THE FUTURE OF THE PAST

THE FUTURE OF THE PAST

sja
ajh

The South African Journal of Art History is a peer reviewed journal publishing articles and review articles on the following subjects:

Art and architectural history
Art and architectural theory
Aesthetics and philosophy of art
Visual culture
Art and the environment
Film and photography
History of craft
History of design

SAJAH does not publish the following:
educational issues;
student research;
architectural designs;
popular culture.

Limiting binary thinking: architectural design in historic urban contexts[1]

Arthur Barker
University of Pretoria
E-mail: arthur.barker@up.ac.za

Heritage practitioners are increasingly facing the challenges of working in historic environments, as issues such as densification, resource depletion and the effects of climate change impact on city development, often at the expense of conservation. Due consideration should, therefore, be given to processes that ensure critical architectural solutions that limit the perception of historical contexts as static resources and design solutions as binary responses. Through a theoretical lens of architectural post-structuralism, based on binaries, it will be argued that architectural heritage practice was initiated in a dichotomous manner and that its processes and resultant architectural design approaches have been similarly polarised. This article will briefly formulate a relevant architectural post-structuralist critique while highlighting and describing the general binary oppositions present in heritage practice and design. Then, crucial project phases that provide a range of possibilities for those working in historical contexts will be presented, to limit heritage practice only operating at the extremes of its current, inherent, binary oppositions.
Key words: architectural design, historical contexts, binaries, preservation, conservation.

Die beperking van binêre denke: argitektoniese ontwerp in historiese stedelike kontekste[1]
Erfenis praktisyne[2] staar toenemend die uitdagings om in historiese omgewings te werk in die gesig, veral omdat kwessies soos verdigting, uitputting van hulpbronne en die gevolge van klimaats-verandering[3] dikwels ten koste van bewaring op stadsontwikkeling impakteer. Behoorlike oorweging moet dus gegee word aan dié prosesse wat veseker dat kritiese argitektoniese oplossings, wat die persepsie van historiese kontekste as statiese hulpbronne, sowel as ontwerpoplossings as binêre antwoorde, beperk. Deur 'n teoretiese lens van argitektoniese post-strukturalisme, gebaseer op teenstrydighede, sal daar aangevoer word dat argitektoniese erfenispraktyke op 'n tweeledige manier geïnisieer is en dat die prosesse daarvan en die gevolglike argitektoniese ontwerpbenaderings op soortgelyke wyse gepolariseer is. In hierdie artikel word 'n relevante argitektoniese, post-strukturalistiese kritiek kortliks geformuleer, terwyl die algemene binêre opposisies in erfenispraktyke en -ontwerpe uitgelig en beskryf word. Dan word belangrike projekfases aangebied wat 'n verskeidenheid van moontlikhede vir diegene wat in historiese kontekste werk, bied, om sodoende erfenispraktyke wat net tot die uiterste van sy huidige, inherente, binêre opposisie werk, te beperk.
Sleutelwoorde: argitektoniese ontwerp, historiese kontekse, teenstrydighede, bewaring, konservasie.

Practitioners are increasingly facing the challenges of working in historical environments. These environments can include monuments, buildings, collections of buildings, landscapes, places of memory and even intangible artefacts such as the location of, and activities associated with, important events. Not only are issues such as densification, resource depletion and the effects of climate change impacting on city development and conservation, but historical contexts are perceived as static resources and design solutions as binary responses. Due consideration should therefore be given to a clear articulation of the various architectural project phases and a development of a range of design approaches, so that reflective and resilient responses can be generated.

It can be argued that architectural heritage practice was formed through the much-described oppositional debate at the end of the C19 between restoration and anti-restoration (conservation) movements led by Eugène Emmanuel Viollet-le-Duc (1814-1879), and John Ruskin (1819-1900) and his protégé William Morris (1834-1896) respectively. This resulted in a dialectic

outcome, which has continuously fostered dichotomous approaches to heritage. Even though Camillo Boito (1836–1914), after Riegl (1858-1905), attempted to resolve the dialectic through a theory of philological restoration, conservation was emphasised over restoration (Hernandez Martinez 2008: 249) resulting in a hierarchy of heritage responses.

The informants for, and approaches of, heritage practice are suffused with binary oppositions such as old versus new, tradition versus modernity, tangible versus intangible and moveable versus immovable. Architectural design *approaches* have been similarly polarised, for example a tendency to privilege new interventions in historical contexts through contrast rather than mimesis. The resultant architectural expression often follows suit, with newer materials set against ageing infrastructure.

This article will highlight binary oppositions and will describe the general oppositions present in heritage practice and design.[4] A non-binary framework for architectural design will then be suggested to provide a range of possibilities for those working in historical contexts. Through this process, it is hoped to allow heritage practice and concomitant architectural design to deal with the current limitations of an either/or approach. As the scope of a possible non-binary framework is broad, the focus, in this article, will be on architectural *approaches* while other project phases will be more superficially dealt with.

It must also be noted that although the influences on heritage practice are ever-increasing, it is assumed that professional heritage practitioners will be well enough informed and will have made decisions about these aspects and their significances, before they formulate general and design specific decisions. This article is also not intended to be a deterministic or reductive design methodology but is an attempt to broaden the possibilities of architectural response in historical contexts.

Binary and structuralist thinking

Binary thinking is a human condition. To make sense of the world around us, oppositional classifications such as night and day and good and evil have been created. Binary thinking has, over time, been exploited through religious practices and philosophy sense, as early as the fourth century B.C., by Socrates when he coined the phrase "The only good is knowledge and the only evil is ignorance".[5]

Although binary thinking began as explanations of science and philosophy, they have often been applied to social thought through fixed hierarchical arrangements (Robbins 2015: 1). These tend to privilege one value system over another while creating foundations for the many varieties of structuralism (Elbow 1993: 51). This approach, unfortunately, still perpetuates current hegemonic discourses and practices (Nalbantoğlu 2000: 26) through holding the beliefs and values of certain groups above those of others. Structuralists like Lévi-Strauss used the unconscious infrastructure of language to describe a system that "does not treat terms as independent entities, taking instead as its basis of analysis the relations between terms" (Lundy 2013: 73). Lévi-Strauss's supposition was that there is a universal structure to the human mind governed by binary rules, which were the same in all cultures and therefore could eventually be discerned (Mallgrave and Goodman 2001: 126).

Although differences are stressed in binary patterns of thinking, actual differences are diluted through a focus on the extremes. These are referred to as hierarchical binaries where the second term, less important term is devalued and merely represents the absence of the first.[6]

The entire strategy of Derridean deconstruction consists of destabilising or decentring privileged terms, thereby overturning the underlying hierarchies on which they are established (Mallgrave and Goodman 2001: 128). Derrida, who himself based his theories on Saussure's philosophy of language, made objection to his idea of the "binary opposition". In this way, the interpretations and the hermeneutics based on binary oppositions were called into question, since there was, as Derrida believed, no true opposition between a pair of conceptions (Shafieyan 2011: 195) but only those that are socially defined.

Reading relationships

Binary oppositions exist at ends of a possible spectrum but their development and articulation are heavily dependent on their interrelationships so these need to be articulated so that a strategy can be developed to minimise hierarchy and provide a range of relational possibilities. The intention is not to dispel with the binaries but rather to establish other possible variable connections to allow for the possibility of many readings or patterns of thinking that limit bias or privilege.

> In criticizing such identity categories, my aim is not to find others to replace them. I am concerned less about the names themselves than how they are mobilized to perpetuate hegemonic discourses and practices. That the category of non-Western architecture cannot simply be abandoned in favour of a different name does not mean that it needs to be redefined. Any such definition helps but to draw other boundaries that will mark other inclusions and exclusions. There is no pure and virtuous space outside our present categories. The idea, then, is to accept the porousness and malleability of boundaries and identity categories and be aware of their strategic significance (Nalbantoğlu 2000: 26).

Binary pairs can be oppositional where each binary represents a contrasting viewpoint such as simple contradictions like black and white (used here in the non-political sense) with little possibility of any union. The existence of one opposition tends to mean the non-existence of the other, such as life and death. The binaries can also hold equal value or parity, effectively being different sides of the same coin. Binaries can also be counterpointed as complimentary entities where neither binary is privileged, such as night and day. On the other hand, they can be hierarchical, which in a post-structuralist sense can represent a set of power relations such as West and non-West. Here there is dominance of one binary over the other with the second term usually representing the absence of the first. Binaries are also differential the difference varying due to circumstances or relevant factors such as the distinction between man and woman. And lastly binaries can be relational (Shafieyan 2011: 197) as they exist at opposite ends of the spectrum. Their relationship does suggest that there is a scale of possible operation (or continuum) between them (Robbins 2015: 1). This approach is possibly a relevant one for heritage to limit many, current, binary oppositions in heritage practice.

Binary oppositions in heritage

The history of architectural heritage is littered with binary thinking through its philosophies, approaches and strategies. A selected range of these binaries (and their type) will be described

to not only highlight the various oppositions, but also to which aspect of heritage practice they are associated.

Generation

The foundation of architectural heritage practice has its inheritances in attitudes to history, which are in turn founded by a continuum of general theory and philosophy over time. It is the subtle nuances of the generation of heritage practice, and its associated practices, that have created a variance of patent and latent hierarchical privileging over time.

Marginalisation is a very prevalent aspect of the generation of approaches to architectural heritage. Wells (2007: 4) highlights the privileging of certain groups through the inclusion or exclusion of thought while authorship often denies the value of relevant participants. The heritage process itself is often founded in a history of power relations. The history of South Africa, through colonisation and apartheid, resulted in a plethora of ideological policies that fostered the marginalisation of certain groups of people. A case in point was the location of displays relating to indigenous peoples being placed in the Natural History Museum in Cape Town while colonial exhibits were located in the Cultural History Museum! Heritage charters, that guide conservation practices, can be interpreted not only as statements of what they contain but also what they ignore (Wells 2007: 2) reinforcing a hierarchical binary that often privileges the author over content.

Smith (2008: 159) highlights that "heritage is gendered, in that it is too often 'masculine', and tells a predominantly male-centred story, [also] promoting … an elite-Anglo-masculine, vision of the past and present". The training of anyone associated with heritage practice also brings with it biases tied to an educational institution and possibly even location in the world, often reinforcing the Global North and South (and associated Western hegemonic) divide.

Philosophy

The underlying philosophies associated with heritage are often linked to broader philosophical attitudes related to the human condition and its relationship to the world. Erder's (1986: 209) assertion that monuments can be classified as living and dead creates an almost existential oppositional dichotomy where one binary cannot exist without the other. Cultural distinctions are also important with Wells (2007: 11), for example, asserting that heritage approaches are strongly linked to Western thinking and that it would not be appropriate to treat sites in the East in the same way. The "Black Lives Matter Movement" that grew from a particular incident exemplifies the significance of cultural artefacts and their characterisation of human life that transcend the relational binary restrictions of the particular and the universal (Jensen 2000: 41) and the local and global (Logan 2008: 442).

For example, the relationship between the physical artefact and its meaning can be described as an oppositional binary of spirit and matter (Ndoro 2009: 3) while objects of cultural heritage embody the binary oppositions between the particular and the universal (Jensen 2000: 42).

History

The Enlightenment brought about the age of reason, resulting in a hierarchical binary condition, which privileged objectivity over subjectivity. Conflicts between industry and art were witnessed in the relationship between the Arts and Crafts Movement and Industrialisation while, later, a battle of styles developed between Gothic and Neo-Classical. New functions created architectural contrasts between functionalism and formalism, such as the clash of sheds and Gothic entrance at St. Pancras Station in London. Underlying the generation of these various architectural-historical responses was the oppositional relationship between memory and modernity, tradition and modernity (Treccani 2007: 93-106) and inheritances and hybridisation. Later, the post-modern condition returned to an understanding of the significances of tradition for modernity.

Ethics

The authenticity of an artefact is a determinant of its significance and value. The corollary of inauthentic describes an opposing condition most often seen as a devalued proposition. This creates a hierarchical privileging witnessed through events such as the nineteenth century debate between Ruskin and Le Duc that argued against the restoration of artefacts to their original "authentic" condition, representing the present as a sanitised version of the past (Lipman 2004: 53). The layering of time, additions and changes to the artefact is important meta-culturally (Silverman 2015: 69) as it fosters a relational condition between authenticity and inauthenticity and between continuity and change. Integrity is at play here, as is the changing nature of approaches to authenticity which can be described as moving from the stability of behaviour such as "authentic experience" to the changing nature of social life. "Contemporary authenticity works from the premise that society generates new contexts in which human beings produce meaningful acts and objects without necessarily bringing the past 'faithfully' into the present" (Silverman 2015: 85).

Meaning

The oppositional relationship between architectural artefact and its context (and associated meaning) is exemplified by the dispute around the Elgin Marbles. Their current dislocation from the Acropolis in Athens highlights their de-contextualisation and an emphasis on its material nature rather than cultural meaning. Heritage charters have attempted to deal with this relational dichotomy through various iterations such as the Venice Charter of 1964 which recognised both setting and event, the 1972 UNESCO charter which defined cultural landscapes, the 1981 (1999) Burra Charter[7] and its focus on cultural significance and the 2002 Ename Charter which highlighted the relationships between cultural heritage sites and meaning. Wells (2007: 11) argues that the current work by the Getty Institute has highlighted the ways in which significance can be shifted from an informational and material understanding to a contextual foundation.

Power

A largely hidden or subversive aspect of heritage practice (mainly through the development of charters) is underlying power relations established through male domination, objectivity and

selection. Wells (2007: 3) has identified, through other authors, that men have always dominated heritage practice, with the concomitant exclusion of females and their othering (until the Burra Charter). Objective determinism can be described as resulting from the establishment of many heritage charters as they limit further discussion and development while being representative of "those technologies which determine the conduct of individuals and submit them to certain ends or domination" (Foucault 1997: 225 in Wright 2003: 37). Objectivity also implies that there is a specific truth that can be defined (Wells 2007: 3).

> The problem with this concept is that it presumes the hermeneutic operation of truth finding; like a religious book, the building will "reveal" itself and tell us how it wants to exist. As post-structuralist philosophers have demonstrated, such as Derrida with his deconstructive methods (1973), a book can often be read differently with each new reading. Authors contradict themselves; buildings can also contradict themselves and confound attempts at synchronous readings (Wells 2007: 7).

Those involved in drawing up charters are often unrepresentative as a select few (Wells 2007: 3) are charged with making important decisions for many others that may be directly invested in the artefacts under discussion.

Architectural dichotomies in heritage practice

Typically, architectural design responses in historical contexts are framed by the relationship between tradition and modernity and the resultant binaries of mimesis and contrast. Several other binary oppositions will also be highlighted in the sections that relate to post-binary design thinking in historical contexts.

Binary design thinking

The design of architectural responses in historical contexts is itself a binary process.

> The polarities in the understanding of architecture and the place of conservation offer us a choice between transcendence and marginality. Dialectics are good for argument, but actions based on dialectical understandings have a habit of going badly wrong. Creativity does not have to be defined in [Nietschean] terms of destructive creation/creative destruction (Kealy 2008: 47).

On the one hand, currency is necessary for cultural development while history, and its protection, is important for memory. It is this opposition that has ultimately driven the binary design approaches. But similarly, architectural design approaches, and associated terminology have been, and still are often, articulated as binary oppositions. Paul Rudolph's (1918-1997; 1957: 17) famous statement "If you desire to retire from the world you have a cave, but when you feel good there is the joy of the open pavilion". Kenneth Frampton's (1930-) stereotomic and tectonic understanding of technology (Frampton 1995) and well used phrases like "public and private" or "inside and outside" still reflect a structuralist view of the world, even though so-called deconstructionists like Peter Eisenman (1932-) and Bernard Tschumi (1944-)[8] attempted to deal with the "inbetween".

Approaches for design in historical contexts, are most often expressed through the application of the binaries of copy and contrast. The informants for, and theory of design in historical contexts is sparse. Heritage charters and associated legislation are limited sources, as they tend to focus on broad policy while publications on heritage conservation usually highlight ethical, functional and practical issues. Neither of these sources is clearly meant to be design oriented. Even those sources that focus directly on architectural design in historical contexts tend to privilege *strategies* over *approaches* so, I have, over the years, attempted to enrich an imaginary design scale with several architectural possibilities for intervening in historical contexts. Here, I am indebted to my education at the University of Cape Town in the 1980s where Prof Derek Japha[9] (1986) first introduced design *approaches* (not his words) to us, naïve students, through a brief "hidden" paragraph in one of his project outlines. It was only years later, when I stumbled upon this piece again, that I finally understood its relevance and meaning for my own pedagogic development. There is of course

> no single correct aesthetic approach – new design in heritage contexts can accommodate a rich variety of interpretation and architectural expression. Some designers may adopt a traditional or vernacular approach; others may explore highly contemporary aesthetics. Both are valid. Regardless of style, respect for significance must underpin every aspect of the design process.[10]

Limiting binary thinking

The binary oppositions that have been highlighted often result in a concomitant polarisation of architectural responses. This is partly due to culturally and politically determined hegemonies, that are often applied in heritage theory and the way that heritage work can be seen as being in direct opposition to creation as it has to, effectively, limit loss (Harrison 2015: 303).

A hierarchical relationship is usually established between the related binary pairs resulting in one response dominating over the other. This approach needs to be deconstructed to facilitate a range of opportunities and, in so doing, limit the usual bias. But rather than destabilising the entire structure, it is more important to establish a scale of operation that considers the binaries without privilege. A range of relationships between binary pairs was used as part of the analysis of heritage practice and theory and can be equally used to provide a way to foster new, non-hierarchical relationships.

Authors like Assagioli (n.d.) have attempted to deal with dichotomous relationships between binaries by focusing on how they relate to one another and how their interrelationship can be balanced. His suggestions of fusion, the creation of a new reality, new centre or even synthesis still rely on a structuralist viewpoint. Oppositional relationships can lead to conflict and dominance. A relationship of parity limits a hierarchy and does not provide a range of possibilities. Counterpointed binaries, which are essentially complimentary in nature, delimit privilege but their equal status prevents a scale of interaction. Differential binaries rely on inherent differences but similarly provide no range of possibilities. Relational binaries, even though they exist at opposite ends of the spectrum, suggest that there is a continuum that links them. Rather than destabilising the relationship between the binary pairs, this scale of operation can take them into account to delimit privilege, hierarchy and bias.

Limiting dialectic design thinking in historical contexts

To be able to design critically in historical contexts, the practitioner needs to engage with several project phases while also understanding at which point in the process to interact. The Burra Charter describes an over-arching framework for making decisions regarding the management of a place of cultural significance. These include an understanding of place, an assessment of cultural significance, the identification of all factors and issues, the development of policy, the preparation of a management plan, its implementation and monitoring. A more detailed understanding is described as the combination of discovery, creation and delivery[11]. Stone (2005: 125) provides a more architecturally focused scenario: "the *analysis* or the revealing of the existing building which leads to the development of a *strategy* that will provide an overall plan for the design of the building whilst the *tactics* provide the detail of what the remodelling actually feels or looks like". However, the author misses several crucial stages that need to be considered.

Recognition and collection

Where heritage legislation is in place and well managed, the practitioner will be at an advantage in being able to recognise values and significance of architectural artefacts. Heritage practice in South Africa, is regulated by Section 38 of the National Heritage Resources Act (NHRA) 25 of 1999[12] which stipulates that "those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities"[13].

In July 2016, the South African Department of Environmental Affairs (DEA) compiled guidelines and assessment tools for protected areas which outline the importance of place and that their significance needs to be recorded and documented so that cultural identity can be protected.[14] Failing these documented significances, practitioners will have to rely on their education and experience to be able to recognise heritage values.

Analysis

Secondly a period of *analysis* follows, where values are determined out and significances defined. This is usually achieved through the development of a Statement of Heritage Significance[15] so that the practitioner can focus on the most important aspects to be responded to. But the determination of value is culturally and politically bound and highly dependent on the spirit of the times. It is therefore important that the practitioner balances the significance of the artefact diachronically and synchronically. Value must also be situated within global, regional and local perspectives. Harrison (2015: 303) notes that the meaning of an artefact is determined by the relationship between personal and universal interest (and appreciation) but that not all these aspects transcend physical and political boundaries. The threat of the loss of heritage resulted in the formation of a draft Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention), which was adopted by the General Conference of UNESCO on 16 November 1972 (Harrison 2015: 303). Unfortunately, the noble intentions of recognising universal heritage value implied that it had value for all. This has been criticised

as being as being a hegemonic approach which then requires circumspection when dealing with the contextualisation of value and resultant significance.

The practitioner would have to determine the significance of the artefact through a range of value statements that would consider the relationship between local and global importance, the relationship of the artefact to its designer and environment, amongst other aspects. The Burra Charter's definition of cultural significance is useful as it highlights several key significances to consider such as "aesthetic, historic, scientific, social for past, present or future generations".[16] But an understanding that social significances constitute spiritual, political, national or other cultural sentiments is a possible limitation in understanding value as the political hegemony in South Africa so ably demonstrates. Two scales can be used to position an understanding of values that lead to significances. A simplistic example would be a scale of low to high value and associated insignificant to very high significance poles (figure 1). Another could be a diachronic to synchronic scale that locates the artefact in, and over, time.
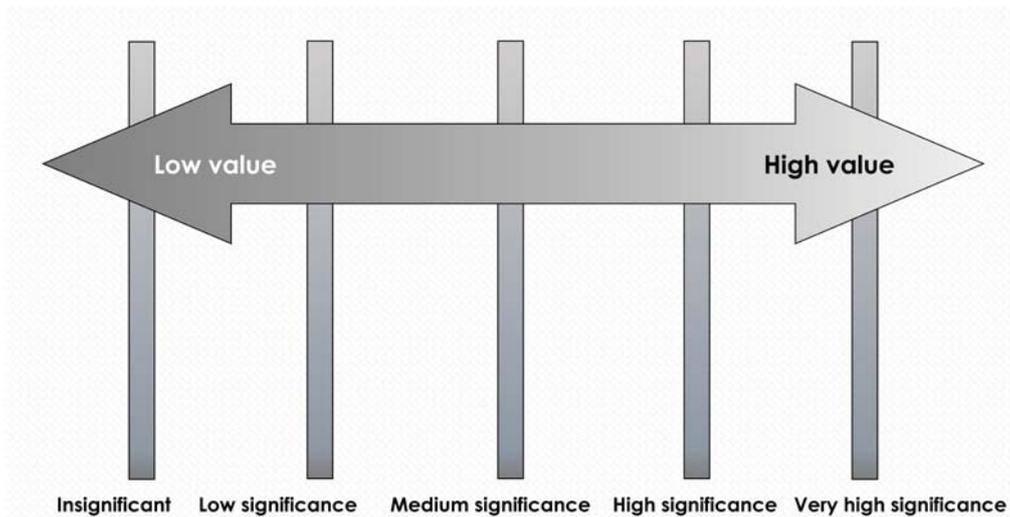
Figure 1
A scale of analysis
(drawing by the author).

Attitudes

Thirdly, practitioners should develop or refine an *attitude* to architectural conservation. This will be influenced by their education, theoretical predilections, legislative requirements and the needs of the client.

> But at another level one can ask the question: has the advance of conservation/restoration halted at the margins of architecture? Architectural intervention in existing buildings over the centuries to create new cultural monuments remains outside architectural history and the theory that has developed on the basis of reflection and experience is not yet part of architectural theory. Histories are constructed out of certain understandings - as David Dunster has put it, as well as there being histories of architecture there are architectures of history. For conservation/restoration to find a place at this level will require a new level of scholarship and of engagement with the creative impulse that has defined the development of architecture over the centuries (Kealy 2008: 44).

Reactions to philosophies and histories about architectural heritage must devolve to the development of attitudes to dealing with existing significant built fabric. "Theory" as an informant for heritage practice and the concomitant decisions about attitudes to architectural artefacts is largely driven by the intentions of heritage charters. But Wells (2007: 2) asserts that circumspection must be applied to the understanding of any Heritage Charter as absence of approach is just as important as the contents. The practitioner must, therefore, be cognisant of the context of charters, their authors and possible biases.

Current binaries

Preservation/conservation

Several binary distinctions can be located in the various attitudes described in declarations and charters developed since the early twentieth century. The restoration/conservation debate is still a major example today. Although the restoration movement's focus was guided by functional necessity through reuse, the associated approaches of adding new fabric through slavish copies of the existing reuse raised the ire of the anti-restoration movement who described "this kind of stylistic restoration as 'a destruction accompanied with false description of the thing destroyed'" (Plevoets and Van Cleempoel 2012).

> Amidst this restoration/conservation dilemma, the end of the nineteenth century saw the emergence in Italy of a 'third way'; an approach which avoided both the style-obsessed excesses of the restorers and the radicalism of those that preferred to see the disappearance of a building rather than an intervention. The Italian architect, Camillo Boito (1836–1914), advocated the 'theory of philological restoration' that was clearly influenced by the ideas of Ruskin and Morris. Boito emphasized conservation over restoration (Hernandez Martinez 2008: 249).

Bollack's (2013: 11) limited view is that preservation can be achieved through meticulously restoring the artefact, "trying to keep alive the smells and textures and the construction that have its birth and constitute its history, or we can gently bring it into the present with minimal interventions; we can also incorporate it into a new construction, benign or invasive".

Boito's palimpsestic and authentic approach highlighted the need for contemporary and contrasting additions. Additionally, in the 1920s, "Colonial Williamsburg, which is often credited with moving building preservation and restoration into the realm of science – driven by archaeological methods – sought the truth of the building in order to inform all manner of interventions from preservation to reconstruction" (Wells 2007: 7).

Following the late nineteenth century debate of preservation versus conservation, one of the clearest Post-Modern architectural *attitudes* for intervening in historical contexts was outlined by Rodolfo Machado in a 1976 issue of Progressive Architecture titled: "Towards a theory of remodelling – old buildings as *palimpsest*". His focus on meaning and interpretation through time closely follows the historicist paradigm of the times in its reaction to the *tabula rasa* approach of much of the International Style.

The International Congress of Architecture, held in Madrid in 1904, highlighted *attitudes* to be taken to existing monuments by defining them as either living (those that continue to serve their purpose) or dead (those belonging to a past civilisation or those that no longer served their original function). Living monuments were to be restored while dead monuments should be

preserved but only insofar as they are prevented from falling into ruin (Erder 1986: 209). The 1931 Athens charter, a revision of Boito's principles (Stubbs and Markis 2011: 16) "discouraged stylistic restorations in support of conservation processes that respected different changes made to buildings over time" (Heroldt 2014: 4). The 1964 Venice Charter broadened the understanding of an historical context to include setting and event providing a more contextual response.

Extant and new

The 1981 Burra Charter (and its 1999 revision) marked important milestones for the development of *attitudes* to working in historical contexts. Its well-used call of "do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained" highlighted a cautious approach to heritage practice while its definitions of preservation, adaptation, restoration and reconstruction provided general *attitudes* for dealing with extant fabric. Unfortunately, the charter is biased, and rather prescriptive, in terms of its description of the relationship between new and old.

Tangible and intangible

According to the UNESCO, cultural heritage is defined by the binaries of intangible and tangible (Ćosović, Amelio and Junuz 2019: 14-15). The distinction is still operative through UNESCO's policy sphere of heritage certification, as seen in its place-based World Heritage List (Silverman 2015: 69). Tangibility refers to all physical artefacts ranging from paintings to monuments including underwater relics. Intangibility refers to oral traditions and skills. There is clearly no middle ground here. Artefacts are representative of cultural pursuits and the traditions associated with them cannot be separated.

Moveable and immovable

Because of the relationship between tangible and intangible historical contexts, the binaries of moveable and immovable property are representative of the physicality of the artefact (Ćosović, Amelio and Junuz 2019: 15) and its location.

A scale of non-dialectic attitudes

Preservation (anti-restoration) and conservation (restoration) attitudes are essentially oppositional, leaving little room for any mediative possibilities, while inaction and new build provide a relational opportunity through conservation as mediative construction (see figure 2).

Inaction (or no action according to the Burra Charter) is a process where the artefact disintegrates over time either due to neglect or through purposeful intent. Reconstruction brings back the past by rebuilding in the vein of the old. This, however, leaves little room for distinction between new and old. Protection would involve the covering of damaged artefacts or parts thereof to retard further deterioration without affecting the currency of the artefact. The existing (possibly) tarnished nature would be allowed to further deteriorate but under controlled

conditions. Preservation is the comprehensive maintenance of an artefact in its existing state while slowing down deterioration.

> Remodelling is a process of providing a balance between the past and the future. In the process of remodelling the past takes on a greater significance because it, itself, is the material to be altered and reshaped. The past provides the already written, the marked 'canvas' on which each successive remodelling will find its own place. Thus the past becomes a 'package' of built up meaning to be accepted (maintained), transformed or suppressed (refused) (Machado 1976: 27).

A palimpsestic[17] approach (from the Greek meaning again) implies a process of layering of physical change and meaning over time. It implies that new layers can either be uncovered or added to the existing, highlighting historical importance and cultural relevance. Adaptive reuse implies a new life for an existing building where a new function is added with mainly internal changes to the existing fabric. It is a process that respects historical significances but contemporises the artefact with modern uses. New build "replaces" that which is lost but in a contemporary manner, responding to important historical significances. This attitude supports one key principle of the Burra Charter, namely that new insertions and interventions, as distinct from restoration or reconstruction, should be clearly identifiable as new, and should not replicate the heritage fabric.[18]
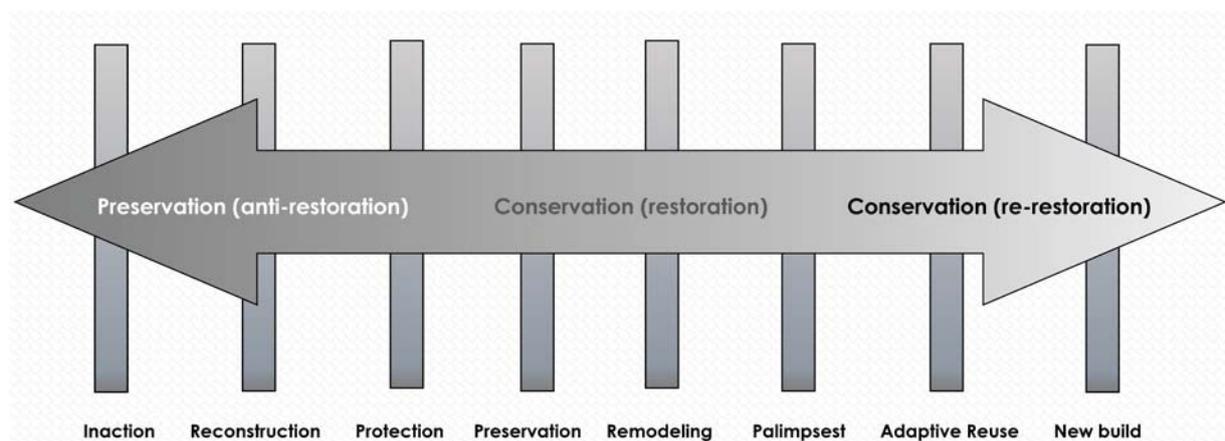
Figure 2
A scale of non-dialectic attitudes
(drawing by the author).

Approaches

All of the preceding descriptions that focus on broad policy, general functional or ethical *attitudes* or guidelines for dealing with historical contexts, represent a privileging over architectural *approaches*. Most existing *approaches* do not provide a range of possibilities to alleviate the simple binary oppositions of mimesis and contrast. Heritage Charters provide limited formal guidance for working in historical contexts as they focus on *attitudes*, principles and broad intentions[19] so we must look beyond these to general architectural and design theory.

Demiri (2013: 47) attempts to provide a description of a mediation between the dichotomies of copy and contrast citing contrast, reference and difference.

> In referential cases, the new develops a language by analogy with the old with immediate and many references to its principles. The architects grasp as a challenge the existing architecture as a productive source for their design. In the differential approach, the new has a different architectural language from the old, is conceived as an abstract continuation of its pattern of development and very few analogies can be traced. In case of contrasting approach, the new architecture is opposed to the existing context violating its principles. The term 'violate' should be understood in the way Bernard Tschumi attributes its meaning as related to intensity, contradiction, dynamism and disruption.

In *The Language of Architecture*, the authors Simivitch and Warke (2014: 136-7) note that form can be interpreted by measuring "them against other forms, not just through similarities, but through differences". They describe these architectural design *approaches* as "Forms of Dialogue" and list several strategies including contrast, enrichment, redirection, addition and indexing. Contrast is a self-evident approach. Enrichment means that "a design can elaborate on the meanings of an existing building or site by highlighting – by framing, isolating, or uncovering – previously underemphasised or hidden aspects of the previous forms" (Simivitch and Warke 2014: 136). Redirection "can also be a means of engaging a work or form in a dialogue. This can occur by means of reprogramming, as in the case of a doorway becoming a window, a factory becoming a museum, or a garden becoming a roof" (Simivitch and Warke 2014: 136). "Addition may produce an expanded or unexpected interior within the implied volumes of an exterior, bring new emphasis to one component in a series, or suggest further meanings by presenting a form or motif in an alternative material (what was brick becomes stone) or shape (one in a row of round columns is hexagonal instead)" (Simivitch and Warke 2014: 136). Indexing is described as "[s]ome facets of dialogue are derived from the concept of indexing, whereby there is an indirect, relational aspect between a form and the perception of its meanings, often one that has been learned from experience" (Simivitch and Warke 2014: 137).

Rapoport (2006: 182) and Ozkan (2007: 104) reinforce the possibilities of a relational scale as operating from the replicative to the interpretative. The former tends towards a scenographic approach while the latter transform principles to suit modern conditions. But neither approach of these diametric poles is a satisfactory response. The limitations of scenography freeze architecture in time, diminishing its validity, while a process of interpretation can abstract the architecture to such an extent that historical continuity is lost. Rather an attenuative and relational approach is required, one that mediates between the approaches of the extreme poles (Barker 2012).

Bernard Tschumi has described this dichotomy as an historical and philosophical dilemma of architecture poised between two goals of aesthetic experience; on the one hand maintaining the experience of de-familiarisation (or newness) and on the other maintaining familiarisation (memory) as secure link to the past.[20]

Defamiliarisation has been used as a general *approach* to deal with polarities, the term being first coined by the "Russian critic Viktor Shklovsky for whom the purpose of art [was] to force the viewers to notice … It is the artistic technique of presenting to the audiences common things in an unfamiliar or strange way in order to enhance the perception of the familiar"[21]

> Defamiliari[s]ation distances the object from its observer, opening a space of cognition that requires thoughtful navigation. But there is more than poetry in this gap. If there is a comfortable stability to what is familiar, defamiliari[s]ation ultimately discloses the instability lurking within—the variability of observations across times and cultures and from individual to individual—as well as exposing the

opaque veil that 'familiarity' often constructs around a subject, preventing one from seeing its deeper significance (Simivitich and Warke 2014: 146).

Defamiliarisation can be achieved by adopting the *strategies* of appropriation, subversion, de- and recontextualisation and accident (Simivitich and Warke 2014: 147-148).

A scale of non-dialectical approaches

Although the *approaches* described previously are relevant to a discussion on responses in historical contexts, they are not well defined in terms of a scale of *approach* that straddles the binaries of copy and contrast to deal with the relationship between new and old. "The relationship between new architecture with its historical context is determined from the values assigned to the meaning of its heritage architecture and consequently its modern interpretation" (Demiri 2013: 44). To alleviate the limited binaries, a relational scale of *approaches* is proposed. The scale operates from the polarities of continuity to contrast and aligns itself with the principles of defamiliarisation. At the conservative end, an *approach* of mirroring is posited. Collage follows, with prototyping thereafter. At the radical end of the scale, transformation and contrast are located.
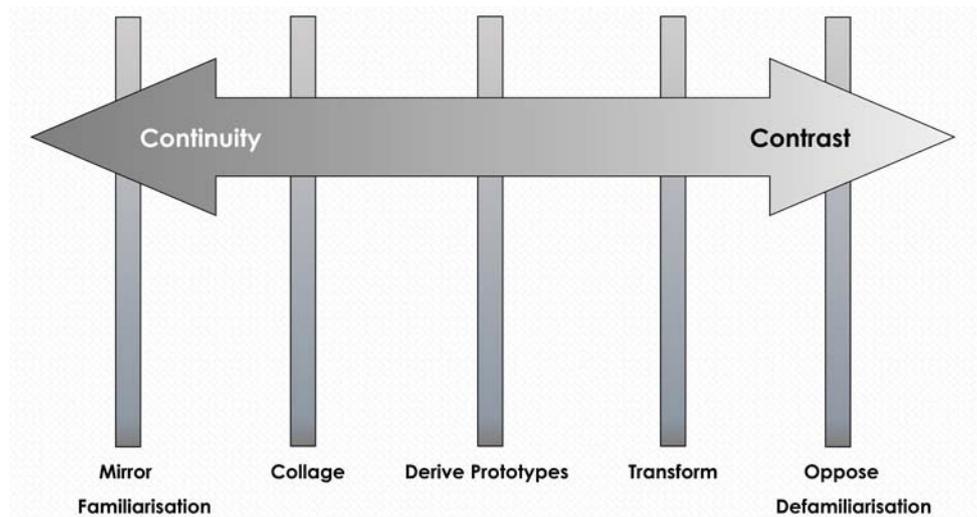

Figure 3
A scale of non-dialectic architectural approaches
(Japha 1986, adapted by Barker 2008-2019).

Copy (historicist restorations/reconstructions)

On the one hand an *approach* to historical contexts supports the tenets of the restoration movement. The supporters "inspired by Viollet-Le-Duc, rested essentially on the amalgamation of newness-value (unity of style) and historical value (originality of style)" (Plevoets and Van Cleempoel 2012). This is reinforced by the process of anastylosis where the original building is restored to its former glory. The application of an historicalist reconstruction implies that any new intervention in a historical context will reflect that which came before to retain integrity and achieve continuity. The new will seamlessly blend in, by mirroring its context. To achieve this "[t]he best thing to do is to try to put oneself in the place of the original architect and try to

imagine what he would do if he returned to earth and was handed the same kind of programs as have been given to us. Now, this sort of proceeding requires that the restorer be in possession of all the same resources as the original master – and that he proceeds as the original master did" (Plevoets and Van Cleempoel 2012). The architect will need to understand and replicate design principles, forms, and technologies. Quinlan Terry's Richmond Riverside scheme (1984-7) is a conservative Palladian revival scheme that reinforces the character of the surrounding fabric by emulating a naïve representation of a bygone past. Congruent with mirroring, are design approaches such as new insertions made in an original artefact made recognisable through their distinctive colour and material.
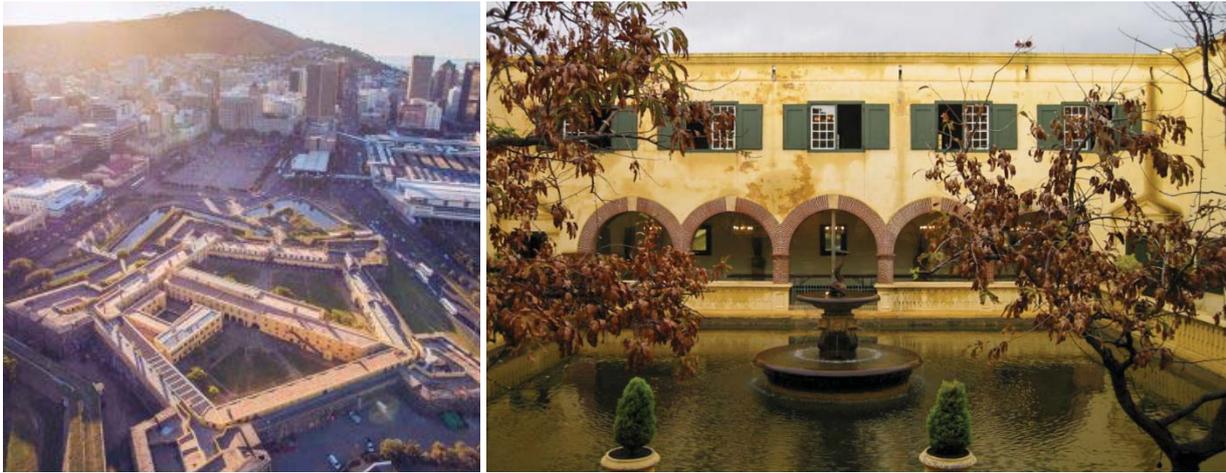
Figure 4
Gabriël Fagan Architects, Cape Town Castle with recreated Dolphin pool and Colonnade Building (1987-88)
(retrieved from the public domain on 2020/03/14 from http://fagan.co.za/castle-of-good-hope-2/).

Gawie Fagan (1925-2020) is one of South Africa's most awarded architects and a specialist in heritage circles having undertaken one of the first conservation projects in 1969 on the earthquake ravaged town of Tulbagh in the Western Cape. His longest running project is the Cape Town Castle built by the Dutch in the late seventeenth century. After several years of restoration work, also starting in 1969, it was decided in the late 1980s to reinstate the Dolphin Pool, the Bakhuys (the bakery) and "Colonnade". Fagan adopted an attitude of reconstruction while mirroring the existing architecture. His philosophy was that the missing buildings completed the authentic meaning of the original Castle as a citadel, while providing necessary functions. Most of the architectural assumptions were based on limited documentary evidence and extant foundations but Fagan's time-based stylistic conservation decisions led to controversy, mostly caused by archaeological guidelines not being met (Büttgens 2010: 80-2). The new insertions capture the spirit of the original building, mirroring a sense of what it was like to inhabit the inner private realm.

Figure 5
Henry Greaves Architect, 1980s Post-Modern historicist Neo-Classical extension
to the parliamentary precinct in Cape Town by Munnik, Visser Black, Fish and Partners
(photograph by the author).

The first of many buildings to define the South African legislative parliamentary precinct, along Government Avenue in Cape Town, was initiated in 1884 with a Victorian Neo-Classical building, designed by Henry Greaves (Picton-Seymour 1989: 18). In the 1980s a new building (currently the National Assembly) was constructed to provide accommodation for the tri-cameral parliamentary system that catered for so-called "Whites", "Coloureds", and "Indians" (figure 5). The significance of the extant buildings on Government Avenue is "[i]n terms of rarity … ensconced as part of a special landscape and demonstrates a distinctive way of life, custom, process, land-use, function and a unique design clearly of exceptional interest to the nation, which could be viewed as a cultural precinct".[22]

Therefore, the architects chose to use an approach of reconstruction emulating the Neo-Classical stance of the extant neighbours (in a Post-Modern way) by using the same overall form, height, window positions and proportions, articulated base, tripartite organisation and red and white colouring. Slight alterations such as extra accommodation in the mansard type roof and an African-inspired entrance behind the porticoed façade are subservient to the overall reconstructive attitude and approach of copying. The new intervention also stands slightly forward from its eastern neighbour to directly relate to the new square called *Stalplein*. This gives the new building a prominence without destroying the integrity of the whole.

Collage (historicist eclecticism)

On the one hand, the second most conservative approach to historical contexts, collage, can be described as aligning with the tenets of the Renaissance, Post-Modern historicism and the supposed return to stable meaning. This copy and paste approach can lead to formal pastiche, degrading the meaning of the original built artefacts as noted by Güney (2007: 9) when he describes that during the Renaissance "[a]rchitectural precedents were cautiously examined for formal study and…application of these precedents was leading the way to eclecticism of styles".

Figure 6
William Hood Grant and Jones and Adams architects,
South eastern edge of Greenmarket Square, Cape Town,
with consolidated Protea Assurance Building (right) by Louis Karol Architects
(photograph by Rikus de Kock architect, 28 April 2019).

On the other hand, collage can be used as an approach that merges two opposing conditions by borrowing and applying design principles and elements from each, in a considered manner to provide a unique unified whole. This is the approach used in the alterations to the 1930 Art Deco inspired Market House (the former Commercial Union Building), by William Hood Grant architect that frames the south eastern edge of Greenmarket Square in Cape Town. "The base is constructed of black marble … [while the façade is] … bush hammered pink Transvaal granite. The entrances are flanked by bas-relief eagles with patterned spandrels, pilasters and multi-levelled parapets" (Rennie 1979: 142). On the opposite corner the white painted Sun Insurance Company Building or Sun Building (now called Protea Assurance) was constructed in 1928 to the design of Jones and Adams.[23]

The architecture is dominated by Classical features including a tripartite organisation, Doric portico and balcony and Georgian inspired windows. In 1990 the centrally located, and rather demure, Natal Society Building was adaptively reused with a collage approach to create a uniform south eastern edge to the square (figure 6). The centrally located, concave, recess draws attention away from the newly constructed edges that align with the extant fabric. Abstracted bass reliefs and enlarged pilasters mimic the original Art Deco building on the eastern edge while similarly abstracted and enlarged Doric columns, plinth, "architrave" and replicated, small-paned, Georgian windows draw the ensemble together through similar proportions and a dominance of wall over window. The abrupt change in colour, and material, draws attention to the unification of the buildings on the western edge.

137

Derive prototypes

"The importance of typology lies in its relationship to the history of architecture and architectural ideas, and to the human aspect of association. It links … to an understanding of our traditions and their importance in our lives to give us a sense of continuity, connectedness or rootedness" (Barker 2012: 29). The value of prototypes, for practitioners working in historical contexts, is that new additions or alterations are founded in history but brought into the present through formal analysis and abstraction. Through this process, the value of history is recognised, an architectural continuum is fostered through a process of defamiliarisation.

Type can be said to have its origins in vernacular architecture. Building traditions were passed down and, in so doing, the model was developed to deal with new functions, materials, technologies and the influences of external socio-cultural forces. The most direct and lucid architectural description of type is that by Quatremère de Quincy (1755-1849) in his *Encyclopédie Méthodique* published in 1825. Here he defines "model" as an exemplar, something to be directly copied, while "type" is seen as adaptable, a process-driven interpretation and development. The typological approach thus reinforces aspects of tradition to foster historical linkage. As Goode (1992: 2) notes, Quatremère de Quincy's intention was the "recovery of a culturally authentic language of built form and space or access to its memory. This is accomplished through recourse to the characteristic forms with which such authenticity has been associated".

A typological approach should also have a recognisable lineage. Theorists such as Vidler refer to the idea of "type" as an antecedent. "Everything must have an antecedent … [a]lso we see that all things … have conserved … this elementary principle, which is like a kind of nucleus about which we are collected, and to which have been co-ordinated over time, the developments and variations of form to which it is susceptible" (Noble 1997: 1-2). In the early 1800s, Durand (1760–1834) highlighted the value of typology for architecture.

> In his lecture notes, Précis des leçons (1802), [he] reduced the form-making principles to its fundamental elements: the architectonic members, and the disposition, the rules of composition. His work was one of the first to attempt to disconnect the foundation of an architectural order from existing tradition towards an autonomous architecture … [and] one might suggest that Durand's theory of type was the first move towards the Modernist idea of prototype (Güney 2007: 8).

These ideas were farther developed in the work of the Italian Neo-Rationalist architects and architectural historians such as Gregotti who emphasised "the notion of type turning into stereotype by explaining that 'a production-oriented model becomes anti-specific and universally applicable and scientifically based'…. Moneo presented three major themes: functional determinism, the rejection of precedents in favour of pure forms, and the notion of prototype versus mass production" (Güney 2007: 9). History is the teacher that provides the foundation for abstract rather than stylistic reinterpretation. The resultant architecture demonstrates independence and reliance. These principles are clearly articulated in Richard Meier's (1934-) Museum for the Decorative Arts in Frankfurt am Main, Germany (1979 – 85) where the formal principles of an existing German villa were used to create three additional buildings blocks merged through circulation routes and service spaces.

Figure 7
Meirelles Lawson, offices adjacent to an existing Victorian building
(photograph by the author).

The studio for Meirelles Lawson Architects, at 2 Gordon Street in Cape Town (figure 7), is situated in a designated Urban Conservation area consisting largely of Victorian residential buildings in the main. Lawson and Meirelles (1997: 2) note that existing buildings on the site had little architectural value but architectural assets in the precinct required that the new intervention contributes to this environment. This was reinforced by the "practice philosophy of supporting conservation in its appropriate context" through "contextual[ly] sensitive" design (Lawson and Meirelles 1997: 2-3). The architects have forged a new modern prototype using the form of the Victorian gable edge and associated vertically proportioned windows. The new setback is reminiscent of the recessed veranda of the extant building.

Twin Houses in the suburb of Observatory (figure 8), Cape Town, is a "contemporary yet sympathetic" intervention (Pepler 1996: 30). It is "a contemporary interpretation of the dominating Victorian character of the area" (Low 2009: 300). Bert Pepler Architects have exploited the existing typologies as "[e]xternally, the houses make reference and reinterpret the surrounding architecture without reproducing it" (Pepler 1996: 30). In Observatory, the Victorian residential fabric consists, mainly, of low front garden walls, verandahs, pitched roofs, ornate gable ends and chimneys. In the Twin Houses, the low garden wall is highlighted and extended into a kitchen courtyard. The verandah becomes an enclosed room and recessed entrance while the roof pitch is exaggerated to a second floor. The chimney is reconfigured as a lantern to the double volume space below. Materials are emulated but detail is made in a contemporary manner.

Figure 8
Bert Pepler, twin houses, Observatory Cape Town with existing, adjacent, Victorian precedent
(photographs by the author).

Transform (convert, rehabilitate)

Transformation can be defined as a middle ground approach as it straddles the binaries of copy and contrast. Through a process of reinterpretation, the existing artefact's significant attributes are transformed. The intention is to create a new and current solution that reflects on, but is not slavish to, the past and its architectural value. An inherent attribute of the approach of transformation is that the existing artefact is morphed into something new. It essentially grows from the existing artefact to establish a new, yet connected, formal relationship. Frank Gehry's (1929-) so-called Fred and Ginger building (1992-1996) in Prague, Czech Republic literally transforms the edge condition and aesthetic of the existing neo-classical buildings. Similar approaches were adopted in Robert Venturi's (1925-2018) Sainsbury Wing extensions to the National Gallery in London (1991) and Herzog (1950-) and De Meuron's (1950-) additions to the Caixa Forum in Madrid (2008).

In 1901, Ernst Seeliger designed a brick clad and unique timber framed warehouse for the Spilhouse company in the Waterfront area of Cape Town. 84 years later, a civil engineering practice, De Villiers and Hume, purchased the building to house their offices, parking and lettable space (De Beer 2014: 34). In 2005, Noero Wollf Architects exploited the existing vertical development rights by adding four floors on top of the existing face brick and plastered base building (Noero and Sorrell 2009: 79) (figure 9). Minimal changes were made to the extant base, save for the bricking up of an original entrance door and the vertical extension of another. The original lift tower addition, and associated stairs and lift, were removed but the memory was respected through the glazed addition in the new mansard-type roof. The removal of the single-storey roof and the replacement with a steeper variant gives the original building a greater formal and physical presence, befitting of its position at the entrance to the city. The Rheinzink clad roof houses four new levels that match the floor heights of the base below. New roof windows are located directly above the extant versions and slowly transform in height to become smaller apertures at the highest levels. Other longitudinal openings respond to the views and climatic orientation farther transforming the addition to suit its context. The resultant architecture represents a transformation of artefact and place.

140

Figure 9
Noero Wollf Architects, 24 Alfred Street, Cape Town, before (left) and after (right)
(retrieved from the public domain http://www.noeroarchitects.com/project/24-alfred-street/).

Contrast

The approach of contrast has a rich, yet eclectic, history.

> Since the Renaissance antique sculptures had been subjected to restorations that often depended only on the imagination of the restorer. Johann Joachim Winckelmann (1717-68), the German scholar who wrote the first critical history of ancient art, saw the work of classical Greek artists as an ideal model for the modern artists to imitate in order to become great. He based his observations on a careful and detailed inspection and evaluation of the original work of art; he was extremely critical of restorations that falsified the original significance of the work. Winckelmann insisted that modern work should always be indicated so as not to mislead the observer (Jokilehto 1985: 6).

Modern Movement and later Hi-Tech architects favoured a contrasting approach to negate the limitations of historical precedent but in the Post-Modern period a more sensitive approach was taken through strategies of subservient insertion.

Through contrast, change and difference it is patently evident as the addition or extension is set against that which exists. "The dialogue between two contrasting forms is especially powerful, in that contrast provides a relational means of defining a form" (Simivitch and Warke 2014: 136). The approach can also be described as an authentic approach as "[e]xtensions in a modern or contemporary way … [are] … not falsifying records [but] are the ideal building-as-document approach. This allows the significance of the [original] building to be apparent" (Heroldt 2014: 10). Contrast can be achieved through the negation of existing form, colour, material and location. Daniel Libeskind's (1946-) Jewish Museum (2000) and Norman Foster's (1935-) additions to the Reichstag (1999) (both in Berlin) as well as the seminal entrance to the Louvre in Paris (1989) by I.M. Pei (1917-2019) are all new contrasting forms with associated technologies, set against their classically stylistic stereotomic neighbours.

In Cape Town, two 1925, neo-classical Werner and Beit buildings on the University of Cape Town Medical Campus housed the Infectious Diseases and Molecular Medicine departments. Fagan Architects were requested to provide a physical link between the two separated buildings to house a singular entrance, communal facilities and circulation spaces amongst other functions (De Beer 2014a: 90). Fagan contrasted the existing stereotomic building fabric in material and form by inserting a new drum-shaped element slightly forward of the existing line of buildings and a linear extension to the rear. The new, layered glazed forms were given prominence by their separation from the existing buildings and their opposing structural and material nature.

141

Figure 10
Gabriël Fagan Architects, Institute of Infectious Diseases and
Molecular Medicine link building, Observatory, Cape Town, 2004.
(Gawie Fagan Architect archive).

Strategies

In the fifth project phase, architectural strategies need to be used to give impetus to the selected approaches. These are detail decisions about formal reactions to, and interactions with, existing built fabric. It is the relationship between new and extant fabric that is under consideration.

Ultimately, this "implies an awareness of the relation between the original, historical body of the building and its new complementary and/or defining elements, that tries to establish a dialogue based on the dialectical confrontation between independent elements. The intention is to define a relation that is established in terms of nearness and juxtaposition" (Borsotti 2015: 4).

Although Robert (1989) directly highlights seven strategies for intervening in historical contexts some can be regarded as approaches. The strategies are "the building within", "the building over", "the building around", "the building alongside", "recycling materials and vestiges", while his approaches can be seen as "adapting to a new function" and "building in the style of".

In the *Idea Journal* (2006: 3) the authors posit three possible architectural *strategies,* for working in historical contexts, namely "intervention, insertion and installation". Borsotti and Campanella (2015: 4) describe several *strategies* associated with remodelling. "We called these actions: approach, addition, insertion and superimposition, because, depending on their internal declinations which form a homogenous spectrum of possible results, they circumscribe the four major areas of homogeneous design approach to the theme of architectural remodelling". Bollack (2013) uses the term transformations and classifies them by type, as "insertions, parasites, wraps, juxtapositions, and weavings".

A scale of inclusion and exclusion provides an operational range of strategies to create relationships between new and existing architectural artefacts (figure 11). On the one hand, new fabric is added so that it is completely set apart from the existing to retain its own formal and spatial identity. At the other end of the scale, an existing building may be demolished, and its constituent parts reused in a new way either as recognisable entities or as a dissolution of their initial integrity. A strategy of addition, links new with old using an independent joining element to retain the identity of both new and old parts. Situating a new intervention inside the existing structure is an inclusive strategy, while intersection involves the overlapping of old and new. An

extension will augment the existing artefact by acting as an appendage that takes on the form and spatial quality of the existing but results in a new interpretative form. Recycling is the use of parts of the existing to create a new vestige.
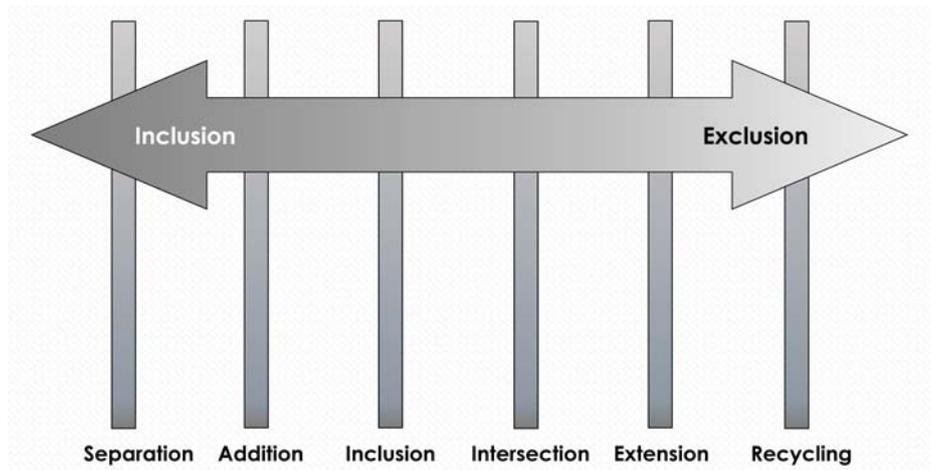

Figure 11
A scale of non-dialectic strategies
(drawing by the author).

Expression

The sixth and final, project phase focuses on the expression of strategies using form, space, materials, technologies and light. This is the mettle of the architect and requires aesthetic control to foster architectural intentions guided by the preceding six design stages. The architect is required to create appropriate form and space by, firstly, adopting an appropriate structural system, which, at its extents, can be visible or hidden. Then, building technologies (which are composed of materials combined in various ways) must be selected to give impetus to form that reacts to the structural expression and spatial meaning. Thereafter, detail expression plays a large role in highlighting design intentions to give effect to principles such as the binaries of separation and connection.

A relational scale that is bounded by separation at one end and enclosure at the other, facilitates a range of possibilities that are derived, in part, from the strategies highlighted in the previous section (figure 12). A distinct connection provides distance between existing and new. At the other end of the scale, protection necessitates envelopment so that the existing is hidden by the new. Intersection requires the meeting of both conditions through a junction that could be additive or penetrative. Intertwining means the continuous intersection of new fabric with old while a parasitic expression draws a new junction out of the old by extending it. An integral connection is a fusion of new and old.
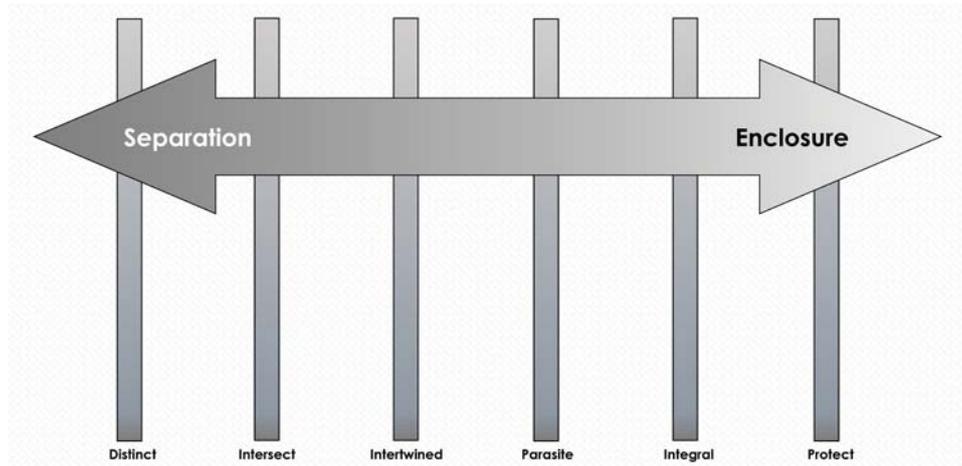
Figure 12
A scale of non-dialectic expression
(drawing by the author).

Conclusion

As our cities densify, due consideration must be given to using extant fabric to limit the depletion of resources and increase the conservation of important architectural artefacts. Designing in historical contexts requires due consideration of the meaning of architectural artefacts, context and intangible memory. Due consideration should, therefore, be given to processes that ensure critical architectural solutions that limit the perception of historical contexts as static resources and design solutions only as binary responses. Several project phases have been proposed to effectively achieve this.

Through a theoretical lens of architectural post-structuralism, based on binaries, it has been argued that architectural heritage practice was initiated in a dichotomous manner and that its processes and resultant architectural design approaches have been similarly polarised. Several relevant binary oppositions present in heritage practice and design were located and described.

To alleviate hierarchical bias or limited response, a scale of operation has been proposed that includes the extents of the binaries without hierarchy. These scales are not finite, and it is the skill and experience of the architect that must mediate these possibilities to provide an even larger range of design approaches.

The argument in heritage practice should not be about further polarisations such as questioning pathologically preservation, progressive conservation or even an attempt to reach a middle ground where history is respected and contemporariness celebrated but rather to shift the perception of heritage as a fixed entity toward a fluid one that holds continuing relational potential for future generations to tap into. Through this method, it is hoped that the perception of historical contexts as static resources can be changed toward a flexible condition that will foster the resilient development of cities.

Notes

1   The focus will, specifically, be on buildings.

2   These include architects but will, hereafter, be referred to as just practitioners.

3   The predicted increases in ambient temperature in cities (and the concomitant increase in the heat island effect) will require adaptations to existing buildings to increase their comfort levels that will impact on heritage artefacts.

4   It is, however, not within the scope of this article to deal with all aspects of post-structuralist thinking, even though it is recognised that an important part of any heritage analysis is an understanding of the underlying meaning of an artefact and a reading thereof, in a specific socio-cultural and political context.

5   Retrieved on 2020/03/14 from http://www.gurteen.com/gurteen/gurteen.nsf/id/X00036AA6/.

6   Retrieved on 2020/03/15 from http://mrhoyesibwebsite.com/Critical%20Theory/Discourse/Binary%20Opposition.htm.

7   Retrieved on 2020/03/22 from www.icomos.org/australia.

8   Through their association with the French philosopher Jacques Derrida.

9   Prof Japha (1949-) was my first-year lecturer whose design pedagogy is still, to this day, an inspiration.

10   Government Architect New South Wales. 2019. *Better Placed Design Guide For Heritage. Implementing the Better Placed policy for heritage buildings, sites, and precincts*: 16.

11   Government Architect New South Wales. 2019: 41.

12   In South Africa, the National Heritage Resources Act (NHRA) encapsulates the spirit of the South African Heritage Resources Agency, SAHRA, which replaced the National Monuments Council (NMC) in 1999. It highlights general principles for heritage resources management, heritage assessment criteria and grading, the responsibilities and competence of heritage resources authorities and local authorities for identification and management of national estate, the rights, duties and exemptions of State and supported bodies and general principles of procedure. The mandate of SAHRA is to control policy regarding our cultural landscapes and to effectively record and protect the country's historic legacy. It does not deal with attitudes or approaches for working in historical contexts.

13   South Africa. 1999. *National Heritage Resource Act 25 of 1999*. Pretoria: Government Printer: 13.

14   Retrieved on 2020/03/14 from https://www.environment.gov.za/sites/default/files/legislations/culturalheritagesurveyguidelines_protectedareas2016_0.pdf.

15   Burra Charter 1999: 13.

16   Burra Charter 2000: 12.

17   In this article the term is used to describe something reused or altered, but still with visible traces of its former form as used by Machado (see works cited).

18   Government Architect New South Wales 2019: 47.

19   Some of these will be highlighted in the sections that deal with directed architectural *approaches* that follow.

20   Retrieved on 2020/03/14 from https://iep.utm.edu/architec/.

21   https://www.academia.edu/28442927/DEFAMILIARIZATION_AND_CRITICAL_REGIONALISM, retrieved on 2020/03/14.

22   Retrieved on 2020/03/14 from https://sahris.sahra.org.za/about/news/sa-parliament-declared-national-heritage-site.

23   Retrieved on 2020/03/14 from https://www.artefacts.co.za/main/Buildings/bldgframes.php?bldgid=4246).

Works cited

Assagioli, R. n.d. *The Balancing And Synthesis Of The Opposites,* retrieved on 2020/07/12 from http://synthesiscenter.org/articles/0129.pdf

Barker, Arthur. 2012. Cape vernacular interpretations, *Architecture South Africa* (September/October): 26-43.

Bollack. Françoise. 2013. *Old Buildings, New Forms: New Directions in Architectural Transformation*. New York: Monacelli Press.

Borsotti, M. and Campanella, C. 2015. *An Atlas of "Architectural Design for Existing Buildings": Towards a Definition of Founding Design Actions*, retrieved on 2020/03/22 from https://www.researchgate.net/profile/Marco_Borsotti2/publication/280736345_An_atlas_of_architectural_design_for_existing_buildings_towards_a_definition_of_founding_design_actions/links/55c473ba08aeca747d5fd0fb/An-atlas-of-architectural-design-for-existing-buildings-towards-a-definition-of-founding-design-actions.pdf?origin=publication_detail.

Büttgens, P. 2010. *Restoration and Re/Creation of Lacunae: The Attitudes and Principles of Gabriël Fagan Architect as Expressed In the Restoration of the Castle of Good Hoop [ie Hope]*, retrieved on 2019/07/17 from https://open.uct.ac.za/bitstream/handle/11427/11750/thesis_ebe_2010_buttgens_p_j.pdf?sequence=1&isAllowed=y.

Ćosović, M., Amelio, A. and Junuz, E. 2019. *Classification Methods in Cultural Heritage,* retrieved on 2020/06/17 from https://www.semanticscholar.org/paper/Classification-Methods-in-Cultural-Heritage-Cosovic-Amelio/ad3328bc2fe850a2098-1aeecba5473f67790f849.

Demiri, Konstantina. 2013. New architecture as infill in historical context, *Architecture and Urban Planning* 2013/7: 44-50.

Elbow, Peter. 1993. The uses of binary thinking, *Journal of Advanced Composition* 13(1, winter): 51-78, retrieved on 2020/05/05 from https://www.jstor.org/stable/20865892.

Erder, Cevat. 1986. *Our Architectural Heritage: From Consciousness to Conservation*. Paris: UNESCO.

Fisher, Roger Charles. 1998. The third vernacular. Pretoria regionalism – aspects of an emergence, in *Architecture of the Transvaal*, edited by R.C. Fisher, S.W. le Roux and E.A. Maré. Pretoria: University of South Africa: 123-47.

Frampton, Kenneth. 1995. *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture*. Cambridge, MA: MIT Press.

Goode, Terrance. 1992. Typological theory in the United States: the consumption of architectural "authenticity", *Journal of Architectural Education* 46(1, September): 2-13.

Güney, Y. 2007. Type and typology in architectural discourse, *BAÜ FBE Dergisi*, Cilt:9, Sayı:1: 3-18.

Harrison Rodney, 2015. Heritage and globalization, in *The Palgrave Handbook of Contemporary Heritage Research*, edited by Emma Waterton and S. Watson. London: Palgrave Macmillan: 297-312.

Hernández Martinez, Ascención. 2008. Conservation and restoration in built heritage: A western European perspective, in *The Ashgate Research*

Companion to Heritage and Identity, edited by Brian Graham and Peter Howard. Hampshire: Ashgate Publishing Limited: 245-66.

Heroldt, Albrecht D. 2014. *Architectural Conservation in South Africa since 1994.* Port Elizabeth: DOT Matrix Publications.

Japha, D. 1986. *Some Guidelines For The Development Of An Analytic Method For Architecture*. Unpublished 1st year design brief. Cape Town: University of Cape Town.

Jensen, Uffe Juul. 2000. Cultural heritage, liberal education, and human flourishing, in *Values and Heritage Conservation: Research Report*, edited by Erica Avrami, Randall Mason and Marta de la Torre. Los Angeles: The J. Paul Getty Trust: 38-43.

Jokilehto, J. 1985. Authenticity in restoration principles and practices, *Association for the Preservation Technology lnternationai (APT)*17: 5-11.

Kealy, Loughlin. 2008. Teaching / thinking / learning / doing: Conservation and creativity in architectural education, in *Teaching Conservation/Restoration of the Architectural Heritage Goals, Contents and Methods: Transactions on Architectural Education No 38,* edited by Stefano F. Musso and Luisa De Marco: 41-7.

Lipman, A. 2004. Architecture, heritage, history, memory, *Acta Structilia*, 11(1 and 2): 44-60.

Logan, William S. 2008. Cultural diversity, heritage and human rights, in *The Ashgate Research Companion to Heritage and Identity*, edited by Brian Graham and Peter Howard. Hampshire: Ashgate Publishing Limited: 439-54.

Low, I. 2009. Twin houses. *10 years + 100 buildings. Architecture in the New South Africa,* edited by 'Ora Joubert. Cape Town: Bell-Roberts Publishing: 300-3.

Lundy, Craig. 2013. From structuralism to poststructuralism, in *The Edinburgh Companion to Poststructuralism,* edited by Benoit Dillet, Iain MacKenzie and Robert Porter. Edinburgh: Edinburgh University Press: 69-92, retrieved on 27/03/2020 from https://www.jstor.org/stable/10.3366/j.ctt1g09v6s.

Machado, R. 1976. Old buildings as palimpsest: Toward a theory of remodelling, *Progressive Architecture* 11: 46-9.

Mallgrave, Harry Francis and Goodman, David J. 2011. *An Introduction to Architectural Theory: 1968 to the Present*. Chichester: Wiley-Blackwell.

Meirelles, X. and Lawson, Q. 1997. New studio for Meirelles Lawson, *Architect and Builder* December.

Nalbantoğlu, G.B. 2000. Beyond lack and excess: other architectures/other landscapes, *Journal of Architectural Education* (1984-) 54(1, September): 20-7.

Ndoro, Webber, Mumma, Albert and Abungu, George. 2009. *Cultural Heritage and the Law: Protecting Immovable Heritage in English speaking Countries of Sub-Saharan Africa*. Rome: ICCROM Conservation Studies.

Noble, Jonathan. 1997. The architectural typology of Antoine Chrysostome Quatremère de Quincy (1755-1849), *History of Architecture Symposium 18-19 July 1997,* edited by Walter Peters. Durban: University of Natal: 1-9.

Noero, Jo and Sorrell, Jennifer. 2009. *Jo Noero: The Everyday and the Extraordinary: Three Decades of Architecture: Jo Noero Architects 1982-1998 and Noero Wolff Architects 1998-2009*. Vlaeberg: A.D.A.

Orbaşli, Aylin. 2008. *Architectural Conservation: Principles and Practice*. Oxford: Wiley-Blackwell.

Ozkan, Suha. 1985; 2007. Regionalism within modernism, in *Architectural Regionalism: Collected Writings on Place, Identity, Modernity and Tradition*, edited by Vincent B. Canizaro. New York: Princeton Architectural Press: 103-9.

Pepler, Bert. 1999. A double dwelling – Observatory, Cape Town, *Architecture South Africa. Journal of the Institute of South African Architects* March April: 30-1.

Picton-Seymour, Désirée. 1989. *Historical Buildings in South Africa*. Cape Town: Struikhof Publishers.

Plevoets, B and Van Cleempoel, K. 2012. *Adaptive Reuse as a Strategy Towards Conservation of Cultural Heritage: A Survey of 19th and 20th Century Theories*, retrieved on 2020/03/24 from https://doclib.uhasselt.be/dspace/bitstream/1942/13554/1/adaptive%20reuse%20as%20a%20strategy%20towards%20conservation%20of%20cultural%20heritage.pdf.

Price, Nicholas Stanley, Talley, M. Kirby Jr. and Vaccaro, Alessandra Melucco (eds.). 1996. *Historical and Philosophical Issues in the Conservation of Cultural Heritage*. Los Angeles: J. Paul Getty Trust.

Rapoport, Amos. 2006. Vernacular design as a model system, in *Vernacular Architecture in the Twenty-First Century*: *theory, education and practice*, edited by Lindsay Asquith and Marcel Vellinga. London and New York: Taylor and Francis: 179-98.

Rennie, John. 1978. *The Buildings of Central Cape Town. Volume 2*. Cape Town: Cape Provincial Institute of Architects.

Robert, Philippe. 1989. *Adaptations: New Uses for Old Buildings*. New York: Princeton Architectural Press.

Robbins, Susan P. 2015. From the editor—The red pill or the blue pill? Transcending binary thinking, *Journal of Social Work Education* 51(1). Retrieved from https://www.tandfonline.com/doi/full/10.1080/10437797.2015.979112 on 24 March 2020: 1-4.

Rudolph, Paul Marvin. 1957. Regionalism in architecture, *Perspecta* 4. Retrieved from http://www.jstor/stable/1566852 on 23 July 2008: 12-9.

Shafieyan, Mahdi. 2011. Binary oppositions and binary pairs: from Derrida to the Islamic philosophy, *2nd International Conference on Humanities, Historical and Social Sciences IPEDR* 17. Singapore: IACSIT Press: 195-9.

Silverman, Helaine. 2015. Heritage and authenticity, in *The Palgrave Handbook of Contemporary Heritage Research*, edited by Emma Waterton and S. Watson. London: Palgrave MacMillan: 69-88.

Simitch, Andrea and Warke, Val. 2014. *The Language of Architecture – 26 Principles Every Architect Should Know*. Beverly, MA: Rockport Publishers.

Smith, Laurajane. 2008. Heritage, gender and identity, in *The Ashgate Research Companion to Heritage and Identity*,

edited by Brian Graham and Peter Howard. Hampshire: Ashgate Publishing Limited: 159-78.

Stone, Sally. 2005. Re-readings: the design principles of remodelling existing buildings*, Structural Studies, Repairs and Maintenance of Heritage Architecture IX.* Southampton: WIT Press: 125-34.

Stubbs, John H. and Makaš Emily G. 2011. *Architectural Conservation in Europe and the Americas*. Hoboken, NJ: John Wiley and Sons, Inc.

Treccani, Giovanni P. 2007. Archeologies of the present: tradition and modernity, *Ancient and New Architectures and Architecture,* edited by Alberto Ferlenga, Eugenio Vassallo and Francesca Schellino. Padova: Il Poligrafo publishing house.

Wells, Jeremy C. 2007. The plurality of truth in culture, context, and heritage: A (mostly) post-structuralist analysis of urban conservation charters, *City & Time* 3(2): 1. Retrieved from https://www.researchgate.net/ publication/228349999_The_plurality_ of_truth_in_culture_context_and_ heritage_A_mostly_post-structuralist_ analysis_of_urban_conservation_ charters on 20 April 2020: 1-14.

Arthur Barker, based in the Department of Architecture at the University of Pretoria, co-ordinates and lectures in the Professional Master's program. He co-ordinates Design Teaching and the Heritage and Cultural Landscapes research field, while chairing the Departmental Research Committee. He is a South African Council for the Architectural Profession Validation panellist and has assessed curricula at six universities in South Africa and Namibia. He is also a validation panel member for the American National Architectural Accrediting Board. He chairs the Education Committee (and is a member of the Environmental and Heritage Committee) of the Pretoria Institute of Architects (PIA) and has assessed design projects submitted for the Namibian Awards of Architecture in 2015, the PIA in 2015 and 2019, while acting as convener in 2017. His main research interest is the architecture of South Africa and that of the Fourth Modern Movement. Allied *foci* are architectural regionalism and the relationship between theory and design thinking.