

Social Justice in Architecture: Building of A New Research Model

Ryan Odanaka
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School of Architecture
University of Hawai'i

Doctorate Project Committee

Lance Walters, Chairperson
Kevin Miyamura
Priyan Das


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We certify that we have read this Doctorate Project and that, in our opinion, it is satisfactory in scope and quality in fulfillment as a Doctorate Project for the degree of Doctor of Architecture in the School of Architecture, University of Hawai'i at Mānoa.

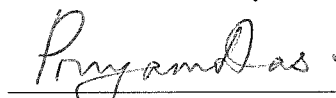
Doctorate Project Committee



Lance Waters, Chairperson



Kevin Miyamura



Priyam Das

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Abstract

Architecture's historic search to create social justice is a source of much contention. The inherent broadness in the definition of social justice and the diverse architecture methods to create it lead to the notion that a research framework to properly address social justice in architecture does not exist. Although an architect's ability to act within professional practice is based on knowledge of a repertoire of cases - a Case Study Model - this generalized contemporary research model does not provide a specific framework for investigators to properly understand and analyze social justice in architecture. Thus, in order to create a new research model with specificity to social justice in architecture, a critical analysis of existing knowledge on social justice and its link to the architecture profession is necessary. A critique of diverse methods stemming from the design or planning of architecture, as well as an analysis of the Case Study Model and its application to four case studies, are conducted in this dissertation. The consequent observations that result from research directly inform a new research framework, the Social Justice in Architecture Model. The architectural implications of this new framework compose a cohesive research model to understand and analyze social justice in architecture.

Introduction

The thesis's position and goal have evolved through Doctorate I, Practicum, and Doctorate II courses at the University of Hawaii at Manoa School of Architecture. Originally, the goal was to study social justice in architecture and develop a method to make projects just. Formulation of this method was expected to be generated through case studies on architecture projects of social justice. However, research on existing knowledge of social justice in architecture and four case studies have yielded an uncertainty in this approach. Such is exhibited in the recognition that the term social justice is subject to personal interpretation and that the architect's methods of creating social justice are greatly diverse. Method typologies, stemming from architectural design or planning, vary according to personal theory, the historic evolution of architectural understanding and notions of social justice, and specificities of contextual circumstances. In addition, the historic creation of diverse methods due to the subjectivity of social justice reflects the lack of a proper research model for investigators to specifically understand and analyze social justice in architecture.

How is social justice analyzed in the architecture profession? The ability to act within professional practice is based on knowledge of a repertoire of cases. Thus, methods to create social justice in architecture are shaped by a Case Study Model. It is this generalized contemporary research model that does not provide a specific framework for investigators to properly understand and analyze social justice in architecture. The dissertation's goal has evolved to the

formulation of a new research model in Doctorate II. This model is a systematic framework that helps investigators analyze and understand all architecture methods to create social justice.

A new research model is generated through analysis and observations of existing bodies of knowledge of social justice in architecture, the generalized contemporary Case Study Model, and four case studies. Chapter 1 analyzes the subjectivity of social justice, its application to architecture, and the diversity of methods to create it. Chapter 2 analyzes case study frameworks of various credible sources to generate this dissertation's interpretation of a generalized contemporary case study model, known as the Case Study Model. This model is then applied to four case studies, including the Bayview Hunters Point redevelopment, Ke Aka Ho'ona self-help housing, Museum of Struggle and Cultural Precinct, and the Georges Pompidou Centre.

Subsequent to the research on the existing bodies of knowledge is the formulation of a new research model that is specific to social justice in architecture. This is the Social Justice in Architecture Model. It provides a specific framework for investigators to understand and analyze social justice projects and methods in architecture. The validity of the new model is tested in Chapter 4 with its application to the Museum of Struggle and Cultural Precinct case study.

CHAPTER 1

SOCIAL JUSTICE IN ARCHITECTURE

Throughout history, architects have searched for methods that shape how architecture can be designed to mold social processes. Their search recognizes that architecture could ultimately provide a framework for society's physical, social, psychological, political, economic, and even cultural structures. In part, the failure of architecture to affect social processes leads to the degradation of communities and social processes. The notion of social justice is then theorized by architects to recover a sense of loss in the social conscience of architecture and to instill a sense of responsibility for consequences of inadequate design.

What is social justice? According to David Harvey, author of *Social Justice and the City*, it distinguishes between fact and value, a dualism that philosophers historically struggled to define.¹ "These dualisms can either be accepted as a fact of life or they can be reconciled in some fashion,"² states Harvey. The German philosopher Immanuel Kant, who believed that actions are morally right if they are motivated by duty without regard to any personal goal, desire, motive, or self-interest",³ continued to theorize the definition of social justice.⁴ However, all dualities, in philosophy include liberalism and socialist views, are torn down with the revolutionary socialist Karl Marx's social approach and technique of analysis.⁵ Marx rejected philosophy in favor of the process of observation and evaluation. The inclusion of the word "social" incorporates a

¹ Harvey, David. 2009.

² Harvey, David. 2009.

³ Sociology Guide – A Students Guide to Sociology.

⁴ Loberfeld, Barry. 2004.

⁵ Loberfeld, Barry. 2004.

code of morality that relates to and stems from human practice.⁶ Justice alone is a political and legal term that begins when limitations are placed upon the sovereign.⁷ Harvey offers an explanation:

“I move from a predisposition to regard social justice as a matter of eternal justice and morality to regard it as something contingent upon the social process operating in society as a whole...The sense of justice is a deeply held belief in the minds of many. But Marx posed the question, “why these beliefs?”...The answer to it cannot be fashioned out of abstractions. As with the question of space, there can be no philosophical answer to a philosophical question, only an answer fashioned out of the study of human practice.”⁸

Jost and Kay elaborates by stating that social justice is based on the principles of equality and solidarity, understanding and value of human rights, and recognizing the dignity of every human being.⁹ Therefore, the definition of social justice and its interpretation is a matter left to personal subjectivities.

How are the ideals of social justice integrated in the design of architecture? The term social justice, as mentioned earlier, is characterized by a historic search for its definition. This is also the case with architecture's search for a method to create it. In conjunction with Marx's notion of observation or

⁶ Harvey, David. 2009.

⁷ Loberfeld, Barry. 2004.

⁸ Harvey, David. 2009.

⁹ Jost and Kay.

evaluation,¹⁰ the architect becomes the observer of facts in the context of injustice and inequality. However, the architect also becomes a philosopher when creating a method for social justice because there is no definite method to address injustice or inequality.

Necessary for understanding social justice is the relevance of recognizing what is being addressed. “Injustices” refers to the disposition of imposed values on a context with awareness. Such dispositions include the imposition of social, political, economic, and cultural discrimination.¹¹ Susan Fainstein, in *The Just City*, characterizes injustice as “...injustice is virtually instinctive, it consists of actions that disadvantage those who already have less or who are excluded from entitlements enjoyed by others who are no more deserving.”¹² In the project of the Museum of Struggle and Cultural Precinct, Red Location Precinct South Africa, Noero Wolff Architects identified the injustice as racial discrimination on black communities. Moreover, the term “inequality” is a product of uncontrolled circumstances such as natural disasters or failed methods of empowerment.¹³ For example, isolation due to physical barriers in Wai‘anae, Hawai‘i, is an inequality in the Ke Aka Ho‘ona self-help housing case (the Wai‘anae mountain range physically separates the community from the main economic hub, the city of Honolulu). In response, architects as revolutionary thinkers have created, refuted, and reformulated methods for addressing these and other barriers. Yet,

¹⁰ Harvey, David. 2009.

¹¹ Fainstein, Susan S. 2010.

¹² Fainstein, Susan S. 2010.

¹³ Fainstein, Susan S. 2010.

this search for a process is impacted by the historical evolution of architectural, social, and cultural values and findings.

Critical to the search for the creation of social justice is recognizing why architects persist. Karl Marx described in his *Communist Manifesto* that creating social justice is not the act of interpreting the world, but it is a way to change it.¹⁴ As cities and communities become increasingly dense, and the demand to maintain and advance modern social, economic, urban, and architectural trends and values intensifies, architects as revolutionary thinkers are more so required to reinvent methods to create social justice. The term social justice is highlighted by the historic search and creation of methods for achieving a common ground. Due to the subjective nature of architectural understanding, total consensus of such methods may not be achieved amongst architects. However, this thesis works to acknowledge the search and creation of diverse methods as the seeds for reform and social justice. These are attempts to spark change to the urban and social context and increase ways in which architects approach the issue of social justice. Thus, rather than refute or assign hierarchy, it is important for architects to embrace all informed methods as contributing factors to creating a broad vision of creating social justice in troubled communities.

Architecture was historically focused on the city as a built environment.¹⁵ Plans for Frank Lloyd Wright's Broadacre City, Ebenezer Howard's Garden City,

¹⁴ Jencks, Charles and Karl Kropf. 2006.

¹⁵ Erickson, Amanda. 2012.

and Le Corbusier's Voisin plan,¹⁶ for example, were designed as utopian methods for urban change. Such visions were formulated as reactions to their awareness of existing environments, and thus redefined how architecture and urban planning shapes society. It also implied a new social structure. Andres Lepik, for instance "...imagined a role for the architect as free agent rather than servant of the state, and whose designs were "metaphors from a series of creation myths as well as from the image of the divine structuring of the universe, a complete and perfect system."¹⁷ However, other revolutionary thinkers like Jane Jacobs, author of *The Death and Life of Great American Cities*,¹⁸ criticized existing urban environments and utopian methods like the Voisin plan. Lepik points out that these varieties of methods contrasted diverse zoning and separation of uses with the integration of mixed-uses in communities.¹⁹ The common thread that binds contrasting views reflects an all-encompassing search for contextual change and social justice.

Diversity of methods at addressing social justice often follows the historic evolution of urban and technological growth, theory, and understanding. A case example is the methods used to address public health in the planning and urban design professions. Methods advocating sprawl or the separation of population from city centers as healthy are now discredited. Frank Lloyd Wright's Broadacre City in 1932 was a decentralized vision of a sprawling suburbanized city

¹⁶ Jencks, Charles and Karl Kropf. 2006.

¹⁷ Lepik, Andres. 2010.

¹⁸ Jacobs, Jane. 1961.

¹⁹ Jencks, Charles and Karl Kropf. 2006.

dependent on the automobile. His vision was a call for “remodeling both American-built form and society at large in response to Roosevelt’s New Deal.”²⁰ In opposition to this vision is the notion of transit oriented developments found in cities like Toronto, Vienna, New York, and Copenhagen.²¹ The developments reflect modern methods for promoting human and environmental health through dense and mixed-use living and public transportation alternatives. These features were incorporated as part of the evolution of environmental awareness through technological ingenuity. However, what is the architect’s role in creating methods for social justice? Are architects relegated to the duties of designing buildings, or are there opportunities to be more proactive in the planning and urban design processes?

Amanda Erickson proposes a response in her article A Brief History of the Birth of Urban Planning that “At America’s first urban conference, held in New York in 1898, a British planner asked whether he and his colleagues were striving for beautiful people or beautiful cities. Is urban planning about physical design, he wondered, or about making things easier for the people who live in our urban spaces?”²² The conference attendees addressing this question were separated into three disciplines: the architects, public health officials, and social workers.²³ Architects, focused on the city as a built environment with city grids, spatial composition, etc. Public health professionals focused on infrastructure,

²⁰ Lepik, Andres. 2010.

²¹ Cohen, Boyd.

²² Erickson, Amanda. 2012.

²³ Erickson, Amanda. 2012.

such as sanitation systems to stop diseases from spreading. Social workers focused on how to use the city to improve the lives of the people living there (i.e., cleaner tenements, more light, and fresh air for residents).²⁴ The Industrial Revolution²⁵ brought together these professions of the early 20th century into an integrated and comprehensive planning process. “Though the social workers and the public health officials continued to play a role, urban planning’s intellectual history ended up grounded in architecture.”²⁶ Anthony Alofsin, author of *The Struggle for Modernism*, mentions that the first city planners were influenced by the focus on the design of physical space. But when they were hired by specific cities to create plans and enact policies, they ended up inadvertently designing master plans for many communities.²⁷ This was heralded as the advent of urban-conscious planners.

Stuart Meck, an urban planning professor at Rutgers, explains that cities used urban planning not to build better, or cleaner, or morally uplifting cities. They used planners to divide the city, creating beautiful spaces at the expense of the poor.²⁸ In the 1960s, scholars of urban politics criticized urban decision makers and planners for imposing policies that exacerbated the disadvantages suffered by low-income, female, gay, and minority residents.²⁹ These policies, which perpetrated injustices, ignored neighborhood needs while giving priority to

²⁴ Erickson, Amanda. 2012.

²⁵ Erickson, Amanda. 2012.

²⁶ Ericson, Amanda.

²⁷ Alofsin, Anthony. 2012

²⁸ Ericson, Amanda.

²⁹ Fainstein, Susan S. 2010.

tourist facilities over schools and labor-intensive industries. Such injustices are viewed by decision makers as a long-term interest of the majority or deemed unhelpful to the poor.³⁰ What is a socially just way to address such injustices? Is it through community empowerment, provision of physical socioeconomic structures, or through the implementation of policy? Susan Fainstein describes, “Although there is a rich literature in planning and public policy prescribing appropriate decision-making processes, these process-oriented discussions rarely make explicit what policies would produce greater justice within the urban context. At the same time most policy analysis concerns itself with best practices or what ‘works’ in relation to specific goals such as producing more housing or jobs without interrogating the broader objectives of these policies.”

Susan Fainstein further questions the application of social justice to the urban context.

“What are the qualities comprising a just city within the wealthy Western world? If the content of justice is defined by a community, and the city is made up of diverse communities, whose definition should prevail, particularly if diversity, democracy, and sustainability, not just equitable material distribution, are constitutive of justice? To what extent have the qualities of a just city been realized in recent history of Western cities, as represented by New York, London, and Amsterdam?...What are the economic and social forces, politics, planning, and policies that have shaped this history?...How constrained is the city by its national context

³⁰ Fainstein, Susan S. 2010.

and by the forces of global competition? What strategies can be followed at the subnational level to improve social justice and what are the institutions and social movements that might bring them about?...Do social movements carry with them the hope of transformation toward a more just society?"³¹

Addressing social justice from a planning perspective is a highly complex and subjective process that yields diverse methods. However, can architects be more proactive in the overall search to create social justice?

"A precondition for starting a significant architectural intervention is to define a project in consultation with those parties involved in its implementation (the government, the local municipality, private investors, developers, construction companies, planners, designers, and architects). This preamble to a recent international conference on 'architectural interventions and transformations' is typical for an 'all-inclusive' way of thinking about processes these days. Plans and policies are no longer defined and implemented by a few specialists; they are developed with all stakeholders (another popular contemporary notion). All parties? The user, consumer, and resident, usually the subject and victim of intervention, is conspicuously missing from this description."³²

³¹ Fainstein, Susan S. 2010.

³² Oosterman, Arjen. 2010.

Following the idea that the architect is the designer of individual structures and the “whole framework of life”,³³ architects formulate utopian urban plans for the built environment and theorize methods to create social justice through written manifestos and urban critiques. Methods range from the scale of urban plans to the design of individual buildings. In the cases of Ke Aka Ho’ona self-help housing and the Museum of Struggle and Cultural Precinct, the architects formulated methods based on personal interpretations of social justice. Their methods involved a more proactive approach in the earlier stages of the project’s development. They formulated what physical socioeconomic structure was necessary to influence community reform (i.e., affordable housing, community centers, schools, etc.). They also theorized a more integrated position in the planning and implementation processes, such as community coordination (refer to Chapter 2 case study). “Architecture design in itself won’t make everything wonderful...integrating architecture with mobility while creating a humane environment is key.”³⁴ This approach reflects a social architecture that incorporates a code of morality that relates to and stems from human practice and analysis.³⁵ In addition, it resists the notion that the architect’s role is to be relegated only to give form to the landscapes and cityscapes shaped by larger forces, such as in the ebbs and flows of a globalized economy.³⁶

³³ Lepik, Andres. 2010.

³⁴ Hustwit, Gary. 2011.

³⁵ Harvey, David. 2009.

³⁶ Lepik, Andres. 2010.

In recent history, architects have more notably turned away from only designing flashy iconic architectures and have moved toward a “humanitarian design,” which is classified by anti-poverty projects, disaster relief and other kinds of community minded work.³⁷ Humanitarian design is defined by professional values of a more collaborative design process among architects and across disciplines; a global awareness and social consciousness; and a concern with local conditions as part of a more holistic approach to sustainability.³⁸ “Humanitarianism has always bubbled under the surface of the profession (architecture),” states Cameron Sinclair, an architect and founder of Architecture for Humanity (AFH).³⁹ Case examples that exemplify socially integrated methods include the Museum of Struggle and Cultural Precinct by Noero Wolff Architects, Meti-Handmade School by Anna Heringer (Rudrapur, Bangladesh),⁴⁰ Inner-City Arts by Michael Maltzan Architecture (Los Angeles, California),⁴¹ and Quinta Monroy Housing by Elemental (Iquique, Chile).⁴² Though not new, humanitarian design is a rising movement that lacks coherency, as reflected in a multitude of diverse methods used. “Some architects doing this kind of work don’t think themselves as belonging to any larger school of thought. Others find, once they get out into the field that they have more in common with aid workers than other architects, or worry that a string of museum shows on their work will begin to

³⁷ Hawthorne, Christopher. 2010.

³⁸ McGuigan, Cathleen. 2012.

³⁹ McKnight, Jenna M. 2012.

⁴⁰ Lepik, Andres. 2010.

⁴¹ Lepik, Andres. 2010.

⁴² Saieh, Nico. 2008.

sharpen the focus on the aesthetics of humanitarian design at the expense of its social mission.”⁴³ Within this past decade, a trend of humanitarian organizations has emerged, which includes Emergency Architects Foundation, Public Architecture, and Article 25, among others.⁴⁴

A contrasting method that architects utilize in search of social justice is focused on architectural design, as Renzo Piano’s and Richard Roger’s theories for the design of the Georges Pompidou Centre. Design of space with the focus on function according to social need is present in such methods.

“If we regard space as absolute it becomes a thing in itself with an existence independent of matter...The view of relative space proposes that it be understood as a relationship between objects which exists only because objects exist and relate to each other...once we have discovered what space is and have discovered ways of representing it, then we can proceed with our analysis of urban phenomena by fitting our understanding of human behavior into some general conception of space.”⁴⁵

As described earlier, social justice relates to human practice. Similarly, architectural design can only create social justice if it address society’s needs. David Harvey further describes that there are no absolute answers to the nature of space because it is a philosophical question.⁴⁶ Thus, methods of architectural

⁴³ Hawthorne, Christopher. 2010.

⁴⁴ McKnight, Jenna M. 2012.

⁴⁵ Harvey, David. 2009.

⁴⁶ Harvey, David. 2009.

design of space are diverse, with no defined tool to assign hierarchy or measure effectiveness.

The notion that social justice in architecture is generated from observation or analysis of factual⁴⁷ human practice⁴⁸ suggests that philosophy and utopian design and theory should be avoided. “The utopian plans have in some cases only physically been realized. But never as the architects imagined them in their totality, because the necessary set of changes was too complex.”⁴⁹ Utopian cities like Frank Lloyd Wright’s Broadacre City and Le Corbusier’s Voisin were far removed from the existent social and political situations of the time.⁵⁰ The utopianists saw themselves foremost as artists who received “a special social function to perform.”⁵¹ Their plans entailed more than the reconstruction of space; it implied a new social structure.⁵² Henri Lefebvre describes that such utopian plans are a product of scientific reduction applied to social space, and in the process, becomes ideological and purely theoretical.⁵³ This is also the case with an architect’s written manifestos consisting of theories and ideals that attempt to persuade actions and methods in response to observation and analysis of contextual situations.⁵⁴ This raises the question, of whether or not Richard Rogers and Renzo Piano create social justice through their design and theory of the Georges Pompidou Centre. Do their designs of open plans,

⁴⁷ Harvey, David. 2009.

⁴⁸ Loberfeld, Barry. 2004.

⁴⁹ Mlicka, Agnieszka. 2007.

⁵⁰ Mlicka, Agnieszka. 2007.

⁵¹ Fishman, Robert. 1982.

⁵² Mlicka, Agnieszka. 2007.

⁵³ Lefebvre, Henri. 1996.

⁵⁴ Jencks, Charles and Karl Kropf. 2006.

transparent materials, and a large public plaza resist the static and elite in Paris? Like the utopianists, they philosophize and theorize about space and utilize it to reconstruct social function. Is there a role in social justice for an architectural aesthetic?

In communities that merit the need for social justice in architecture - notably socially-engaged and humanitarian projects - aesthetics takes a back seat to the social mission.⁵⁵ It follows the notion of Aldo van Eyck's description that the role of the architect is to provide someone with a roof and to propose what users might want. He added that it was "no easy task").⁵⁶ "Limitations of funding, limitations of politics, limitations of material, and limitations of time"⁵⁷ in troubled contexts restrain aesthetic expression. Thus, a default aesthetic language reflecting a "no-frills" design approach is utilized. In response to the issue of aesthetics' diminished role in socially-engaged projects, Rory Hyde questions, "But can one aesthetic be more 'ethical' than another? Surely the ethical responsibilities of architecture are achieved through deed not appearance. If a project is doing good, does it matter if it isn't also looking like it is doing good?"⁵⁸

As mentioned, social justice is formulated through observation and analysis of human practice. It is human interaction with contextual circumstances (i.e., injustice and inequalities). This interaction directly informs

⁵⁵ Hawthorne, Christopher. 2010.

⁵⁶ Jencks, Charles and Karl Kropf. 2006.

⁵⁷ Hyde, Rory. 2010.

⁵⁸ Hyde, Rory. 2010.

the specificities of methods, like the case study of the Museum of Struggle and Cultural Precinct by Noero Wolff. His methods effectively combine the planning (humanitarian) process, which fosters global awareness and social consciousness, with an integrated architectural design process. Identification and acknowledgment of social injustices and inequalities in the South African context informs the design of space according to social need. Safe spaces like open plazas and boulevards for the community to gather and for children to play on⁵⁹ are products of observation and analysis. In addition, design decisions for the scale of the building, materials of construction, museum content, and overall aesthetic⁶⁰ reflect contextual sensitivity. In this case, architectural aesthetic is utilized as a method to generate civic pride⁶¹ and social justice.

The search for a method to create social justice in architecture is shrouded in uncertainty. The resulting product of this search is the historical development of diverse methods. Fueled by the inherent broadness of the term social justice and the subjectivity of architectural understanding and opinion, architects will continue to create, refute, and redefine methods in response to observation and analysis of contextual circumstances. Rather than develop a new method, this thesis aims to redefine the way architects analyze and understand projects and methods of social justice through the case study model.

⁵⁹ Findley, Lisa. 2005.

⁶⁰ Lepik, Andres. 2010.

⁶¹ Findley, Lisa. 2005.

CHAPTER 2

CASE STUDY MODEL

An architect's ability to act within professional practice is based on knowledge of a repertoire of cases that are generated from case study research. Resources on formatting case study research are diverse but have similar goals and processes. Unearthed from numerous resources on the composition of this model is the commonality of referencing a central book titled *Case Study Research: Design and Methods* by Robert Yin.⁶² His writings lay the foundation for an investigator to conduct case study research. Other sources work to build upon his framework of a generalized contemporary model. The following research outlines my analysis and understanding of this research framework, referred to as the Case Study Model.

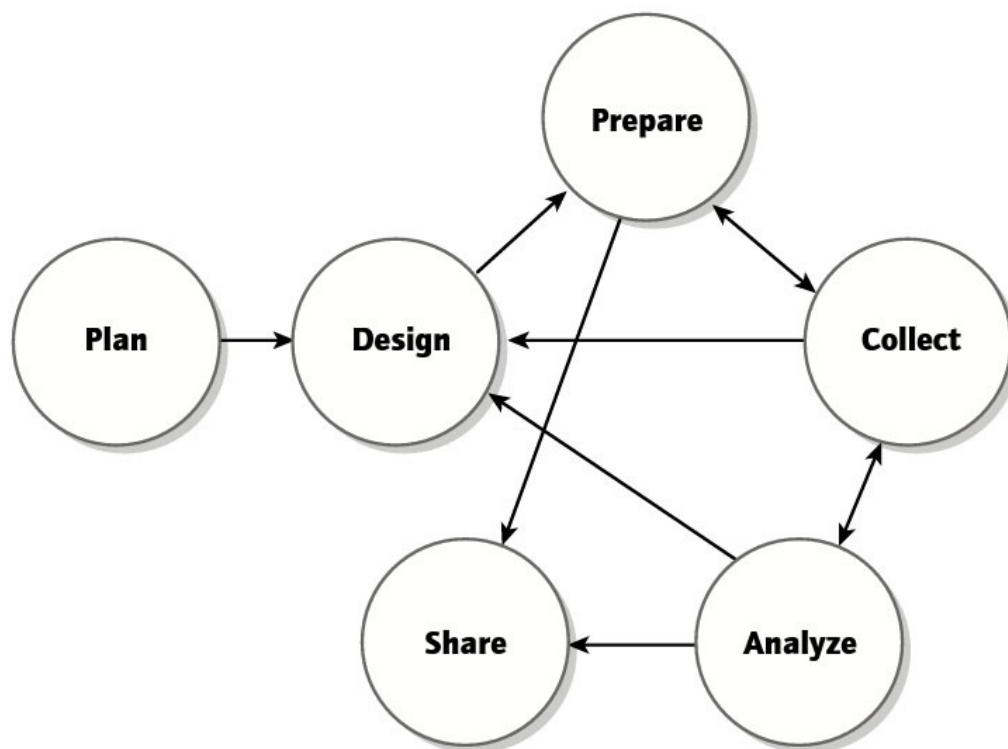


Figure 1. Robert Yin's process for creating an effective case study.

⁶² Yin, Robert K. 2009.

Process: Plan

The case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. The case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis. – Robert Yin⁶³

How does the investigator know when to use the Case Study Model?

Robert Yin describes that the choice depends largely on the research question (the most important part of the research is defining a question).⁶⁴ This question seeks to understand complex social phenomena and it allows investigators to retain holistic and meaningful characteristics of real-life events.⁶⁵ “It explores new areas and issues where little theory is available or measurement is unclear...to describe a process or the effects of an event or an intervention, especially when such events affect many different parties.”⁶⁶ Of the numerous sources that works to build upon the Case Study Model, Robert’s approach

⁶³ Yin, Robert K. 2009.

⁶⁴ Yin, Robert K. 2009.

⁶⁵ Yin, Robert K. 2009.

⁶⁶ Kohn, Linda T. 1997.

provides a descriptive framework that brings clarity to this research model. It is evident in the case study process that he outlines in his book.

METHOD	(1) Form of Research Question	(2) Requires Control of Behavioral Events?	(3) Focuses on Contemporary Events?
Experiment	how, why?	yes	yes
Survey	who, what, where, how many, how much?	no	yes
Archival Analysis	who, what, where, how many, how much?	no	yes/no
History	how, why?	no	no
Case Study	how, why?	no	yes

Figure 2. Understanding what research method to utilize.

The commonality that most case study resources share is the questioning of why to use the Case Study Model over other research models. Some of the alternative models include:

1. Qualitative research – non-numerical data collection and explanation base on the attributes of data.
2. Correlational research – statistical relationships between two or more random variables or observed data values (does not imply causation).

3. Experimental research – hypothesis and testing by building ‘small-scaled’ mockups or ‘test cells’ with conclusions and inferences drawn from test data.
4. Interpretive historical research – investigations into social-physical phenomena with complex context, with a view toward explaining those phenomena in narrative form and in holistic fashion.⁶⁷

As mentioned, the choice to utilize the Case Study Model highly depends on the research question. For example, the case study can be explanatory and either descriptive or exploratory, as opposed to experimental and correlational research models.⁶⁸ In addition, the advantage of the Case Study Model is that it has the capability to incorporate numerous research models, producing well-rounded research.⁶⁹

Robert acknowledges traditional prejudices criticizing the validity of the Case Study Model. The first is the specificity of its framework for its application to diverse questions of inquiry.⁷⁰ Does this defined framework work for the architecture profession as it does for research in other professional fields? In turn, his framework is a generalized model applicable to diverse questions and professions. The second acknowledgment is the concern that it provides little basis for generalization.⁷¹ How does a single or even multiple case studies lead to a generalized answer? He writes, “The short answer is that case studies, like

⁶⁷ Clifford, Janine. Powerpoint Presentation. *Interpretive Historical Research*

⁶⁸ Clifford, Janine. Powerpoint Presentation. *Case Study Method*

⁶⁹ Johansson, Rolf.

⁷⁰ Yin, Robert K. 2009.

⁷¹ Yin, Robert K. 2009.

experiments, are generalizable to theoretical propositions and not to populations or universes. In this sense, the case study, like the experiment, does not represent a 'sample,' and in doing a case study, your goal will be to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization). Or, as three notable social scientists describe in their *single case study* done years ago, the goal is to do a 'generalizing' and not a 'particularizing' analysis."⁷² Generalizing from case studies are not statistical, they are analytical, based on reasoning.⁷³ Generalizing to theory can then be tested through experiments.⁷⁴ Other criticisms include the potential for over-complication of the goal, 'causality' likely to be multi-faceted and complex, challenge of integrating many data sources in coherent way, replication required in other case studies, and it is difficult to do well because of fewer established rules and procedures than other research methods.⁷⁵

⁷² Yin, Robert K. 2009.

⁷³ Johansson, Rolf.

⁷⁴ Clifford, Janine. Powerpoint Presentation. *Case Study Method*.

⁷⁵ Clifford, Janine. Powerpoint Presentation. *Case Study Method*.

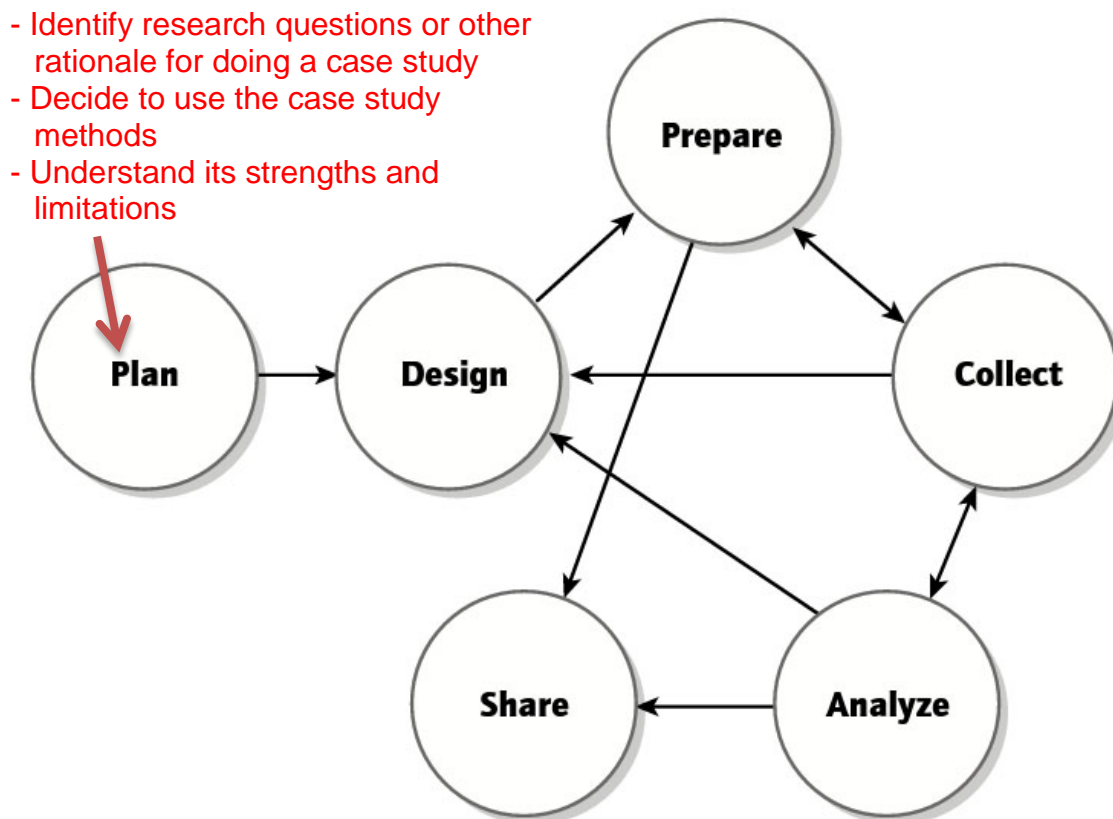


Figure 3. Planning the Case Study Model.

Process: Design

A research design is the logic that links the data to be collected (and the conclusions to be drawn) to the initial question of study. Every empirical study has an implicit, if not explicit, research design. Articulating “theory” about what is being studied and what is to be learned helps to operationalize case study designs and make them more explicit. – Robert Yin⁷⁶

Designing the Case Study Model is the most difficult part of the process because it lacks the development of a concise method.⁷⁷ This is due to the complexity of the range of professions and question topics it addresses. Robert Yin’s design process describes a basic set of guidelines for doing single and multiple case studies.

The design of the Case Study Model is, “a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set of conclusions (answers) about these questions.”⁷⁸ It is a blueprint for research that deals with problems like what questions to study, what data are relevant, what data to collect, and how to analyze the results.⁷⁹ In addition, this works to help the investigator avoid situations in which evidence does not address the initial research question.

⁷⁶ Yin, Robert K. 2009.

⁷⁷ Yin, Robert K. 2009.

⁷⁸ Yin, Robert K. 2009.

⁷⁹ Philliber et al. 1980.

Robert goes on to list five components of the design process that fosters a process to remain on-track with the primary identified task:

1. A study's questions;
2. its propositions, if any;
3. its unit(s) of analysis;
4. the logic linking the data to the propositions; and
5. the criteria for interpreting findings.⁸⁰

The five components of the design process listed will “effectively force you to begin constructing a preliminary theory related to your topic of study.”⁸¹

Theory development is essential to creating a concise focus (what you hope to achieve) that will be developed or tested. It is a blueprint to be followed, it facilitates the data collection phase, it should not be considered with the formality of grand theory, and it does not ask for the investigator to be a masterful theoretician.⁸² This is particularly evident in exploring new or cutting-edge issues.⁸³ In those instances a logical model or “theory of action” is developed that defines how the researcher expects an intervention, event or process to take a case from point A to point B and, therefore, defines the issues to be examined during the analysis.⁸⁴ An example is: the Case Study Model will help to develop

⁸⁰ Yin, Robert K. 2009.

⁸¹ Yin, Robert K. 2009.

⁸² Yin, Robert K. 2009.

⁸³ Kohn, Linda T. 1997.

⁸⁴ Patton, Michael Quinn. 1997. *Utilization-Focused Evaluation: The New Century Text.*

a method for the creation of social justice in architecture. Thus, it is emphasized that a preliminary theory is vital prior to the collection of any data.⁸⁵

Theory, which is the question and hypothesis, must be refined as an important step in the process of planning a case study.⁸⁶ Such is the refinement of a definition of intervention or process, and context surrounding the intervention (other important policies or activities). In addition, who is affected by the intervention, how much of the intervention the affected parties are subjected to, and what changes are expected.⁸⁷

Criteria for judging the quality of research is then created in the design process to test the trustworthiness, credibility, confirmability, and data dependability of the research.⁸⁸ Thus four tests have been created.

1. Construct validity: identifying correct operational measures for the concepts being studied.
2. Internal validity: (for explanatory or casual studies only and not for descriptive or exploratory studies) seeking to establish a causal relationship, whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships.
3. External validity: defining the domain to which a study's findings can be generalized.

⁸⁵ Kohn, Linda T. 1997.

⁸⁶ Kohn, Linda T. 1997.

⁸⁷ Kohn, Linda T. 1997.

⁸⁸ Yin, Robert K. 2009.

4. Reliability: demonstrating that operations of a study, such as the data collection procedures, can be repeated, with the same results.⁸⁹

Not all of these tactics occur during the design stage of the process, but could be utilized during others stages like data collection or data analysis.

TESTS	Case Study Tactic	Phase of research in which tactic occurs
Construct validity	<ul style="list-style-type: none"> ◆ use multiple sources of evidence ◆ establish chain of evidence ◆ have key informants review draft case study report 	data collection data collection composition
Internal validity	<ul style="list-style-type: none"> ◆ do pattern matching ◆ do explanation building ◆ address rival explanations ◆ use logic models 	data analysis data analysis data analysis data analysis
External validity	<ul style="list-style-type: none"> ◆ use theory in single-case studies ◆ use replication logic in multiple-case studies 	research design research design
Reliability	<ul style="list-style-type: none"> ◆ use case study protocol ◆ develop case study database 	data collection data collection

Figure 4. Case study tactics for four design tests.

The last step in the design process is to identify the type of case study. There are various identified case studies. The first is the explorative case study, which is the investigation if a hypothesis is sound or can be proven.⁹⁰ The second is the explanatory case study, which uncovers situations or phenomena.⁹¹ The third is the causal case study which deals with finding what actions that caused an organization to be what it is today.⁹² After defining the case study type, the specificity of how the research is composed is then

⁸⁹ Yin, Robert K. 2009.

⁹⁰ Coherency Architects.com.

⁹¹ Coherency Architects.com.

⁹² Coherency Architects.com.

determined as a single or a multiple case study. A single case study design represents a critical test of existing theory, a rare or unique circumstance, or a representative or typical case, or where the case serves a revelatory or longitudinal purpose.⁹³ Multiple case studies are utilized for multiple experiments with contrasting results or situations predicted explicitly at the outset of the investigation.⁹⁴ However, it is suggested that multiple case studies are preferred because analytic conclusions arising from multiple cases will be more powerful.⁹⁵

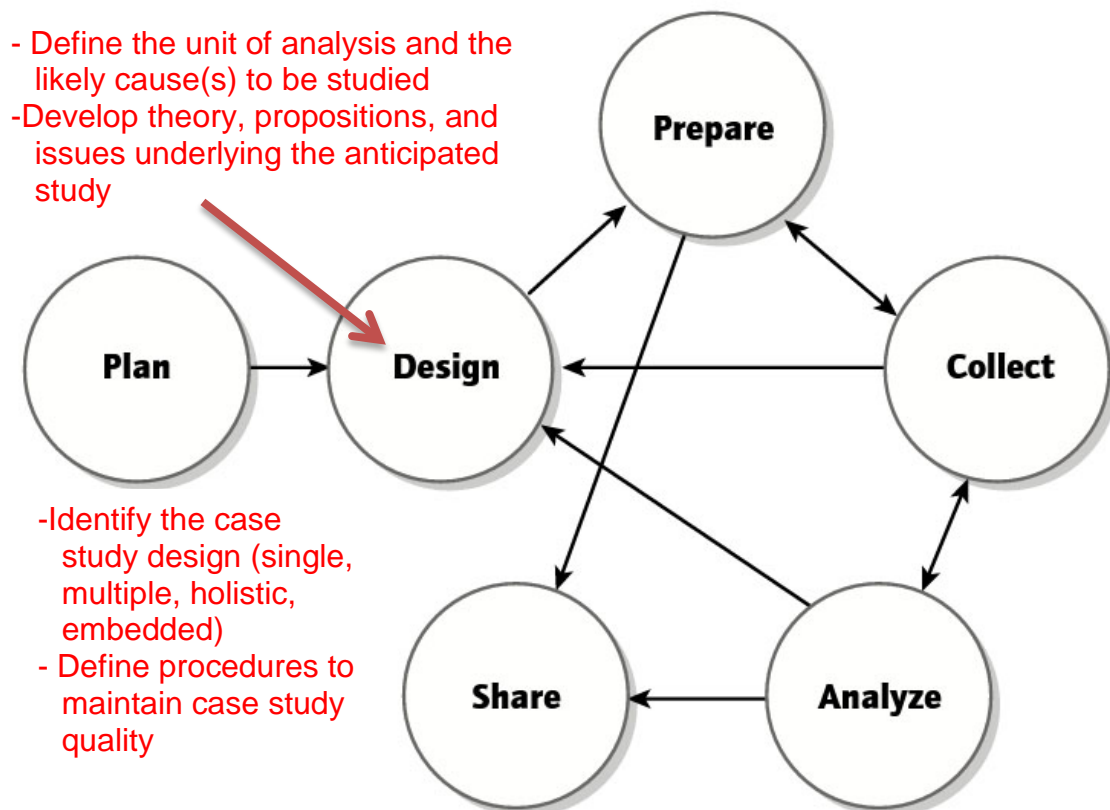


Figure 5. Design of the Case Study Model.

⁹³ Yin, Robert K. 2009.

⁹⁴ Yin, Robert K. 2009.

⁹⁵ Yin, Robert K. 2009.

Process: Prepare

Preparing to do a case study starts with the prior skill of the investigator and covers the preparation and training for the specific case study, the development of a case study protocol, the screening of candidate cases to be part of the case study, and the conduct of a pilot case study.

With Regard to prior skills, many people incorrectly believe they are sufficiently skilled to do case studies because they think the method is easy to use. In fact, case study research is among the hardest types of research to do because of the absence of routine procedures. Case study investigators therefore need to feel comfortable in addressing procedural uncertainties during the course of a study. Other desirable traits include the ability to ask good questions, listen, be adaptive and flexible, have a firm grasp of the issues being studied, and know how to avoid bias.

– Robert Yin⁹⁶

Attributes that are commonly required to conduct a successful case study include:

1. A good case study investigator should be able to ask good questions and interpret the answers.
2. An investigator should be a good listener and not be trapped by her or his own ideologies or preconceptions.

⁹⁶ Yin, Robert K. 2009.

3. An investigator should be adaptive and flexible, so that newly encountered situations can be seen as opportunities, not threats.
4. An investigator must have a firm grasp of the issues being studied, even if an exploratory mode. Such a grasp reduces the relevant events and information to be sought to manageable proportions.
5. A person should be unbiased by preconceived notions, including those derived from theory. Thus, a person should be sensitive and responsive to contradictory evidence.⁹⁷

Preparation for the case study includes a case study protocol that outlines procedures and general rules to be followed.⁹⁸ It increases reliability of case study research by guiding the investigator through the data collection process. In addition, it should contain an overview of the case study project, field procedures for data collection, case study question to keep in mind while collecting data, and a guide for the case study report (outline, format for the data, use and presentation of other documentation, and bibliographical information).⁹⁹ Creating a protocol will help to anticipate future problems, such as contradictions in process and theory or question.

The last step in the preparation process is screening the candidate cases for the case study research. This is most applicable to a multiple case study approach where there is an array of candidate cases to choose from. “The worst scenario would occur when, after having started formal data collection, the case

⁹⁷ Yin, Robert K. 2009.

⁹⁸ Yin, Robert K. 2009.

⁹⁹ Yin, Robert K. 2009.

turns out not to be viable or to represent an instance of something other than what you intended to study.”¹⁰⁰ The screening process should not be an extensive process of data collection (the creation of mini case studies). However, if a large number of cases are to be sorted through, asking a knowledgeable source for advice, collecting relevant quantitative data from some archival source, looking at complex pilot case studies, and defining relevant criteria for reducing the number are helpful methods to follow.¹⁰¹ In addition, convenience of access to relevant information may be a major determinant in selection. “A case may be purposefully selected in virtue of being, for instance, information-rich, critical, revelatory, unique, or extreme.”¹⁰²

¹⁰⁰ Yin, Robert K. 2009.

¹⁰¹ Yin, Robert K. 2009.

¹⁰² Patton, Michael Quinn. 1990. *Qualitative Evaluation and Research Methods*.

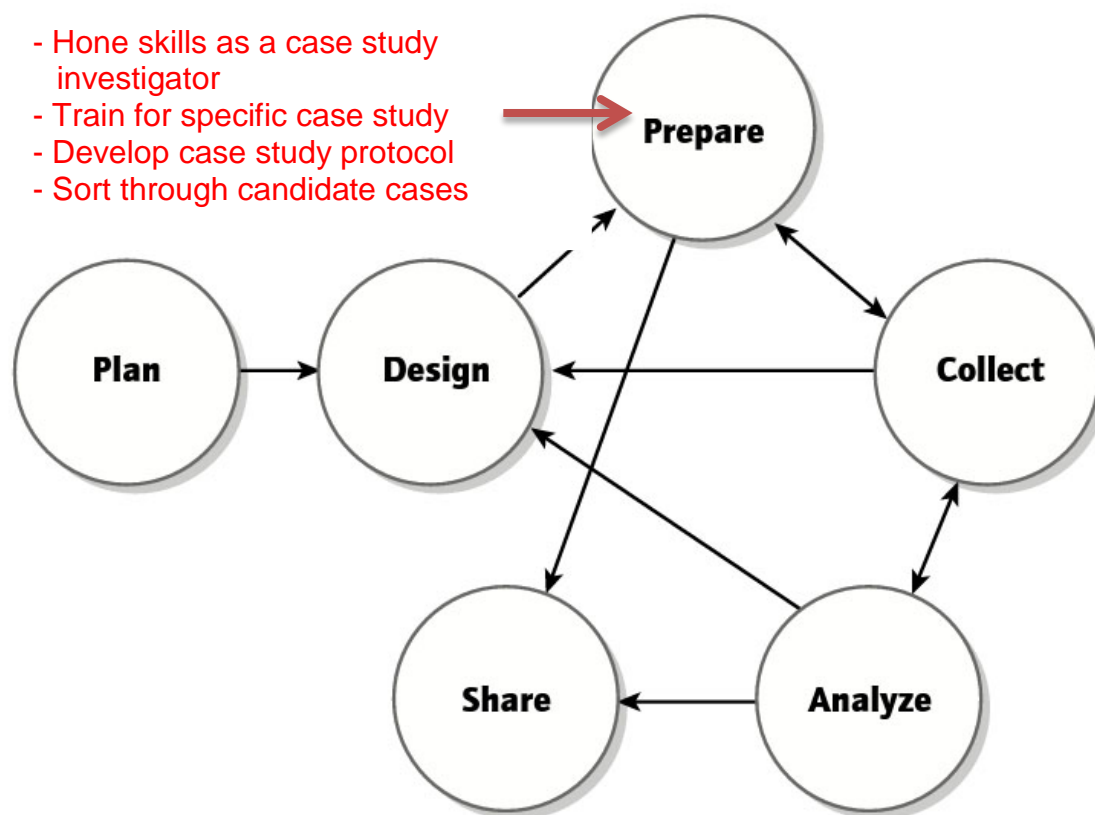


Figure 6. Preparing the Case Study Model.

Process: Collect

Case study evidence may come from six sources: documents, archival records, interviews, direct observation, participant-observation, and physical artifacts. Using these six sources calls for mastering different data collection procedures. Throughout, a major objective is to collect data about actual human events and behavior. This objective differs from (but compliments) the typical survey objective of capturing perceptions, attitudes, and verbal reports about events and behavior (rather than direct evidence about the events and behavior).

In addition, to the attention given to the six sources, some overriding principles are important to any data collection effort...multiple sources of evidence..., a case study database (a formal assembly of evidence distinct from the final case study report), and a chain of evidence (explicit links among the questions asked, the data collected, and the conclusions drawn).

– Robert Yin¹⁰³

Case study researchers will typically begin a study using only one method of data collection and will add others as the situation warrants it.¹⁰⁴ The process of collecting data according to Robert Yin is composed of six sources commonly used in the Case Study Model. No source has

¹⁰³ Yin, Robert K. 2009.

¹⁰⁴ Dooley, Larry M. 2002.

an advantage over the other, and the utilization of a number of sources is highly recommended to strengthen case study research.¹⁰⁵ Though he lists six sources, there is an extensive list of sources, including films and photographs, which should be taken into account.

While utilizing the various sources of evidence, data collection is categorized in two forms, qualitative and quantitative data.¹⁰⁶ It is viewed that qualitative data is the most difficult of conducting case studies because of the intensity of the data collection process and the overload of information obtained.¹⁰⁷ However, the abundance of information enriches the quality and validity of the research.¹⁰⁸ Quantitative data generalizes from a sample to a population¹⁰⁹.

In addition to addressing common sources of evidence, three principles of data collection are explained to help construct validity and reliability of the evidence.¹¹⁰ The first is the use of multiple sources of evidence, explained as triangulation of sources.¹¹¹ This principle allows an investigator to address a broader range issues (from historical to behavior data) and multiple measures of the same phenomenon. It is the combination of research models and also data sources, theory, or investigators.¹¹² This is likely to make a conclusion more

¹⁰⁵ Yin, Robert K. 2009.

¹⁰⁶ Coherency Architects.com.

¹⁰⁷ Kohn, Linda T. 1997.

¹⁰⁸ Coherency Architects.com.

¹⁰⁹ Kohn, Linda T. 1997.

¹¹⁰ Yin, Robert K. 2009.

¹¹¹ Yin, Robert K. 2009.

¹¹² Johansson, Rolf.

convincing and accurate (validity).¹¹³ The second principle of data collection is to create a case study database. This separates two collections of documentation which include the data or evidentiary base and the report of the investigator.¹¹⁴ In addition, organization of data should be separated by major subject or idea in such a way that other persons, including the investigator, can retrieve it efficiently.¹¹⁵ This is critical so as to allow for patterns and themes to emerge.¹¹⁶ The third principle is to maintain a chain of evidence, which increases the reliability of the information. “The principle is to allow an external observer, in this situation, the reader of the case study, to follow the derivation of any evidence from initial research questions to ultimate case study conclusions.”¹¹⁷ This suggests that the reader should be able to trace the steps of evidence in either direction, like from conclusion to the initial research question.

The decision when to end data collection involves both practical and theoretical considerations. Such considerations include time and budgetary constraints. Other criteria may include the exhaustion of sources, saturation of categories (categories used to code data appear to be definitively established), emergence of regularities (sufficient consistencies in the data that allows the researcher to develop a sense of whether the phenomena represented by each

¹¹³ Yin, Robert K. 2009.

¹¹⁴ Yin, Robert K. 2009..

¹¹⁵ Yin, Robert K. 2009.

¹¹⁶ Dooley, Larry M. 2002.

¹¹⁷ Yin, Robert K. 2009.

construct occur regularly or only occasionally), and overextension (information coming in is far removed from the core of the primary idea).¹¹⁸

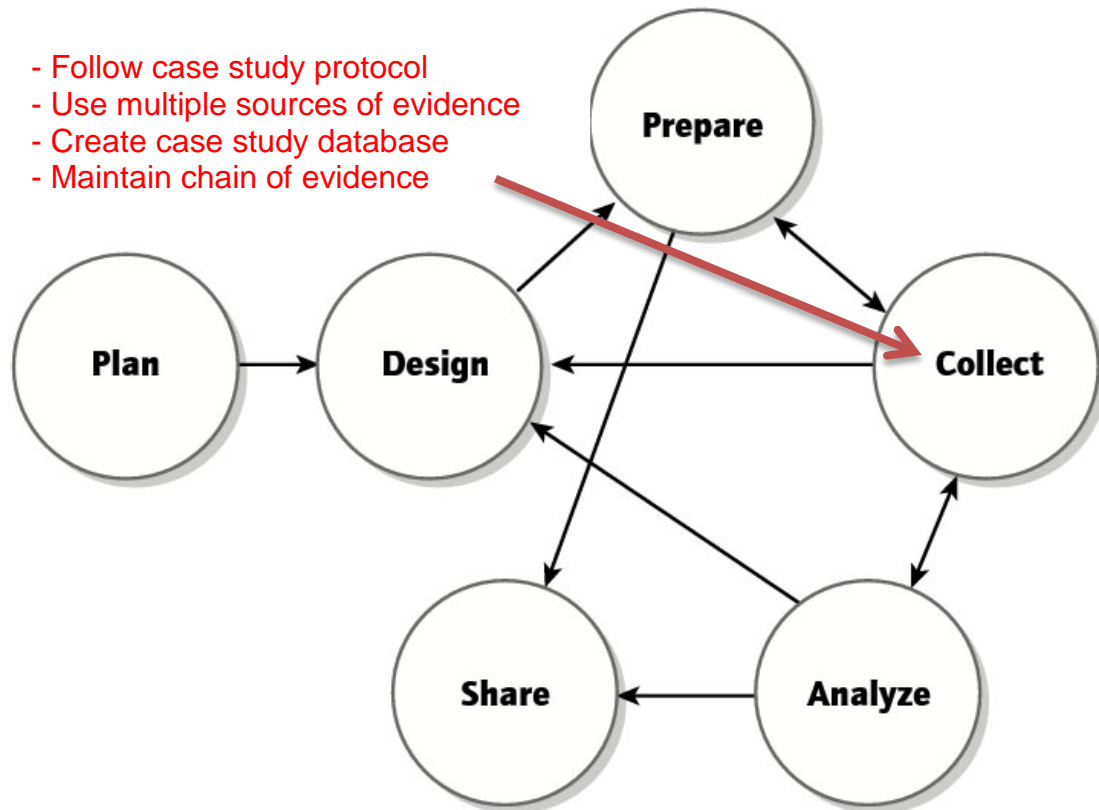


Figure 7. Collection process in Case Study Model.

¹¹⁸ Dooley, Larry M. 2002.

Process: Analyze

Data analysis consists of examining, categorizing, tabulating, testing, or otherwise recombining evidence, to draw empirically based conclusions. Analyzing case study evidence is especially difficult because the techniques still have not been well defined. To overcome this circumstance, every case study analysis should follow a general analytic strategy, defining priorities for what to analyze and why... Throughout, a persistent challenge is to produce high-quality analysis, which require attending to all the evidence collected, displaying and presenting the evidence separate from any interpretation, and considering alternative interpretations. – Robert Yin¹¹⁹

It is now the investigator's time to evaluate the data using an array of interpretations to find any and all relationships that may exist with reference to the research questions.¹²⁰ But the analysis process of the Case Study Model is the most ambiguous of the six processes. This is determined by the way data was collected, what the goal of the case study is, and personal analytic skills.¹²¹ A helpful starting point is to play with the data.¹²² Miles and Huberman summarized various analytic manipulations, which include:

1. Putting information into different arrays;

¹¹⁹ Yin, Robert K. 2009.

¹²⁰ Dooley, Larry M. 2002.

¹²¹ Dooley, Larry M. 2002.

¹²² Yin, Robert K. 2009.

2. making a matrix of categories and placing the evidence within such categories;
3. creating data displays, flowcharts and other graphics for examining data
4. tabulating the frequency of different events;
5. examining the complexity of such tabulations and their relationships by calculating second-order numbers such as means and variances;
6. putting information in chronological order or using some other temporal scheme.¹²³

However, the risk of playing with data is the likelihood of not producing a general strategy to analyze data. This will waste large chunks of valuable time.

Robert Yin mentions four general strategies that help the investigator to treat the evidence fairly, produce compelling analytic conclusions, and rule out alternative interpretations. These are analytic strategies that that will help analysis proceed much easier and reduce potential analytic difficulties. The first is relying on theoretical propositions, which is the most preferred strategy.¹²⁴

This is defined by following the theoretical propositions (theory and question) that led to the development of the case study. The theoretical propositions shaped data collection and created priorities to the relevant analytic strategies.¹²⁵ The second is developing a case description, which is the development of a descriptive framework for organizing the case study. The third is using both

¹²³ Miles and Huberman. 1994.

¹²⁴ Yin, Robert K. 2009.

¹²⁵ Yin, Robert K. 2009.

qualitative and quantitative data, and the fourth is examining rival explanations.¹²⁶

Yin further mentions five analytic techniques that are effective in laying the groundwork for high-quality case studies, given one of the three mentioned general strategies were utilized. These include pattern matching, explanation building, time-series analysis, logic models, and cross-case synthesis.¹²⁷ Pattern matching deals with identifying patterns in the data the investigator collected through the study of phenomenon. Explanation building creates causal links among various forms of data by explaining what happened and why. Time-series analysis explains how the case study organization has developed over time. Logic models deals with a complex chain of events over extended period of time, and it consists of matching empirically observed events to theoretically predicted events. Cross-case synthesis deals with multiple cases that are treated separately then compared and contrasted.¹²⁸ Cross-case analysis allows the investigator to analyze whether a particular theme observed in one case was also present in other cases.¹²⁹ It can also be analyzed to detect rational or causal patterns.¹³⁰ This strengthens individual cases.

Larry Dooley builds upon Robert Yin's model by determining that analysis is separated into two typologies, structural analysis and reflective analysis.

Structural analysis is the process of examining case study data for the purpose of

¹²⁶ Yin, Robert K. 2009.

¹²⁷ Yin, Robert K. 2009.

¹²⁸ Yin, Robert K. 2009.

¹²⁹ Dooley, Larry M. 2002.

¹³⁰ Dooley, Larry M. 2002.

identifying patterns inherent in discourse, text, events, or other phenomena. It is used in conversation analysis, ethnoscience, and other qualitative research methods.¹³¹ Reflective analysis relies on the investigator's intuition and personal judgments to analyze data rather than on technical procedures involving explicit category classification systems.¹³² He further describes that it is important to sort data in as many ways as possible to seek unintended outcomes that may not be apparent in the beginning.¹³³

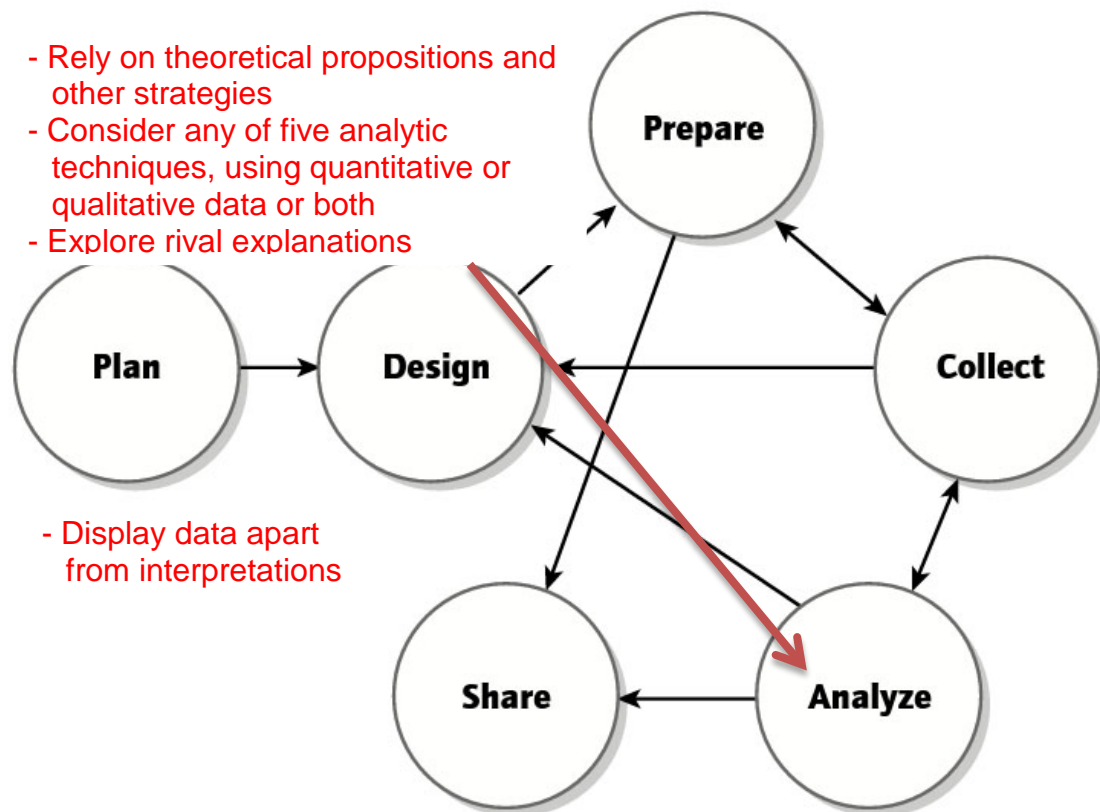


Figure 8. Analyzing the Case Study Model.

¹³¹ Dooley, Larry M. 2002.

¹³² Dooley, Larry M. 2002.

¹³³ Dooley, Larry M. 2002.

Process: Share

Reporting a case study means bringing its results and findings to closure. Regardless of the form of the report, similar steps underlie the case study composition: identifying the audience for the report, developing its compositional structure, and having drafts reviewed by others.

Once composed, the case study may be finished, or it may be joined with data collected through other methods, as part of a broader, mixed methods study. Such studies can be advantageous and represent a further challenge in doing case study research. – Robert Yin¹³⁴

The goal of the case study is to present a conclusion to the theory and questions developed in the planning process. The case study is utilized to build on theory, produce new theory, dispute or challenge theory, explain a situation, provide a basis to apply solutions to situations, explore, or to describe an objective or phenomenon.¹³⁵ There are two styles of case study formatting, the reflective reporting and the analytic reporting. The reflective reporting is where the writer uses literary devices to bring the case alive for the reader and the investigator's voice is present. The analytic reporting typology is an objective writing style where the investigator's voice is either silent or subdued.¹³⁶

¹³⁴ Yin, Robert K. 2009.

¹³⁵ Dooley, Larry M. 2002.

¹³⁶ Dooley, Larry M. 2002.

Robert Yin further explains that the case study must consider alternative perspectives, display sufficient evidence, and composed in an engaging manner.¹³⁷ He further suggests that an experienced investigator will begin to compose the case study before data collection and analysis processes.¹³⁸ The suggested starting-point in the sharing process is to target the likely or preferred audience.¹³⁹ This helps with dictating the format of the case study document and applying an effective way to communicate the overall goal.

As previously mentioned, the format of case study research is determined by its design, if it is single or multiple cases. Multiple case studies can be formatted as individual chapters followed by cross-case analysis and results, or it can be formatted as a single chapter of cross-case analysis.¹⁴⁰ This should be identified during the design process of the case study. Formatting of the case study's bibliography, methodological section, preliminary literature review, and descriptive data about the cases being studied is suggested to be completed before analysis.¹⁴¹

¹³⁷ Yin, Robert K. 2009.

¹³⁸ Yin, Robert K. 2009.

¹³⁹ Yin, Robert K. 2009.

¹⁴⁰ Yin, Robert K. 2009.

¹⁴¹ Yin, Robert K. 2009.

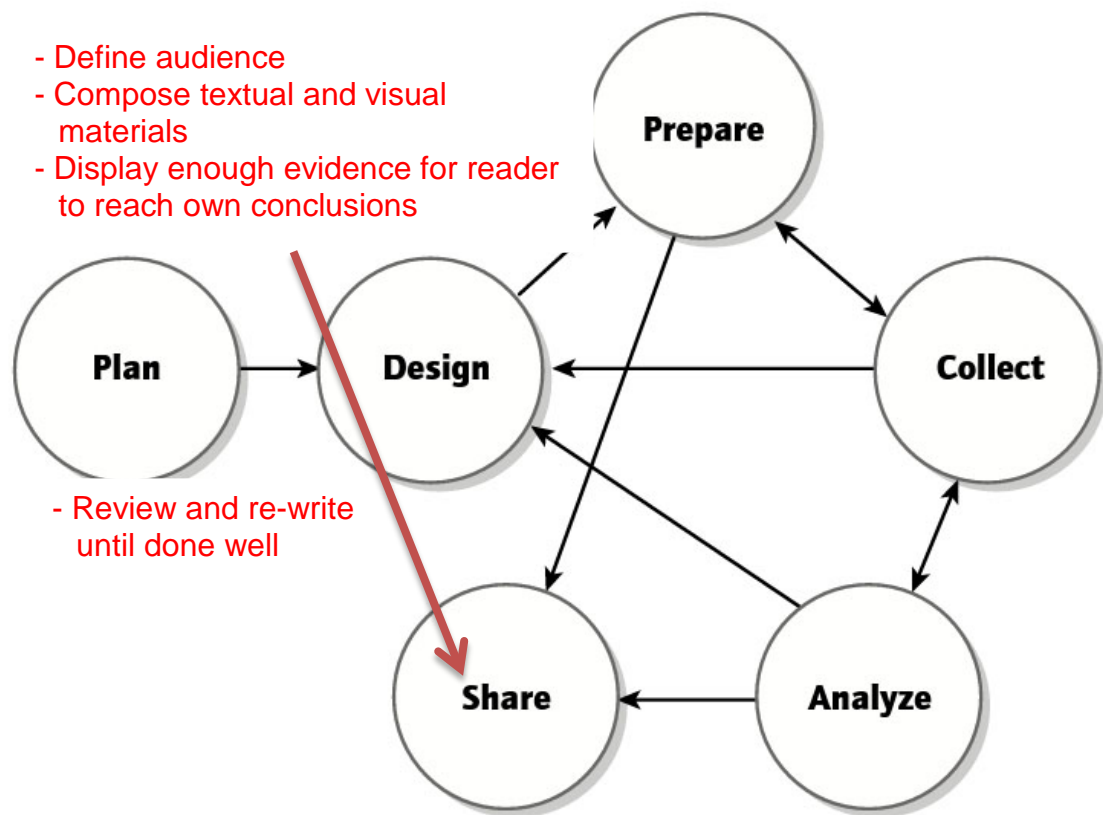


Figure 9. Sharing conclusions from the Case Study Model.

Application of the Case Study Model

In the second half of Chapter 2, four architecture case studies are incorporated, reflecting diverse methods to create social justice in architecture. The case studies include Bayview Hunters Point redevelopment, Ke Aka Ho'ona self-help housing, Museum of Struggle and Cultural Precinct, and the Georges Pompidou Centre. Utilizing the framework of the Case Study Model, this chapter will analyze the specificities of the four case studies' context, injustices and inequalities, and the methods to create social justice in architecture.

Bayview Hunters Point Redevelopment

Location: San Francisco, California



Figure 10.

Context

“This is the San Francisco America pretends does not exist.”¹⁴² Plagued with social injustices such as limited job opportunities, high crime rates, industrial toxicity and correlated health problems, and substandard housing and public infrastructure, Bayview Hunters Point (4.8 square miles of land on the southeastern edges of San Francisco) is marginalized as a social virus unsuitable for a city known for its liberal ideas. The complexity of the various stigmas placed on its very existence is based on an unfavorable reputation and the linear decline of its social framework. Thus, the idea for social reformation and justice in Bayview Hunters Point is met with uncertainty.

Relevant to Bayview Hunters Point, many communities have experienced waves of economic and social flux marked by an event or series of events that are synonymous with the tipping point of social decline. Bayview Hunters Point’s tipping point rested on the turbulent history of their Naval Shipyard, which sparked the decline of its existing social framework.

During World War II, droves of African Americans left southern plantations for the promising work (ship fitters, welders, sheet metal workers, boilermakers, electricians, and general labors) at the Naval Shipyard,¹⁴³ which employed 18,235 workers at its peak.¹⁴⁴ However, in 1949 after the war ended, the need for a naval presence was minimal and thousands of workers were laid off (from

¹⁴² KQED. 1963.

¹⁴³ Plank and Ver Plank. 2010.

¹⁴⁴ Jeffries, Amy.

18,235 to 5,500 workers).¹⁴⁵ In the meantime racial tensions were high and many white families left the area due to an increasing African American population and favorable mortgage rates available to war veterans to move to the suburbs. By this time the black population grew to 58 percent and another 17 percent by 1970.¹⁴⁶ The final and most devastating wound inflicted on the community was the eventual shut down of the Hunters Point Naval Shipyard in 1974. This compounded the outlining issue of unemployment and it increased social tensions in the community. “When I was at the shipyard there were jobs here, people had work and the neighborhood was fairly good, but when it closed – well that was one of those pivotal moments,” describes James Blanding, founder of Bayview Property, manager and longtime resident.¹⁴⁷

With the closure of the Naval Shipyard and industrial job opportunities, unemployment numbers skyrocketed and the feeling of social, economic, and racial isolation plagued the community. According to the 2000 U.S. Census, it is one of the highest poverty rates in San Francisco, with 30 percent of families earning less than \$10,000 per year, and a median household income of \$29,640 annually, as compared to \$65,000 for white San Franciscans and a \$55,221 average city-wide (72 percent of African American incomes in Bayview Hunters Point is below the federal poverty level).¹⁴⁸ They saw that poverty and the dilapidation of the built environment (lack of maintenance) in the community as a

¹⁴⁵ Plank and Ver Plank. 2010.

¹⁴⁶ Plank and Ver Plank. 2010.

¹⁴⁷ McNamara, Danielle.

¹⁴⁸ Hunters Point Family.

result of discrimination in broader city policies and agencies.¹⁴⁹ In response, political organizations were formed by residents and the government to alleviate the poverty, racism, and deteriorating urban conditions experienced by residents of the area. Most political organizations did not succeed nor had little impact due to the overwhelming number and complexity of social and economic issues and because of outside decision makers' who turned a blind eye on the community. Another reason for failed solutions is because programs like the Model Cities program (1970's) did not address the core of the problem in Bayview Hunters Point: the lack of legitimate and gainful employment opportunities.¹⁵⁰

Injustices and Inequalities

The rise and fall of the shipyard was the tipping point that led to a plethora of injustices and inequalities. Much of the identified injustices and inequalities are chains of events or issues, direct causations, directly linking to other injustices and inequalities.

1. Physical isolation and neglect. Bayview Hunters Point's physical isolation from the rest of the city (separated from the central city by physical distance and freeway barriers¹⁵¹) compounds the notion that it is a neglected neighborhood. In addition, physical separation increases the feeling of isolation because of the lack of legitimate and gainful employment opportunities in the area, and it leaves the minimal skilled

¹⁴⁹ Lindsey, Dillon.

¹⁵⁰ Finch, Kelsey. 2008.

¹⁵¹ Finch, Kelsey. 2008.

and educated unable to access jobs in other parts of the city (i.e. workers affected by the closure of the shipyard).

2. Psychological deterioration
3. Racial discrimination
4. Lack of economic opportunity in the community and high poverty rates due to a large contingent of unskilled labor. According to the 2000 U.S. Census, it is one of the highest poverty rates in San Francisco, with 30 percent of families earning less than \$10,000 per year, and a median household income of \$29,640 annually, as compared to \$65,000 for white San Franciscans and a \$55,221 average city-wide (72 percent of African American incomes in Bayview Hunters Point is below the federal poverty level).¹⁵²
5. Deteriorated living conditions. In order to accommodate for the increase in population, the San Francisco Housing Authority converted the temporary barracks into 1,600 units of fulltime public housing.¹⁵³ By the early 1960's nearly 700 families overcrowded the temporary housing ("the projects") which were deemed "almost unlivable" by the Housing Authority ten years before it was occupied.¹⁵⁴
6. High crime rates and drug use. Starting in the 1980's with the crack cocaine epidemic and the health problems and violence associated with it, gangs and drug dealers became a fixture of many corners and public

¹⁵² Hunters Point Family.

¹⁵³ Finch, Kelsey. 2008.

¹⁵⁴ Finch, Kelsey. 2008.

housing projects.¹⁵⁵ Homicides became an epidemic and it accounted for half of the city's reported cases (notable is that Bayview Hunters Point comprises five percent of San Francisco's population).¹⁵⁶ The murder rate rivals Washington D.C. and Oakland for the murder capital of the country and the leading cause of death among San Francisco children, ages 15 to 24, is homicide.¹⁵⁷

7. Closure and lack of community programs and facilities and subpar education systems. A school serving a high concentration of youth from Bayview Hunters Point has the greatest rate of truancy, suspensions, and dropouts in San Francisco.¹⁵⁸

Compounding social problems at Bayview Hunters Point is the health of local residents being heavily impacted by ongoing environmental contamination of the community's soil and water with particulates, pesticides, petrochemicals, heavy metals, asbestos, radioactive materials, and more than 200 toxic chemicals and materials as reported by the Environmental Protection Agency (USEPA).¹⁵⁹ Such contaminants are products of the communities' turbulent industrial past and present. With over half of San Francisco's land zoned for industrial use in Bayview Hunters Point, sites and industries like one federal Superfund site, the old Hunters Point Naval Shipyard, PG&E Hunters Point Power Plant, and a sewage treatment plant (handles 80 percent of the City's

¹⁵⁵ Plank and Ver Plank. 2010.

¹⁵⁶ Finch, Kelsey. 2008.

¹⁵⁷ Hunters Point Family.

¹⁵⁸ Hunters Point Family.

¹⁵⁹ "Pollution, Health, Environmental Racism and Injustice." 2004.

solid wastes) all contribute to the contamination of land and its associated health problems.¹⁶⁰ In 2004, environmental justice groups put together a report titled “Pollution, Health, Environmental Racism and Injustice,” which documents 100 brownfield sites, 187 leaking underground fuel tanks, and more than 124 hazardous waste handlers regulated by the US EPA in the area.¹⁶¹ This is correlated to a number of alarming health statistics.

Methods for Social Justice

1. With the new extension of the light rail in 2002 through Bayview Hunters Point on Third Street, the issue of physical isolation and job access is alleviated by this public transportation alternative. Envisioned is that it is a tool to clean and revitalize the area’s aesthetic and economy (attract new and a diversity of businesses and development), increase foot-traffic, diversify its demographics, and eventually attract new businesses.¹⁶² In addition, new street lamps, tree-planting, and public art were added along the five mile stretch of Third Street.
2. Steps which include health and environmental studies (creating awareness) and the closure and cleanup of various harmful industries like the PG&E Hunters Point Power Plant (originally one of the two power plants in San Francisco) in May 5, 2006 are seeds of resistance against the environmental injustices at hand.

¹⁶⁰ “Pollution, Health, Environmental Racism and Injustice.” 2004.

¹⁶¹ Lindsey, Dillon.

¹⁶² Finch, Kelsey. 2008.

3. Environmental remediation of the toxic Hunters Point shipyard is the most expensive naval-led restoration project in the country, which lays the foundations for the redevelopment of Hunters Point Shipyard. From 1999 to 2001, the Miami based Lennar Corporation, a private home developer, acquired the rights as master developer for the redevelopment of the decommissioned Hunters Point Shipyard (phase 1) and Candlestick Point (phase 2) with the support of its political connections (notably Mayor Willie Brown and Representative Nancy Pelosi).¹⁶³ The proposed \$2 billion project would be the city's largest redevelopment project since World War II. Lennar claims to spend more than \$1 billion on infrastructure to remake the combined 720 acres with 10,500 residential units, a new stadium for the San Francisco 49ers (though unlikely because of the 49ers' plans to relocate on Santa Clara), art districts, 2 million square feet of commercial space, approximately 3 million square feet of clean technology research and development space, sports and performance arena, 400 acres of park and open public space, seven miles of waterfront walkways, wildlife habitat and restored wetlands, and to rebuild the Alice B. Griffith apartments (public housing development) that has fallen into disrepair.¹⁶⁴ The master-plan (935 total acres) aspires to transform the area into a vibrant and green community projected to be complete by 2031.¹⁶⁵ However, the process to move forward with the

¹⁶³ Phelan, Sarah.

¹⁶⁴ San Francisco Building and Construction Trades Council.

¹⁶⁵ Civil Grand Jury, City and County of San Francisco, 2010-2011.

redevelopment has encountered many problems with the formulation of its planning, implementation, and vision.

Ke Aka Ho'ona Self-Help Housing

Architect: Group 70 International

Location: Wai'anae, Hawai'i



Figure 11. Ke Aka Ho'ona plan.

Context - Injustices and Inequalities

The evaluation of Ke Aka Ho'ona in relation to the idea of social justice and its success or failure to address injustices or inequalities requires an in-depth analysis of the Wai'anae context (before and during 1994 to 2002). Wai'anae, like Bayview Hunters Point, was and still is a community plagued by unfavorable

social stigmas as Hawai'i's most depressed and crime-ridden community, fostering a sense of avoidance and neglect. Such a negative reputation and social deterioration is in direct correlation to its geographic location (physical barriers), economic disparity, and living conditions. Thus, the idea of social and economic justice is met with scrutiny and uncertainty. What are the necessary courses of action for reform? Like Bayview Hunters Point, much of the identified injustices and inequalities are chains of events or issues, direct causations, directly linking to other injustices and inequalities.

1. The Wai'anae community is an "isolated" community. Located on the leeward coast (western shore) of Oahu, it is physically isolated by the Wai'anae mountain range and ocean. This physical disconnect separates the community from the benefits of the island's primary industry hubs (tourism) in Waikiki and Honolulu. Physical distance from these industries profoundly increases social and economic isolation. Transportation to and from economic hubs are a tremendous social and economic deterrent rather than a connector. Through the connecting routs of Farrington Highway and Queen Liliuokalani Freeway, commuting time is approximately one hour, pending traffic conditions to downtown Honolulu.¹⁶⁶ Blocking the highway due to accidents and other emergency situations exponentially increases commute time, or it completely cuts off the community from the rest of the island.

¹⁶⁶ Stufflebeam et al. 2002.

2. Lack of job opportunities. This is due to physical isolation and the reluctance of businesses willing to invest in this area.¹⁶⁷
3. High unemployment rates. The Wai'anae community stands out with the highest percentage living below the poverty level (21 percent of the population) and the highest percentage of living on public assistance (25 percent of the population), according to a 2002 study.¹⁶⁸ In addition, there are many homeless families living along Wai'anae's 16 miles of pristine coastline shores.
4. Wai'anae's physical and psychological isolation, economic disparity, poor education, homelessness due to soaring housing and rent costs, and rising unemployment rates are correlating variables in increased crime and drug use. This comes during a time (recorded in 2001) in which drug convictions, notably methamphetamines (also known as "ice"), made up 50.4 percent of all total criminal convictions in the state. This is above the national average of 41.2 percent.¹⁶⁹ Studies indicate that Wai'anae stood out with the highest rate of aggravated assault (3.4 per 1,000 residents) and rape (.66 per 1,000 residents) in Hawai'i.¹⁷⁰ In addition to high crime and drug use, education statistics such as having the highest percentage of suspended students

¹⁶⁷ Hoover and Perez. 2006.

¹⁶⁸ Chesney-Lind et al. 2003.

¹⁶⁹ To-Hawaii.com: Hawaii Travel Guide.

¹⁷⁰ Chesney-Lind et al. 2003.

- (12.2 percent compared to 7.6 percent in Kalihi and 6.8 percent in Waipahu) and low attendance rates indicates troubling community statistics.¹⁷¹
5. Failed attempts at providing a solution for homelessness. Efforts to create a temporary housing solution like the creation of a designated tent city in Wai'anae was abandoned due to strong protests from the resident population, who believed that this would increase crime rates.¹⁷² Another failed example was a 60-unit low-income rental that was demolished by the government in the year 2005 due to neglect and physical deterioration past the point of renovation.¹⁷³

Residents of Wai'anae target primary blame on the injustices of politician and public official neglect.¹⁷⁴ Despite this argument having validity to an extent, it is not the fault of the government alone. Factors like the resultants of physical isolation, deficit of adequate mental health programs and facilities¹⁷⁵, immigrant disadvantages, mental and drug health issues, and the lack of attempt and motivation by a percentage of the homeless families themselves to be proactive at improving their lifestyles are all contributing injustices and inequalities.

¹⁷¹ Chesney-Lind et al. 2003.

¹⁷² To-Hawaii.com: Hawaii Travel Guide.

¹⁷³ Hoover and Perez. 2006.

¹⁷⁴ Hoover and Perez. 2006.

¹⁷⁵ To-Hawaii.com: Hawaii Travel Guide.

Architect's Methods for Social Justice

The genesis of the Ke Aka Ho'ona self-help housing project is a product of the Consuelo Foundation's devotion to its mission of community reform and development. During the time of Ke Aka Ho'ona's uprooting, the foundation was relatively new, in which its personnel lacked the experience and expertise with such community projects. However, the foundation's strengths at the time were its professional assets, those with expertise in architecture, engineering, finance, law, and social work.¹⁷⁶ Group 70 International was chosen as the architects to lead this vision. With such professional backing and a clear vision, the necessary first step was to define a course of action. Ke Aka Ho'ona has then materialized to become the foundation's first Hawaiian project.

Through research, discussion, and by word of mouth, the focus on the leeward coast community of Wai'anae became the center of the foundation's awareness. The communities' contextual injustices and inequalities pinpointed a specific need for affordable housing and a safe and drug-free neighborhood. Thus, the development of affordable housing became a prioritized method to create social justice in the Wai'anae context. "The foundation's goal is not simply to increase the supply of affordable housing, but build an intentional community of low-income working families with children who wish to live in a nurturing neighborhood free from violence and substance abuse."¹⁷⁷ However, how is this

¹⁷⁶ Stufflebeam et al. 2002.

¹⁷⁷ George, Terrence R. 2000.

concept of a “value driven community”¹⁷⁸ to be integrated with the provision of affordable housing? The solution is the concept of self-help housing.

Ke Aka Ho’ona is a 14-acre plot of agricultural land that was converted into a vibrant community housing 75 low-income families (a phased and incremental development).¹⁷⁹ Unlike the process of develop and then occupy, the subject project engaged the local community and the carefully assessed families chosen to live there to build their own homes (recognized as “self-helped housing”). Self-help housing is a method in which families participate in a high percentage of the construction labor under qualified supervision. The savings from the reduction in labor costs allows otherwise ineligible families to own their homes.¹⁸⁰ In addition, this process “gives families more pride in ownership, more skills to do their own home repair (construction training), and more cohesion as a group of future neighborhoods.”¹⁸¹

In addition to the rigorous process of assessing and choosing participants or families for this affordable housing development, asserting social and lifestyle covenants are vital for the insurance of a values based community. The Consuelo Foundation and architects from Group 70 International specified the following rules:

1. Abstention from violence in relationships between peers and between parents and children.

¹⁷⁸ Consuelo Foundation.

¹⁷⁹ Stufflebeam et al. 2002.

¹⁸⁰ USDA: Rural Development.

¹⁸¹ George, Terrence R. 2000.

2. Abstention from use of illegal drugs.
3. No abuse of alcohol.
4. Dedication to giving back to the community.¹⁸²

Such rules are utilized as criteria for the foundation to eject a family for non-conformance or require participation in counseling.

¹⁸² Lengyel, Thomas E. 1999.

Museum of Struggle and Cultural Precinct

Architect: Noero Wolff Architects

Location: New Brighton, Red Location Township, South Africa

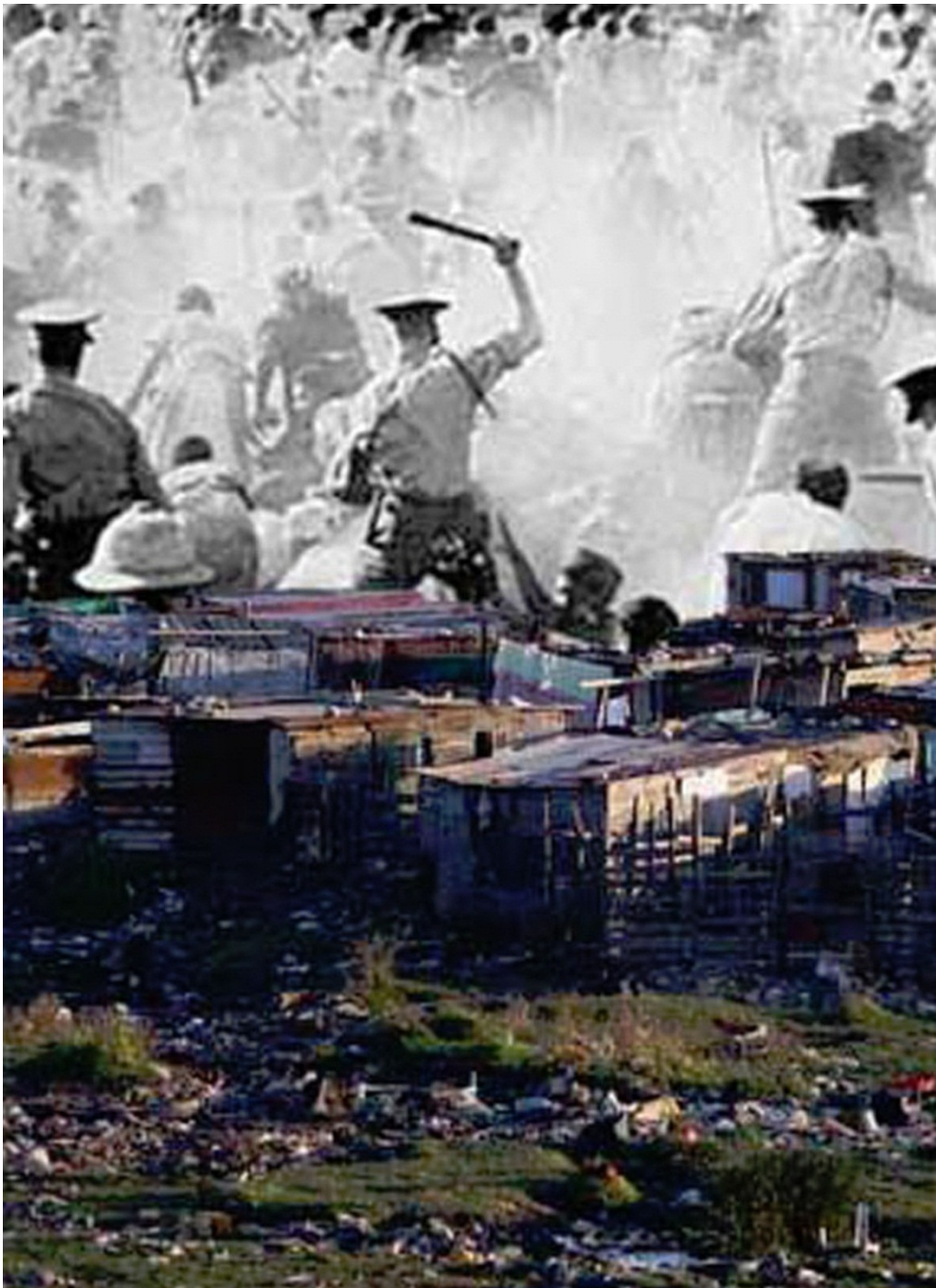


Figure 12.

Context - Injustices and Inequalities

The state of South African planning lacks a clear vision or definition due in part to its most recent and unjust history. Apartheid was a system of racial segregation enforced by the National Party of South Africa between 1948 and 1994.¹⁸³ It is characterized by decades of unscrupulous and merciless racial oppression and segregation, creating tensions over ethnicity and race that quickly resulted in spatial consequences in the urban landscape.¹⁸⁴ Unjust social policies were enforced on targeted groups that further enhanced such tensions between the “colored” (black, other non-white nationalities, and mixed races) and the white community. Such policies and laws were established by the government’s National Party as a way to formalize the already existing and longstanding practices of racial segregation.

Due to the complexities of apartheid and its differentiating effects on various urban and suburban townships in South Africa, this case study will narrow its focus on the black township of New Brighton, near the small south coastal city of Port Elizabeth. New Brighton, also known as Mandela Municipality,¹⁸⁵ was a township at the center of apartheid activity. Unjust policies like the Group Areas Act deeply scarred and shaped the urban landscape, leaving a large task for architects and planners to address and undo.

The Group Areas Act, passed in 1950, clearly marked the start of racial and spatial segregation of apartheid. This act deemed that all non-black

¹⁸³ Findley, Lisa. 2005.

¹⁸⁴ "History"

¹⁸⁵ Findley, Lisa. 2005.

residents of New Brighton were to relocate, isolating the existing black community in its place.¹⁸⁶ New black residents who were displaced from their homes joined this population. The result of this isolation is similar to containment camps, but instead of barbed-wire fences, imaginary and psychological barriers constrained these communities. In addition, segregation of the black communities extended far beyond the suburban landscape. They were also excluded from the urban landscape. Ninety percent of the population was excluded from any adequate institutional facilities such as museums, libraries, schools, and economic buildings.¹⁸⁷ Racial exclusion and segregation was further exacerbated with a series of policies and legislative acts (i.e., Mixed Marriage Act, Immorality Act, Population Registration Act, Bantu Authorities Act, and the Abolition of Passes and Coordination of Documents Act) that resulted in transfers of huge tracts of land out of black and colored ownership and control.¹⁸⁸ These unjust acts had negative political, cultural, economic, and psychological implications on black and colored communities. Such policies were a political act that exercised the white population's beliefs of racial superiority.

In response to such racial segregation and oppression, the black community responded through protests and violence. This was met by the white government with increasing aggression through torturing, imprisoning, and killing “enemies.” After much struggle, apartheid was reaching its end in 1989 after newly elected F.W. De Klerk legalized previously banned political parties, such

¹⁸⁶ Encyclopedia: Britannica.com.

¹⁸⁷ Findley, Lisa. 2005.

¹⁸⁸ Findley, Lisa. 2005.

as the African National Congress, and apartheid laws.¹⁸⁹ In 1994, a new constitution went into effect and Nelson Mandela was sworn in as president. It marked the end of apartheid and millions of black South Africans voted for the first time.¹⁹⁰

Injustices of apartheid are evident in the physical landscape of New Brighton, most noticeably recognized in aerial photographs, in which its policies still have an effect on everyone-spatially, socially, and economically. Towns are clearly divided between the grid streets of comfortable houses and lawns (where middle to upper-class whites live) and the densely packed dirt roads of tiny makeshift houses and shacks (black community).¹⁹¹ The homes in black communities are composed of an unplanned grid of shacks made of thick, aged corrugated iron, rusted red, surrounded by tiny fenced or walled lots. Over decades, these shacks have been continuously modified with corrugated iron, giving it an adaptive or deteriorating aesthetic, depending on one's point of view.¹⁹² In addition to such low standard, suburban living conditions is the absence of infrastructure (below and aboveground), contributing to unsafe and unsanitary living conditions. Commercial facilities are integrated into the black communities that are directed to serving the black townships of New Brighton

¹⁸⁹ "History"

¹⁹⁰ "History"

¹⁹¹ Findley, Lisa. 2005.

¹⁹² Findley, Lisa. 2005.

(unless they are given with government permission).¹⁹³ These unsavory conditions are a product of racial isolation and neglect.

Architect's Methods for Social Justice

1. Locate the museum into the immediate context of the black township. Noero Wolff Architects questions the government's direction by emphasizing that integrating commercial, medical, education, and other services into these townships may greatly enhance the communities' civic pride and socioeconomic dynamic. The poor will not have to travel long distances for work, services, and amenities, and the development of such buildings will help to spark improvement in the economy, planning, and architecture aesthetic.
2. To supply the much need public space that is safe for the community to enjoy. Besides the program of the precinct, the plan of the building does so by incorporating a number of benched areas and public plazas for recreation and hangout.¹⁹⁴ In addition, streets along the museum and precinct are renewed with pavement and trees planted in tree-wells, providing shade in the future. The paved streets with vegetation are envisioned to replace the dirt-lined streets of the entire community enhancing its overall aesthetic.¹⁹⁵
3. Due to the Red Location's community association obvious reasons for being highly suspicious of outside attempts to introduce structural changes, a weekly community-based project committee met weekly throughout the

¹⁹³ Findley, Lisa. 2005.

¹⁹⁴ Lepik, Andres. 2010.

¹⁹⁵ Lepik, Andres. 2010.

- design and construction process to ensure that concerns of the community were being met.¹⁹⁶
4. Building guidelines created by the architect stipulated that a third of the unskilled laborers were to come from the museum's immediate environment (Red Location), so that a large number of community members could gain construction knowledge and experience.¹⁹⁷ Workers would spend three months on the job before new workers would take their place.¹⁹⁸ Though this raised costs and extended construction time, the city felt it was a worthwhile trade-off both for the residents and for the neighborhood's acceptance of the facility.¹⁹⁹
 5. New affordable homes, renovation of other existing homes, and enhancement of the township's infrastructure were included in the project's scope.
 6. The museum represents the untold history (the struggles) of the people through its design and curatorial content.²⁰⁰ It is an approach that celebrates the strength and persistence of the struggle against oppression, war, and racism. In order to do so, the design of the museum is sensitive to its contextual surroundings. This is done through the sensitivity and innovation of the building's scale, aesthetic, and content.

¹⁹⁶ Findley, Lisa. 2005.

¹⁹⁷ Findley, Lisa. 2005.

¹⁹⁸ Findley, Lisa. 2005.

¹⁹⁹ Lepik, Andres. 2010.

²⁰⁰ Findley, Lisa. 2005.

Georges Pompidou Centre

Architect: Renzo Piano and Richard Rogers

Location: Paris, France



Figure 13. Georges Pompidou Centre

Context

Between the postwar 1940s and 1960s, a long period of economic expansion (known as *les trente glorieuses*) brought prosperity and growth to France. However, by May 1968, increasing societal dissatisfaction particularly with the youth charged the political atmosphere in Paris.²⁰¹ The May 1968 protest refers to a particular period in French history when the largest general strike, resulting in the economy coming to a virtual standstill, commenced with a series of student and labor force occupation protests. Groups revolted against modern consumer and technical society and embraced left-wing positions that were critical of authoritarianism and Western capitalism. The results affect political sentiment and contributed to major reforms to the education system and a more democratic system of governing councils.²⁰²

The site of the Centre at the Plateau Beaubourg is close to that of the former magnificent nineteenth-century Les Halles markets, which were destroyed to Rogers' dismay. (The markets were moved out of central Paris, leaving a void-eventually filled by a vast shopping center and rail interchange). To the east, the rundown Mariais district had been reprieved from total clearance, but was far from fashionable. Beaubourg was a key connection in the renewal of the historic heart of the capital. The site for the Centre had been cleared in the

²⁰¹ Fierro, Annette. 2003.

²⁰² BBC News.

1930s and was used as an untidy car-park before it was identified as the ideal location for President Georges Pompidou's art center.²⁰³

The initial program for the Pompidou was strictly a library. However, in 1969 the newly appointed President George Pompidou decided that it should be a library and a center for the contemporary arts, exhibition center, and tourist attraction (a cultural center).²⁰⁴ As for the specifics of the program, it was left to the architects participating in the international competition to formulate.²⁰⁵ The project brief was developed by Francois Lombard as a 'cultural center'. However, Rogers and Piano referred to it as a 'live center for information and entertainment', with the implicit belief that this would be a radical and innovative place, perhaps feeding on the energies of 1968 and the widely-acclaimed youth culture of Paris.²⁰⁶

Injustices and Inequalities

1. Injustices of debate include public space and the continuing need for a public and social architecture in Paris.²⁰⁷ This is the belief that public architecture in Paris reflects the elitist view of culture, segregation of socioeconomic classes. Open space in the dense urban landscape of Paris is often privatized as courtyards surrounded by the building, and public architecture hides behind grand stone facades.

²⁰³ Powell, Kenneth. 1999.

²⁰⁴ Silver, Nathan. 1994.

²⁰⁵ Silver, Nathan. 1994.

²⁰⁶ Sudjic, Deyan. 1986.

²⁰⁷ Powell, Kenneth. 1999.

2. The notion that structure of the building is permanent, defining how its occupants functions in its spaces.
3. Years after the completion of its construction, renovations (privatizing of various spaces in the building) and programmatic changes (increase of the museum's entry free) that were made to the Pompidou were interpreted as threats or injustices to the notion of the building being an open public space. "This decision was made in a blatant attempt to sanitize the occupation of the ground floor and plaza, which had been seen as unsavory in their (museum administration) increasing attraction to marginal social elements," states Annette Fierro, Associate Professor of Architecture at the University of Pennsylvania.²⁰⁸

Architect's Methods for Social Justice

1. Resistance of the notion of elitist view of culture and public architecture. Culture is meant to be seen as open and unrestricted.²⁰⁹
"It is my belief that exciting things happen when a variety of overlapping activities designed for all people – the old and the young, the blue and the white collar, the local inhabitant and the visitor, different activities for different occasions – meet in a flexible environment, opening up the possibility of interaction outside the confines of institutional limits. When this takes place for those who live, work and visit; places where all can participate, rather than

²⁰⁸ Fierro, Annette. 2003.

²⁰⁹ Jodidio, Philip. 2008.

less or more beautiful ghettos,” states Rogers.²¹⁰ In order to accomplish this, the architects utilized the following architectural design methods.

- A. Created a large public plaza outside the confines of institutional limits.
- B. Designed the building’s façade (vertical circulation) as an extension of the plaza. Vertical circulation along the spaces in the building’s façade is not only meant to be occupied as a transitional zone to its interior. It is a viewing platform to the rest of the city.
- C. The building is intended to have no single main entrance. Rather the entire ground floor of the open plaza functions as the entrance to all parts of the building.
- D. Transparency of the building through the materials of construction.

This enables the exterior public to clearly view the internal functions of the building’s interior. This is also applicable to the interior’s public looking to the building’s exterior urban surroundings.

2. The design of open floor plans was designed for flexibility. The structure is a frame spanning from one end of the building to the other. The stairs, elevators, and mechanical services were all pushed to the envelope of the building. This takes into consideration the evolving needs of its users. In addition, it expresses the belief that buildings should be able to change to allow people the freedom to adjust their environment as they need.
3. The architects protested the renovation’s privatized spaces and increase in public entrance fee as it opposed their original intention of the building’s

²¹⁰ Great Buildings Online.

relationship to the general public.²¹¹ According to them, it ultimately castrates the building's redefinition of the transparent urban monument. Transparency in this context refers to the building's resistance to a closed set of defining terms and its relation to the human scale and everyday life (all socioeconomic classes).²¹²

²¹¹ Fierro, Annette. 2003.

²¹² Fierro, Annette. 2003.

Reflections

The architect's methods in the four case studies reflect diversity in the process to understand social justice in architecture. The case studies of the Bayview Hunters Point redevelopment and Ke Aka Ho'ona self-help housing heavily focus on the planning process as the tool to create social justice. In contrast, the process of architectural design is prominent as a primary method in the Georges Pompidou Centre. The Museum of Struggle and Cultural Precinct incorporates both the planning and architecture design processes. However, the preliminary approach that binds all of the case studies is the analysis and interpretation of contextual injustices and inequalities and an acknowledgement of the necessity of social justice.

The importance of understanding social justice in architecture is identified through analysis of social, economic, political, cultural, and historic circumstances that are specific to context. In the case studies of the Bayview Hunters Point redevelopment, Ke Aka Ho'ona self-help housing, and Museum of Struggle and Cultural Precinct, in-depth analysis identifies these contexts as communities plagued by adverse urban and human ecological forces. *Social Justice and the City*²¹³ and *Growing Urban Habitats: Seeking a New Housing Development Model*²¹⁴ address the notion of the deteriorating community dynamic as a product of physical and psychological neglect, racial and cultural discrimination, or value imposition. These negative forces imposed on

²¹³ Harvey, David. 2009.

²¹⁴ Morrish et al. 2009.

communities are then politically identified as injustices and inequalities. Injustices refer to the disposition of imposing values on a community with awareness of doing it.²¹⁵ Inequality is a product of uncontrolled circumstances (i.e. natural disasters) or failed methods.²¹⁶ However, the processes that architects utilize to address injustices and inequalities are greatly diverse.

As mentioned, the process utilized to address injustices and inequalities in the Bayview Hunters Point redevelopment and Ke Aka Ho'ona self-help housing is primarily accomplished through planning. Identification of injustices and inequalities directly informs the planning process of creating social justice. This is clearly described in the evaluation report titled *The Spirit of Consuelo: An Evaluation of Ke Aka Ho'ona*,²¹⁷ which acknowledges the integrated planning process of affordable self-help housing in Wai'anae. *Bayview Hunters Point Area B Survey: Historic Context Statement*²¹⁸ also acknowledges the necessity of integrating the planning process with identified injustices and inequalities through critical analysis of failed solutions. However, the specificity of identifying the method to create social justice is at question. This is evident in the Bayview Hunters Point redevelopment case study, where a proper method for creating social justice is a highly disputed issue. What physical socioeconomic product will be the most effective at enhancing the well-being of the community? The case studies of Ke Aka-Ho'ona self-help housing, Museum of Struggle and

²¹⁵ Fainstein, Susan S. 2010.

²¹⁶ Fainstein, Susan S. 2010.

²¹⁷ Stufflebeam et al. 2002.

²¹⁸ Plank and Ver Plank. 2010.

Cultural Precinct, and Georges Pompidou Centre address this uncertainty through the implementation of specific predefined socioeconomic projects. However, methods used to implement these physical projects for social justice greatly differ.

The case studies of the Ke Aka Ho'ona self-help housing and the Museum of Struggle and Cultural Precinct utilize identified contextual injustices and inequalities to directly inform planning and urban design methods for social justice. Such methods include community outreach and design input, psychological and cultural remediation (i.e., civic pride), and the enhancement of community safety as described in video interviews²¹⁹ by the South African architect, Noero Wolff. However, it is the Museum of Struggle and Cultural Precinct that pushes the envelope. Noero Wolff does this by directly applying the identified injustices and inequalities to the projects' architectural design and planning process. *Building Change: Architecture, Politics and Cultural Agency*²²⁰ and the Museum of Modern Art's *Small Scale Big Change: New Architectures of Social Engagement*²²¹ celebrate the museum and cultural center as a much-needed architectural and social gesture in the South African post-apartheid context. Sensitivity to context is created through the building's informed aesthetic, scale, and spatial awareness. The end result is a method that creates social justice through civic and cultural pride and rehabilitation.²²²

²¹⁹ Small Scale Big Change: New Architectures of Social Engagement.

²²⁰ Findley, Lisa. 2005.

²²¹ Lepik, Andres. 2010.

²²² Small Scale Big Change: New Architectures of Social Engagement.

Methods created by Renzo Piano and Richard Rogers for the Georges Pompidou Centre greatly differ from the other case studies. Architecture design is the primary method to create social justice. Rather than utilize factual context information to directly inform the architecture's design, the architects identified injustices and inequalities through the lens of personal theory and interpretation. Their open plan design and large public plaza were acts of resistance to the notion of elitism,²²³ which was identified to be overwhelmingly portrayed by public architecture in Paris at the time. Their design was an effort to make a public architecture socially just and open to all socioeconomic classes. Most written analyses gathered on the Georges Pompidou Centre (i.e., *New Architecture, Foster Rogers Stirling*²²⁴ and *The Glass State: The Technology of the Spectacle*²²⁵) primarily focus on the architecture's design, as opposed to the other three case studies. Notably, the analysis is the justification of the architect's intentions for the building's design with theory, for example, the "Le Centre Georges Pompidou" segment from *Architectures Volume 1*²²⁶ movie series. In addition, critical analysis by architectural critics of the Pompidou rests on the subjectivity of opinion. What is identified as a method to create social justice is often refuted by others as an injustice. This has been the case for the Pompidou's radical hi-tech design.

²²³ Fierro, Annette. 2003.

²²⁴ Sudjic, Deyan. 1994.

²²⁵ Fierro, Annette. 2003.

²²⁶ RMN Architectural Documentaries.

Methods for the creation of social justice in architecture stem from planning and architectural design. As exhibited in the four case studies, the planning process held more justification as methods for social justice than the architecture design process. The identified injustices and inequalities were directly integrated in planning processes, such as community engagement and the integration of a physical socioeconomic structure (e.g., affordable housing or a museum and community center). In contrast, the process of architecture design, notably in the Georges Pompidou Centre, were methods created through the subjective lens of the architect's theory and personal interpretation of social justice. The ambiguity of the creation of diverse methods questions the nature of what is being addressed. What is social justice?

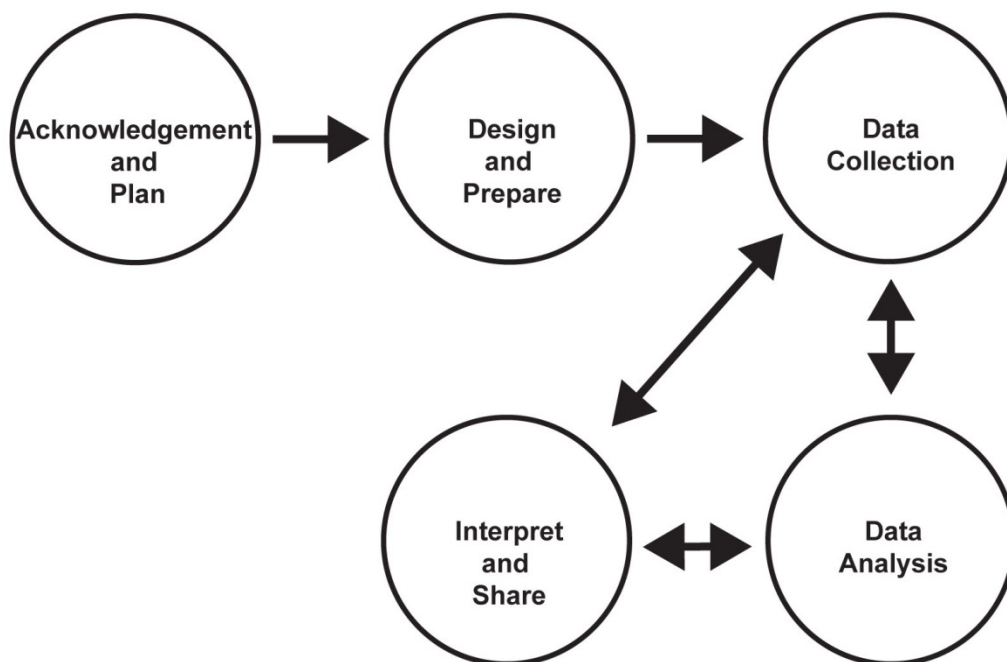
General Observations from the Existing Body of Research

The case studies of the Bayview Hunters Point redevelopment, Ke Aka Ho'ona self-help housing, Museum of Struggle and Cultural Precinct, and Georges Pompidou Centre reflect the diversity of methods to understand how social justice in architecture is created. The goal in Doctorate I class was to incorporate this case study analysis to develop a method to create social justice in architecture. However, research on existing knowledge of social justice in architecture, the Case Study Model, and the application of the four case studies lead to the observation that there is no specific research framework to understand and analyze social justice in architecture. The uncertainty of a specific research framework calls into question how the investigator should analyze social justice in architecture. The uncertainty leads to questions of how an investigator should prepare for research, what types of data collection is necessary in order to generate credible research, how data is linked (i.e., through context, injustices and inequalities, and an architect's methods), and how social justice is measured and critically analyzed in architecture.

CHAPTER 3

SOCIAL JUSTICE IN ARCHITECTURE MODEL

Acknowledgement that social justice in architecture is subject to personal interpretation, and that there are diverse methods to create it is necessary for architects to effectively analyze and design a socially just project. As mentioned, the ability to act within the architecture profession stems from knowledge of a repertoire of cases. However, based on observations from the existing body of knowledge on social justice in architecture, the Case Study Model, and the four case studies, a research framework for investigators to analyze and understand social justice in architecture does not exist. The Case Study Model is a generalized contemporary research method, lacking specificity, which provides a broad framework for any research topic. Chapter 3 dismisses the Case Study Model and proposes a new research model, the Social Justice in Architecture Model, which is diagrammed below.



Process: Acknowledgement and Plan

The acknowledgement and plan process is the stage in which the investigator decides to use the Social Justice in Architecture Model with an understanding of its strengths and limitations, and then formulates a research question. The Social Justice in Architecture Model's description of the plan process provides guidelines, and mental notes for investigators to prepare for research. Its process is a basic framework that is required and necessary in all research subjects. It is designed to be broad, where more specificity of the research question will be formulated in later processes.

The necessary first step in the process to develop the Social Justice in Architecture Model is to acknowledge that the definition of social justice is subjective. The architect's and investigator's personal interpretation will vary, and that there are diverse methods to create social justice in architecture. Acknowledging subjectivity develops credibility in the investigator's research by elucidating that the investigator's definition or method is not absolute and does not represent the entire population. Rather, it represents a specialized sample group and theory. An example of this is that self-help housing is an innovative method for the provision of affordable housing. However, this method does not discredit other affordable housing solutions nor establish hierarchy.

The next step is the investigator's decision to use the Social Justice in Architecture Model for research. In order to do this, the investigator must have an understanding of its significance in the architecture profession. In practice-

oriented fields of research, such as architecture, case studies have a special importance in that it is based on a repertoire of cases. An advantage of the Social Justice in Architecture Model is that it has the capability to incorporate numerous research models to produce well-rounded research. Research models include the Case Study Model, qualitative research, correlational research, experimental research, and the interpretive historical research models among others (refer to Chapter 2 for descriptions). A research model can be explanatory, descriptive, or exploratory, as opposed to other research models.²²⁷ Data from various research models are triangulated to create credibility in research. This is will be further described in the data collection process of Chapter 4.

The decision to use the Social Justice in Architecture Model highly depends on the research question. Formulating the research question is the most important stage of the research process, as “It explores new areas and issues where little theory is available or measurement is unclear...to describe a process or the effects of an event or an intervention, especially when such events affect many different parties.”²²⁸ The research question in this thesis focuses on creating social justice in architecture. However, the subjectivity of the term social justice and the diverse methods created in the architect’s historic search reveals that there is no single and definite answer to this question. Thus, the Social Justice in Architecture Model provides the most opportunity to reach

²²⁷ Clifford, Janine. Powerpoint Presentation. *Case Study Method*

²²⁸ Kohn, Linda T. 1997.

an unbiased conclusion by analytically comparing and contrasting diverse methods for social justice.

The question in the acknowledgement and plan process of the Social Justice in Architecture Model does not yet have to be set-in-stone. Such is questioning the specificity of what method will be utilized (stemming from planning, architecture, or a combination of processes). In addition, defining social justice, a subjective notion, as a tool to analyze the case study is not necessary at this stage of development. Like the decision to utilize the Social Justice in Architecture Model, the question can be broad, focusing on the notion of creating social justice in architecture. Specificity will be reached in later processes.

In relation to the topic of social justice in architecture, questions may be structured differently according to the investigator's goal. The first type is the questioning of the effectiveness or ineffectiveness of a particular architect's methods at creating social justice. This focuses on an individual project predetermined by the investigator. For example, does Renzo Piano's and Richard Rogers' method create social justice in Paris? The second type analyzes a particular method utilized to create social justice in architecture. This is a broader approach that does not have a predetermined project or case. As mentioned, the investigator's question should not be definite. The design and prepare process and the data collection and analysis processes of the Social Justice in Architecture Model will help to strengthen, restructure, or reformulate

this question. Candidate cases will also be screened in the design and prepare process.



- Acknowledge ambiguity and diversity
- Decide to use the Social Justice in Architecture Model
- Generate research question
- Understand types of questions

Process: Design and Prepare

The design and prepare process is the last stage prior to the main body of research (data collection, data analysis, and interpret and share processes) in the Social Justice in Architecture Model. The designing of a case study in the Social Justice in Architecture Model is the most difficult stage because it lacks the development of a concise question of research. Thus, in order to design a direction for research, the investigator must develop a theory for the definition of social justice and the methods utilized to create it, develop a system for judging the validity of the research, and identify the type and composition of the case study research. In addition, this process establishes procedures and general rules for the investigator to prepare for research, which includes the requirement that the investigator must be flexible to diverse and alternative methods, create a case study protocol, and develop procedures for screening candidate cases. Like the plan and acknowledgement process of the Social Justice in Architecture Model, the framework for the design and prepare process provides a set of mental guidelines for investigators to acknowledge prior to the main body of research. A framework for this process is required and relevant for any subject of research.

Composition of a Preliminary Theory

There are five components for designing a case study that fosters a process to help construct a preliminary theory. This includes a study's question,

its propositions, its unit of analysis, the logic linking the data to the propositions, and the criteria for interpreting findings.

1. The first component, a study's question, is constructed in the acknowledgement and plan process of the Social Justice in Architecture Model. This is a generalized question that asks how or why social justice is created in a specific architectural project or method.
2. The second component is a study's proposition, if any. Propositions direct attention to something that should be examined within the scope of study. The most notable proposition is the definition of the term social justice. The investigator's definition of social justice will be utilized as a tool to measure the effectiveness of the project's methods for creating social justice. Another proposition, such as addressing the subjectivity of the definition of social justice, recognizes the historical diversity of methods architects utilize. Acknowledging subjectivity creates validity in the investigator's research. Recognizing diverse methods also helps the investigator select an architecture project or method to research.
3. The third component, the unit of analysis, is related to the fundamental problem of defining the case or cases if it is a multiple case study.²²⁹
What is a case in architecture, social justice? "The concept of case is not well defined and remains a subject of debate. The case may be

²²⁹ Yin, Robert K. 2009.

relatively bounded object or a process; it may be theoretical, empirical, or both...At a minimum, a case is a phenomenon specific to time and space.”²³⁰ Within the field of architecture, a physical structure (e.g., housing, museum, urban plan, etc.) is often the focus of attention and “...the gap between case study and history tends to diminish. An artifact [physical structure] is a carrier of its history...The context of design and the context of use may be separated in time, but are often equally important to the understanding of the case of an artifact...when the case is a physical artifact, case studies often become more or less historical case studies.”²³¹ However, if the question focuses on the analysis of an architect’s method, the case is the architect’s theories, observations, and actions for implementation rather than the physical artifact. The physical artifact is then utilized as a means to create credibility for the architect’s methods.

Selection of the appropriate unit of analysis or case starts with specifying the study’s question and identifying and analyzing the propositions. “If your questions do not lead to the favoring of one unit of analysis over another, your questions are probably either too vague or too numerous, and you may have trouble doing a case study.

However, when you do eventually arrive at a definition for the unit of

²³⁰ Ragin and Becker S. 1992.

²³¹ Johansson, Rolf.

analysis, do not consider closure permanent.”²³² Screening candidate cases will be further described later in this process.

4. Linking data to propositions and criteria for interpreting the findings can be generated in the design and prepare process of the Social Justice in Architecture Model to a certain degree. However, it is usually and more effectively done in the data analysis process when the bulk of data and findings are already generated.

Theory

The components of the design and prepare process will help the investigator formulate a preliminary theory related to the topic of study prior to the collection of data. A theory is essential, especially if the case study's purpose is to develop or to test a theory. It is a blueprint to be followed; it facilitates the data collection phase. A theory should not be considered with the formality of grand theory, and it does not require the investigator to be a masterful theoretician.²³³ “When a generalization is based on deductive principle, the procedure is similar to an experiment: a hypothesis is formulated, and testable consequences are derived by deduction. By comparing the expected findings, which are deduced from a theory and a case, with the empirical findings, it is possible to verify or falsify the theory.”²³⁴ Such can be structured in a statement as the following:

²³² Yin, Robert K. 2009.

²³³ Yin, Robert K. 2009.

²³⁴ Johansson, Rolf.

Emerging from the case study analysis is a process that seeks to evaluate and understand social justice. It will also establish a useful process to evaluate methods of social empowerment in past and future architectural projects.

In the process of analyzing how social justice is created in architecture, a theory about the definition of social justice and the method to create it should be made by the investigator. This is a theory of action that defines how the researcher expects a specific intervention or method to respond to and affect contextual circumstances. Formulating a theory helps to define the issues to be examined during analysis. As mentioned, preliminary theory is not grand theory and is subject for change. For example, extensive research, utilizing the Case Study Model on the four case studies in Chapter 2 has altered this thesis's theory and focus because of new discoveries and realizations; specifically, the subjectivity of the term social justice and the creation of diverse methods.

Refining the theory is generated through later processes of the Social Justice in Architecture Model. However, basic and broad parameters must be created along with theory in the design and prepare process for the investigator to remain on track. Parameters include the investigator or architect's interpretation of the definition of social justice, the methods, context of the case, who is affected by the method, how much of the method the affected parties are subjected to, and what outcomes are expected. On the topic of social justice, identification and detailed research on the specificities of context and injustices

and inequalities are important due to diverse cultural, social, economic, political, and historic circumstances. Methods and the definition of social justice may differ according to context.

In addition to the formulation of a preliminary theory, the investigator of social justice in architecture must acknowledge rival theories. Architecture's historic search to create social justice yields diverse methods. Thus, a particular method that the investigator theorizes as socially just may be refuted by another theory or method as an injustice or not affective. Like in the study's proposition component, validity of the case study research and conclusions can only be achieved through acknowledgement of rival theories. Rival theories will be further discussed in the data collection and analysis processes.

Judging Validity

The next stage in the design and prepare process of the Social Justice in Architecture Model is formulating criteria for judging the quality of research by testing its trustworthiness, credibility, confirmability, and data dependability. This is because a research design is supposed to represent a logical set of statements. Criteria for judging the quality of research include constructing validity, internal validity, external validity, and reliability. However, all but external validity is best utilized later in the data collection and analysis processes of the Social Justice in Architecture Model. The other criteria will be described later in this chapter.

External validity deals with the problem of knowing whether a study's findings can be generalized beyond the immediate case study.²³⁵ This is especially pertinent to creating validity in the topic of social justice in architecture. As previously mentioned in the acknowledgment and plan process, the notion of social justice is not a term that can be generalized to the population. Social justice is subjective and varies according to contextual circumstances (cultural beliefs, social beliefs, economic and political beliefs, etc.). Subjectivity is also evident in the creation of diverse methods. An example of this is the difference in methods utilized by the architects in the four case studies of Chapter 2. If Renzo Piano's and Richard Rogers' methods worked in Paris, will it work in the Red Location Township of South Africa, Bayview Hunters Point, or the Wai'anae contexts? The logical answer is that it will probably not work to the same effect. Specificities of the individual architect's methods differ. In addition, their methods address different injustices and inequalities unique to context.

Creating external validity with social justice in architecture is a difficult task to accomplish. Generalizability amongst a vast range of cases may not be possible because of the plethora of context differences and the evolution of architectural understanding and trends. In order to create a generalization, "A theory must be tested by replicating the findings in a second or even third case, where the theory has specified that the same results should occur. Once such direct replications have been made, the results might be accepted as providing

²³⁵ Yin, Robert K. 2009.

strong support for the theory, even though further replications had not been performed.”²³⁶

Identifying Type and Composition

The next stage in the design and prepare process is to identify the type of case study. There are various identified case studies. The first type is the explorative case study, which investigates if a theory is sound or can be proven.²³⁷ Utilization of this case study type relies on the existence of a case that directly correlates to the investigator's theory of social justice and method of focus. However, selecting and sorting through the multitude of cases is a difficult task. The second type is the explanatory case study, which uncovers situations or phenomena.²³⁸ This investigation works to reveal context information (social, economic, political, historic, culture, etc.), the identified injustices and inequalities, and the specificities of the architect's methods. The third type is the causal case study, which deals with finding what actions caused an organization to be what it is today.²³⁹ Context information, identified injustices and inequalities, and the architect's methods are linked together or unified into a systematic process that creates social justice or even an injustice. For example, the deterioration of the Red Location Township of South Africa (the context) was caused by the injustices of apartheid's unscrupulous and merciless racial

²³⁶ Yin, Robert K. 2009.

²³⁷ Coherency Architects.com.

²³⁸ Coherency Architects.com.

²³⁹ Coherency Architects.com.

oppression and segregation.²⁴⁰ The identification of this directly informed Noero Wolff Architects' methods of a combination of planning and architectural design to create social justice in the areas of living and socioeconomic reform, psychological repair, and cultural remediation. Case studies of social justice in architecture will utilize a combination of the explanatory and causal case study types.

The final step in designing a case study is the selection of how the research is composed, whether it will be a single case study or multiple case studies. As mentioned in the planning process of the Social Justice in Architecture Model, the selection of the research's composition is dependent on the question. A single case study includes the questioning of the effectiveness or ineffectiveness of a particular architect's methods at creating social justice. For example, questioning if Group 70 International's method creates or does not create social justice in the Wai'anae community context. A multiple case study analyzes the particular method utilized to create social justice in architecture. For example, how does the architect's method of cultural remediation create social justice in the post-apartheid context of South Africa? This type of questioning reflects a broader approach, where validity of the particular method is strengthened with the analysis of multiple cases. It entails a rigorous process that requires the investigator to sort through and collect data on multiple cases. An issue that the investigator must be aware of is that along with the selection of the architect's methods, specificities of context are a major determinant in

²⁴⁰ Findley, Lisa. 2005.

selecting multiple case studies. Would the architect's method used in the Georges Pompidou Centre, Paris, work to the same effect in the South African context? This is further explained in the data collection and analysis processes of the Social Justice in Architecture Model.

Adaptability and Flexibility

Social justice in architecture is a complex subject that relies on informed theories (observation and analysis of human practice²⁴¹ and human processes operating in society as a whole). Similar to a philosophical question, there are no absolute answers to theory. This is reflected in the creation of diverse methods, where rival theories question a project or method's effectiveness at creating social justice in architecture. The investigator is then required to be adaptive and flexible to diverse methods so that newly encountered situations can be seen as opportunities and not as threats. An example is the contrasting views on what physical socioeconomic need is necessary as a starting point or catalyst in the cases of Ke Aka Ho'ona self-help housing and the Museum of Struggle and Cultural Precinct. As described by Francis Oda (architect, planner, and chairman of Group 70 International), the necessary first stage in reforming or creating social justice in a troubled community is to focus on creating a healthy and safe family atmosphere, through the provision of affordable housing.²⁴² In contrast, Noero Wolff Architects believed that the necessary first step was to provide

²⁴¹ Harvey, David. 2009.

²⁴² Oda, Francis.

psychological and cultural remediation through civic pride, a museum and community gathering place.²⁴³ Both are valid methods and theories for creating social justice in architecture. Rival theories are also reflected in the subjectivity of the term social justice.

Case Study Protocol

The design and prepare process includes the acknowledgement of a case study protocol. This includes procedures for data collection to avoid bias and preconceived notions; the case study question to keep in mind while collecting data (a tool to keep the investigator on task throughout the data collection and analysis processes; and a guide for the case study research (outline, format for the data, use and presentation of other documentation, and bibliographical information). The investigator should also have his or her theory and definition of social justice and method on hand as tools to reference and maintain on task throughout the rest of the research process. Creating a protocol will help to anticipate future problems, such as contradictions in processes, the case study question, and the investigator's theory. It also establishes that the investigator is knowledgeable and ready to continue on to the data collection process of the Social Justice in Architecture Model.

²⁴³ Findley, Lisa. 2005.

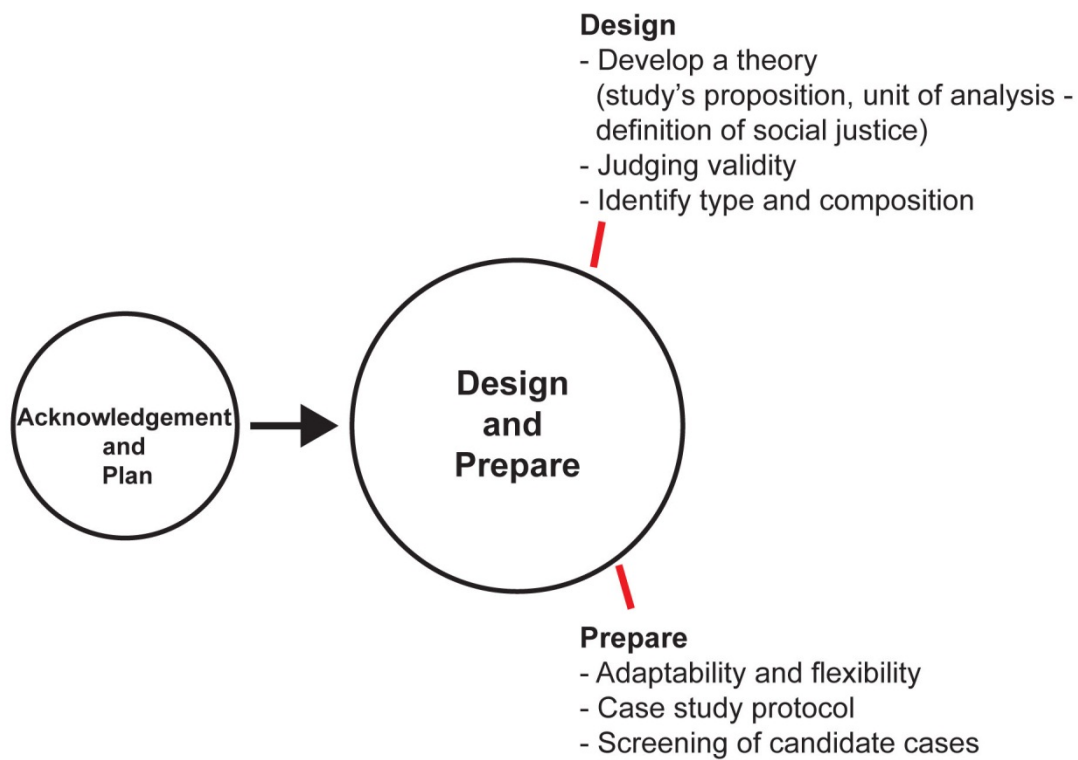
Screening of Candidate Cases

The last stage in preparing to conduct a case study, though it will continue into the data collection process, is screening the candidate cases. “The worst scenario would occur when, after having started formal data collection, the case turns out not to be viable or to represent an instance of something other than what you intended to study.”²⁴⁴ As mentioned earlier, the type of case study (single or multiple case study) depends greatly on the question at hand. If the question regards the effectiveness or ineffectiveness of a particular architect’s methods at creating social justice, the project case will most likely be selected during the process of question development. Data collection of a single case will determine if a project has sufficient data for comprehensive analysis. However, screening cases is highly important in a multiple case study. This is the questioning of a particular method utilized to create social justice in architecture. With the multitude and diversity of cases available, how does the investigator select the right cases? If a large number of cases are to be sorted through, helpful methods to follow include asking a knowledgeable source for advice, collecting relevant quantitative data from some archival source, looking at complex pilot case studies, and defining relevant criteria to reduce the number of cases to review. In addition, convenient access to relevant information may be a major determinant in selection. “A case may be purposefully selected in virtue of being, for instance, information-rich, critical, revelatory, unique, or extreme.”²⁴⁵

²⁴⁴ Yin, Robert K. 2009.

²⁴⁵ Patton, Michael Quinn. 1990. *Qualitative Evaluation and Research Methods*.

Selecting proper cases will be further explained in the data collection process of the Social Justice in Architecture Model.



Process: Data Collection

Data collection for social justice in architecture is an important and complex process of the Social Justice in Architecture Model. This process has influence on the evolution of the case study's question and theory, and it is guided by theoretical propositions. The investigator must understand what types of data are necessary to compose credible and unbiased research on social justice in architecture. The process includes the collection of data on context, injustices and inequalities, as well as the architect's methods to create social justice. The generalized description of the collection process in the Case Study Model is broad and ambiguous. It creates uncertainty in how an investigator systematically collects data for an architecture project or case or method of social justice.

According to the Case Study Model, the process of data collection is composed of six sources that are commonly used. This includes documentation, archival records, interviews, direct observations, participant observation, and physical artifacts.²⁴⁶ Architecture sources also include manifestos, written theories, video documentaries and interviews, and even architectural drawings. No source has an advantage over the other, and the utilization of a number of sources is highly recommended to strengthen case study research.

²⁴⁶ Yin, Robert K. 2009.

Context, Injustices, and Inequalities

David Harvey, author of *Social Justice and the City*, describes that social justice is contingent upon the observation of social process and human practice operating in society as a whole.²⁴⁷ The architect becomes the observer of facts. In order for an architect to create a method for social justice, observation and analysis must be made on the unique specificities of contextual circumstances and its unfavorable effects on social processes. Context includes the existing social, economic, political, physical environment, historic, and cultural data. The affected social processes include data on injustices and inequalities. Such data is unique from project to project. Thus, contextual generalizations formulated from a single project must be avoided. Contextual data in a multiple case study must be collected separately for each case. This determines if the selected cases can be grouped together for a credible generalization.

Collecting data on context and injustices and inequalities is comprised of evidentiary-based data collection. This is a complex task that involves the collection of exact data (i.e., exact names, references, and details of an event) and a broad coverage of facts. All data that influences the architect's methods and social justice should be included in collection. The most difficult aspect of this is an overload of information. Though the abundance of information enriches the quality and validity of the research,²⁴⁸ the investigator must be able to sort through data that is irrelevant or unnecessary to the question and goal of the

²⁴⁷ Harvey, David. 2009.

²⁴⁸ Coherency Architects.com.

case study. In a multiple case study, the investigator must be aware of the specificities of cases in order to create consistency. Such cases must exhibit similar contextual conditions, such as location, culture, social, economic, and political factors, and injustices and inequalities to create credibility in the particular architect's method of focus. For instance, a method utilized in two very different contexts will most likely generate dissimilar results.

Unlike factual and historical data collected on context data on injustices and inequalities are derived from statements, using observation and interpretation of context, by credible sources such as architects, decision makers, and stakeholders. Necessary for observation and interpretation is the source's ability to defend his or her statement with factual data and evidence. An example is the identification of Bayview Hunters Point industrial factories as an injustice because of the correlated damage it has done to human (high cancer rates, etc.) and landscape (toxic brownfields) health. Due to the subjectivity of injustices and inequalities, contrasting opinions are formulated. What is identified by an individual or group as an injustice may be refuted as just. For instance, the architects of the Georges Pompidou Centre identified the design of architecture in Paris as static and elite, an injustice.²⁴⁹ This can be argued otherwise.

²⁴⁹ Silver, Nathan. 1994.

Methods to Create Social Justice in Architecture – Architectural Design and Planning

Subsequent to the collection of data on context, injustices, and inequalities is the collection of data on the architect's methods to create social justice. This is a complex and extensive process. Strategies vary according to the investigator's question and the specificities of the targeted method (architectural design, planning, or a combination of both). As mentioned, the question developed in the acknowledgement and plan and design and prepare processes of the Social Justice in Architecture Model will determine how the case study is composed (single or multiple case study). A multiple case study is a highly rigorous process because the investigator is required to first collect data on a variety of cases. These steps will assist the investigator in selecting valid cases to analyze a particular method. Selecting cases is a comprehensive task that may be determined by being "information-rich, critical, revelatory, unique, or extreme."²⁵⁰ In particular, the cases selected are determined by the investigator's question. Context, injustices and inequalities, specificities of method (planning, architectural design, or a combination), and theory of how social justice is defined are factors that determine cases. Once the cases are selected, the investigator collects detailed data for each.

The first type of method is a process in which architects utilize the identified injustices and inequalities to directly inform their method of architectural design. An example of this is the case study of the Georges Pompidou Centre in

²⁵⁰ Patton, Michael Quinn. 1990. Qualitative Evaluation and Research Methods.

Paris. The architects identified public architecture in the city as static and elite, an injustice. Thus, they designed the Georges Pompidou Centre with an open plan, visual transparency through type of materials selected, and a large public plaza that would resist the identified injustice by creating a true public architecture.

In order to create validity and avoid bias in the research of architectural design methods, the investigator must collect data from various credible sources. This process includes collecting the unbiased historical data on the specificities of the project's design, determining the architect's personal theory and reasoning, architecture critics and stakeholders' analysis of the method and project, and results of the method or completed project. In addition, an understanding of the project or method's specific time of relevance (i.e., evolution of architectural thought, theory, and practice) is necessary for the data analysis process and the creation of a valid case study.

Collection of unbiased historical data on the specificities of the project case entails a collection of facts. Utilizing the historical research model, data collected would span the project's conception through its design, creation, implementation and post-implementation phases. Like context data, factual and historical data is necessary to collect because of the notion that social justice in architecture is only valid if all project phases from an integrated method for social justice. The investigator must question if a project's injustices diminish its overall ability to create social justice in architecture.

Data collection on the architect's personal theory of social justice, the injustices and inequalities, and their methods (i.e., causal links between theory and the design of architecture) is critical to creating validity in research. Such data is collected from the architect's interviews, personal writings, and even architectural drawings and sketches. Though this data reflects the architect's bias, the data is necessary in order to understand and critically analyze a particular method of focus. Data from the lens of architecture critics, stakeholders' analysis of the method or project, and the results of the completed project all work to validate the success or failure of the architect's personal theory and method to create social justice. Data from external sources is subject to opinion. The investigator becomes a mediator of the range of data, sifting through and determining what is credible. This will be further explained in the data analysis process of the Social Justice in Architecture Model.

The second type of method is based on the planning process to create social justice in architecture. For example, Group 70 International who worked on Ke Aka Ho'ona self-help housing, and Noero Wolff Architects who worked on Museum of Struggle and Cultural Precinct, focused on the creation and implementation of informed policies and guidelines specific to contextual circumstances. The planning process includes strategies for community participation, cultural remediation, psychological empowerment, and socioeconomic reform. Data collection on planning methods varies according to the specificities of the particular physical socioeconomic project. For example,

the planning processes' requirements and approaches for the provision of affordable housing will differ from the process of providing a community center, school, or health-care facility. Thus, the investigator should obtain general knowledge data on the physical socioeconomic project in order to analyze and understand the method's ingenuity and innovation. What makes self-help housing an innovative concept of affordable housing?

Like the architectural design method, the investigator must collect data on all of the project phases (i.e., project's conception through the design, creation, implementation, and post-implementation phases) in the planning method. This includes factual information on context analysis (i.e., statistics of population, demographic, density, health, economy, etc.), vision, financing, policies, implementation procedures, and community relations amongst other data. In addition, like the architectural design method, data from the lens of architecture and planning critics, stakeholders' analysis of the method or project, and the results of the completed project work to validate the success or failure of the architect's personal theory and method to create social justice. Data on the results of the completed project includes the project or method's social, economic, political, and cultural effects, and the impact of its unforeseen circumstances on all community stakeholders.

Validity of Data

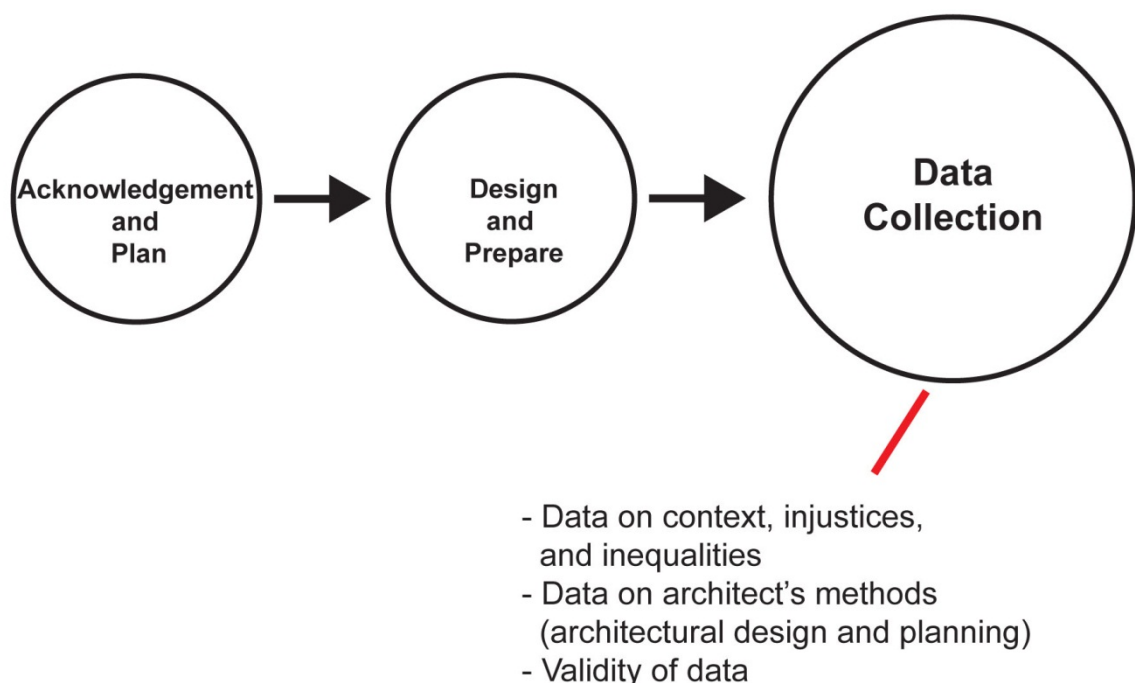
As described in the collection of context, injustices and inequalities, and method typologies data, validity is a necessity to create trustworthiness, credibility, confirmability, and data dependability. Constructing validity is one of the most challenging process for the investigator because the most common problem is the failure to “develop a sufficiently operational set of measures and that subjective judgments are used to collect data.”²⁵¹ For example, the investigator makes an assumption, prior to data collection by concluding that a particular method will certainly create social justice. This is a contradiction to the questioning of a project or method’s ability to achieve social justice in architecture and the purpose of the Social Justice in Architecture Model. Another validity problem occurs when the investigator selectively excludes data that either challenges or disproves personal theory or collected data.

The goal of creating validity is to create reliability. An investigator should be able to collect the same factual data as another researcher would. In understanding and analyzing social justice in architecture, the investigator should avoid being selective of context data, injustice and inequality data, and data on the architect’s methods. Steps utilized to construct validity in the data collection process are to use multiple sources of evidence and to create a chain of evidence. The investigator should also incorporate data on rival theories. An example of this is the data on the community and architecture critics’ negative analysis of the George Pompidou Centre. Controversy about the building’s

²⁵¹ Yin, Robert K. 2009.

design immediately ensued after its construction. Criticism included the questions: why translate culture into the language of high-tech? What is the point of grafting a science fiction machine onto the urban fabric?

When does the investigator know when to end the data collection process? Exhaustion of sources and data is often a sign for the investigator to move on to the next Social Justice in Architecture Model process, analyze data. However, it is important to understand that data collection is a process that may continue through preceding processes. As the investigator analyzes data, new findings may require more data collection for validity of research. Sharing interpretations and conclusions in the interpret and share process will also utilize this process. This is because conclusions and interpretations must be backed with factual evidence.



Process: Data Analysis

The next stage of the Social Justice in Architecture Model is the body of the investigation called the analyze data process. This is an analysis of factual data collected using an array of interpretations to find any and all relationships that may exist within reference to the research question.²⁵² Data is analyzed and then linked by the investigator to generate an informed conclusion on whether or not the project case or method is just. Like the data collection process, it is guided by prior development of theoretical propositions. The Case Study Model's description of this process is the most ambiguous because the techniques still have not yet been well defined due to unique specificities of the research being conducted.

With specificity to social justice in architecture, context, injustices and inequalities, the architect's methods are first analyzed and then linked in the analyze data process. This process is guided by unbiased analysis of facts. However, subsequent to this, in the interpret and share process, is the formulation of the investigator's interpretations and conclusions of the project's ability to create social justice in architecture. In the instance of a multiple case study, the cases are linked together by the investigator to formulate an interpretation of the method's ability to create social justice in architecture. As mentioned, such interpretations are guided by theoretical propositions made in the acknowledgement and plan and design and prepare processes.

²⁵² Dooley, Larry M.

Identifying Context and the Injustices and Inequalities

By this stage in the Social Justice in Architecture Model process, data collected should provide a framework for comprehensive analysis on the specificities of context, injustices and inequalities, and the architect's methods. Abundance of information enriches the quality and validity of the work by providing in-depth analysis on the subject of focus and alternative viewpoints, theories, causations, and conclusions. However, as mentioned, one of the most difficult tasks is to sort through the expanse of information collected in order to determine what data is irrelevant or unnecessary to the question and goal of the case study. Sorting through data is an ambiguous task that relies on the investigator's logic and analytic skills. In addition, it relies on the investigator's ability to develop a precise question, a theory, and a definition of social justice as tools to sort through and measure the relevancy of data without bias.

Vital for data analysis on context, injustices and inequalities, and the architect's method is the recognition of historic relevance. Analyzing a project case during its specific time period is an acknowledgement of history and the evolutionary differences in critical and theoretical thinking. What was theorized to be a method for social justice in the past may be refuted today. An example is Frank Lloyd Wright's 1932 utopian vision for the Broadacre City. He theorized that a decentralized (suburban) sprawling city dependent on the automobile was a healthy method to construct society.²⁵³ Today, urban planners and architects argue that a centralized and highly-dense city dependent on alternative public

²⁵³ Lepik, Andres. 2010.

modes of transportation (i.e., transit oriented - mixed-use developments) is necessary to construct a healthy and sustainable society. Data on historic relevance should be gathered in the data collection process of the Social Justice in Architecture Model, and should be utilized as a tool to guide analysis of the context, injustices and inequalities, and architect's methods. In addition, an investigator's acknowledgement of historic relevance of data should be clearly stated in the context analysis portion to establish credibility in the research.

Context data collected is composed of evidentiary-based information that includes exact names, references, event details, and a historical chain of events. This is necessary so that the data provides background on the project's unique conditions and describes the focus of the project. This includes collecting existing or historically relevant social, economic, political, cultural, and the physical environment data. It also includes factual data on the project like data on the architect, information on the project's conception, programmatic and functional requirements, and the project's targeted stakeholders, those who have a limited voice in public life and are affected by injustices and inequalities, among other data. However, data analysis on the architect's method to create social justice and complete the project will be analyzed later in this process.

Like the historical research model, validity is based on the actual flow of time and it does not or cannot violate the sequence of this flow.²⁵⁴ However, as the possibilities for context data are endless, how does the investigator determine what information is necessary, and what should be weeded out? As

²⁵⁴ Clifford, Janine. Powerpoint Presentation. *Interpretive Historical Research*.

mentioned, a tool to sort and analyze data is the investigator's question, theory, and definition of social justice. For example, as David Harvey described in *Social Justice and the City*,²⁵⁵ social justice focuses on the observation and analysis of human practice, social processes operating in society as a whole. Thus, a broad starting point is to categorize context data in accordance with its particular effects on human practices. Another tool to sort and analyze context data is to connect its relevancy to the identified injustices and inequalities that are deteriorating the social processes of the context.

Injustices and inequalities are extensions of context data that focus on human processes. It is characterized by stakeholder identification and acknowledgment of unjust contextual circumstances that result from value imposition or neglect. The investigator identifies injustices and inequalities through evidence derived from statements through observations and interpretations by credible sources such as architects, decision makers, and stakeholders. Often such evidence is generated from the population or community that is directly affected. Injustices and inequalities are also identified through the investigator's analytic identification rather than statements from the affected population or community. Through the analysis of context and the collection of credible resources, the investigator is able to reach an informed decision that the identified injustice or inequality is valid. Necessary for generating credibility are factual data and evidence; the cause of unjust policies, social and racial discrimination and neglect, physical barriers, etc., and what

²⁵⁵ Harvey, David. 2009.

were the reasons for its creation; rival explanations; and consensus among the affected population.

The architect's method to create social justice in architecture can only be analyzed after data links context with injustices and inequalities. This is due to the fact that an architect's methods are reactionary and dependent on analysis and interpretation of both.

Linking Data: Context, Injustices and Inequalities

The second stage in the analyze data process is creating causal links of a case's context, injustices and inequalities, and the architect's methods. Such causal links between context and injustices or inequalities are identified by the investigator in order to analyze how the architect interpreted injustices and inequalities to directly inform his or her method to create social justice. The following example of the Bayview Hunters Point redevelopment case study reflects the process of identifying and outlining causal links between the context and the identified injustices or inequalities. It contains the identification of the injustice, how it was created, and the specificity of the injustice.

1. Context: Bayview Hunters Point community
2. Injustice: High unemployment rates
3. How: Bayview Hunters Point's tipping point rested on the turbulent history of their Naval Shipyard, which sparked the decline of its existing social framework. During World War II, droves of African Americans

left southern plantations for the promising work at the Naval Shipyard.²⁵⁶ These workers were limited to mostly custodial or heavy labor jobs with little prospect for advancement,²⁵⁷ a precursor to today's racial tensions. After the end of the war, the need for a naval presence was minimal and thousands of workers were laid off. The shipyard continued to decline until its closure. In addition, there were many policies that failed at solving poverty.

4. Result: The community has one of the highest poverty rates in San Francisco, with 30 percent of families earning less than \$10,000 per year, and a median household income of \$29,640 annually, as compared to \$65,000 for white San Franciscans and a \$55,221 average citywide (72 percent of African American incomes in Bayview Hunters Point is below the federal poverty level).²⁵⁸

In addition to developing causal links between context and the injustices and inequalities, the investigator must connect identified links to other injustices and inequalities. This process can be utilized to create a chain of links.

1. Injustice: High unemployment rates in Bayview Hunters Point.
2. Links to injustice: racial segregation and discrimination.
3. Links to injustice: deteriorating physical environment.
4. Links to injustice: high crime and drug use rates.

²⁵⁶ Plank and Ver Plank. 2010.

²⁵⁷ Plank and Ver Plank. 2010.

²⁵⁸ Hunters Point Family.

5. Links to injustice: physical avoidance represented in the lack of any major circulation arteries to or through the community and a minimal economic presence.

6. Links to injustice: psychological neglect due to negative reputations.

For each link the investigator should follow the previous process of outlining the injustice or inequality, how it was created, and the result and specificity of the injustice. The process of outlining causal links will lead to a comprehensive understanding of the context and its injustices or inequalities in which the project and architect's method will intervene to create social justice.

Linking the Context, Injustices, and Inequalities with the Architect's Methods - Architectural Design and Planning

After the process of analysis and the linking of context with injustices and inequalities, the next stage is the analysis of the architect's methods to create social justice in architecture. This is a highly complex process in which the investigator must take into account many factors of analysis. This includes the analysis of the architect's theory of social justice in architecture, how the architect interprets injustices and inequalities of the specific context, how these injustices and inequalities inform the architect's method, and the specificities of the methods utilized (i.e., architecture design, planning, or a combination of both). In addition, prior to analysis of the specificities of the architect's methods, the investigator must collect and analyze data on how methods stemming from

planning or architecture design may be affected by unique contextual circumstances. The final steps are to link cases in a multiple case study. The investigator's personal interpretation and conclusions on the method's ability to create social justice do not occur until the interpret and share process.

The difficulty of identifying the architect's definition and theory of social justice is that it is often not directly stated in the investigator's collected data. Rather, the investigator is required to generate an understanding of the architect's definition by analyzing and linking a series of personal statements through architect interviews and writings, the project's mission statement as described in the project's brief, and the architect's reflections after the project's completion. It can also be generated through the analysis and interpretation of the method's process of implementing social justice. In innovative cases where methods are being created for the first time, or working to restructure or replace an existing method, the architect's definition and theory may change or evolve throughout discovery during the creation and implementation processes. Understanding the architect's definition of social justice may be ongoing through the process of analyzing methods.

Similar to the identification of the architect's definition and theory of social justice, the architect's identification and interpretation of injustices and inequalities may not be directly stated in the investigator's collected data. Thus, the investigator is to identify these through the analysis of the architect's personal statements, the project's mission statement, the architect's reflections, and

through the method's process of creating and implementing social justice. The investigator's analysis and identification of injustices and inequalities (as previously described in this chapter) is utilized as a tool to critically analyze the architect's identification and analysis of injustices and inequalities in the identify and share process. An example of this is the analysis of South African architect Noero Wolff Architect's decision to address the injustices of racial neglect (i.e., discrimination, deteriorating living conditions, and lack of socioeconomic structures benefiting the black community of Red Location) through the implementation of a museum and cultural precinct. Is this a necessary starting point for economic and social reform in post-apartheid communities? Should the focus have been directed to the provision of better living conditions through improved housing and infrastructure?

Analyzing methods of architecture design is a complex process because, as David Harvey described, "As with the question of space, there can be no philosophical answer to a philosophical question."²⁵⁹ So, can social justice be achieved through the design of architecture? The answer to this is in accordance with the interpretation of the investigator. For instance, does Renzo Piano's and Richard Roger's design of open floor plans, transparent materials and systems, and a large public plaza space resist the injustice of public architecture in Paris being static and elite?

This thesis follows the notion that social justice can be achieved through the design of architecture. Mentioned in the collect data section of this chapter,

²⁵⁹ Harvey, David. 2009.

credibility relies on the investigator's collection of unbiased historical data on the specificities of the project case, architect's personal theory and reasoning, architecture critics and stakeholders' analysis of the method and project (including rival theories), and results of the method or completed project. When analyzing this data, the investigator should avoid bias and personal opinion until after all evidence is presented. The investigator's voice and interpretation will be shared in the interpret and share process.

How is a museum, cultural center, or affordable housing designed? As mentioned, there can be no absolute solution to the design of space and form. However, as methods for social justice in architecture are responses to injustices and inequalities, architectural design methods should be derived from such identifications. This is a call for a contextually (social, political, economic, historical, cultural, physical) informed architecture. From the design of a building's scale to the design of aesthetic expression, the architect must have an understanding of what design implicates. For example, Noero Wolff Architects designed the scale of the Museum of Struggle and Cultural Precinct to fit in and not overpower its surrounding built environment in an act of sensitivity to the psychology of the community. In addition, the architect utilized the materials like corrugated steel and concrete to reflect the museum's surrounding built environment. They designed the memory boxes in the building's interior as memorials to the victims of apartheid and they created open and safe public spaces for the community to gather and play on, which the Red Location precinct

community lacked. These are design choices that recognize cultural values, historic struggles, and a fragile social dynamic. The architect mentioned that these choices were used to create civic pride. It would also be utilized as a catalyst or starting point for future architecture design in the community and for South Africa to enhance the economic prosperity of the community by attracting new businesses and visitors, and provide psychological remediation from racial discrimination and segregation.

Other types of methods to create social justice in architecture stem from the focus on planning. However, as mentioned in the collect data process, planning methods are complex and varies according to the particular socioeconomic project. Requirements and strategies for providing affordable housing will differ from the provision of a community center, school, or healthcare facilities. Thus, the investigator who selected the specific socioeconomic project in the plan process must generate a general understanding of the specific physical socioeconomic project of focus. For example, in the case study of Ke Aka Ho'ona self-help housing, general knowledge of affordable housing was collected and analyzed. This helped the investigator analyze the specific method's innovation.

Though planning methods are diverse and complex, there are general guidelines that create a framework for investigators to analyze all planning methods with specificity to social justice. Reflected in the Ke Aka Ho'ona self-help housing, Bayview Hunters Point redevelopment, and Museum of Struggle

and Cultural precinct, general planning guidelines include the processes of community engagement, psychological and cultural empowerment, environmental sustainability and safety, and the provision of economic opportunity.

Community engagement is a planning method that can advocate for those who have a limited voice in public life. It builds structures and policies for inclusion that engage stakeholders and allow communities to have a role in decision making processes. An example of this is Noero Wolff Architect's extensive community engagement processes that lead to policies and requirements for the development of the museum and cultural precinct. A tradeoff for the development of the museum and cultural precinct was the restoration of some corrugated iron houses, enhancement of infrastructure, and the inclusion of new housing in the community.²⁶⁰ Community engagement minimizes public opposition and is a socially just method that avoids value imposition (an injustice). This is the authoritative implementation of an idea or physical product without value and sentiment of culture, social values, and context.

Psychological and cultural empowerment is a necessary planning method in communities that are plagued by adverse urban and human ecological forces. In contexts like Bayview Hunters Point, post-apartheid South Africa, and Wai'anae, communities have histories of experiencing unjust racial and socioeconomic discrimination and neglect. This has led to a plethora of other

²⁶⁰ Findley, Lisa. 2005.

injustices and inequalities like high poverty, drug, and crime rates among others. Thus, a planning method to address this has been through the provision or rebuilding of physical socioeconomic needs and programs for rehabilitation. The challenge that psychological and cultural empowerment methods face is community skepticism of decision makers, developers, and even planners and architects. This is due to past experiences, such as value imposition. Like psychological and cultural empowerment methods, environmental sustainability and safety focuses on the provision and rehabilitation of deteriorating contextual conditions.

The final general guideline for analyzing planning methods is the provision of economic opportunity. Planning methods of doing this are diverse, ranging from the provision of physical economic structures as catalysts for the creation of policies. An example of providing physical economic structures is Bayview Hunters Point light rail (the M-line). The rail is a tool that connects the community with the rest of San Francisco through affordable public transportation. Residents are able to commute to and from the city and its economic center. An example of policy is Museum of Struggle and Cultural Precinct's guideline that stipulates that a percentage of construction labor consists of the unskilled local community which provides them with opportunities for job training.

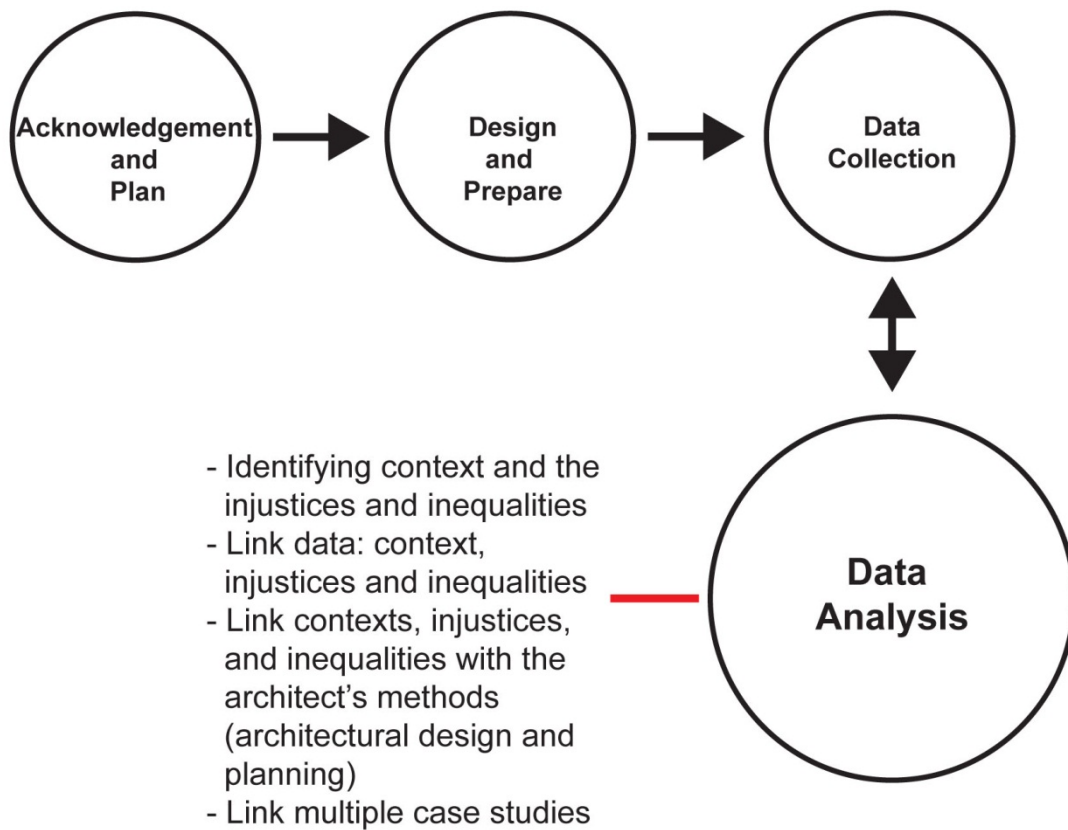
The methods stemming from architectural design to the focus on planning are affective methods of creating social justice in architecture. However, as in

the case study of the Museum of Struggle and Cultural Precinct, the architect combined both method typologies to more effectively create social justice. Noero Wolff Architect's methods clearly reflected Jo Noero's understanding and sensitivity to the injustices and inequalities in a post-apartheid context. Planning methods were utilized in the early stages of the project. Such methods include extensive community engagement, creation of jobs and training, and the provision of other community necessities affordable housing and infrastructure. The second method he utilized was the design of architecture, which reflected cultural, historical, and social sensibility. Jo Noero's method is innovative in the sense that neither planning nor architectural design has to be compromised or assigned hierarchical order in the overall search to create social justice. In addition, it sets precedence for how architects can be more proactive in the formulation of methods that stem from planning.

Linking Multiple Case Studies

After the case's context, injustices and inequalities, and the architect's methods are analyzed and linked, the final stage in the analyze data process of the Social Justice in Architecture Model is linking multiple case studies. How are cases linked? This process is not difficult because the cases' method of focus is the same. The investigator compares and contrasts the processes that the architects utilized to create and implement the method. It can be accomplished by creating a chart throughout the data collection and analysis processes of the

Social Justice in Architecture Model. Later during the interpret and share process, the investigator can apply personal interpretation and make a conclusion on the method's success or inability to create social justice in architecture.



Process: Interpret and Share

The final process in the Social Justice in Architecture Model is interpretation and sharing through the lens of the investigator. It is also the process in which the investigator develops a format for the research to effectively represent his or her data and findings. Like the data collection and analysis processes, the description of the Case Study Model's process of sharing does not create a framework specific to social justice in architecture. Thus, this section of Chapter 3 works to completely restructure this process.

Generating Conclusions

The difference that distinguishes the interpret and share process from the data analysis process of the Social Justice in Architecture Model is that the investigator's subjective interpretation, opinion, and theory are incorporated into the research. This is the process in which an investigator reflects on the collected and analyzed (factual) data and then interprets if the project case or architect's method is successful or unsuccessful at creating social justice in architecture.

Though the investigator concludes the case study using personal interpretation, it is important that there is critical evidence for readers to reach their own conclusions. This means that the data in the collect and analyze process of the Social Justice in Architecture Model is not biased, swaying the reader to reach a particular conclusion. Data is clearly presented as a chain of

facts that analyzes and accurately links information on context, injustices and inequalities, and the architect's method.

As mentioned, tools to measure a project or method's effectiveness are the investigator's definition of social justice and theory of how it is created. These tools were developed through the design and prepare process of the Social Justice in Architecture Model. In addition, development of the investigator's theory and definition of social justice may evolve throughout the data collect and analysis processes. Definition and theory must be acknowledged at the beginning of the research process as subjective in order to make research on social justice credible.

As mentioned by David Harvey, there are no answers to a theoretical question, such as spatial composition in architecture. Thus, the investigator is relegated to question the effectiveness of the architect's method and then apply personal interpretation or individual biases. Generating a credible conclusion relies on the investigator's ability to support opinion and bolster interpretation with credible data. This has been established in the data collection and analysis processes. Data includes all steps and methods the architect utilizes to complete the project and create social justice in architecture. The following example of Ke Aka Ho'ona Self-help housing in Wai'anae is a process in which the investigator reaches a credible conclusion:

1. Tools of measurement:

Definition of social justice: analysis of social processes in a particular context. It is created when those that are subject to injustices are given equal socioeconomic opportunity to better living conditions in society.

Method of focus: through the planning method, the architect provides affordable housing opportunities. The necessary first step in reforming a community is to enhance the quality of the family dynamic.

2. Data collection and analysis:

Architects from Group 70 International worked closely with a nonprofit private operating foundation, the Consuelo Foundation, to supply much needed affordable housing in the Wai'anae community context. Strict guidelines, reform programs, and incentives for its future residents were created and implemented to build a value-driven community. Such includes drug and violence prevention through counseling, rigorous participation in the construction of one's own house, job training, etc. (refer to chapter 2). The result is a much safer community fostered through the process of psychological and socioeconomic empowerment.

3. Interpretation and Conclusion:

Social justice was achieved, in which community reform was created through the architect's method of self-help housing. Wai'anāe residents were provided opportunities for psychological empowerment and socioeconomic enhancement without distractions and dangers of the injustices and inequalities of its immediate context.

Observations from the existing body of knowledge in Chapters 1 and 2 clearly recognize that methods stemming from planning are directly utilized to address social concerns. The observations are reflected in planning policies and community integrated planning. However, methods that stem from architecture design are brought into question regarding its ability to create social justice. The design of architectural space is theoretical, and its ability to create social justice relies on the investigator's definition of the term. Does the design of a more efficient space (i.e., open plan) in the George Pompidou Center create social justice? Or does it only create spatial productivity and ingenuity? Like planning methods, if the design of space and architecture are linked to the purpose of addressing identified injustices or inequalities, social justice can be realized. Renzo Piano and Richard Rogers link the design of the building's open plan, transparent aesthetic, and large open plaza as architecture design methods to resist the notion of elitism in the public architecture of Paris, France. The result is a "venue for unprogrammed, spontaneous activities,"²⁶¹ where over 7 million

²⁶¹ Powell, Kenneth. 1999.

people (20,000 per day) visit every year. "Street and building form a continuous and homogenous space; they penetrate and shape each other."²⁶²

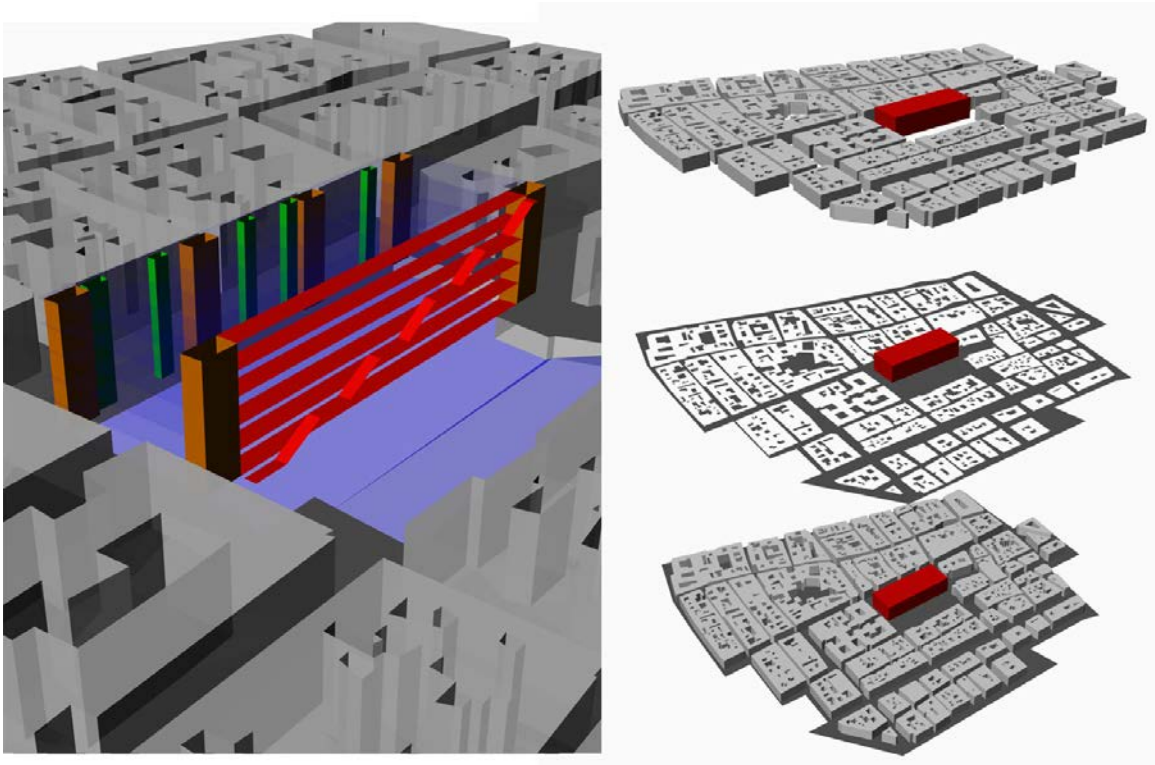
In a multiple case study, data from the data collection and analysis processes are compared and contrasted by the investigator to reach a conclusion. Factual data on the context, injustices and inequalities, and the architect's methods must align amongst the cases of focus for the investigator to conclude that a particular method was effective at creating social justice. For instance, a particular method utilized by an architect may not work or may have different results according to context. Would the method utilized in the Georges Pompidou Centre have the same effect in the South African context? Inconsistent selection of cases would not create credibility in the investigator's conclusions. Thus, as mentioned in the design and prepare through data collection processes of the Social Justice in Architecture Model, the investigator must select multiple cases of study with understanding of such information.

Formatting the Case Study

The formatting of the case study is an ambiguous process that is subject to the investigator's preference of representation and the topic of research. It is composed of a textual or visual format, which is specific to the data being represented (context, injustice and inequalities, architecture design, planning, etc.). The investigator decides on a format before the data that is collected and analyzed is shared in the body of the case study research.

²⁶² Powell, Kenneth. 1999.

In the profession of architecture, a commonly utilized format for abstracting design ideas, theory, and analysis of architecture, or urban design is through visual or graphic representation. This includes photographs, hand sketches and renders, digitally generated renders, diagrams, graphs, and plans. Graphic representations, if done correctly, can replace extensive use of textual formatting. When generating visual representations, the investigator must define the audience of the case study research. For example, if the research is targeted at a select academic audience, graphics may be more abstract and complex. However, the investigator must keep in mind the clarity and substance of the visual representations, and must have the ability to clearly convey an idea. The following images were created to analyze the Georges Pompidou Centre case study:



(Left) Diagram representing different programmatic functions of the Georges Pompidou Centre.
 (Right) Analysis of the Pompidou's creation of public space in the surrounding urban context.

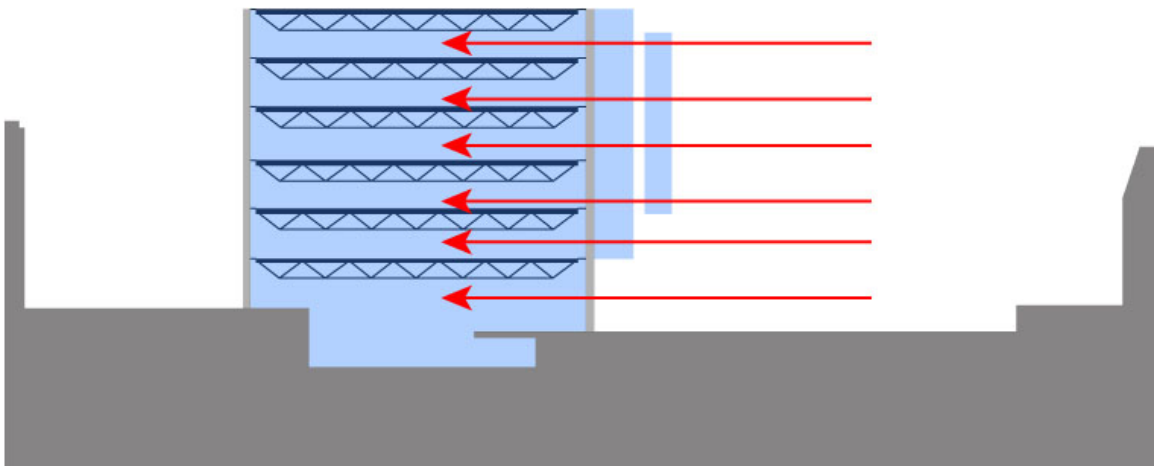
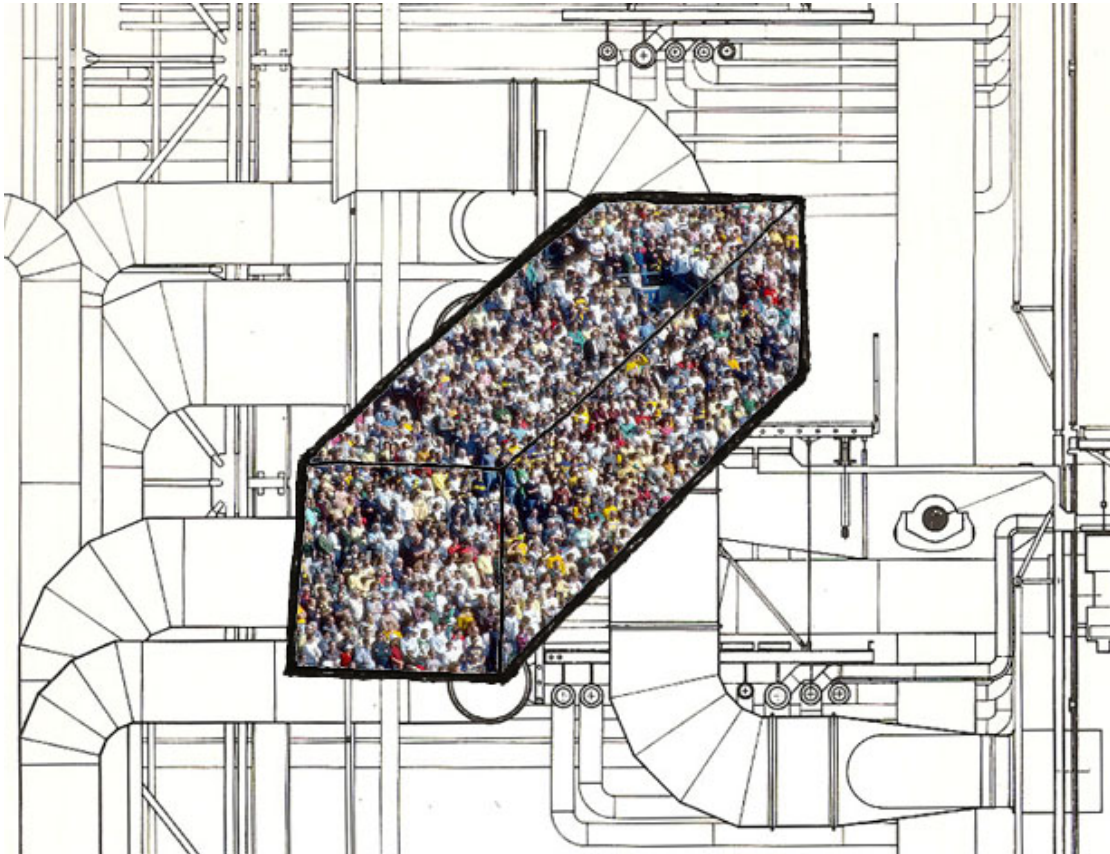


Diagram analyzing the architect's method of creating a public architecture through visual transparency.



The high-tech and innovative design of the Pompidou is secondary to its primary concept of being a social catalyst for social reform. Rather, its high-tech design is merely the container for a social space.

Unlike the visual representation of architecture analysis, planning methods and context analysis (data on social, economic, political, cultural, historic, injustices and inequalities) are primarily composed of text. This includes data documents of policies, guidelines, statistical information, and other factual and descriptive data. Such information is not generated from theoretical propositions and interpretations like architectural design (theory of physical space and form), but it is generated from observation and factually informed propositions (processes of creating and implementing policies and guidelines). The formation

of the text is an analytic reporting style, in which the investigator's interpretations and conclusions are avoided.

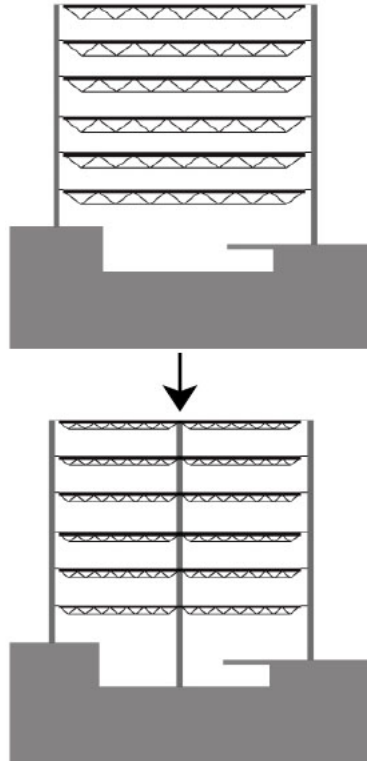
In the case study of the Museum of Struggle and Cultural Precinct, textual and graphic representation formatting was utilized to share the collected and analyzed data. As mentioned, Noero Wolff utilized both the planning and architecture design methods. Context analysis of South Africa's physical landscape, apartheid history, injustices and inequalities, and the architect's planning methods were primarily composed of text formatting. Graphics were secondary sources to support collected and analyzed data. Analysis of architectural design primarily utilized graphics.



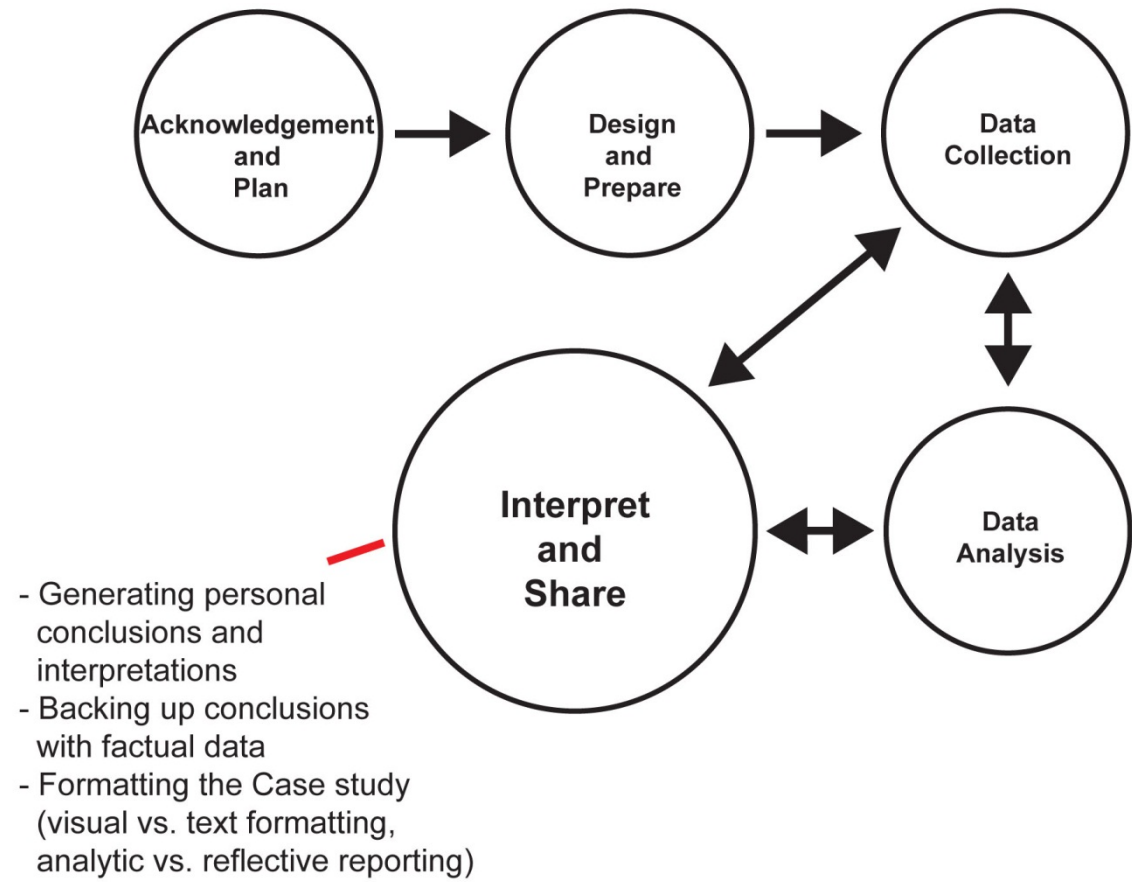
The investigator's conclusion and personal interpretations are formatted in a reflective reporting style. This is where the investigator uses literary devices to bring the report alive for the reader and the investigator's voice is present. Text or graphic representations are utilized for the reflective reporting style.

As mentioned, the investigator's interpretations and conclusions must be avoided during the process of data analysis. Does this restrict the format of the case study to the presentation of facts, followed by the investigator's interpretations and conclusions to a linear format? The answer is that a linear format is necessary to avoid swaying the reader's conclusions. However, the

investigator's voice does not have to be neglected during the data analysis process. The investigator's voice is utilized simply to pose a question or address rival theories (i.e., architect's theory versus the architecture critic's analysis).



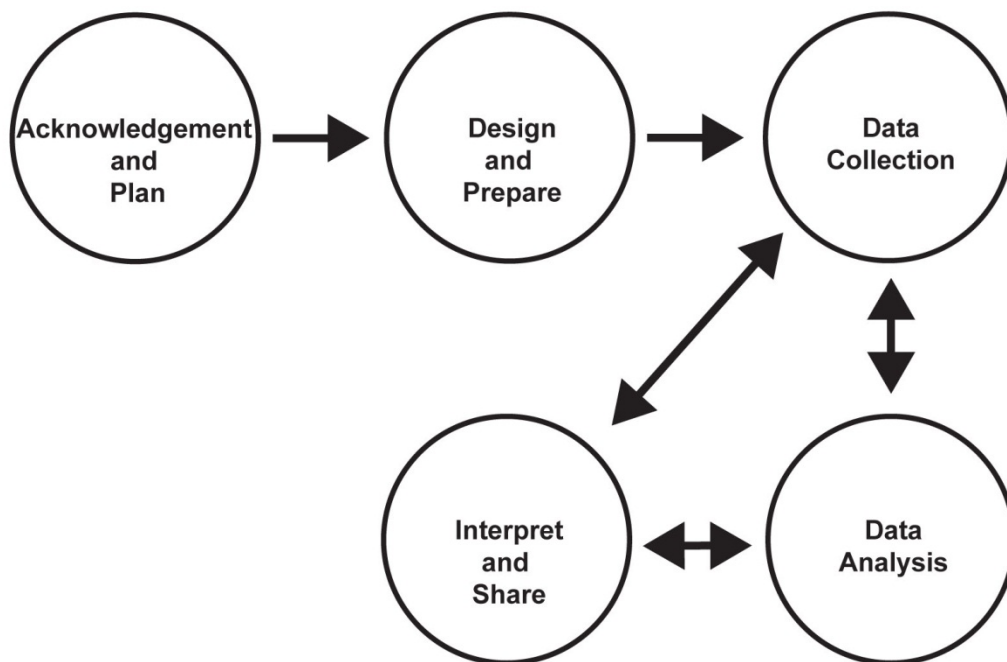
The wide depth of these trusses is required at the length of its span. Despite freeing up floor space, flexibility and maximization of interior vertical space (floor to ceiling) is obstructed. Would the inclusion of another column and thinner trusses increase the space's potential? Piano and Rogers believed that open horizontal space would increase usable space by 10% to 25%.



CHAPTER 4

APPLICATION OF THE SOCIAL JUSTICE IN ARCHITECTURE MODEL

The Social Justice in Architecture Model provides an alternative research framework to the Case Study Model. As observed in Chapter 2, the Case Study Model is a generalized research framework that does not provide an adequate way to analyze social justice in architecture. Thus, the goal of Chapter 4 is to test the Social Justice in Architecture Model by applying its framework to the Museum of Struggle and Cultural Precinct case study. This case study is selected because the architect utilizes a variety of methods that stem from planning and architecture design.



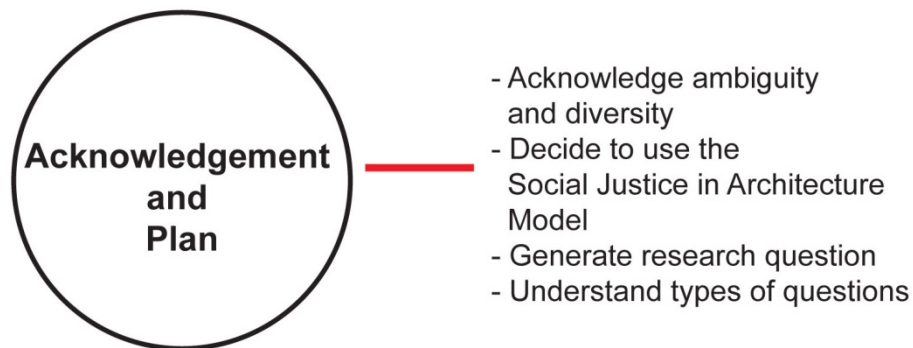
Museum of Struggle and Cultural Precinct

Architect: Noero Wolff Architects

Location: New Brighton, Red Location Township, South Africa

Project Date: 1998-2005

Process: Acknowledgement and Plan



Acknowledgement:

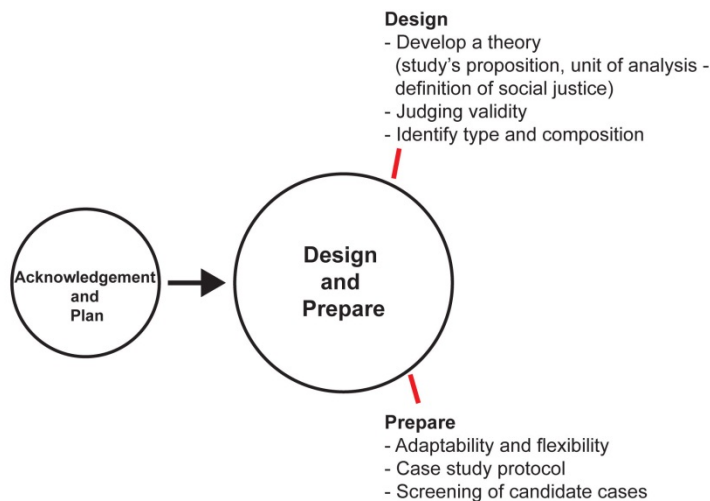
This case study acknowledges that social justice in architecture and methods to create it are subject to personal interpretation. Thus, social justice is defined specifically for this case study as a tool to analyze and measure the effectiveness of the architect's methods at creating it.

Question:

Do Noero Wolff Architect's methods create social justice in the post-apartheid South African context?

NOTE: The question in this stage of case study research can be broad, and a definition of social justice is not required until the design and prepare process of the Social Justice in Architecture Model.

Process: Design and Prepare



Theory:

Investigator's definition of social justice:

Social justice stems from the process of the observation of human practices in society as a whole. It is based on the principles of equality and solidarity, understanding of human rights, and recognition of the dignity of every human being.

Expected Results:

Expected from this case study is a better understanding of an architect's specific methods that can effectively create social justice in the post-apartheid South African context.

NOTE: This definition is the investigator's subjective interpretation, as described in the acknowledgement and plan process. It will be utilized as a tool to analyze and measure the effectiveness of the architect's method in this case study.

Judging Validity (external validity):

The architect's methods utilized in this case study are specific to the post-apartheid South African context in New Brighton, Red Location Township. In addition, this case study does not make the generalization that the architect's methods will be effective in other contexts of South Africa.

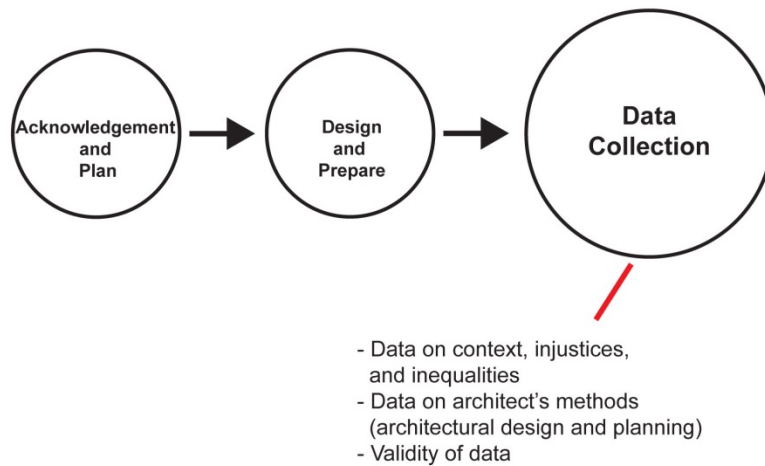
Identifying Composition:

Composition:

As reflected in the case studies' question (identification of a particular project – Museum of Struggle and Cultural Precinct), the composition of this research is a single case study.

NOTE: The design and prepare process works as mental guidelines for the investigator to acknowledge and be aware of prior to the main body of research. Thus, all steps in this process (i.e., identify type and composition, adaptability and flexibility, case study protocol, and the screening of candidate cases) do not require the investigator to record through text or graphics. In addition, because the question focuses on analyzing a particular architecture project, the steps of identify the composition (single or multiple case study) and the screening of candidate cases are obvious.

Process: Data Collection



Data collected on the Museum of Struggle and Cultural Precinct's context, its injustices and inequalities, and the architect's methods includes a variety of sources. As described in Chapter 3, sources include factual and historical data that is unbiased, the architect's personal theory, and architecture critic's analysis of the project and methods. The following are some of the various sources that were utilized in the data collection process for the Museum of Struggle and Cultural Precinct:

1. *Building Change: Architecture, Politics and Cultural Agency*.²⁶³ This source is a case study that investigates various projects that provides a "vision of a revitalized role for architecture as a critical cultural and spatial practice."²⁶⁴ Incorporated is historical and factual data on the post-apartheid context of South Africa and the Museum of Struggle and

²⁶³ Findley, Lisa. 2005.

²⁶⁴ Findley, Lisa. 2005.

Cultural Precinct, direct theory from Jo Noero, and critical analysis of the project.

2. *Small Scale Big Change: New Architectures of Social Engagement*.²⁶⁵ Like the previous source, this source provides historical and factual data, the architect's theory, and critical analysis.
3. "History: South African Government Information"²⁶⁶ and "Group Areas Act".²⁶⁷ These sources provide historic and factual data on apartheid and post-apartheid context of South Africa. In addition, it provides data on the identification of injustices and inequalities.
4. Noero Wolff Architects.²⁶⁸ The architect's theory is obtained directly from text and video interviews from his personal website.
5. "Participatory Development: A Jargon Concept?"²⁶⁹ This source is a critical analysis on the architect's methods of creating social justice in the Museum of Struggle and Cultural Precinct.

NOTE: The analyze data process is made easier through the formulation of brief descriptions or outlines of the collected sources. In addition, the process helps the investigator formulate an analysis of the project (i.e., case's question) prior to the data analysis process of the Social Justice in Architecture Model.

²⁶⁵ Lepik, Andres. 2010.

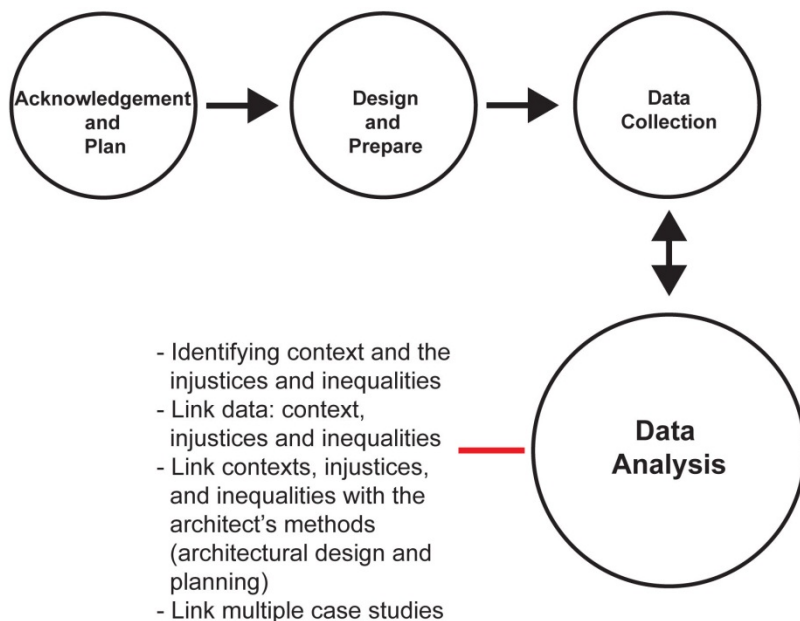
²⁶⁶ South African Government Information.

²⁶⁷ Encyclopedia: Britannica.com.

²⁶⁸ Noero Wolff Architects.

²⁶⁹ Roodt, M.J.

Process: Data Analysis



NOTE: When analyzing the collected data, the investigator must not incorporate personal interpretation and bias and make conclusions until the interpret and share process of the Social Justice in Architecture Model. In addition, this process should not be presented to sway readers to reach particular conclusions. All facts, including opposing theories, must be presented. For the purpose of Chapter 4, formatting from the interpret and share process will be included into this section. However, the investigator's interpretation and conclusions from the interpret and share process will be described in the next section.

Context (Historical and Political) and the Injustices and Inequalities:

NOTE: As mentioned in Chapter 3, the first step includes the identification of context, injustices, and inequalities. This is followed by the linking of context to the injustices and inequalities. However, formulation of these steps of analysis is according to the investigator's discretion. As represented in this case study, formatting of both steps are integrated to link cause (contextual circumstances) and effect (injustices and inequalities).

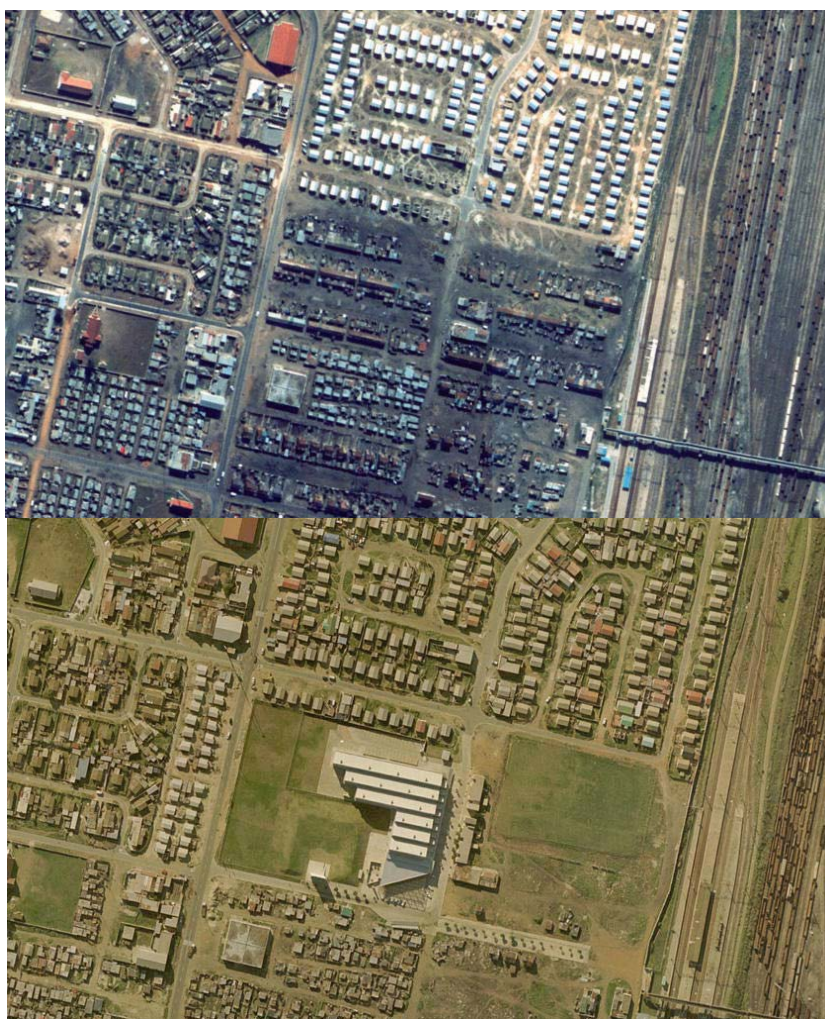


Figure 14. Museum of Struggle and Cultural Precinct site before its construction (above) and after.

NOTE 1. Vital for analyzing data on context, injustices, and inequalities, is the recognition of historic relevance. Analyzing a project case during its specific time period is an acknowledgement of history and the evolutionary differences in critical and theoretical thinking. Context data collected is comprised of evidentiary-based information that includes exact names, references, event details, and a historical chain of events. This information is necessary to accurately describe the unique conditions, background, and location of the project of focus. An overview of apartheid and its historical context is necessary prior to analysis of the case's immediate context, Red Location Township, New Brighton.

The state of South African planning lacks a clear vision or definition due in part to its most recent and unjust history. Apartheid was a system of racial segregation enforced by the National Party of South Africa between 1948 and 1994.²⁷⁰ It is characterized by decades of unscrupulous and merciless racial oppression and segregation, creating tensions over ethnicity and race that quickly resulted in spatial consequences in the urban landscape.²⁷¹ Unjust social policies were enforced on targeted groups that further enhanced such tensions between the "colored" (black, other non-white nationalities, and mixed races) and the white community. Such policies and laws were established by the government's National Party as a way to formalize the already existing and longstanding practices of racial segregation.

²⁷⁰ Findley, Lisa. 2005.

²⁷¹ "History"

Due to the complexities of apartheid and its differentiating effects on various urban and suburban townships in South Africa, this case study will narrow its focus on the black township of New Brighton, near the small south coastal city of Port Elizabeth. New Brighton, also known as Mandela Municipality,²⁷² was a township at the center of apartheid activity. Unjust policies like the Group Areas Act deeply scarred and shaped the urban landscape, leaving a large task for architects and planners to address and undo.

The Group Areas Act, passed in 1950, clearly marked the start of racial and spatial segregation of apartheid. This act deemed that all non-black residents of New Brighton were to relocate, isolating the existing black community in its place.²⁷³ New black residents who were displaced from their homes joined this population. The result of this isolation is similar to containment camps, but instead of barbed-wire fences, imaginary and psychological barriers constrained these communities. In addition, segregation of the black communities extended far beyond the suburban landscape. They were also excluded from the urban landscape. Ninety percent of the population was excluded from any adequate institutional facilities such as museums, libraries, schools, and economic buildings.²⁷⁴ Racial exclusion and segregation was further exacerbated with a series of policies and legislative acts (i.e., Mixed Marriage Act, Immorality Act, Population Registration Act, Bantu Authorities Act, and the Abolition of Passes and Coordination of Documents Act) that resulted in

²⁷² Findley, Lisa. 2005.

²⁷³ Encyclopedia: Britannica.com.

²⁷⁴ Findley, Lisa. 2005.

transfers of huge tracts of land out of black and colored ownership and control.²⁷⁵

These unjust acts had negative political, cultural, economic, and psychological implications on black and colored communities. Such policies were a political act that exercised the white population's beliefs of racial superiority.

In response to such racial segregation and oppression, the black community responded through protests and violence. This was met by the white government with increasing aggression through torturing, imprisoning, and killing "enemies." After much struggle, apartheid was reaching its end in 1989 after newly elected F.W. De Klerk legalized previously banned political parties, such as the African National Congress, and apartheid laws.²⁷⁶ In 1994, a new constitution went into effect and Nelson Mandela was sworn in as president. It marked the end of apartheid and millions of black South Africans voted for the first time.²⁷⁷

Injustices of apartheid are evident in the physical landscape of New Brighton, most noticeably recognized in aerial photographs, in which its policies still have an effect on everyone-spatially, socially, and economically. Towns are clearly divided between the grid streets of comfortable houses and lawns (where middle to upper-class whites live) and the densely packed dirt roads of tiny makeshift houses and shacks (black community).²⁷⁸ The homes in black communities are is composed of an unplanned grid of shacks made of thick,

²⁷⁵ Findley, Lisa. 2005.

²⁷⁶ "History"

²⁷⁷ "History"

²⁷⁸ Findley, Lisa. 2005.

aged corrugated iron, rusted red, surrounded by tiny fenced or walled lots. Over decades, these shacks have been continuously modified with corrugated iron, giving it an adaptive or deteriorating aesthetic, depending on one's point of view.²⁷⁹ In addition to such low standard, suburban living conditions is the absence of infrastructure (below and aboveground), contributing to unsafe and unsanitary living conditions. Commercial facilities are integrated into the black communities that are directed to serving the black townships of New Brighton (unless they are given with government permission).²⁸⁰ These unsavory conditions are a product of racial isolation and neglect.

Black townships like New Brighton were isolated communities for essentially captive, underpaid labor that built the prosperity of South Africa.²⁸¹ Townships were, to a certain degree, forced, self-sustaining communities because of the absence of facilities that provided necessities. These conditions, similar to the concept of suburban or urban sprawl, forced the black community to travel long distances without adequate modes of transportation for these necessities. Shops for food and basic necessities are only currently being established in a convenient manner, but to a limited extent.

In response to the living conditions of these townships, the newly established post-apartheid government is focused on building thousands of new homes in these communities²⁸² in efforts to revitalize the townscapes and amend

²⁷⁹ Findley, Lisa. 2005.

²⁸⁰ Findley, Lisa. 2005.

²⁸¹ Findley, Lisa. 2005.

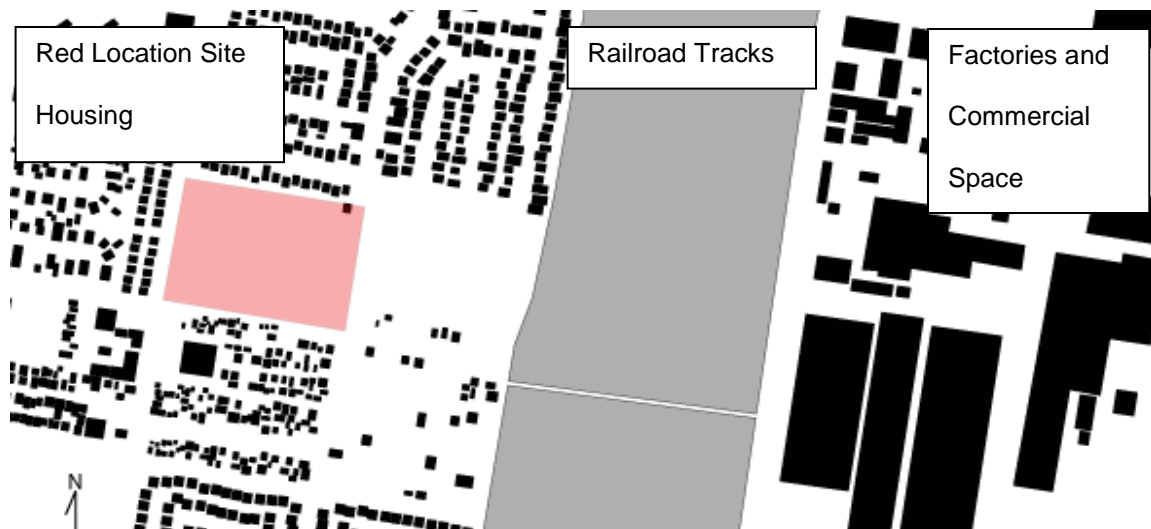
²⁸² Findley, Lisa. 2005.

their wrongdoings. Along with the establishment of new homes, adequate infrastructure and safe living environments are incorporated into this large-scale redevelopment plan.²⁸³ These efforts are a response to the demands of residents for decent dwellings. However, is this the best solution for revitalizing the social dynamic of these townships, and is there a more efficient or effective solution?

NOTE: As mentioned, a chain of historic events (cause and effects) are identified and analyzed in the data collection and analysis processes. This allows the investigator and the architect to generate a more informed decision or analysis of how social justice can be created in South African context.

NOTE 2. The next step in identification and linking of context and the injustices and inequalities of this case study is the analysis of the project's immediate context. This step is directly tied to the injustices of apartheid and historical context. Such data includes physical data and the project's information (conception – planning process, development, etc.).

²⁸³ Findley, Lisa. 2005.



Physical Isolation separating black communities from economic uses.

The Red Location Township (its name deriving from the rust color of ubiquitous, corrugated iron shacks) civic complex is located in one of New

Brighton's oldest townships that were set up in 1902 at the end of the Second Boer War. Later, in 1948, Red Location was the heart of a political hotspot for the anti-apartheid movement.²⁸⁴ In 1986, the apartheid



Figure 15. New Brighton, Red Location is composed of a grid of shacks made of thick, aged corrugated iron, rusted red, surrounded by tiny fenced or walled lots.

government, hoping to revitalize the Red Location, made plans to demolish the township and resettle its inhabitants. This provoked massive demonstrations that

²⁸⁴ Lepik, Andres. 2010.

led to the abandonment of this plan. However, the repression of the populace only increased.²⁸⁵

After the end of apartheid in 1994, the social and physical (architecture and urban planning) state of South Africa was released from the stranglehold of the defunct, pro-apartheid National Party government. This change enabled the revitalization of a less restricted language for policymaking, urban design, and architectural freedom. "Because South Africa had a new beginning in 1994, given our history, there was a sense of a real new beginning and that meant for architects [and planners] at least the opportunity to find new ways to design public institutions like museums and other such buildings," states Jo Noero, principle owner of Noero Wolff Architects.²⁸⁶ This new beginning also gives rise for the opportunity for the integration of commercial and other institutional buildings into the townships to revitalize its social and economic dynamic.

After the abolition of apartheid, plans for the construction of a number of museums dedicated to the history of the brutal regime and the people that suffered and fought against it were to be built around South Africa.²⁸⁷ The necessity for such museums comes at a time where first-hand "oral traditions of memory sharing are still alive and vivid."²⁸⁸ A decade after the end of apartheid, only two museums that were dedicated to the larger apartheid story has been erected.

²⁸⁵ Lepik, Andres. 2010.

²⁸⁶ Small Scale Big Change: New Architectures of Social Engagement.

²⁸⁷ Lepik, Andres. 2010.

²⁸⁸ Findley, Lisa. 2005.

The first was the Gold Reef City Museum by the architecture firm Mashbane Rose. The museum was criticized as "un-nuanced and predictable...its location is completely inappropriate context on the outskirts of Johannesburg...isolated in a landscape of endless parking lots by theme parks and casinos."²⁸⁹ The museum was contrived as an incentive to gain permission to develop a large-scale casino and a themed amusement park on the outskirts of Johannesburg.²⁹⁰ It is located among an up-scaled community geared as an engine for economic revitalization in South Africa, targeted towards tourism. Despite the museum's design and curatorial content being highly praised by critics, its location amongst such tourist attractions detract from its emotional and narrative substance as a museum to apartheid. In addition, its location is separated from past apartheid activity. The second museum dedicated to the larger apartheid story was the Museum of Struggle and Cultural Precinct.

Linking the Context, Injustices, and Inequalities with the Architect's Methods

NOTE: The following is analysis on Noero Wolff's methods that stem from the focus on planning. As mentioned in the data collection process, the architect's planning methods are given credibility through factual data (phases of the project's development, vision, financing, policies, implementation procedures, and community inclusionary processes). In addition, like the architectural design method, data from the lens of architecture critics, stakeholders' analysis of the

²⁸⁹ Findley, Lisa. 2005.

²⁹⁰ Findley, Lisa. 2005.

method or project, and the results of the completed project all work to validate the success or failure of the architect's personal theory and method to create social justice.

NOTE 1: The first step of analyzing the architect's planning methods is the acknowledgement of possible planning issues that may be unique to context. This is especially important in the post-apartheid South African context.

Architects and decision-makers are able to define the underlying problem in the physical and social environment of New Brighton as a product of unjust policy-making of apartheid. However, the actions of implementing new policies in response to apartheid often encounter a plethora of planning hurdles. For obvious reasons, most of the hurdles involve the opposition or skepticism of the black community. Skepticism from the black community is generated by the unjust implementation of policies by post-apartheid professionals (planners, engineers, architects, and other decision makers).

These policies are attempts to mislead black communities.²⁹¹ In many cases, decision makers are able to deceive black communities through inadequate or biased information. Perhaps this is due to the lack of educational opportunities for black stakeholders as these communities lack educational institutions. Perhaps decision-makers consciously censor or withhold information.

How can the misrepresentation of information be resolved? Besides the incorporation of more and higher-standard educational facilities for the black

²⁹¹ Marschall and Kearney. 2000.

community and the moral issue of decision-makers providing adequate and neutral information, community representation is in need of reform. Community representation in many black townships is problematic because community committees, which hold the majority of decision-making power, exclude equal representation of all stakeholders or potential opposing interest groups within the community.²⁹² Thus, this misrepresentation on the part of black communities leads to the further exacerbation of problematic urban and policy issues.

Other hurdles in the implementation of planned policies include long delays in the planning and implementation phases, which produces an emotional drain on both the community and planners. Funding problems, lack of skilled or trained labor, complex tensions within the community, extended decision-making processes, and internal and external power struggles are associated with the causation of these delays.²⁹³

NOTE 2: The next step is the identification and analysis of the architect's planning methods. This includes the linking of the planning methods with the identified contextual injustices and inequalities.

In 1998, a national competition was announced by the Port Elizabeth city government to design a town cultural center precinct which included the restoration of some corrugated iron houses, new housing, a library, art center, gallery and market hall, a conference center and accommodations, and an

²⁹² Marschall and Kearney. 2000.

²⁹³ Marschall and Kearney. 2000.

Apartheid Museum.²⁹⁴ This cultural center was conceptualized to memorialize apartheid in Red Location Township, making the historic site of resistance an integral part for empowering the museum experience.²⁹⁵ Noero Wolff Architects won the competition over the second place Mashbane Rose, designers of the Gold Reef City Museum.²⁹⁶ “The first proposition is to locate the museum and the new buildings in a neighborhood close to where people who were once victims of apartheid live. The buildings are integrated into the neighborhood so that they become part of the daily life of the people. In this way, the horror of apartheid becomes more apparent simply by the presence of, for example, the Apartheid Museum within a functioning community,” states Jo Noero.²⁹⁷

As mentioned, the effects of racial segregation are evident in the landscape of post-apartheid South Africa. In efforts to revitalize living conditions, the post-apartheid government is developing many new homes. However, does this improve the social dynamic of these suffering townships? [NOTE: The investigator’s voice does not have to be neglected during the data analysis process. It is utilized to simply pose a question or address opposing analysis (i.e., architect’s theory versus the architecture critic’s analysis)]. Noero Wolff Architects question the government’s direction by emphasizing that integrating commercial, medical, education, and other services into these townships may greatly enhance the communities’ civic pride and social dynamic. The poor will

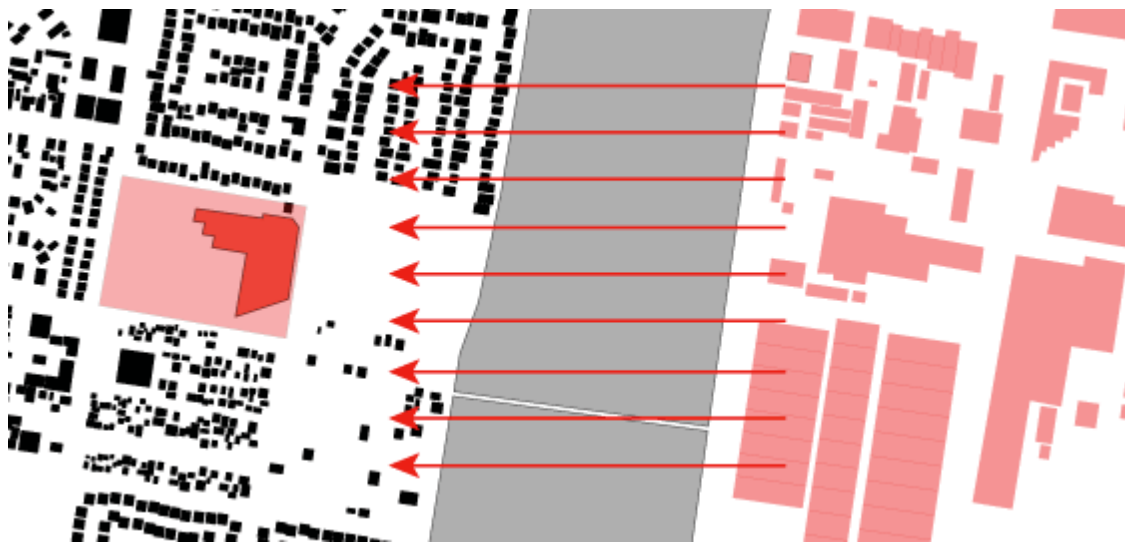
²⁹⁴ Marschall and Kearney. 2000.

²⁹⁵ Lepik, Andres. 2010.

²⁹⁶ Findley, Lisa. 2005.

²⁹⁷ Findley, Lisa. 2005.

not have to travel long distances for work, services, and amenities, and the development of such buildings will help to spark improvement in the economy, planning, and architecture aesthetic. Noero Wolff Architects' Museum of Struggle and Cultural Precinct is the first phase of a planned cultural center located in Red Location's community. The museum is a tool utilized to resist racial segregation and demonstrate their notions of a renewed social and architectural dynamic.²⁹⁸ An example of the civic pride fostered by the idea of this museum and cultural precinct occurred during the planning stage of the project, when the mayor offered the citizens 1,500 homes instead of the museum and cultural center. However, citizens chose the museum despite the fact that the majority of them lived in unpleasant conditions.²⁹⁹



Integrating commercial space into the township community.

²⁹⁸ Small Scale Big Change: New Architectures of Social Engagement.

²⁹⁹ Findley, Lisa. 2005.

Red Location is representative of many black townships fact that there is an absence of any formal public space or gathering areas and architecture.³⁰⁰ The planning by the Port Elizabeth city government, planners, and Noero Wolff Architects envision the Museum of Struggle and Cultural Precinct to supply much-needed public space that is safe for the community to enjoy. Besides the program of the precinct, the plan of the building does so by incorporating a number of benched areas and public plazas for recreation and leisure.³⁰¹ In addition, streets along the museum and precinct are renewed with pavement, and trees planted in tree-wells provide shade in the future. The paved streets with vegetation are envisioned to replace the dirt-lined streets of the entire community enhancing its overall aesthetic.³⁰² The envisioned renewed aesthetic and the museum and cultural precinct are elements of the grand scheme in the economic revitalization of Red Location because it will attract visitors and tourists, which in turn enable its future expansion of commercial buildings.

The museum and cultural precinct's design is widely celebrated, but the planning process of the building's conceptualization is a social justice hallmark. "From the outset, a main issue in the planning of the museum was the future acceptance of the institution within its neighborhood," describes Jo Noero.³⁰³ Due to the Red Location community's reasons for being highly suspicious of outside attempts to introduce structural changes, a weekly community-based

³⁰⁰ Findley, Lisa. 2005.

³⁰¹ Lepik, Andres. 2010.

³⁰² Lepik, Andres. 2010.

³⁰³ Small Scale Big Change: New Architectures of Social Engagement.

project committee met throughout the design and construction process. This ensured that concerns of the community were being met.³⁰⁴

Resulting from these community meetings were project requirements sensitive to community concerns. One of the more notable requirements stipulated that a third of the labor force were to come from the museum's immediate community, so that a large number of the communities' unskilled population could gain valuable construction knowledge and experience.³⁰⁵ These workers would spend three months on the job before new workers would take their place.³⁰⁶ Though this raised costs and extended construction time, the city and Noero Wolff Architects felt it was a worthwhile trade-off for both the residents and the neighborhood's acceptance of the facility.³⁰⁷ "As visitors start to come in greater numbers, over time this influx will help to improve the economy of the surrounding area," states Noero.³⁰⁸ Currently, more than two hundred jobs have already been created through the construction of the Museum of the Struggle (half of these became permanent positions), seventy people work in relation with the museum, and other small businesses emerged to cater to the museum's visitors.³⁰⁹

The Museum of Struggle and Cultural Precinct is valued by the community as a source of civic pride due to the jobs it created and the integration of public

³⁰⁴ Findley, Lisa. 2005.

³⁰⁵ Findley, Lisa. 2005.

³⁰⁶ Findley, Lisa. 2005.

³⁰⁷ Lepik, Andres. 2010.

³⁰⁸ Small Scale Big Change: New Architectures of Social Engagement.

³⁰⁹ Lepik, Andres. 2010.

and commercial space in the township. However, its construction was delayed by skepticism and public opposition. The first delay encountered was due to the citizen's concerns that the construction of the housing phase of the museum and precinct be addressed prior to museum funding being placed in a protected account.³¹⁰ Such a reaction is understood because of the community's experiences with broken promises and being misled by the municipal government. The second delay in construction occurred when members of the Municipal Council representing white neighborhoods had difficulty understanding the reasons behind the idea of funding a museum in a black township.³¹¹ They attempted to redirect the funds to other projects outside the township. However, these attempts were unsuccessful because of the strong backing of the museum by the mayor and other members of the city council.³¹² These delays bring to question the issue of how architects are to deal with a radical or threatening party, such as those perspectives of the white community and decision-makers, in a historical context. Should the concerns of the white community and stakeholders, with in regard to the social and economic well-being of the black community, be ignored and completely nullified due to their past histories? If so, would this be an injustice?

Phase one of the cultural center is the construction of the Museum of Struggle, which was completed in 2005.³¹³ The second phase includes an art

³¹⁰ Findley, Lisa. 2005.

³¹¹ Findley, Lisa. 2005.

³¹² Findley, Lisa. 2005.

³¹³ Noero Wolff Architects

gallery, library, and archive.³¹⁴ The construction of these buildings required the relocation of 150 families living in shacks. New two-story homes were built to accommodate the displaced families. The third and final phase is the construction of a performance theater and movie theater.³¹⁵ The project will be completed by 2016, 20 years since its inception. Jo Noero finds the project “satisfying because it has been a slow hard process and everything had to be fought for and negotiated, from dealing with local politicians, national figures, and government. Although it has been time consuming, it has given a chance for the buildings to mature and become much richer than it would have been if it were to be an instantaneous development.”³¹⁶ The Museum, even before the completion of the construction of the cultural precinct, is a symbol of success for its architectural presence and the social justice brought about by architecture, planning, as well as its impact on community participation and integrity. Archbishop Desmond Tutu commented, "It shows the contributions architecture can make...it helps with the people's morals and it contributes to the struggles against the viciousness of the apartheid... People seem to like the building. We never had a single bad comment from anyone inside the Red Location or outside."³¹⁷

³¹⁴ Noero Wolff Architects

³¹⁵ Noero Wolff Architects

³¹⁶ Small Scale Big Change: New Architectures of Social Engagement.

³¹⁷ Small Scale Big Change: New Architectures of Social Engagement.

NOTE: In addition to methods stemming from planning, Noero Wolff Architects utilized various methods that stem from architectural design. As mentioned in the data collection process of the Social Justice in Architecture Model, historical or factual data on the specificities of the project's design, the architect's personal theory and reasoning, architecture critics and stakeholder's analysis of the method or project, and results of the method or completed project are utilized to create a credible analysis. The following analysis utilizes an integrated graphic and textual representative format to analyze the architect's methods.

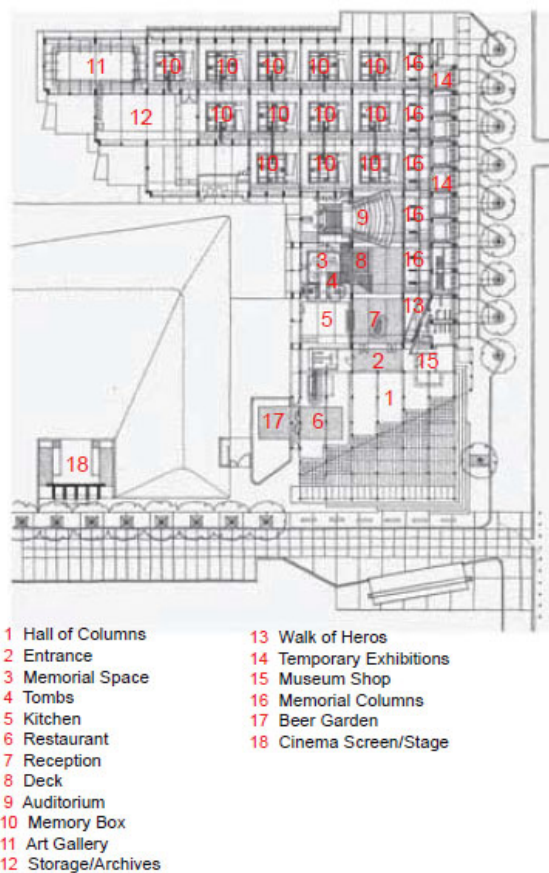


Figure 16. Museum floor plan

What makes the Museum of Struggle and Cultural Precinct radically different from museums like the Gold Reef Apartheid Museum? Noero Wolff Architects' design of the Museum of Struggle questions the culture, spatial design, aesthetic, and social dynamic of a museum. How does a museum best represent the history of apartheid that is relevant to the people's struggles, and how does it relate to everyday life? Besides its location in an apartheid relevant context (Red Location), the architects deploy a number of strategies that integrates the building with its location history and political context.

The museum is carefully scaled and conceived as part of the existing physical and cultural fabric of New Brighton.³¹⁸

This is skillfully done with respect to the large area space requested in the competition brief.³¹⁹ Its scale is enormous in comparison to its surrounding context of single-story homes and shacks. Rather, its size reflects the industrial scale of the factories located across the railroad tracks. However, the citizen's emotional connection to the museum as a symbol of civic pride is justification for its size.³²⁰

The monumentality of the museum brings a much-desired piece of the metropolitan area into their community, and it is a visible symbol of their struggles and freedom.

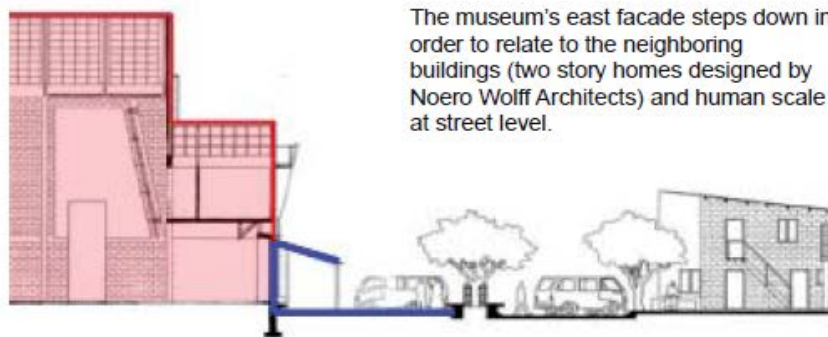
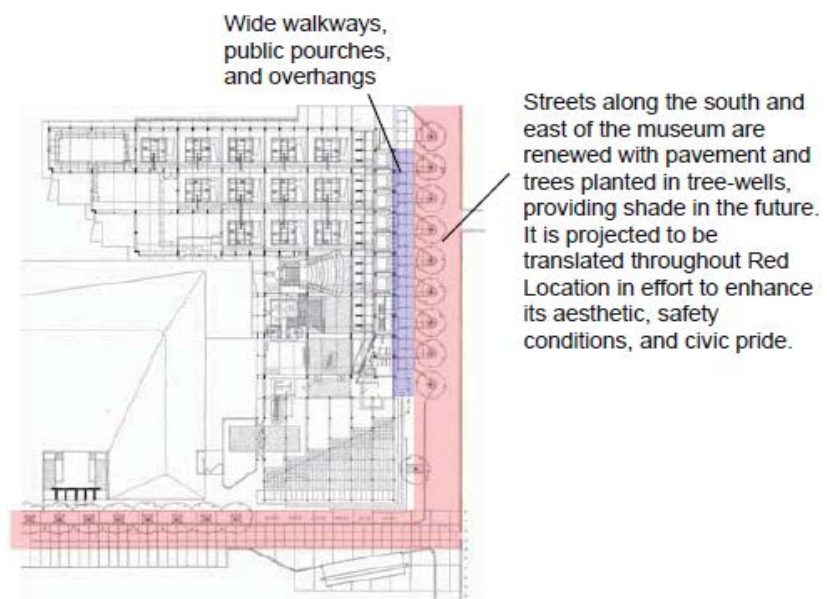


³¹⁸ Findley, Lisa. 2005.

³¹⁹ Findley, Lisa. 2005.

³²⁰ Findley, Lisa. 2005.

Most large buildings in New Brighton are set well back from the property line and are surrounded by fencing. These buildings turn their back to the street with the privatization of space. It reflects the notion of social unrest well after the end of apartheid in 1994. In contrast, the Museum of Struggle is placed right on its property line. Wide walkways, public porches, and corrugated tin overhangs, provide shade line on the east facade of the museum. This is a secondary social space designated as a hangout area for the community.³²¹



³²¹ Findley, Lisa. 2005.

Museum's aesthetic:

"The project, by Noero Wolff Architects of Cape Town, calls into question the internationally accepted and seemingly natural strategies of presentation and memorialization of eras of profound upheaval as embodied in the curatorial and architectural strategy of the Holocaust Museum in Washington DC," writes Lisa Findley.³²²

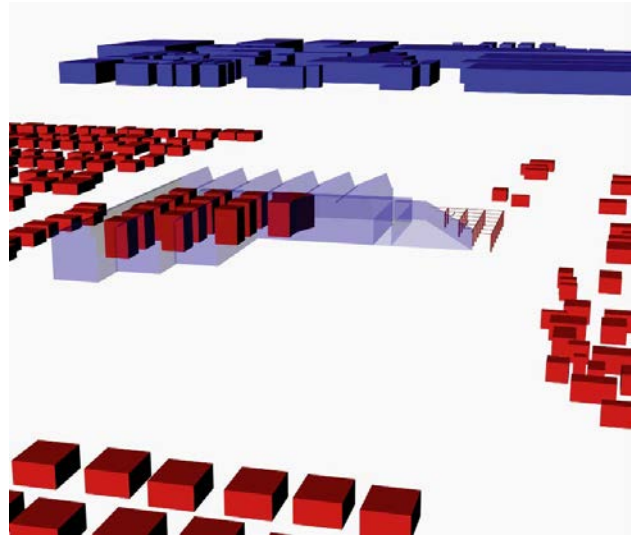
"The site is located alongside a large industrial area. It was the Trade Unions that largely shaped the internal struggle for freedom in South Africa. As a result many people tend to associate the workplace with civic virtue. This is important since most public buildings in South Africa were viewed with distrust since they were associated with the ruling apartheid government. The language of the new buildings is utilitarian and industrial and it is hoped that this will act as a connection to a proud union past and seek to remember the labor of those people who gave up their lives for the struggle." Jo Noero 1999.³²³

The industrial aesthetic which utilized symbolic, cultural "ordinary" materials and were influence by the factories near Red Location, acknowledges cultural sensitivity. The incorporation of this aesthetic may also be perceived as a commentary on other existing civic buildings in South Africa as having 'little positive resonance' with the people, to the exclusion of public life.

³²² Findley, Lisa. 2005.

³²³ Noero, Jo. 1999.

The envelope (shell) of the Museum of Struggle utilizes an industrial aesthetic like the factories across the railroad tracks. The museum's interior content of memory boxes and material represents the struggle of the people and it reflects the living conditions of the building's surroundings.



The design of the museum utilizes its contextual surroundings (structure and materials) in its design. The industrial aesthetic, influenced by the factories on the other side of the railroad tracks, is associated by the community as a source of civic virtue. Thus, Noero Wolff Architects utilizes the community's perceptions as an influential factor in the design of the museum. They resist the urge to design architecture that may be perceived as foreign.



Figure 17. Industrial buildings.

Corrugated iron, clay face bricks, saw-tooth roofs (a recurring theme in trade union posters), and its large scale in comparison to surrounding shacks



Figure 18. Industrial aesthetic and materials.

reflect the industrial aesthetic.

Materials used in the design and construction of the museum celebrate the common materials residents scrounged for to make shelter for themselves: corrugated metal, brick, polished concrete, and plywood. In addition to its industrial aesthetic, the museum is creating meaningful dialog about the past and present.³²⁴

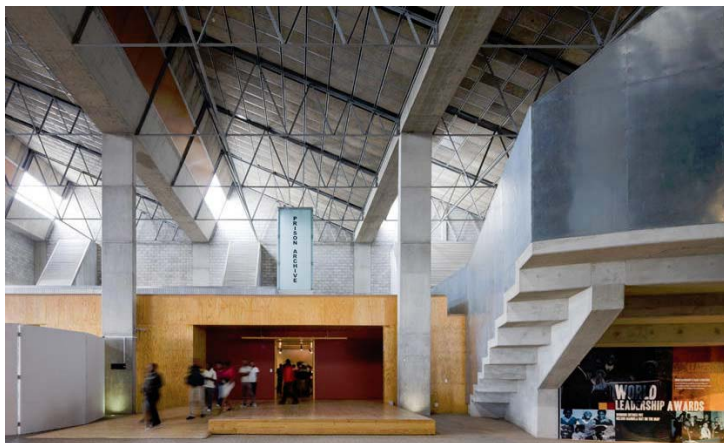


Figure 19. Industrial aesthetic and materials.

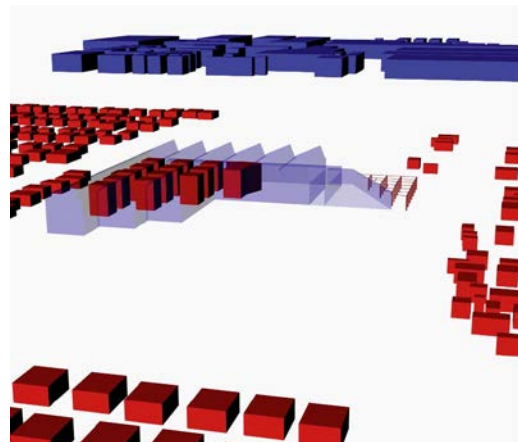
The design and materials suggest an architectural prototype for South African post-apartheid public and civic architecture. The museum's materials symbolize

³²⁴ Findley, Lisa. 2005.

a visual history of the people. It celebrates the common person and the struggle against poverty, racial oppression, and segregation.³²⁵

The community of New Brighton and Noero Wolff Architects adamantly believed that the museum should represent the untold history of the struggles of the people through its design and curatorial content.³²⁶ This is a humanistic approach that celebrates the people's strength, persistence, and resilience in fighting oppression, war, and racism. This approach is a departure from the broad narrative strategy that Mashbane Rose architecture firm utilized in the architecture and organization of the Gold Reef Apartheid Museum.

This museum is a container for its content. Its exterior shell creates large and open interior spaces with no windows. The only source of natural light penetrating the container is from the saw-tooth skylights utilized for dramatization of space. Rather than guide its visitors



through a narrative of hallways and processional rooms, the museum removes hierarchy and provides multiple and simultaneous narrative points of view.

Similar to an open plan, like the Georges Pompidou Center, the Museum of Struggle encourages its visitors to explore freely and construct their narrative.³²⁷

³²⁵ Small Scale Big Change: New Architectures of Social Engagement.

³²⁶ Small Scale Big Change: New Architectures of Social Engagement.

³²⁷ Lepik, Andres. 2010.

“Visitors will be challenged to make their own decisions about how to make their way around and into the boxes people are asked to confront their own readings and understanding of race, class, and inequality.” Noero Wolff

Architects’ competition statement.³²⁸

In addition to the museum’s unique space arrangement, its curatorial content further encourages visitors to piece together a narrative of their choosing. This is achieved through twelve large and equally sized rooms called ‘memory boxes’. The memory boxes are containers 50 feet tall and 20 square feet in dimension that are closed on all sides except for a door.³²⁹



Figure 20.

³²⁸ Findley, Lisa. 2005.

³²⁹ Findley, Lisa. 2005.

The museum's memory boxes are influenced by the brightly painted wooden boxes that black migrant workers of South Africa used to carry their possessions. These boxes contained both clothing and mementos from home that reflect their personal lives and dreams.³³⁰

Like the small wooden boxes of the black migrant workers, the memory boxes in the museum present different perspectives on the experience of the struggle against apartheid. These perspectives tell stories of particular events or specific places. Avoiding a historic narrative of apartheid, it focuses on complex human experiences and individual interpretations and accounts.³³¹ Lisa Findley describes the memory boxes as "unstable". The contents of the memory boxes are intended to be changed over time due to the many perspectives and stories of struggle.

It is a project where oral histories are collected and curated. Sponsored by the municipal government, an extensive process of collecting these first-hand stories has begun.³³² This is an urgent effort to preserve the memories of the aging public and the African National Congress members who have experienced apartheid.³³³

³³⁰ Lepik, Andres. 2010.

³³¹ Lepik, Andres. 2010.

³³² Findley, Lisa. 2005.

³³³ Findley, Lisa. 2005.

"The memory boxes serve a larger political purpose because it fell in line with the part I was concerned about after 1994, in which we can't allow South African political history particularly to collapse in the narrative and be used for political means," states Jo Noero.³³⁴

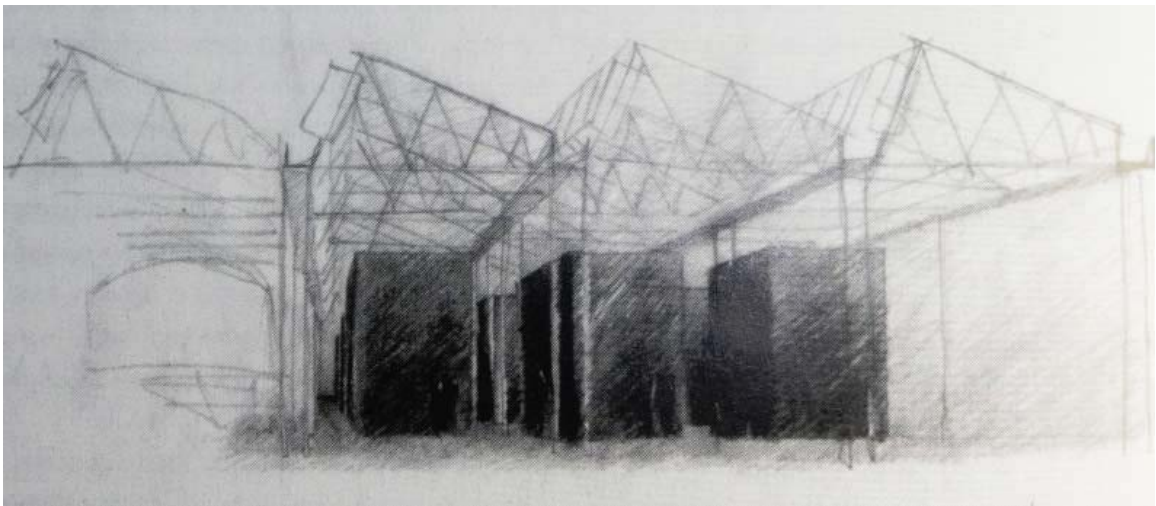


Figure 21. Noero Wolff Architects' rendering of the memory boxes.

³³⁴ Small Scale Big Change: New Architectures of Social Engagement.

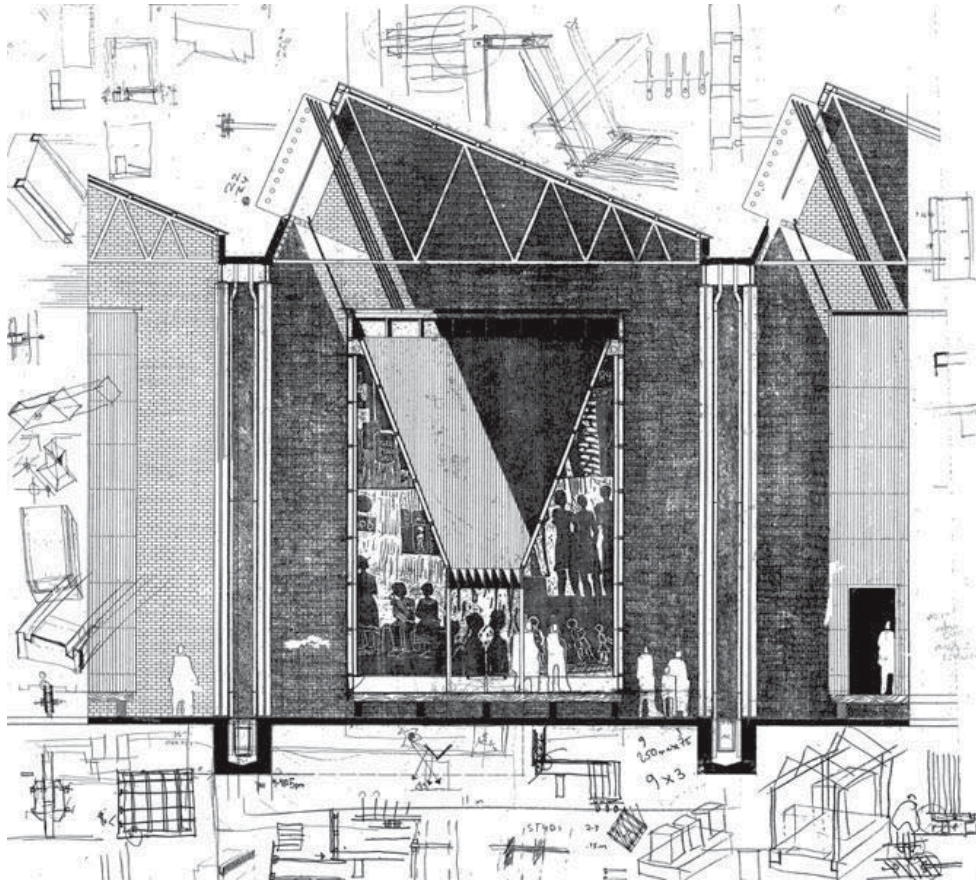
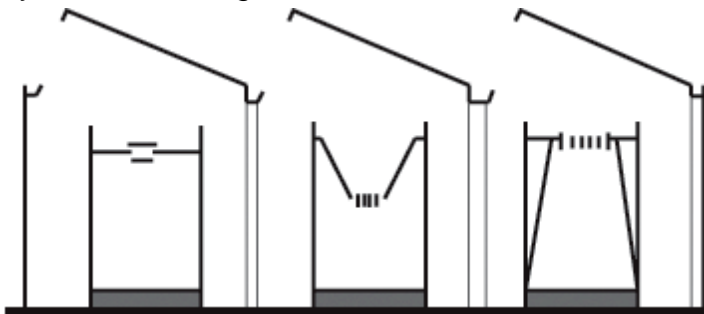


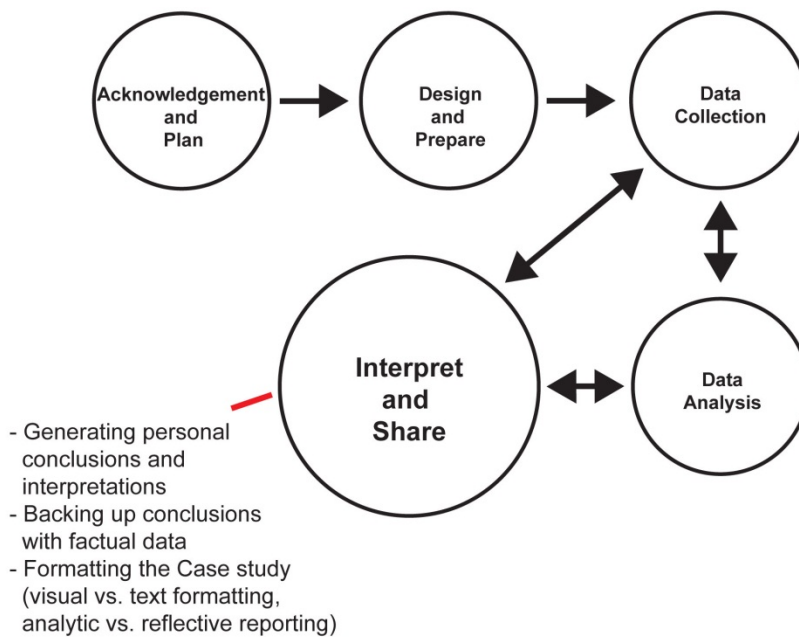
Figure 22.

The interiors of the memory boxes are intended to be spaces of reflection. Natural light is filtered into its interior space from the saw-tooth skylights above. Each memory box accepts this light differently by utilizing a unique light filtration system according to its emotional content.³³⁵



³³⁵ Small Scale Big Change: New Architectures of Social Engagement.

Process: Interpret and Share

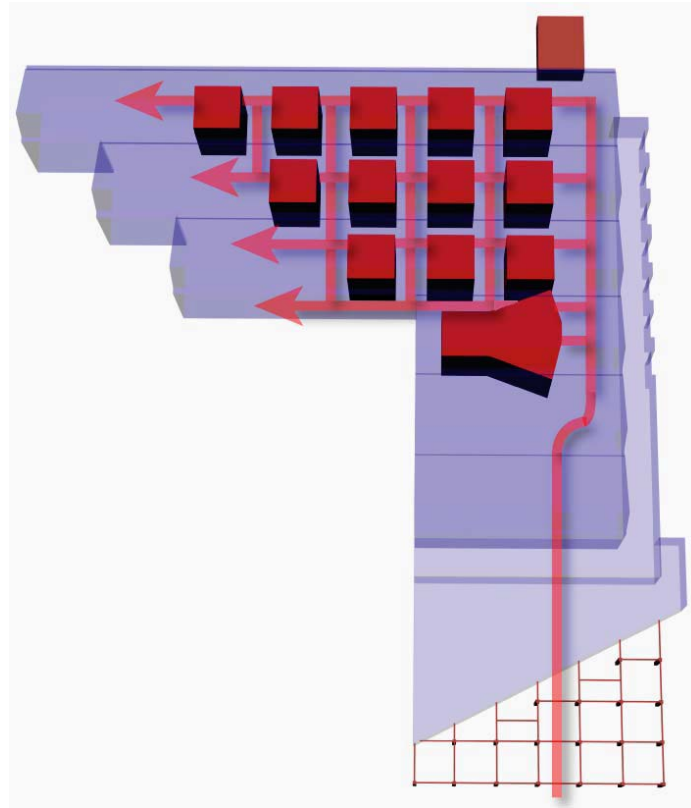


NOTE: The interpret and share process is loosely defined, allowing the investigator to formulate the composition of their personal interpretations and how research should be shared. In this section of Chapter 4, the following are examples of personal interpretations and conclusions generated from the data analysis process. Formatting of the research document was discussed in the process of data analysis of this chapter.

NOTE: As mentioned, there are no answers to a theoretical question, such as spatial composition in architecture. However, the investigator's interpretation of its effectiveness at creating social justice can be justified through the support of facts. The following are examples on interpreting architecture design methods.

The historical context of Red Location Township was defined by the segregation of the black community from economy and industry; most notably, the old railroad tracks separated the black community from industrial warehouses. Thus, does Noero Wolff Architect's decision to utilize an industrial aesthetic reflect such negative history? Or does it reflect the breaking of segregation through the incorporation of the restricted industry into the community? I choose to believe the latter, in which the building's aesthetic works to cultivate civic pride through the incorporation of the once restricted industrial aesthetic into the black community. Social justice is achieved through this design method.

Does the L-shaped plan of the museum counteract the idea of hierarchy and undefined movement? The L-plan and the open entry and transitional space leading to all primary content, specifically the memory boxes located at the back end of the museum, may suggest hierarchy in space. In addition, the end of the L-plan suggests that it is the end of the museum.



The tense political and cultural dynamics of South Africa is far from being resolved. The policies and the urban and spatial framework that reflects the social well-being of the people that suffered through racial oppression and segregation of apartheid is in need of reformation and closer analysis. How can architects reform the political, social, cultural, and physical context of South Africa in terms of social justice? The solution is unclear and highly debated due to the complexities of this situation. However, there is clear consensus that it will be a long and arduous process of implementing planning policies and architecture design by trial-and-error. In order for architects and other decision-makers to make the best-informed decisions, they need to have a better understanding of the history of apartheid through the eyes of the people.

Currently, a project where oral histories are collected and curated is under way. Sponsored by the municipal government, it is an extensive process of collecting first-hand oral stories of the people. It is an urgent effort to preserve the memories of the aging public and African National Congress members who experienced apartheid.³³⁶ The oral history collection project highlights the importance of the necessity to interact with black communities through community participation. Through community participation, architects are able to understand and more effectively apply policies such as job creation and training that are directly related to current community concerns, skepticisms, and culture.

Social justice is only achieved through the application of policy and design that incorporates sensitivity for the targeted population. Thus, all stakeholders must be identified and integrated into the planning and architecture design processes. Rigorous and open understanding of opposing viewpoints and beliefs are skills needed by architects and decision-makers, along with the ability to adapt to evolving circumstances. This is how architects should deal with uncertainty in their profession, especially in the political and social contexts like post-apartheid South Africa. Noero Wolff's methods in planning and architecture design reflect skills that successfully meet the challenges of the concerns and methods required to utilize the Social Justice in Architecture Model. Thus, social justice in architecture is achieved.

³³⁶ Findley, Lisa. 2005.

CHAPTER 5
CONCLUSION

An architect's ability to create social justice in architecture is based on knowledge of a repertoire of cases, a Case Study Model. However, the subjectivity of social justice and the diversity of methods to create it lead to the notion that this model is a generalized research framework. It does not provide specificity for an investigator to understand and analyze projects and methods to create social justice in architecture. Realization of this inadequacy occurred subsequent to this thesis's original goal in Doctorate I of formulating a method to create social justice in architecture.

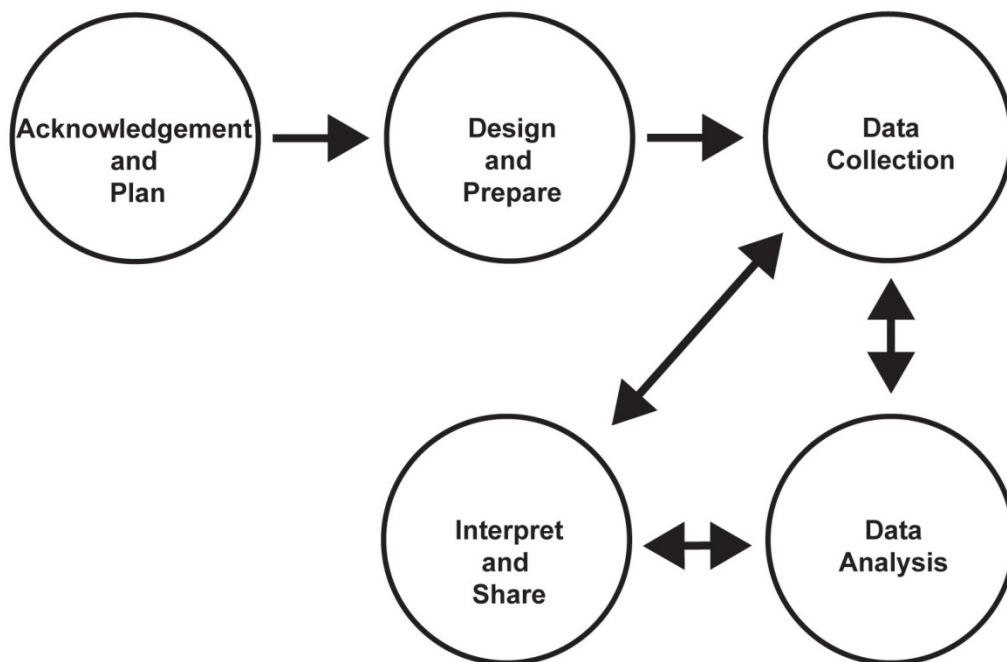
Investigations of social justice through its history and the completion of four case studies led to the realization of the diversity of its definition. Diversity is a result of the subjectivity of interpretation and opinion, which theorists and sociologists historically struggled to define. Like a theoretical question, there is no absolute answer for its definition. However, an informed personal definition can be generated out of the investigator or architect's study of human practices in society as a whole. The subjectivity of social justice is further emphasized through its integration to the architecture profession. Historically, architects formulated diverse methods to create social justice, stemming from architecture design or planning. Such methods vary according to the architect's theories of social justice and the most effective methods to create it. Also, the specificities of a context's unique circumstances, like the identification of injustices and inequalities, directly inform an architect's methods. The task of formulating a specific method for this thesis is a complex task that can only be abstracted from

the subjectivity of personal interpretation and theory. Thus, the position and goal of this thesis shifted in Doctorate II to the focus on the development of a research model to effectively understand and analyze social justice in architecture, the Social Justice in Architecture Model.

As mentioned, the Case Study Model is a generalized research model that does not provide a specific framework to understand and analyze social justice in architecture. It is a research model that was abstracted from various sources that broadly compile six processes (plan, design, prepare, collect, analyze, and share) for investigators to effectively compose a case study. The application of the Case Study Model to four case studies of social justice further emphasizes the broadness of its general framework. Thus, the Social Justice in Architecture Model provides an alternative research framework for investigators and architects to analyze social justice in architecture.

The Social Justice in Architecture Model is composed of five processes. The first two processes are linear guidelines that prepare the investigator prior to the main body of work. The first is the acknowledgement and plan process, in which the investigator decides to use this research model, acknowledges the subjectivity of social justice and the diversity of methods to create it, and develops a research question. The second is the design and prepare process, which establishes mental guidelines in preparation for research on social justice in architecture. Following these processes are the data collection, data analysis, and interpret and share phases, which comprise the main body of work. The

investigator gathers and analyzes factual and historical information in the collection and analysis process without personal bias. A major contribution of this thesis is in these processes, in which a framework to link data to context, injustices and inequalities, and the architect's methods is provided. Lastly, the investigator's voice and personal interpretations and conclusions are incorporated into the case study research through the interpret and share process. Unlike the linearity of the acknowledgement and plan and the design and prepare processes, the final three processes may work in conjunction with one another as the investigator proceeds with analysis and interpretation.



At this point in history, social justice in architecture is a global struggle and a pertinent issue. As communities deteriorate from social, economic, political, cultural, physical, technological, and historic injustices and inequalities, the demand for informed and sensitive methods used by architects is valued.

Architects must use methods to create social justice in architecture that are based on a repertoire of cases. Thus, it is important to recognize the necessity of a specific applicable research model. The Social Justice in Architecture Model provides a research framework for architects to effectively understand and analyze social justice in architecture.

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Note: All other images and diagrams are personal renderings created for this dissertation.

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