CRITICAL APPROACHES TO THE DISCOURSE OF CLIMATIC RESPONSIVENESS IN MODERN ARCHITECTURE IN WEST AFRICA

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A dissertation submitted to the Faculty of Engineering and the Built Environment, University of the Witwatersrand, in fulfilment of the requirements for the degree of Master of Architecture

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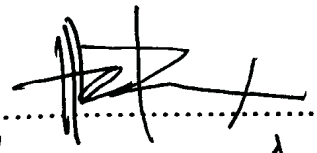
DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the Degree of Master of Architecture in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.



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This 1st day of August 2002

ABSTRACT

In a period of intense building activity between the end of the Second World War and the era of independence, modern movement architects in British West Africa developed the approaches of "tropical architecture"to deal with conditions that differed from the British metropolis.

This thesis outlines the key events, buildings and texts of this period, and investigates climatic thinking in the work, amongst others, of Fry and Drew, James Cubitt and Partners, Godwin and Hopwood, The Architects Co-Partnership, and Kenneth Scott in the Gold Coast and Nigeria. Drawing on discourse analysis and post-colonial criticism, this thesis questions the identity of climatic thinking in tropical architecture. In contrast to the popular conception of climatic responsiveness as a neutral approach, the study builds up an understanding of its use in tropical architecture as a form of modernist and colonial discourse, as well as discursive field in its own right.

The thesis shows how institutional arrangements tied the practice and dissemination of tropical architecture to the spatial logic of the modern colonial system. Modern climatic approaches differed from local practices, displacing local subjectivities, practices and places, and installing solutions that were beneficial to colonial interests and that extended the project of modernism.

The thesis concludes that climatic thinking in modern architecture in West Africa was not neutral, but rather operated as a discourse in the development of colonialism and modernity. This past prefigures its contemporary influence on the architecture of post-colonial contexts.

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CONTENTS

ABBREVIATIONS

AA	The Architectural Association
A d' A	l'Architecture d'Aujourd'hui
AD	Architectural Design
AJ	The Architect's Journal
AR	The Architecture Review
Arch & Bldg News	The Architect and Building News
Arch Forum	Architectural Forum
BRE	Building Research Establishment
CSIR	Council for Scientific and Industrial Research
RIBA	Royal Institute of British Architects

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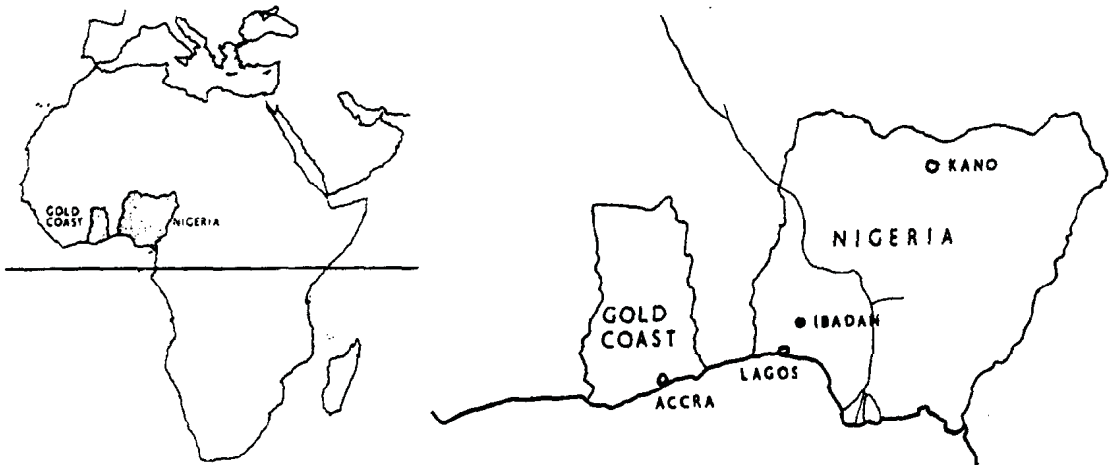
1. INTRODUCTION



1.1 Location of Ghana and Nigeria (AD 1955: 137)

1.1 Climatic discourse

1.1.1 Opening statement

From the late 1940's through to the early 1960's, the West African countries of Nigeria and the Gold Coast (Fig 1.1) were the setting for some remarkable experiments in climate responsive architecture. Inspired by the international modern movement, British trained architects developed innovative approaches to hot and humid conditions, devising new building forms and spatial practices to deal with a climate that differed from that in the west.

In the post Second World War period, British architects such as Maxwell Fry, Jane Drew, James Cubitt, Kenneth Scott, Leo de Syllac, John Godwin and Gillian Hopwood, and town planning experts and engineers, notably Ove Arup, went to West Africa to practice. Substantial investment took place in public buildings, especially schools and universities, and the development of trade and primary industries created the need for commercial and office buildings and employees' housing. Some of these practices remained in West Africa in the post-independence period that began when the Gold Coast became Ghana in 1957. During this period British-trained West African architects such as John Awuso-Addo, Oluwole Olumuyiwa and A. Ifeanyi Ekwueme entered practice.

Climate, according to the architects Fry and Drew, was one of "three main considerations influencing architectural design in the tropics" (Fry and Drew 1956: 23). A significant part of the thinking on climatic responsiveness in modern architecture is to be found in the words, images and buildings that emerged from West Africa within this period of about fifteen years, and which became defined as "tropical architecture"by individuals and through networks and institutions.

Over a hundred buildings built in Ghana and Nigeria between 1947 and 1966 in which modern approaches to climate are used were published in the architectural media. In addition to journal articles, information about climatic responsiveness was circulated in guides for practitioners. *Tropical Architecture in the Humid Zones* (Fry 1956) is the earliest to deal with West Africa, and in technical guides such as the *Overseas Building Notes* published by the Building Research Establishment (BRE 1950). A conference held in Britain in 1953 on Tropical Architecture (Foyle 1954) gave impetus to the idea of training architects for non-western sites, and a course in "Tropical Architecture" was established in 1954 at the Architectural Association.

It is significant that the work of these architects was published in the metropole of Britain. While the metropolitan media regularly covered West African work in the 1950's, this coverage fell away after the end of the colonial period.

In the architectural histories published in subsequent decades, West African modernism, like most architecture from Africa, was scarcely represented. Yet while it was marginalised within history, its climatic thinking was salvaged and circulated into other post-colonial networks. From the 1950's to the present many of the innovations of the "tropical architects", severed from their historical context and described as architectural details or analytical techniques, have continued to circulate in bulletins and textbooks aimed at architects and students practising outside the west (Koenigsberger 1974, BRE 1950, Fullerton 1970). These publications suggest that modern techniques of climatic responsiveness, including those coming from British West Africa in the 1950's, are of universal validity.

Recently, a number of books have revisited the history of postwar modernist architecture. Some are reference works with a largely empiricist approach (Curtis 1996, Frampton 1992), while others take into account critical methodologies borrowed from other disciplines. The latter includes a scattering of information on tropical architecture (Tzonis, Lefaivre and Stagni 2001), and on African colonial modernism (Celik 1992, Rabinow 1989, AlSayyad 1992, Wright 1991). None of these references, however, have looked at modern architecture in the British colonies in West Africa in detail. The general surveys of African architecture in the period are limited to a few buildings (Kultermann 2000, Elleh 1997).

Recent critical histories of colonial modernist architecture in sub-Saharan Africa tend to focus on the outcomes of colonial power in the spatiality of segregation, as it is manifested in town planning and in major building programmes. These studies detail the sorts of planning mechanisms such as land appropriation, racial segregation, the selective use and repression of indigenous practices, and legal frameworks that were used to control the colonial built environment. They fall short of providing any detail on the technological choices of colonial modernist architecture.

This study intends to address this absence. It focuses on the technical achievements of tropical architecture, re-examining them in the light of colonial and modernist discourse. It aims to extend the scholarship on modern colonial architecture by looking beyond the politics of planning, at the ways in which political and social forces were embedded in an apparently discrete area of expert knowledge that determines the fabric of the building.

Specifically, it examines the concept of climatic responsiveness in West African modernism, questioning the assumption that it is a neutral and universally valid approach. The thesis analyses climatic responsiveness *as discourse*, in order to unearth the meanings that are naturalised within its approaches.

In its findings, the thesis describes multiple ways in which climatic responsiveness mirrored and extended colonial power and modernising forces in West Africa. It builds up an understanding of climatic thinking in tropical architecture as a form of colonial and

modernist discourse and as a discursive field in its own right. As such, it is tied to the ideological power that a metropolitan centre holds over its periphery. The consequences of this inequality is the dominance of a universalising way of thinking over local ones. In effect, modernist climatic thinking displaced local ways of working with climate with the sorts of spaces, uses and definitions that could be applied anywhere.

1.1.2 Motivation

There are several reasons why a critical study of climatic responsiveness as it emerged in the modern architecture of West Africa would be appropriate today. These concern, on the one hand, the internal logic of its approaches, and on the other, the conditions that surrounded its emergence.

The first set of questions should be prefaced with an observation about the longevity of the kind of thinking about climate that was part of modern tropical architecture. Modern definitions of climate responsiveness are still in use within architectural practice and its representations, particularly in the post-colonial world. Their status is acknowledged by the subject's appearance in the curricula of architecture schools, reviews of architectural work, and professional self-representations. It has become a naturalised or "obvious" part of architecture which is seldom challenged. It remains, with its histories, intrinsically valorised by the discipline.

This valorisation is at odds with the critical tone of many contemporary discussions of other aspects of modernism. It may be that the technical nature of much of the thinking about climate makes it resistant to the forms of social and semantic critiques that characterise post-modernist thinking. Indeed, far from being superceded, climatic design has continued to grow and develop as an expert field.

This thesis challenges the belief that climatic design is a neutral and universal approach. It disputes that there are approaches to climate, as articulated in the forms, representations and practices of modern architecture in West Africa, that are really neutral and universal.

This would imply that these approaches are as self-evident to cultures outside the west as they are to their authors, and that they can be transplanted to other contexts without problems.

In order to unseat the belief that these climatic approaches are based on universally valid definitions, it is necessary to read into them to understand their conceptual underpinnings. Such a critique would expose the assumptions about the sites, subjects and aesthetic values of architecture on which modern forms of climatic thinking tend to rest.

This critical position involves the framing of questions about the conditions around the emergence of climatic responsive design. Where does the approach emerge from, historically, geographically, and biographically? How did circumstances, including the broad political and economic experiences of modernity, colonialism and post-colonialism affect it? How did the subjectivity of the architects who developed it impact on its conceptualisation?

These questions are asked against the background of a specific time and place from which this study emerges. South African architecture, like the architecture of West Africa, has been strongly influenced by modernism. The University of the Witwatersrand was home to a branch of the modern movement that corresponded with the European avant-garde as early as the 1930's, and I believe their influence still underlies many of our professional norms. In my own training as an architect in the 1980's, I was exposed to climatic response as a self-evident approach to design. Although I have become increasingly aware of the western biases within this thinking, it is hard to imagine an approach to practice that would not in some way draw on the considerable body of knowledge that the subject has generated.

At the same time, my awareness of the resourcefulness and creativity that is evident in the African city has made me aware that we should value alternative forms of climatic practice. All around us, there are visible signs of the failure of modernist thinking, of the re-appropriation of its forms, and of radically different practices. In South Africa, as in

Ghana, significant changes made to modern movement buildings by users, modernist elements assimilated into everyday practices, and entirely local alternatives appear side by side in the built and lived environment.

The broad motivation for this study, then, is to interrogate the heritage of modern climatic thinking in order to understand both its positive contributions and its limitations with respect to a culture of architectural practice in Africa. I would hope that critical understanding of the subject would enable us, as architects and as agents of change, to make appropriate choices about the forms and practices that we choose to reproduce.

1.1.3 Outline

After this introduction, including the literature review, methodology and a table that introduces the scope of the study in terms of its main buildings, figures and events, four central chapters then describe the climatic thinking of the study period in terms of its different manifestations, followed by a contemporary description of one case study. The study ends with concluding remarks that summarise findings from the central chapters.

The literature review brings together two strands of enquiry that have been influential on the study, dealing with, respectively, climatic studies in architecture and discourse analysis. The review outlines each area and describes how these relate to the study. The section on methodology describes how the documentation of the period was compiled and how it was then analysed, using thematic filters that looked at different aspects of tropical architecture. The analysis of these three themes of site, body and boundary interweave the central chapters.

As a summary of the scope of the study archive, Table 1, at the end of the introduction, presents a sequential chronology of selected architectural works in relation to the timetable of political events, media representations and biographical events that accompanied it. It is presented as a time line in which events in the west, The Gold Coast/Ghana and Nigeria are shown in parallel horizontal bands. This is used as an

analytical tool to allow for connections between architectural works, events and political contexts to be established.

The central chapters deal with the interlinked practices of climatic, colonial and modernist discourse. They have been organised to deal with, respectively, movements, publications, built form and use, each of which is treated as a chapter. The first central chapter, Chapter 2, Tropical Architecture, deals with the development of an architectural movement in which response to climate is a key principle. The definition of this approach, known as tropical architecture by western architects, is tied to the development of colonial territories in the tropics. The chapter relates architectural practices to events in Ghana and Nigeria, and sets them against the broader background of international modernism.

The next central chapter, Chapter 3, Representing the Tropical, looks at the ways in which the tropics were defined as a generic site in the media of tropical architecture. It documents the cartography and images of the movement, looking for similarities and exclusions in the representation of sites that indicate the limits of the architects' understanding of its qualities. This theme is explored in more concrete terms in the following chapter, Chapter 4, Making Buildings, which describes how architects applied their knowledge of climatic difference in designing, siting and supervising the construction of buildings. It then traces how the articulation of the built boundary became an important problem in climatic design.

The following chapter, Chapter 5, Comfortable Bodies, looks at the function of climatic design in relation to ideal and real users. It looks at the development of the concept of comfort as a central criteria for evaluating the success or failure of climatic response. It then documents the ways in which buildings operated in relation to the people who occupied or used them, to understand how social and political dynamics that operate on a broad scale are reproduced at an architectural scale.

The next chapter, Chapter 6, Revisiting Tropical Architecture, is intended as an epilogue, in that it draws on the site visit in this study to describe how some important buildings

from the 1950's are used today. It will use the observations made in the visit to contextualise and critique tropical architecture. It shows how the contemporary users have reintroduced a range of embodied responses to climate that had been excluded by the modern discourse of climatic responsiveness.

The appendix summarises the archive on which this study rests listing architectural works, divided by country and the architectural practice that designed them, laid out in chronological sequences. This works towards the creation of a register of modern, climate responsive buildings in Nigeria and Ghana.

The conclusion brings together observations from the central chapters to summarise how climatic thinking operates as a form and part of modern colonial discourse. It challenges the conception presented within climatic thinking, still popular today, that this was a neutral approach. Instead, it summarises how climatic thinking in the modern movement in West Africa can be seen as a form of knowledge that reproduces the functioning of power through the institution of architecture. Its effects operate at the scale of the body, through the structure of its institutional forms, in the materiality of its buildings and in their representation in the media.

1.2 *Literature review*

1.2.1. Outline

This study has been quite broad-ranging in terms of its references, resting on three areas of reading. The first of these is the archive that forms the basis for analysis which was largely compiled from primary material on modern architecture. The methodology references and describes the sources of this primary material.

In addition to the primary material, a survey of two normally discrete fields was conducted to research the analytical methodology of the study. The first subject is climatic responsiveness. There has been significant development in the field since modernism, and a general review was necessary in order to outline any critical or

historical work that bears on it. The second area of research covered the broad area of discourse analysis, particularly as applied to colonial cultures and architectural history and theory. There is a fair amount written on each of these two subjects, and a small body of contemporary literature that synthesises both fields.

1.2.2 Critiques and histories of climatic discourse

The idea that architecture should respond to climate is widely expressed in the discipline's texts and practices. From the earliest known writing on architecture in the Western canon, Vitruvius' text from the 1st Century BC, the need to consider the path of the sun and breezes across a building's site is spelled out (Vitruvius 1914). Outside the west, practices of geomancy give climate careful consideration. In contemporary practice, an architect who failed to consider the climate of a site, or the orientation of facades, or to deal with rainwater or used materials that weathered badly would be considered negligent. Because shelter is seen as a primary reason for constructing buildings, climate is an obvious concern for architects.

In vernacular architecture, responses to climate are developed locally and integrate social practices with forms, materials and maintenance in ways that relate to the particular weather of the place. This is in contrast with modern approaches which rely on theoretical knowledge about climate and develop solutions which can be applied in multiple locations. Climatic design in the twentieth century has become an expert practice developed by architects, engineers and scientists in locations that are often remote from the building site, and is represented in images, abstract diagrams and concepts that can be circulated amongst the parties.

Climatic related research in architecture is a significant field, represented today by research institutes, journals, conferences and web sites. Many of the texts aimed at student and practising architects induct the reader into empirical ways of dealing with climate (Napier 2000, Hyde 2000, Givoni 1998).These draw from the examples of built precedent as well as from scientific research, much of which is undertaken today by

engineers involved in environmental services. An important approach for this study is the ongoing work in institutional research to refine the scientific language used to describe climate and the body's physiological reactions to it (ASHRAE 1990).

Alongside the empirical language of much of this research, there is, however, a smaller tradition of commentaries regarding the qualitative aspects of climatic response. These include critiques of the universalist approach to physical and environmental standards within climatic data (Rapoport and Watson 1972, Soebarto 1998). These critiques raise concerns that the sorts of definitions of bodily comfort and activity that have been made for the west might not work equally well for people from other cultures.

Some contemporary descriptions of thermal response (Auliciems, Andris and Szokolay 1997) suggest that scientifically defined norms must be augmented with the active and voluntary involvement of the user in modifying their environment. Contemporary formulae for determining comfort might include a factor for adaptive opportunities. These acknowledge that the possibility alone of changing their environment, by the provision of opening windows and blinds, or adjustable local fans and thermostats would make users feel more comfortable.

These critiques suggest that a concept of agency is being introduced to contemporary climatic thinking. This means that the identity of the user cannot be entirely constructed in theories about comfort. Instead, the user must to some extent initiate actions in order to be comfortable. The consequences of these actions would diversify the norms for comfort, and reflect, to an extent, personal and cultural preferences. This is a significant departure from the modernist discourse of climate. At the same time, the generic concept of "user preferences" hardly begins to inspire us to imagine alternative practices in relation to climate.

Heshong (1979) and Leatherbarrow and Mostafavi (1993), whose perspectives are those of the designer, contribute two possibilities for alternative approaches to the modernist norms of comfort and functionalism. They deal with the experiential potential of architecture in relation to climate. Heshong's idea is to use "the thermal function of a

building as an effective element of design" (1979: vii), using thermal qualities in the same way that light is used, with contrasts rather than norms, to give "delight". Leatherbarrow and Mostafavi point out the ways in which the weathering of surfaces can give expressive quality to buildings. For instance, they argue that the mouldings of classical architecture as they discolour in time become visually more interesting. Far from being damaged by weathering, these surfaces are animated by its effects. These readings see the effects of weather as something positive for architecture. This is implicitly a critique of modernist approaches to climate which intend to erase or negate the effects of climatic extremes on the user and the building.

The history of climatic responsiveness is often related in broad surveys within practical manuals (Aronin 1953) or embedded in a discussion of useful concepts (Lippsmeier 1969). An exception is the classic history of environmental design in western buildings, *The architecture of the well-tempered environment* (Banham 1969). This book gives a detailed account of the architectural articulation of technologies for light, air-conditioning, heating and power supply in modernism. Banham notes that the history of services is neglected in discussions of architecture as the production of structures. He observes that the modern western world is concerned with modifying the environment through enclosed spaces framed by massive structures, in contrast to the actions taken by nomadic people who move to better environments. While he voices interest in the development of alternatives to "over-emphatic, expensive, intractable" western structures, his book implicitly supports the search for these within the western tradition. The only image of a site outside Europe and North America in the book shows the balconies of late 19th century colonial architecture in Sydney.

In some respects, the concept of Critical Regionalism (Frampton 1983, Tzonis 2001) provides a critique of modern western climatic practices. As an architectural approach which historically follows on closely from the period of tropical architecture, Regionalist thinking suggests that modernism can be corrected by adding or substituting elements to modernist practices. These elements, such as materials, spatial types, or landscaping approaches, are drawn from vernacular practices as fragments. For instance, as in the work of Geoffrey Bawa in Sri Lanka, wide eaved thatch roofs can be used in place of

concrete slabs to insulate and shade a modern building type such as a hotel.

Although the approach of this study considers Regionalist approaches useful in that they give recognition to some climatic responses outside the western canon, they extend modernist practices as much as they correct them. Regionalism absorbs local practices in pieces, often disembedding them from the social practices which produced them. In this respect, Regionalism offers formal rather than lived alternatives to modern climatic responses.

1.2.3 Critical histories and theories of architecture

A number of theorists and historians have used the history of architecture to understand the cultural or ideological narratives around design. Markus (1993), Dovey (2000) and Rakatansky (1992) examine the relationship between (political or economic) power and architecture, while Crawford (1991), Agrest (1991), and Dutton and Mann (1996) record omissions in existing architectural practice. Tafuri (1987), Frampton (1992) and Colomina (1994) have outlined broad surveys of modern architecture in which buildings and texts are evidence of these tensions. These studies go beyond, but include formalist analyses.

These critical approaches are influenced by cultural and critical theory, and attempt to situate the production of architecture within a context of ideological contestations. They refute the apparent closure or muteness of the architectural work. By opening architecture to new interpretations, these studies parallel developments in other disciplinary fields. Following the influence of post-structuralist and interdisciplinary studies, modernist architecture begins to appear in relation to the broader cultural context which produces it, and which it reproduces in its functioning.

Apart from adding to an understanding of social contexts, some writers believe that critical histories are valuable for the renewal of the discipline of architecture itself. Vidler (1992) explains the impact of these critical histories as their ability to critically work with definitions imposed on the discipline "either by present historical paradigms, or by the

subjects of our enquiry themselves" (1992:130). Pointing out that commonplace criticisms in other disciplines seem startling in architecture, he proposes that architectural precedent be seen not as a succession of forms but as discourse, power, institution and practice. As such it can begin to make the discipline interrogate the conditions of its disciplinary procedures.

Tafuri's approach to the architectural history of avant-garde movements is elaborated in *The Sphere and the Labyrinth* (1987). Tafuri observes that the modernist architectural project takes place on many levels, including written work, which leads towards the need for a methodological eclecticism in its evaluation. This not only includes evaluation of built and unbuilt work, and related texts, but the study of intersecting themes which are not intrinsically architectural histories. Architecture and its material conditions of production are entangled histories which are both interdependent but also antagonistic. While architectural work cannot "reflect" preexisting ideologies, he proposes that architecture in avant-garde moments consciously attempts to define "what is other to it...its conditions of existence, of production, of use" (Tafuri 1987: 17).

The specific material history of tropical architecture is informed by the colonial and post-colonial identity of its context. In this respect, it draws on the field of study opened up since 1976 by Anthony King. His work (1976, 1980, 1984, 1990) in the spatial history of the planning disciplines in relation to the development of a global systems of colonialism and capitalism. As he has shown at a larger scale, the internationalisation and the exportation of architectural approaches followed the development of the world economy.

King's work provides a valuable source of ideas and approaches. In earlier work, he uses semiotic approaches to understand how the nomenclature of colonial urban settlement sheds light on the political, economic and social relations that produce them (King 1976: 68-96). The later work, which situates architectural and planning practices in relation to the history of British colonial network, suggests looking at the products of these professions alongside political events, and at the specific mechanisms including education systems, conferences, publications and research units by which the transplantation of professional knowledge is achieved.

This study draws the use of many terms such as 'colonial', 'tropical', 'peripheral', 'non-west' from King. He uses the term *metropolitan* or *the metropolis* in reference to the societies that had colonial possessions, and specifically to London as the political and cultural centre of English colonial practice. The term *periphery* will be used to refer to the colonised regions, particularly in this study referring to British colonies such as Ghana, Nigeria and other colonies located in the tropical region of the globe. The period of the study largely falls into what King calls a *post-colonial* or *neo-colonial* period that is associated with ongoing transplantation of ideas through global practices even when the de-facto period of colonialism reaches an end.

While King's work in terms of its emphasis on British colonial planning and building is the closest model for this study area, some of the post-colonial reviews of spatial practice that survey outside this field are useful. The research on French colonial architecture in Africa (Celik 1998, Al Sayyad 1992, Wright 1991, Rabinow 1989, Abu Lughod 1980) describes how relations between a dominant, colonial force and the dominated native population were spatialised in planning and architectural practice in French colonies such as Morocco and Algeria. The mechanisms included land appropriation, segregation, the selective use and repression of indigenous practices, and legal frameworks that favoured modern built practice.

King's approach of studying networks of knowledge is mirrored by some contemporary studies of modernism in architecture, which have looked at the paths of ideas in that discourse. For instance, critical readings of the careers of le Corbusier in relation to his travel in the Orient have been made, reviewing the ways in which practices and motifs are drawn from place to place in their work (Lipstadt 1997, Celik 1992). Despite this, the writing of the history of modernism is still dominated by the view from the west, which sees its own locality as the fixed site from which all other practices move out.

The exceptions to this perspective may enrich rather than clarify our understanding of modernism. The work on postcolonial architecture presented at the "Other Connections" conferences between 1993 and 1999 (Nalbantoglu and Wong 1997, Prakash 1997, Cairns and Goad 1997, Ghandour, Labban and Lozanovska 1999) has pointed to the extraordinary

possibilities of an enlarged and multiple view of practice. Drawing on the experience of architects and critics from postcolonial countries including India, Lebanon, Australia, Singapore, Turkey and South Africa, the picture these papers present is that of a complex situation which binary constructs such as west/non-west can no longer contain. The research issues that the conferences promoted through critical interdisciplinary methods include questions about agency, change and legitimation in architectural practice in postcolonial sites.

1.2.4 Discourse analysis

Drawing on the precedent set by the authors outlined above, this study uses critical methodologies to appraise the primary material, drawing on, in particular, the area of discourse analysis. The forms of discourse analysis established by Foucault (1971) and developed for non-western contexts by Said (1970, 1984) have generated an enormous amount of academic interpretation and been influential in numerous applied studies. Most contemporary academic studies of the spaces, subjects and cultures of the world outside the west bear some debt to these authors.

For the purpose of this study, a review of those cultural studies that draw on the methods of discourse analysis and post-colonial theory was undertaken. Through their engagement with the non-western sites and subjects, these studies point towards methodologies for critically evaluating architecture in Africa as a form of colonial discourse. These approaches can augment the critical approaches in architectural history and theory which, while useful in their methods, tend to focus on the western canon.

Ashcroft et al (1998), Moore-Gilbert (1997), During (1993) and William and Chrisman (1993) offer a summary of key concepts and approaches in critical cultural studies. These share a concern with representation as forms of discourse through which the identity of subjects is constructed and reproduced. This subjectivity is enacted at the scale of the individual body as well as through the collective, spatial constructs of institutions or nations.