MEASURING THEIR IMPACT ON CREATIVE LED URBAN [R]EVOLUTION.

[R|ECALIBRATION] [R|EVOLUTION]



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Submitted in fulfilment of part of the requirements of the degree MArch(Prof) Architecture in the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria

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I further state that no part of my thesis has been, or is currently being, submitted for any such degree, diploma or other qualification.

I further declare that this thesis is substantially my own work. Where reference is made to the works of others , the extent to which that work has been used is indicated and fully acknowledged in test of the list f references

Christopher Ian MacClements

Applial land



VWL Building erf 2961 Pretoria South Africa

25°44'41.12"\$ 28°11'19.04"E

(3)

| Masters Architecture | Human Settlements and | Urbanism

Urban Void/ Urban Vanguard/ Hybrid Plinth/ Culture Led Regeneration

Christopher Ian MacClements 2015

Department of Architecture University of Pretoria

J



Fig. a Digital Render Pretoria



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STUDIO -Macclements residence

 $\label{eq:Fig.b} \textbf{Ian MacClements} \mid \textbf{Architect} \mid \textbf{Grandfather}$



PREFACE

"I am at war with my time, with history, with all authority that resides in fixed and frightened forms. I am one of millions who do not fit in, who have no home, no family, no doctrine, no firm place to call my own, no known beginning or end, no "sacred and primordial site." I declare war on all icons and finalities, on all histories that would chain me with my own falseness, my own pitiful fears. I know only moments, and lifetimes that are as moments, and forms that appear with infinite strength, then "melt into air." I am an architect, a constructor of worlds, a sensualist who worships the flesh, the melody, a silhouette against the darkening sky. I cannot know your name. Nor you can know mine. Tomorrow, we begin together the construction of a city." [Woods, 2011].

Perched above an audience of weathered faces, Lebbeus Woods delivered his manifesto calling for radical urban transformation in the heart of Sarajevo, a war-torn city cowering beneath its iron sky. Pretoria, a city left gasping for air in the wake of a repressive onslaught spurred on by autocratic ideologies and urban devices, appears less dystopian and battered physically; however, certain poetic parallels can be drawn between Sarajevo as a previously scorched urban landscape and Pretoria's contemporary urban landscape as a residual deposit of post-Apartheid social engineering and planning.

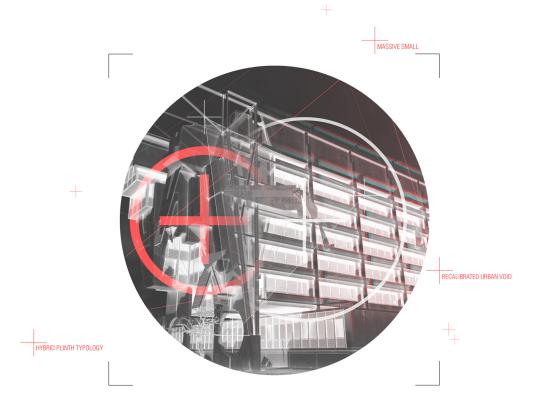
By challenging an inherent preconceived bias towards Pretoria's bygone political ideologies and urban devices, and through the acceptance of imperfection and chance due to unlikely connections, architecture may empathise with the human condition. Thus, the dissertation reveals a more personal attempt to unearth Pretoria's urban divisions. Perhaps, with compounded interest, the city itself may be experienced through new eyes symbolic of the entire being - The Eyes of the Skin, as Pallasmaa terms it [Pallasmaa, 2005].

Empirically, the exploration chronicles not only the author's own personal transformation, but, above all else, his outlined interests through the amplification of a specific and atmospherically rich site located within the heart of Pretoria. In congruence with Wood's description of the millions who do not fit in; the identified site, pending its right to permeate the urban fabric, and withdrawn and suspended in a perpetually concealed network of interstices, offers an entirely new hypothetical exploration of a series of insurgent networks that reside between fixed and frightened architectural forms.

The pursuit of a succinct and architectural technique that embraces both the imagination and senses through active engagement with the urban fabric is emphasised; whilst highlighting the importance of an authentic, circuitous process that resides in the pleasure of using one's own hands and mind in the creation of an architecture that generates, beyond form, the spatial and environmental configurations of the building and proposed site — avoiding an a priori, XYZ functional understanding of space and place that could further augment the autocratic nature of Pretoria's constituents.

Succinctly, the proposed programme integrates itself into the urban voids created within and around the built fabric of Pretoria's judicial centre. Oscillating between an inherent love for technology and a love affair for context, and through insertion and functional re-adaption; the programme, in favour of a new hybrid architectural form, challenges conventional construction methodologies and governing political systems.





"The spaces of the old city were shaped to sponsor coventionality. In their damaged state, they offer an entirely new possibility for understanding of both space and habitation. The architect leads the way by codifying this understanding only in terms of space, without fixed reference to habitation."

> Lebbeus Woods, Radical Reconstruction [Woods, 2011]

RECALIBRATED NARRATIVE

WOUND

conflict between old and new

BODY

urban context/ host structure/ urban void as recipient

NEW TISSUE

occupant/ urban vanguard as healing agent

SCAB hybrid plinth/ prototypical architecture as physical manifestation

SCAR

visual reminder of urban advancement

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ABSTRACT

The urban fabric of contemporary cities is changing at a fast pace. In order to meet the needs of modern society, a new vision of how urban design and architecture are perceived is needed. *Urban Voids, Plinths, Urban Vanguards, Experiential Urbanism* and Smart Urbansim all are vital components in the context of the built environment. With enormous potentials, they have the capacity of becoming the corner stone of the city of tomorrow.

The Masters Dissertation project aims to create a concept of how culture-led urban development based on principles of-shared and knowledge based economy, and the importance of cultural clusters housed within these *Urban Voids* can be used as catalysts for the development of their environment. It takes advantage of already existing built fabric, to give a sustainable solution for urban growth.

Mixing practicality, economic feasibility and creativity the main research questions are guided by; the application of tools designed for shared and knowledge based economy in an urban setting and how those relate to the trend of temporary uses in culture led-urban development; the most favourable conditions for permanent cultural cluster development to occur; and ways to adapt those international strategies to a South African setting.

Fig. d (opposite)

Abstract: A series of recalibrated urban voids and their impact on the urban climate.

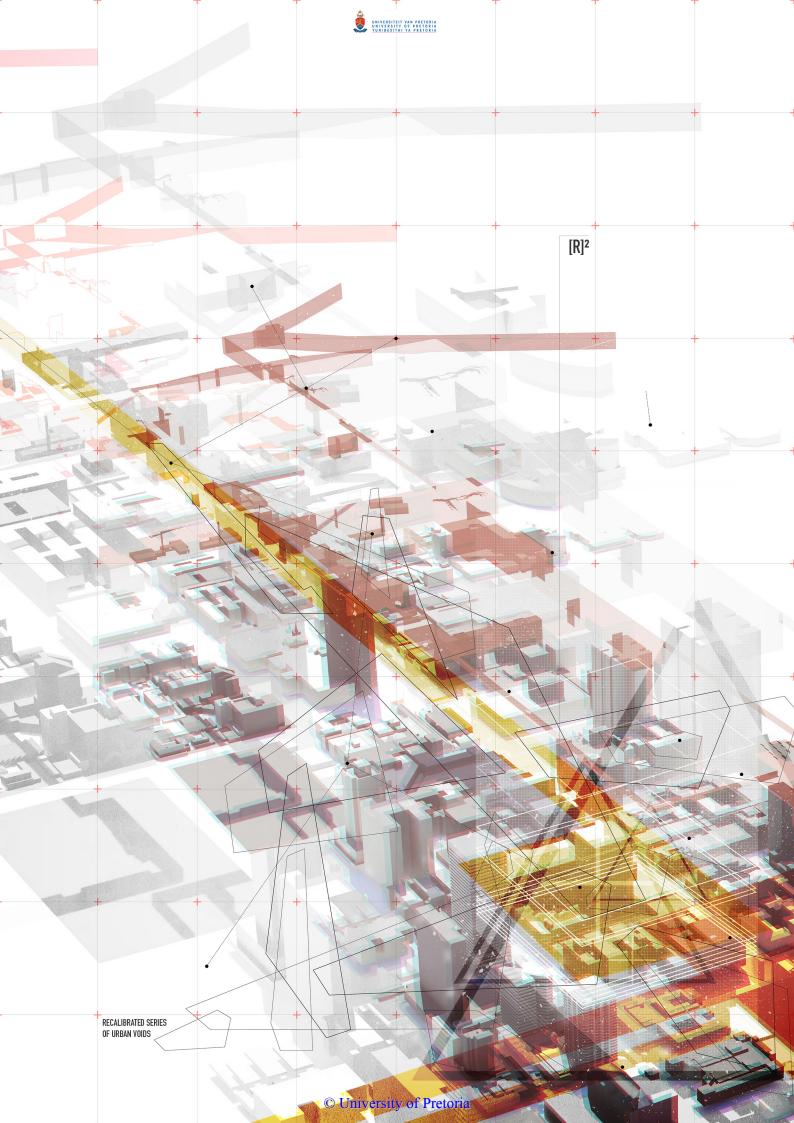




FIGURE REFERENCES

Fig. a Digital Render Pretoria (Author, 2015)

Fig. b Ian MacClements | Architect | Grandfather (Author, 2015)

Fig. c Original Image: Reconstruction by Lebbeus Woods, 1964. Computer rendering by Carlos Fueyo, 2006. (https://mcrassus.files.wordpress.com/2015/01/meaning-emerging-from-destruction1.pdf, 2015)

Edited Image: Woods's War and Architecture reconceptualised and interpreted as urban narrative relative to exploration and manipulation of urban void. (Author, 2015)

Fig. d Abstract: A series of recalibrated urban voids and their impact on the urban climate. (Author, 2015).





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NORMATIVE STANCE

"Because, really, all I'm interested in, always, as an architect, is the way things are produced because that's what I do. Right? And it's not based on an a priori notion. I have no interest at all in conceiving something in my brain and saying, "This is what it looks like.... Architecture is the be ginning of something, because it's - if you're not involved in the first principles, if you're not involved in the absolute, the beginning of that generative process - it's cake decoration."

- Thom Mayne [How Architecture Can Connect Us, 2010]

Through the acceptance of imperfection and chance, architecture may empathise with the human condition. Underpinning the quest for a synthesis of art and life, imagination and reality is ultimately important to do so. Thus, the pursuit of a succinct systematic architectural approach that embraces both the imagination and senses through participation and active engagement with a site is imperative during all investigations. Ultimately, a long (pre)occupation with an appreciation of technological beauty that encourages a work flow embracing the spirit of techne is evident.

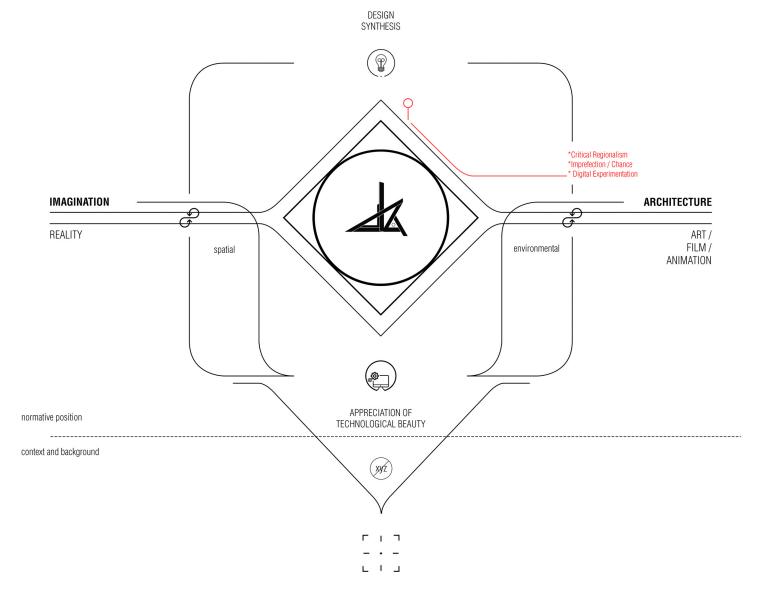
Of importanace:

- I Architecture as a communication device
- I Imperfection/Chance
- I Critical regionalism



Graphic interpretation of normative stance. Christopher Ian MacClements abbreviated as C.[i].M





PROCESS OF ENQUIRY

-

"Because, really, all I'm interested in, always, as an architect, is the way things are produced because that's what I do. Right? And it's not based on an a priori notion. I have no interest at all in conceiving something in my brain and saying, "This is what it looks like.... Architecture is the beginning of something, because it's - if you're not involved in the first principles, if you're not involved in the absolute, the beginning of that generative process - it's cake decoration.""

- Thom Mayne, TED, 2005 -





INTRODUCTION

"One of the interesting things about architecture and urbanism is that, as architects we are not really the creators of the city. We are rather like the midwives. Essentially we assist the city in giving birth to itself."

- Bjarke Ingels [Cities for Tomorrow 2015].

Keller Easterling classifies urban space as a mobile, monetised technology within which some of the most radical changes are being transcribed in the spatial spheres of infrastructure, architecture and urbanism; and not in the language of law and diplomacy [Keller Easterling: Extrastatecraft, 2014]. Tacitly, the logic behind Lefebvre's and the Situationist's polemic has intensified and provides us with an adequate conceptual framework for understanding the city - a framework geared towards contemporary urban environments that are concerned with the experiential and qualitative expectations of its users where "urban citizens are not simply passive consumers, but are constantly engaged with the city, appropriating and re-appropriating the sites and systems for their own ends" [Lefebvre 1991:17]. Thus, a change towards a true civic and urban activity and understanding of the urban fabric as an incubator for revolutionary change is encouraged.

The riposte of these revolutionary ideas and modes of thinking to Pretoria's contemporary urban setting must be a revolutionary type of action. Manfredo Tafuri, in his book Architecture and Utopia: Design and Capitalist Development, expressed that, "... architecture now undertook the task of rendering its work 'political'. As a political agent the architect has to assume the task of continual invention of advanced solutions, at the most generally applicable level. In the acceptance of this, the architect's role as idealist became prominent" [Tafuri, 1976:12]. The architect, and other related professions, must seek to address the Right to the City from a revolutionary as opposed to reformist perspective [Harvey, 2013:3]. Thus, adequate analytical frameworks for coping with the complex problems at the interface between social and spatial analysis are needed. We must therefore devise provisional frameworks with which to construct a theory of the city.

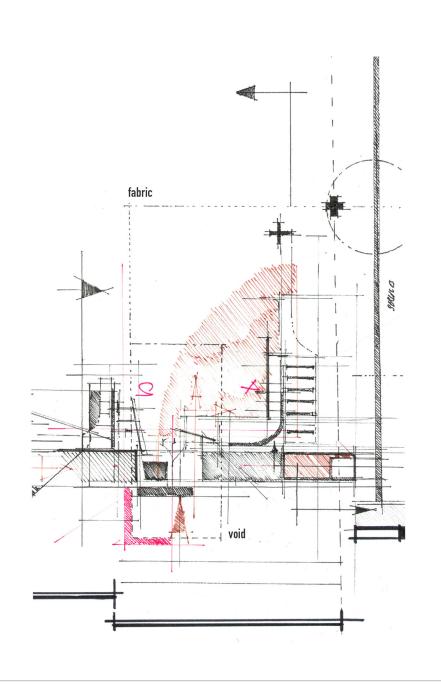
Effectively, the dissertation chronicles the recalibration of a specific network of urban voids as byproducts of Pretoria's bygone autocratic and urban devices which, stemming from urbanist Jan Gehl's description, quantify the "invaded city" [Gehl, 2003:14] — a mono-functional city where traffic has taken precedent and led to diminished public space. This resultant public space encourages necessary activity only, where people walk between spaces "because they have to, not because they want to" [Gehl, 2003:14]. Thus, the investigation challenges the conventional typology of public space, investigating the potential of providing a network of interstitial public space within the city as re-imagined public squares and streetscapes.

Furthermore, the dissertation explores how it is possible to bring everyday social processes and spatial forms together analytically, and as a guide to action, where a framework of culture-led urban development would provide a basis for a deeper understanding of Pretoria's urban voids. The influence that the urban vanguard has on the social identity of the city and the integration of autonomous city property into the urban environment for the creation of an open and shared system of public/private space that encourages creativity, innovation and collaboration is also paramount.

Fig. 1.2 (opposite)

Conceptual sketch exploring the the possibility of using urban fabric and voids in the creation of a prototypical urban landscape.





URBAN FABRIC AND VOID

WOLTEMADE AND VWL BUILDING



URBAN VOIDS

void noun

8. an empty space; emptiness:

[dictionary.reference.com, 2015]

The dissertation deals with the neglected or either forgotten spaces of contemporary cities. Aptly titled urban voids, these spaces, seen as disruptors of the urban tissue, belong neither to a public nor private realm. They are seen as out of context and incoherent with their surroundings. They are ill-defined, without measurable boundaries and fail to connect elements in a coherent way.

"The usual process of urban development treats buildings as isolated objects and sites in the landscape, not as part of the larger fabric of streets, squares and viable open spaces. Decisions about growth patterns are made from two-dimensional land-use plans, without considering the three-dimensional relationship between buildings and spaces and without a real understanding of human behaviour." [Trancik, 1986:1]

Leading on from this quote taken from Roger Trancik's book, Finding Lost Space: Theories of Urban Design, we can understand why people do not perceive such spaces. Designed on a simple two-dimensional plan, staged out from below, these spaces have no consideration for the quality of public life and have been exclusively programmed without consideration for the users of the urban fabric. Furthermore, Alvar Aalto often described the problem of spatial design as, "on of connecting the form of the building to the structure of the site, or of twisting and turning the building's facades to create positive exterior space." [Trancik, 1986:100]

Trancik describes five typologies of urban voids. Each void bears its own individual identity and wields the potential to redefine itself in the envisioned design and proposed cultural precinct. These five types of urban voids (with different degrees of openness and enclosures) play a part in the exterior city. [Trancik, 1943:103-106]

- A. "The first is the entry foyer space that establishes the important transition, or passage, from per sonal domain to common territory. Security is a significant design and social consideration."
- B. "The second type is the inner block void the enclosed "hole in a doughnut" a semiprivate residential space for leisure or utility or a midblock shopping oasis for circulation or oasis."
- C. "A third type of void is the primary network of streets and squares, a category that corresponds to the predominant field of blocks and that contains the active public life of the city [...] Streets and squares were places to be to spend time in- as well as corridors through which to move."
- D. "Public parks and gardens are the fourth type of larger voids that contrast with architectural urban forms. Acting as nodes for the preservation of nature in the city, they are incorporated into the urban grid [...] to provide relief from the hard urban environment"
- E. "The final type of urban void is the linear open space system, commonly related to major water features such as rivers, waterfronts, and wetland zones."

Fig. 1.3 (opposite)

The five known void typologies according to Trancik.



A B C D E



Due to the inherent nature of these five typologies; urban voids provide the right tools for the development of new urban landscapes which provide functional and visual continuities, thereby creating an integrated, humane city in which architecture and the exterior space are inextricably fused. As Susana Torre describes them; "urban voids are at once the vessel and symbol of human gathering, and represent the tension between the individual and collective". According to Transik, "space is the medium of the urban experience, providing the sequence between public, semipublic and private" [Trancik, 1986:100].

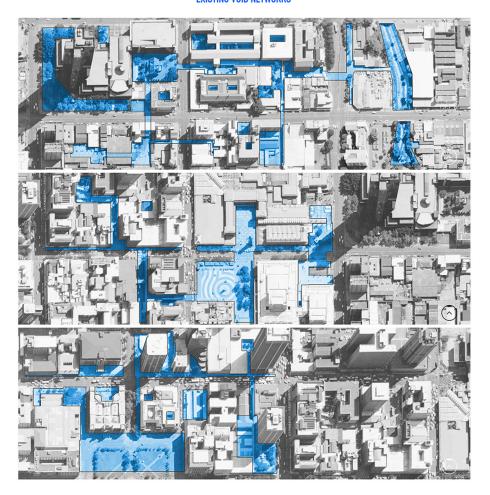
This transitional route between public and private space, of cultural and commercial zones, overturns the bygone modern urban movement, with its desire to create distant mono-functional territories, but to no great purpose — in essence a blurring of boundaries between public and private realms. It is necessary to therefore redefine how a city might be made so its citizens are able to comprehend and be accommodated by the environment in which they are expected to live.

Thus, the dissertation aims to make visible these urban divisions by investigating the activities of daily life. Therefore, the main focus is to locate, document, hypothesise and recalibrate these void spaces which the dissertation has defined as inaccessible and/or invisible to the public, answering one of the main research questions of the dissertation;

How can design harness the catalysing potential of urban voids in the recalibration of public space in contemporary cities?



EXISTING VOID NETWORKS



UNPAKCING VOIDS

A SERIES OF INTERCONNECTED URBAN VOIDS

Fig. 1.4 Pretoria's void networks



URBAN VANGUARDS

vanguard

noun

2.the forefront in any movement, field, activity, or the like.

3.the leaders of any intellectual or political movement.

[dictionary.reference.com, 2015]

Urban Pioneering movements (as seen on a global scale) are highly complex, open, adaptive and self-organising systems where the shared but tangible vision of each project keeps the relationship between each participant active. The urban pioneering movement as a participant in systemic change and emergence of a new city culture forms part of a study contributing to the understanding of future learning environments. This study conducted at Aalto University, Finland, illustrates that these movements, led by these rightly titled pioneers/vanguards, hold the capacity of creating original local culture that increases the strength of area identity that local people perceive [Pulkkinen, 2015]. Working against the controlled and regulated urban experience, the movement aims at shifting the perception of how cities can be utilized and experienced. Furthermore, the movement, rightly viewed as *urban activism*, deals with actively engaging citizens with urban space on a more frequent and personal basis.

Understood as a grassroots movement, urban activism - led by urban pioneers/vanguards - focuses on creating change from the bottom up. Supporting this notion of a bottom-up approach is the work of leading Urbanist and founder of Urban Initiatives [London], Kelvin Campbell. In a recent publication *Massive Small: Smart Urbanism in an Upside Down* World, Campbell attempts to the shift current paradigm of contemporary urban design and planning movements which he believes has become technocratic exercise where the urbanism and architecture fall back on, "... dumbed-down solutions to deal with complex issues" [The Smart Urbanist, 2015]. Therefore Massive Small and the urban pioneering movements look to reconcile the conflicts and potentials between top down and bottom up processes in urban planning in order to create the conditions for a viable human habitat.

Pre-occupied with culture led urban regeneration and the effect it has on strengthening the relationship between urban resilience, social innovation and civil society, this dissertation harnesses the potential that emerging urban movements have on enforces a new social contract between government and community.

Thus, the dissertation unveils contemporary urban pioneering movements and emerging urban landscapes present in South African cities. Whilst emphasising the importance that such movements have on the progressive evolution of urbanism of South African cities, the investigation will answer one of the main questions of the dissertation;

How can urban pioneering movements harness the collective power of creative individuals in reconciling top-down and bottom-up processes in urban planning to create a platform for shared economy?









THE URBAN VANGUARD

PROFILE: STUDENT / PHOTOGRAPHER / INSTAGRAMER

Fig. 1.5 The Urban Vanguard





THE URBAN VANGUARD

PROFILE : STUDENT / BLOGGER / PHOTOGRAPHER

Fig. 1.6 The Urban Vanguard





THE URBAN VANGUARD

PROFILE : STUDENT / MARKET ORGANISER

Fig. 1.7 The Urban Vanguard



RESEARCH DESIGN

The main goal of the research field would be to identify the necessary spatial climate for harnessing the catalysing potential of urban voids by utilising autonomously owned property and city-owned infrastructure. Furthermore, the design methods, architectural intentions and deliminations will encourage successful spatial strategies for the development of a network of cultural clusters occupying a series urban voids through adaption of necessary urban principles.



RESEARCH FIELD: the research field stemming from the theoretical foundations of urban design theories concerning the quality of public spaces and their usage extends from; a practical precedents study that is in keeping with the intentions of the dissertation, to an understanding of policies suggested by sharing economy on a global scale and the effects thereof on culture-led urban regeneration.

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DESIGN METHODS: the dissertation is divided in three parts; a theoretical foundation and precedents study; a critical analysis of the contemporary nature of Pretoria's urban setting and the potential for the development of creative clusters as an urban regeneration strategy against the backdrop of the City of Tshwane's 2055 Vision; and, an architectural project illustrating the adaption and re-use of urban voids in the creation of prototypical cultural precincts.

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DESIGN DEVELOPMENT: the development of a conceptual strategy for cultural cluster formation within Pretoria's urban voids is based on thorough urban investigations and critique of Tshwane's 2055 Spatial Development Framework (SDF) and urban vision.

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ARCHITECTURAL INTENT: the design must propose a prototypical architecture that is both practical and feasible within a micro-urban climate. The design must be versatile enough to adapt itself to a site similar in setting and resilient enough to serve the specific characteristics inherent of each new site. It should act as an 'urban device' that intends to blur the boundry between public and private whilst fostering public points of entrance onto pilnths and into a specific series urban voids. The design encourages the creation of social spaces through the use of basic design principles of movement and threshold conditions. [Hertzberger, 2002:38].

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DELIMINATIONS: the dissertation will focus on a specific urban void which is *smaller in scale* and positioned in direct contact with a host structure and/or plinth. At a reduced scale the design has the potential to fully harness the theoretical framework. Supplementing the urban vision, the next step in developing the project would be the realisation of the design permeated throughout a series of urban voids — with the intention rescripting Pretoria's urban morphologies. As such, the dissertation should be viewed as a speculative investigation.

No heritage impact assessment has been conducted with regard to the dissertaion. As intended the design is in response to a future postulated condition. Thus, despite heritage considerations, the design scheme's primary focus is not the contestation of HIA methods and protocol.



RESEARCH QUESTIONS

- 1.) How can design harness the catalysing potential of urban voids in the recalibration of public space in contemporary cities?
- 2.) How can urban pioneering movements harness the collective power of creative individuals in reconciling top-down (autocratic) and bottom-up (collective) processes in urban planning to create a platform for shared economy?

SUB RESEARCH QUESTIONS

- A.) What is Pretoria's emergent vernacular?
- B.) To what extent can cultural clusters develop in a South African context?
- C.) How can the temporary nature of said interventions be implemented at a more permanent level?
- D.) What is the link between the urban vanguard and void in urban recalibration?
- E.) What role do plinths have to reclaiming and achieving a future civic space and place in South Africa?

DIALOGUE: URBAN VANGUARD / VOID

Two voices lead the conversation reflecting the status of the city - void and vanguard. The dissertation further attempts to unveil the inherent similarities between vanguard and void in cultural and urban recalibration in a effort to generate an urban symbiosis between the two.

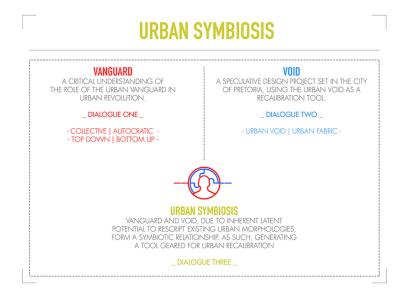


Fig. 1.8
Urban Symbiosis as a result of conversation between Vanguard and Void



FIGURE REFERENCES

- Fig. 1.1 Graphic interpretation of normative stance. Christopher Ian MacClements abbreviated as C.[i].M (Author, 2015)
- Fig. 1.2 Conceptual sketch exploring the the possibility of using urban fabric and voids in the creation of a prototypical urban landscape (Author, 2015)
- Fig. 1.3 The five known void typologies according to Trancik (Author, 2015)
- Fig. 1.4 Pretoria's void networks (Author, 2015)
- Fig. 1.5 The Urban Vanguard (Author, 2015)
- Fig. 1.6 The Urban Vanguard (http://drop-your-drink.com/)
- Fig. 1.7 The Urban Vanguard (http://drop-your-drink.com/)
- Fig. 1.8 Urban Symbiosis as a result of conversation between Vanguard and Void (Author, 2015)