

DESIGNING IN A DIFFERENT PLACE:
DIGITAL VIDEO AS LANDSCAPE REPRESENTATION
IN SENEGAL, WEST AFRICA

by

IAN M. SCOTT

(Under the Direction of Pratt Cassity)

ABSTRACT

Landscape architecture's ability to address the challenge of designing in a different culture is limited by its own reliance on standardized methods of representation. Using the village of Bandafassi, Senegal, West Africa as a study site, this thesis employs digital video as a way to critique the process of understanding the landscape of a different culture. The body of this work is divided into two parts; an experimental portion consisting of a DVD that explores video's potential as landscape inventory, analysis and design representation, and a written theoretical portion serving as an interpretation of the DVD, and a broad conceptual inquiry into video and its relation to space, place, time and perception in the landscape. This product aims to contribute to a continual rethinking and redefining of a representational vocabulary within the field of landscape architecture with the intent to portray landscapes as dynamic living systems rather than static images.

INDEX WORDS: film, place, representation, Senegal, video, West Africa

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IAN M. SCOTT

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IAN M. SCOTT

Major Professor: Pratt Cassity
Committee: Gregg Coyle
Mary Anne Akers
William Shealy

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
December 2007

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Chapter 1

Introduction

How do you conceive a design in a different place? How do you 'see' a landscape through the eyes of another culture? Has landscape architecture's ability to address these issues been limited by its own reliance on standardized methods of representation? Using the village of Bandafassi, Senegal, West Africa as a study site, this thesis employs digital video as a way to critique the process of understanding the landscape of a different culture. I contend that in order to design in any place successfully—dealing creatively and sensitively with a specific local ecology and culture—landscape architects must enhance the current palette of accepted design representation. It is this collective vocabulary, media and methods used to communicate ideas, that is the most important tool of the designer.

It is generally emphasized in design that "we must recognize that graphics, the physical end product we are always concerned with, is itself the result of a design process, a careful analysis of why, when, and where a graphic technique is employed, as well as the execution of the technique" (Ching 1996: vii). This thesis acknowledges representation not only for its creative expression as an "end product" or "result", but more importantly, it looks at the inherent association between representation as a generative process and its resulting manifestation in design. This paper is based on the premise that landscape and landscape representation interact in a cyclical manner in which the landscape informs representation and representation in turn affects the landscape. Accordingly, there is a direct correlation between the reliance on

standardized and limited graphic imagery in the representation of *place* and the proliferation of homogeneity in designed places. As the profession of Landscape Architecture reaches more and more frequently into places beyond its conventional boundaries, it is apparent that an oversimplification of form and imagery persistent in our design language is stagnating creativity while risking to homogenize a dynamic and diverse reality.

Is everything concerned with representation entirely subjective, or is there some set of objective, universal standards by which to follow? I attempt here to shed light on this question so that we might have a clearer understanding of design representation's potential to generate ideas outside of its' cultural enclave. Still, before representation can be generative, it must be effectively communicative. With the understanding that people in different places and different cultures perceive and understand landscapes in different ways, this thesis in effect, becomes a discussion of the act of translation. In the process of translating culturally and environmentally specific concepts, like in any language, the pitfalls of insufficient vocabulary are intensified. The impending challenge therefore concerns the best vehicle for this translation, "For the artist, too, cannot transcribe what he sees; he can only translate it into the terms of his medium" (Gombrich 1960:36).

While technology becomes an ever present part of landscape architecture language, an appropriately coinciding evolution of the needed vocabulary and techniques to properly explore and define landscapes must occur. Design "graphics", a common misnomer for representation, implies a static image which tends to disregard many non-visual, temporal and phenomenological aspects of landscape. Consequently, elemental qualities of time, sound, motion and change are often ignored. Likewise, the advantages of representation as an analytical study of spatial relationships are often passed over in hasty and mechanical graphic reproduction.

Considering these problems, the objective here was to immerse myself in a process of multimedia communication within the context of another culture, in order to bring to light the need for a departure from conventionally used methods of representation within landscape architecture. I explore digital video as a representational method—one way to effectively and more holistically represent *place* using emerging, non-traditional techniques. I also explore the role of video as a demonstration of environmental perception—an attempt to let the scenery tell the story of the place. Moreover, using contemporary social theory to analyze debates surrounding *space*, *place* and *place making* that reverberate through fields of design, this thesis asks what it means to create a design that is 'of the place'.

Methods and Intents

This thesis relies on the foundation of a larger project's use of ethnographical research methods including participant observation, sketching, cognitive and physical mapping, proxemics studies, personal histories, interview, and video compiled during three separate visits to the site—the culmination of which provides for this purpose, an adequately comprehensive understanding of the natural and built environment. Landscape architecture representation has remained largely un-problematized in academia. In a less than innovative fashion, this thesis critiques the current state of landscape architecture vocabulary. Where the study diverges into a creative exercise, nevertheless, is in its translation of this discussion into an actual representational work. The body of this work is divided into two parts, the experimental and the theoretical—intended to be understood as a whole, where the two parts refer to each other. The experimental portion consists of a digital video study that explores different visual approaches to understanding and representing the landscape of Bandafassi. This study aims to take the viewer

on a trip through the cognitive and physical landscape, revealing how video can be used both as a method of inventory, compiling and organizing elements of the site, and as a tool of analysis, examining relationships between the compiled elements in order to reveal design possibilities for the physical environment. I found this video experimentation essential to the thesis, as the particular qualities of experience captured in film are only partly reducible to verbal description and explanation. Another aim of this experimental investigation was to learn more about the technical capabilities of digital video by working with editing software, animation and sound. The written body of text is the second, theoretical portion of this study, serving as a critique, theoretical background and interpretation of the experimental portion, where understanding the process undertaken is as important as the end result. It is disposed as a broad conceptual inquiry into video and its relation to space, place, time and perception in the landscape.

The core method of analysis employed in the project simply involves compiling and reviewing digital video of the site. This methodology came together in unforeseen ways—a sort of fortunate accident. Intending initially to rely on standard graphic techniques to represent the village, i.e. maps, sections and sketches, I used video at the outset of the project for convenience and ease of reviewing images and activities in 'real time'. However, a failure to convert the meanings illuminated in the captured video in to more traditional forms of representation initiated a shift in my thinking about process. Questions and dilemmas inherent in the act of filming itself forced me to examine my process of representation, and endeavor to look at *place* through a different lens. In an attempt to marry video, ethnography and design I looked to convey experiential meanings to an outside audience in an artistic fashion. I employed video to provide a way to analyze my own process of learning to 'see' the landscape while offering viewers a similar immediacy to actually being on site.

In short, I have treated this study as a reflexive critique of my own creative process. In any study of another place there must be careful attention paid to one's self—a reflexive approach inseparable from personal, emotion and cultural predisposition. Reflexivity is simply; understanding my place in relationship to those or that which I am studying (Dubisch 1995). This involves a movement from the personal, to the theoretical, to the experimental, embodied in the idea that “to be reflexive is to be self-conscious and also aware of the aspects of self, necessary to reveal to an audience so that it can understand both the process employed and the resultant product” (Myerhoff and Ruby 1982:6). This includes the 'where' and 'how' I diverge from what is traditional landscape representation. In order to build on existing concepts, rather than reject everything learned, my theoretical orientation for this study falls in the anthropological tradition of the Dialectic—a common sense approach whose process is three-fold:

Cancel - what is not useful
Preserve - what is useful
Transcend - to a new idea

This thesis is not meant to be a comprehensive ethnographic or ecological account of a place—nor is it a push for an obscure and cryptic culture within landscape architecture, in which individual designers' expressive agendas ignore the benefits of a shared vocabulary and overwhelm their ability to communicate. It is instead an exploration meant to pursue and fulfill a creative outlet, yet speak a language that is both appropriate for its intent and readily understandable. It joins others in the deconstruction of representation, and seeks to break with former conventions and assumptions. My hope is that it will help to lessen the limitations imposed by our incessant repetition of non-specific graphic forms, and that it will continue to diminish the metaphorical 'box' we strive to think outside of. I seek to reveal that the great

potential for creativity provided by the representational process lies more in exploration and experimentation than in memorized technical mastery. Relying on the ideas of many others, this is a move towards a contemporary understanding of 'representation as process,' enabling Design to speak more closely to how places are experientially known.

Context

This work is embedded in a larger project and series of site visits between the years 2001-2005 aimed at understanding the landscape in Bandafassi, Senegal. In 2001 I first visited this site as part of a year-long Watson Fellowship and individually devised project entitled *Discovering a Sense of Place; Anthropology and Art in the Landscape*. This experience collecting and organizing humanistic and environmental meanings inspired two ensuing site visits during my graduate studies in Landscape Architecture. During these visits I began a process of inventory and analysis, the phases of primary concern in this thesis, with the intent of laying a framework for future 'sustainable design guidelines' for the village and region.

Bandafassi is an area in Senegal (in the Département de Kédougou) about 750 km from the capital city Dakar. The central village of the same name is a small settlement on the plains of eastern Senegal, near the borders with Guinea and Mali, at the foot of the Fouta Djallon mountain range. The village population, around 500, is primarily FulBe (singular Pullo) or Fula Bandé (Fulbe in English or Peul in French) a sub-group of the Fulani, a Muslim culture of peoples living primarily in Guinea-Bissau, Senegal and The Gambia. Traditionally nomadic traders and pastoralists herding cattle, goats and sheep, the village is now the center of life for the Fulbe in Bandafassi. They are now partially subsistence farmers, growing rice, millet, peanuts and corn, and living side-by-side other ethnic groups, the Bedik, Bassari, Mandinka and

Bambara. There are strong gender based divisions in the society, women doing most of the work around the village, e.g. taking care of children, pulling and carrying water from wells and cooking, while men are occupied with building huts, digging wells, wage-earning jobs and spiritual proceedings. The primary language in the village is the native Fulfulbe or Pulaar, while children learn French in the classroom and Arabic is used for religious purposes in the mosque. Although not formally educated in the western style, many of the FulBe elders in Bandafassi are well traveled social analysts and linguists, sometimes fluent in seven or more languages.

Architecture in the village is single story, round or rectangular earthen structures with grass thatched roofs—a building style with roots in the place as deep as the trees that surround them. Vegetation and topography is varied as the flat grasslands and woodlands to the north give way to forested hills and plateaus in the south. Bandafassi is located in the Sahel, an Arabic word meaning 'border' or 'shore' (the shore of the Saharan Desert) which can be considered one of the worlds most 'hostile' and unpredictable inhabited environments. The area is prone to drought, temperatures over 110° Fahrenheit, torrential rainstorms, locust infestations and many other natural hazards. Thus, everyday life in the village reveals the implications of the natural environment as a social construct, and limiting agency in the development of the built environment. In this harsh climate, with limited resources, centuries of creativity, resourcefulness, and a deep knowledge of the place have guided environmental design.

This region in southeast Senegal is now on the cusp of rapid, unprecedented, and often irresponsible development. Bandafassi, now seems to be ensnared in a negotiation with cultural and environmental loss, and the infringing and unfamiliar development to the west. Other regions of Senegal and West Africa experiencing increased development have seen some benefits from western 'modernization'. More often than not however, a backlash of waning local

ownership and control, increased environmental impact, and the loss of cultural heritage is apparent. As ownership shifts out of this region, economic and political repercussions are developing at the local level. In addition, the unique character of the landscape is obscured by an onslaught of myopic, 'quick fix' design solutions. The stills below show distinct differences between two streets; one in Tambacounda (left), a town that has seen 'modernization' and tourism, and one in Bandafasssi (right), a village that has not yet seen significant 'modernization' and tourism.



The landscape in any place is fashioned partly by the cultural group, thus reflecting the cultural uniqueness of that group. For this reason, losing ownership and design responsibilities to insensitive or uniformed outside sources can mean the loss of the place itself. However, considering the region's current state in which funding, education and resources are thinly stretched, it is foreseeable that the development of design solutions *may* rely on an outsiders' comprehension of this place—an understanding far outside the realm of their own culture.

Chapter 2

Perception, Language and Ideation

'Seeing' the Landscape

We see the world not as it is but as we are. - Talmud

Human perception is expressed in many ways, one of these being through art and representation. Throughout history there has been a direct correlation between the way people 'see' their environment and in turn how they treat it. The representation of environment within the field of landscape architecture, however, is commonly overlooked as a founding force behind its perception and treatment. Origins of the word landscape itself reveal this important relationship. The word landscape was introduced into the English language in the late 16th century as a term for painters, with its root in the Dutch word *landschap*. What is known today as a landscape came to be because it reminded people of things they had seen in paintings (Hirsch 1997).

For many centuries in Europe the natural scope of the land was viewed as something wild and untamed and therefore in need of being tamed by people. However, when artists in the western world began painting landscapes as subject matter rather than merely backgrounds, there evolved a switch in the western European consciousness and in what they found aesthetically pleasing. In *Nature Pictorialized*, Gina Crandell explains that people had a conception of an ideal form of nature derived from landscape painting, and they aimed to discover similar ideal scenes in actual places. Gradually, the land began to be perceived as beautiful and pristine (1993). In North America, the Hudson River School of painters helped to transform the

perception of intimidating and untamed landscapes into inviting and romantic ones. People then saw the natural landscape as 'picturesque', because it reminded them of a painted picture (Hirsch 1997).

Richard Payne Knight, who first traced the origin of the term picturesque back to the Italian *pittoresco* (after the manner of painters), questioned the common interpretation and understanding of what the picturesque was (Crandell 1993). This discussion of the legitimacy of the concept of the picturesque largely surrounded the relationship of the painted picture to the experienced reality (Crandell 1993). People began to question if picturesque landscapes were simply those that looked like paintings, or was the picturesque a way of seeing, and therefore subjective, rather than a quality inherent in objects (Crandell 1993). It is this concept of 'seeing' the landscape that is at the heart of my exploration of representation.

"We have neglected the gift of comprehending things through our senses. Concept is divorced from percept, and thought moves among abstractions. Our eyes have been reduced to instruments with which to identify and to measure; hence we suffer a paucity of ideas that can be expressed in images and an incapacity to discover meaning in what we see" (Arnheim 1974:1).

Does the 'cultural situation' described above in Rudolf Arnheim's *Art and Visual Perception* pertain not only to artists, but to designers as well? Must we, landscape architects, also reawaken our "inborn capacity to understand through the eyes" (1974:1)? There is no doubt a close relationship between seeing and thinking exists, as it is common in English to use "I see" to mean "I understand". The Greek ocularcentrism—the core of their study of cognition—can be expressed by Plato's definition of intellect as "the eye of the mind". Such words as "idea" and "theory" derive from the Greek verbs meaning 'to see' and 'to look at attentively, to behold'. In this thesis I use 'see' in two different capacities. Firstly, seeing or percept is a non-intellectual

operation occurring in the visual sector of the nervous system, by which we perceive forms, shapes, color etc. There after, I use seeing to mean an intellectual process of thinking and reasoning—although much overlapping exists between the two, as much of what is achieved by the senses would seem to be the workings of the intellect (see Arnheim 1974).

Trained to see the world through the eyes of a landscape architect, this project acts as a reflexive critique of visual culture within landscape architecture. In *Art, Design and Visual Culture* (1998), Malcolm Barnard suggests that "various cultural and social groups have different conceptions of the visual and the cultural, differences that are themselves used to constitute distinctions between these groups" (Dikovitskaya 2005,33).

"The epistemological centrality of culture implies not that "everything is culture" but that every social practice depends on and relates to meaning, and culture is the constitutive condition of that practice. One can conclude that visual culture is a field for the study of both the social construction of the visual (visual images, visual experience) and the visual construction of the social, which apprehends the visual as a place for examining the social mechanisms of differentiation" (Dikovitskaya 2005, 58).

Like the field of visual culture, design representation should shift away from things viewed toward the process of seeing and ask what is it that you learn when you learn to see (Dikovitskaya 2005,56-57). It must be recognized that there are different visual cultures as well as 'visual culture', much like there are languages and language. In their book *Visual Anthropology: Photography as a Research Method*, John Collier Jr. and Malcolm Collier describe the difficulties in learning to observe visually. They make known the necessity of 'seeing culture in all of its complex detail' (1986). Arnheim describes this perception of detail as a 'restlessly active pursuit' where "with an invisible finger we move through the space around us, go out to the distant places where things are found, touch them, catch them, scan their surfaces, trace their borders, explore their texture" (1974:43).

When analyzing video I captured in Bandafassi, it is necessary to take into account that the camera “sees” differently than the human eye does. As the film-maker I choose what is in the frame and what is excluded. Simultaneously, there is a constant decision about when, where or of what it is appropriate to take video. This creates a value judgment affecting how I choose to represent the place and later how I perceive its experienced reality or existing condition when analyzing the footage. And yet, my eye does not see with the mechanical accuracy of the video camera. It does not document everything impartially, the entire collection of minutia of shapes and colors amounting to the person being filmed as well as the bull grazing slowly in the background (see Arnheim 1974:43). What then does it mean to 'see' the landscape? Vision seizes the exceptional features of things—the redness of the sunset, the roundness of the hut, the shimmer of a puddle, the straightness of a bamboo pole (see Arnheim 1974:43). Yet, when shown as pieces of a whole, as in short clips or snapshots, rather than arranged in the context of general patterns, all the relevant details lose their meaning. Arnheim describes how "anthropologists have been surprised to find that in groups unfamiliar with photography people have trouble identifying human figures in the kind of picture that looks so "realistic" to us because we have learned to decipher their devious shapes (1974:44). The job of representation in its simplest form can be thought of as generating patterns that candidly interpret experience by creating a corresponding pattern of organized forms, in this case video, by means of video editing.

"The camera creates a peculiar relationship to one's surroundings. It is a distancing device, not only placing a physical object between the observer and the observed but also clearly turning what is observed into an object...The camera also shapes what one chooses to see, for it seeks out what is “photogenic,” that is, the striking and different, and often passes over what is more mundane. I frequently had to work to get my camera to follow my own experience, that is, to focus on what I saw without the camera, and

I sometimes made lists of what I wished to photograph so that I would have a more complete visual “record” of my experience" (Dubisch, 1995:112).

Much as Jill Dubisch describes above, using video as a representational medium is not neutral, and presented a continuous challenge to record the ‘real’ experience of the landscape. Similar to the way Dubisch finds herself struggling to keep her method of observation from altering her perception of the place, I am left in a paradoxical struggle to connect several realities—the reality of experience in Bandafassi, the reality of the need to effectively communicate in an academic context back home, and the reality of the representation (1995).

As a designer trying to understand a foreign place, I encountered many objects, systems and relationships I did not know. Because of this, I found it very easy to become deceived, to see things or find meanings in the landscape that did not really exist—false conclusions that were based in my own cultural, perceptual predispositions. The biggest challenge then becomes learning to distinguish between what ethnographers describe as the *etic*, the 'outside' perspective and the *emic*, the 'inside' perspective. Although a concept that has a blurred line and is not mutually exclusive, and in constant transformation, I found the notion of insiderness and outsiderness to be ubiquitous in my understanding of the landscape.

When first arriving in Bandafassi I took video footage of a large area of grassland that stretches to the north east of the village. What to me looked like a never ending monotony of waving yellow grass was to people there a clearly discernable system of paths and landmarks. As the weeks went by, I watched and filmed activities in the area. Although my initial intent was to capture striking and dynamic images of people in the landscape, the video gradually and unknowingly helped me achieve a clearer picture of what that particular landscape meant to the people who live it. In this fashion, my preoccupation with filming people's daily activities

became an unplanned venue for learning to 'see' meaning in the landscape. Later, in attempts to take an even more intimate glimpse into the landscape's meaning, I began giving people that lived in the village the camera to film what they chose. I wanted to capture those things I could not see and might therefore pass over, or perhaps those things I simply chose not to see.

Aesthetics

“Aesthetic reactions reflect neither a casual nor a trivial aspect of the human makeup. Aesthetics is not the reflection of a whim that people exercise when they are not otherwise occupied. Rather, such reactions appear to constitute a guide to human behavior that has far reaching consequences...Aesthetics could thus be seen as a set of inclinations, however intuitive or unconscious, which might influence the direction people choose not only in the physical environment but also in other domains” (Kaplan 1987:19).

Understanding a place for the purposes of design relies heavily on the understanding of different conceptions of aesthetics. “People in any country see their terrain through preferred and accustomed spectacles, and tend to make it over as they see it” (Lowenthal, Prince, 1965). As a designer in a foreign place I found it is difficult to avoid concentrating on only the aesthetic qualities I found exotic and appealing. I sometimes discovered many of the more mundane or bizarre aesthetic details in Bandafassi to be more representative of the place. Much of what I perceived as an outsider as a bizarre aesthetic, e.g. soft drink wrappers as wall paper or cheap plastic additions to an elegant bamboo structure, are seen from within as fashionably foreign décor. After some time filming and living in the community I began to experience a shift in the way I perceived the landscape, allowing me to see swept barren earth not as stark and uninviting, but comfortingly snake and scorpion free. I could see the clutter of seemingly useless objects in family compounds, not as an eyesore in need of being tidied up, but an important cultural disposition to save and recycle.

Learning the Language

This study is born from a desire to understand the particularities of a place. The word "understand" here does not necessarily suggest "scientific knowledge; it is rather an existential concept which denotes the experience of *meanings*" (Norberg-Shultz 1979: 23). What then is experience? In *Space and Place: The Perspective of Experience*, Yi-Fu Tuan suggests; "Experience is a cover-all term for various modes through which a person knows and constructs a reality. These modes range from the more direct and passive senses of smell, taste, and touch to active visual perception and the indirect mode of symbolization" (1977:8). It is through this experience that people invest the landscape with meaning and therefore construct the reality of their place. Language or representational methods used to affectively represent a place, then, should be as much about expressing experience and meaning as they are about depicting forms.

"What of language? Yes language is a superb tool of communication, and undoubtedly the business of the day's practical affairs is served better with language, than it would be without it. But more and more, language is seen as a tool of consciousness: a way of thinking better; a way of more effectively reconstructing a picture of our social world in our heads" (Lewin, 1988).

Although the use of a standardized rudimentary set of symbols in the design process does certainly help to expedite the process of getting ideas from the mind onto paper, its simplicity impairs the ability to be fully expressive. Limited language creates a limited scope of creative possibilities, which in turn creates a limited scope of realities manifested in the built environment. When working in a different culture, designers are forced to 'read' the landscape in a different 'language'. When entering the village of Bandafassi, or for that matter, entering any place where the spoken language is new, the incoming foreigner can only imitate the sounds of the new language as far as the phonemes of their own native language will permit. The motor

habits of the tongue and vocal cords acquired very early in childhood affect not only the pronunciation of the sounds, but also the way the sounds are heard or perceived (Gombrich 1960:363-364). The Sapir-Whorf hypothesis, as proposed by the linguist B.L. Whorf, states that language, “by providing habitual grooves of expression, predisposes people to see the world in a certain way and so guides their thinking and behavior” (Haviland 1996:106). In the same way, the language of design and representation, though in this case symbolic rather than spoken, conditions people to attune to certain distinctive features, while glazing over otherwise important attributes. A designer is thus bound by their own vocabulary and ability to 'speak' the 'language' of that landscape.

As noted by Terrell Nye, representations of the environment have a direct impact on perceptions and expectations of the landscape that are personal, functional and cultural. “The connections that we recognize between these images and our expectations of the landscape reveal the strong relationship between what we design and the ways we choose to represent those designs” (1997:7). The basic challenge then becomes an attempt to represent and in a way concretize what exists between the circles and lines in a drawing, thus revealing the ‘whole picture’ (Nye 1997).

Although conventional landscape architectural graphics has done its part to over simplify the diversity of landscape, its' importance in the field cannot be overlooked. It is understandable that many "Landscape Architects who learned to create drawings with trace paper, parallel bars, No. 2 pencils, and markers cringe at the idea of having to settle for drawings generated with CAD (computer-aided design) programs" (Sipes, 2006:78). Graphic representation that blatantly reveals the touch of the human hand evokes a closeness and understanding of the represented place that cannot be achieved solely with the computer. There is something visceral and intimate

about drawing something by hand; a directness from the eye and mind to the manipulation of the hand. As Kim Sorvig explains in his 2005 article in *Landscape Architecture Magazine*, *Drawing the Experience of Place*, "ensuring each new project tells the right story requires extensive preparation, a lot of client psychology, and graphic tools that help everyone visualize possibilities quickly, and accurately" (171). It is perhaps unnecessary to state, by nature of my thesis, that I am not opposed to the rapid technological advancement in the field. I do not see this as a contradiction. I do however, believe there are many important things we (landscape architects) have lost, and we should try perhaps to re-find. An initial push of computer aided representation found, or finds it necessary to turn its back and build itself up against older generations of 'hand graphics'. This evolution conforms to historic trends across many disciplines and times.

“It was thought that science could only exist by turning its back upon the world of the senses, the world we see, smell, taste, and perceive: the sensory was a delusive world, whereas the real world was a world of mathematical properties which could only be grasped by intellect and which was entirely at odds with the false testimony of the senses.” (Levi-Strauss 1979:6)

This thesis however, is not meant to rescue our understanding of the human environment from the limitations of rational science. The rejection of tradition was perhaps a necessary step, enabling computer aided methods of representation to gain a foothold in the discipline. Now, firmly a part of landscape architecture, my contention is that computerized methods of representation must search for ways to reincorporate the world of the senses and overcome the schism. The more intuitive, intimate methods of the senses need to be reintegrated into an ever progressing media of communication. As a result, I envision the emergence of a richer palette of

accepted representational media and methods rivaling the diversity of the landscapes they portray.

Chapter 3

'Sense of Place'

Any designer attempting responsible design strives to create something that is "of the place", a catch phrase muttered often in Landscape Architecture without a clearly understood definition of what it means for the profession. Looking into the table of contents or index of a landscape architecture text, or even an Introduction to Anthropology textbook, the category called "place" will not be found. The somewhat obscure idea of *place* seems to be something science cannot prove, and "no one really has a theory of it, no one imagines that it is some sort of data set to be sampled, ordered, tabulated and manipulated" (Geertz 1996:260). The most common conclusion among landscape architects seems to equate a *sense of place* with the existence of native plants, local materials, or some sort of historic reference in their design. I argue that a *sense of place* must be something more. In their compilation of essays, *Senses of Place*, Keith Basso and Steven Feld define a *sense of place* as:

"the relation of sensation to emplacement; the experiential and expressive ways places are known, maintained, yearned for, held, remembered, voiced, lived, contested, and struggled over; and the multiple ways places are metonymically and metaphorically tied to identities" (1996:11). A *sense of place* is found in the landscape, the people, the architecture, the stories, the organization, the naming of places, and local historical events.

What is this place, Bandafassi? What gives it its identity, aura, mystique?

What are the things that give its landscape meaning and make it unique? Analyzed scientifically and quantifiably, the mosque is made of mud, cement and a tin roof. After observing the rich

expression of faith, ritual and community during Friday prayer, it is amazing how the perception imbedded within these physical attributes changes in the mind. An infant experiencing a triangle does not know it as such—it is simply a space. Recognizing the triangle as a geometric shape requires first identifying its corners—its places (Tuan 1977). Much in the same way, I first entered Bandafassi perceiving only a confusion of images and forms in space. Learning to understand the village as a place required the knowing of localities as meaningful and connected objects and experiences. Representation of the place consequently, cannot be dominated by fleeting impressions in space, but must acquire a similar stability of the organized meanings and places. When considering the connection between representation and an effective communication of place, we must look at the difference between place and space—place being a meaningful space—and the ways in which this meaning and value are invoked through both cultural as well as environmental particularities.

I do not argue that representation is therefore a conflict between the objective methods of science and the subjectivity of the artist, but instead, should be the interface of the two. Yet, an overly mechanistic analysis process in Landscape Architecture, borrowed from the fields of science, directly relates to its' overly mechanistic representation. We must come to realize that 'there remains an aspect of meaning in landscape which lies "beyond science", the understanding of which cannot be reduced to formal processes' (Cosgrove 1984:17, cited in Hirsch). By consequence, in landscape architecture, as in any discipline studying landscape, 'there is a tension evident in the relationship between the subject-position of place and the non-subject position of space in the way landscape has been taken up as an analytical concept' (Hirsch 1995:9).

Within a larger project scope, the video product can be considered an "inventory", a traditional analytical phase common in the beginnings of most design projects. However, in landscape architecture, an "inventory", even when considering cultural aspects of a site, seems habitually limited to the analysis of physical objects. Norberg-Shultz reminds us that when we over-simplify landscapes analytically, “we miss the concrete environmental character, that is, the very quality which is the object of man’s identification, and which may give him a sense of existential foothold” (1979:5). The things that make *space* a *place* can perhaps be preserved in the physical environment or in objects, however, they thrive in things less apparent.

Although my study looks at the huts, the fences, the mango trees, the sun and shade, texture and color, the importance of the representation is found in the real existence of the phenomenological place. The "phenomenological" describes those things so often excluded in discussions of *place*. These are the feelings, the emotions, the character, the spirit, the "rhythm of life"—things that cannot be quantified, things science cannot prove. In his discussion of the *genius loci*, the "spirit of the place", Christian Norberg-Schultz simply describes these phenomena as the ‘life-world’ rather than the tools that help make it (1979). He further determines that *place* can be analyzed and represented by means of the categories “space” and “character”, 'Whereas “space" denotes the three-dimensional organization of the elements which make up a place, “character” denotes the general “atmosphere” which is the most comprehensive property of any place' (1979, 11). We can further simplify the definition to be; “A place is a space which has a distinct character”(Norberg-Shultz 1979:5). I see the ability to portray this 'character', this 'atmosphere' to be most important in creating a comprehensive representation of the experienced, lived space. My aim, then, is to discover the “genius” of the place and let the representation “be what it wants to be”, to use words of Louis Kahn (see Norberg-Shultz 1979).

In a traditional design inventory one might take photographs or complete sketches of a site and then organize these into preconceived categories. Unfortunately, these groupings tend to be dislocated from a cultural reality. In my process of creating a video representation I attempt to avoid this dislocation by arranging the compilation so to avoid the restricting imposition of conventional categories for classification. In other words, I let the reality of the place determine how the representation is organized. The focus of the "inventory" then is shifted from collecting images of static objects, to organizing the dynamic relationships held between them. It is these relationships that exist between the physical objects that help viewers understand the ways people in Bandafassi perceive their home place, and invest it with meaning and significance. Representation then serves as a tool to help identify and understand, and begin to communicate something of this community's underlying attitudes, motivations and assumptions about their place, and the particular ways these things are expressed.

Subsequently, the challenge with representation becomes covering the full range of experience or knowledge, a principle that weaves through Yi-Fu Tuan's book *Space and Place: The Perspective of Experience*. Tuan explains that "Experience can be direct and intimate, or it can be indirect and conceptual, mediated by symbols." (Tuan 2003:6). People in Bandafassi know the landscape in a very direct and intimate way, an intimacy I strived to achieve in my experience in the village. Through a process of filming and editing footage of Bandafassi I attempt to translate the range between direct and intimate into the conceptual and symbolic. The video must look to distill, out of all the complexity, an essence of *place* so that it may portray this range of experience. I see the purpose of representation to be first a search for the ways people invest meaning in, and organize their space, and only then can it serve as a way for others to symbolically experience the place and any proposed design.

Chapter 4

Space, Time and Orientation

“THE PHILOSOPHY of landscape design began as a belief in myth, merged into humanism based on the establishment of fact, and is now grappling with the realization that facts are no more than assumptions. Humanism is passing into another, unknown, phase. It is possible, for instance, that the present disruption of the environment can be traced beyond the manifest reasons to one basic cause: the subconscious disorientation now in man’s mind concerning time and space and his relation to both” (Jellicoe 1975:398).

The above testimonial from *The Landscape of Man* concerning “the subconscious disorientation now in man's mind” (a concept from which women are surely not omitted) holds significant weight in my look at representation. Much in the same way many find themselves bewildered in the movement between ‘model space’ and ‘paper space’ in design software, there exists a disorienting rift between representational space and its resulting relationship to time and place.

Through the editing process, I found it necessary to underline those things that communicate this transition from *space* to *place*. If the term *place* is meant to describe a meaningful *space*, then by nature the ideas of *space* and *place* necessitate each other for definition. Tuan contrasts the security and stability of *place*, with the openness, freedom and threat of *space* (1977:6). Furthermore, he equates *space* with movement, and *place* with pause; where “each pause in movement makes it possible for location to be transformed into place”—a concept I found easy to translate into video (1977:6). Communicating this transition from *space* to *place*, video may first reveal only a fleeting collage of images and a basic idea of where a place physically exists. In time, more and more frames, experiences and forms are revealed.

Forms reveal relationships, are related back to a broader context, and revisited in different experiences. Finally, *space* consists of recognizable and familiar experiences and forms, a communication of *place*. Tuan describes this transition very simply, “(w)hen space feels thoroughly familiar to us, it has become place” (1977:73).

My depiction of Bandafassi is largely based in these movements from disoriented to oriented space. My understanding of the organization of space that allows this movement to take place, I find, comes into being under the contingencies of five topics discussed in the following sections: Spatial Ability and Relationships, Remembering and the Imaginary, People and Place-names, Architecture, Environment and Subsistence.

Spatial Ability and Relationships

Spatial ability is essential to human livelihood and differs between people and cultures. It is presumed that spatial knowledge at the level of symbolic articulation enhances spatial ability (Tuan 1977:74-76). When designing in a foreign place, the challenge becomes how to symbolically address the differences in spatial perception between cultures. Attempts to orient myself in Bandafassi revealed many differences in local spatial perception and its description. For instance, measuring techniques used in architectural construction are either innate visual calculations or measured by non-precise methods of pacing. Long distances are generally described in terms of the ability to cover the distance walking in a day. Therefore, a village that is 5 miles away or one that is 10 miles away are grouped together as a one day walk. When asking how to get to the nearby village of *Nyangé*, I learned that the concept of 'straight' when describing a path does not mean that it is in fact a straight line. This concept of 'straight' instead permits it to turn and lead to other villages or avert landforms. The circuitous nature of the path

is discounted as perhaps simply the only way to move through the landscape from one point to another. So, no matter how many times the path winds and turns, it is still headed 'straight' for its destination. Also very important in orientation are the locations of different ethnic groups in the area. I learned that “with the Bediks”, when talking about the topography of the landscape, means on the hilltops. The Bedik people inhabit the hilltops of the region, and an association between that culture and the landform exists whether or not a village exists on a particular hill or not. “Towards the FulBe-Fouta”, implies south, in the direction of Guinea where a different dialect of Pulaar is spoken.

Looking at a landscape we know well, our own backyard, it is perceived as the same yard throughout the day even as sun and shade bath and disguise its features (see Tuan 1977). Humans have an uncanny ability to infer from relationships alone. In the pitch dark night of the Sahel (the few generator-powered lights are turned off a few hours after nightfall) people rely on intricate cognitive maps of the landscape, an intimate knowledge of spatial relationships that helps them move effortlessly through the darkness. By following people at night, avoiding holes and stumps, and adhering to seemingly invisible trails, I was able to heighten my awareness of spaces and sharpen my sense of relationships. I deduced that understanding landscapes spatially, as well as how to represent them, seems to be involved more with relationships of images (objects), rather than the medium of the individual projected images themselves. This is a basic concept understood in everyday life—“When we open our eyes under water we recognize objects, shapes, and colors although through unfamiliar medium” (Gombrich 1960:52). In other words, we have the capacity to adjust to an unfamiliar type of transposition, as long as the relationships are not distorted (see Gombrich 1960).

Remembering and the Imaginary

When sketching something on site, memory plays a large factor in representation. We look at the object to study it, then to our paper, tracing a remembered contour or texture. It reaches the paper as a cryptogram in disoriented space, only to be deciphered when placed in relation to everything else added to the paper (Gombrich 1960:48-50). With the use of film the concept is little changed. The place is transmitted in a code whose meaning only becomes apparent when it is edited and organized through exercises in remembering. Representation inquires as much into the nature of the physical world as it does the nature of our perceptions of it and reactions to it.

In Bandafassi people repeat and retell stories in which happenings are conjured up and remembered in incessant daily narrative. These stories can grow progressively imaginary, while sharing experience and local history. This imaginary becomes a culturally expressive space by which the village becomes regulated. These social regulators have no need to be proven by fact, but can begin in the imagination and develop into an important part of the social organization. Spatial markers in the landscape can likewise be held entirely within the mind. For example, the locations of many things in the western part of the village were explained to me in relation to “le petit moulin” (a little corn mill). Mariama is selling mangos beside “le petit moulin”. Hassana is at Alpha’s house beyond “le petit moulin”. I discovered later, after numerous misguided ventures, that the structure and machinery itself no longer existed. It was purely the memory and association of “le petit moulin” to that location that served to orient people. Similar to many places in the world, people in Bandafassi create a social imaginary founded in history selectively remembered and retold. My difficulty in portraying this vernacular landscape is compounded by its oscillating context of ‘real’ space, subject to flat description, and imagined space.

Many ethnographic studies have underlined the existence of mythical space in the cultural landscape. The Walibri people in Australia, contemporary hunter gatherers, invest the landscape with mythic meaning through habitual movement in space. They impose a matrix of paths called “songlines” associating specific locales in the landscape with the spiritual dream world. This way of knowing the landscape on a mythical level is not simply an intriguing cultural practice, but an extremely important device for their survival (see Rogers 2001). These sites created in dreamtime act as an alternative to historical time and a 'mnemonic system' for memorizing features in the landscape that mark needs such as water holes (Rogers 2001:504). Similarly, the landscape surrounding Bandafassi is laced with sacred, mythical and spiritual spaces. An area to the west of the village, not apparent to an 'outside' viewer, is forever burned in the minds of men as the location where as young boys they were taken to be circumcised. To the west, the mountain spirit makes it dangerous to stay after dark on the mountain. In the village men gather in the shade under the sacred Baobab tree, but women, especially pregnant women never linger because of the risk of having stillborns or mental disorders in their babies. These cognitive spaces form an invisible landscape that comes alive as a social system enforced through repeated narrative and mental remembrance.

People and Place-names

“Space is a society of named places” – Claude Levi-Strauss, *The Savage Mind*

People in Bandafassi tend to view the land as a genealogical landscape, that is, they see it as a network of human kinship, lives and stories lived out on it (Allen 1996). The way people in Bandafassi perceive their landscape is very similar to what Barbara Allen explains of people of the Upper Cumberland region of Appalachia. She describes this perception of the community as

“organized around two interlocking elements: the people who have lived within the boundaries of the community and the land they live or have lived on” (1990:156). Rarely is a place in Bandafassi spoken of without the naming of a person. Likewise, a person is rarely named without mentioning the place where they grew up, worked, lived or died.

People see the land as divided by invisible lines into named land tracts, settlement sites, life stories and other personal attachments structured by historical events. People in Bandafassi regularly come across woodlands, buildings, roads, trees, or hillsides that have a story that strikes them with an inescapable memory. These memories guide their behavior, and anchor them in the place. “The sense of place evoked in conversation then becomes a filter through which people perceive the landscape around them, indeed, which structures their very thinking about the land and the social relations carried out on it” (Allen 1990:153). Much like the conversations recorded by Barbara Allen in southern Appalachia, the recognition of people is articulated in a distinctive conversational pattern that emphasizes placing them within a social and geographical frame (1990:152). Similarly, in this region of Senegal, this idea of tying person to place is demonstrated in conversation. For instance, in order to explain to people who made me dinner one night, I learned I had to refer first to Fatou Djallo (an extremely common name in Senegal) then Bandafassi (the village) and if in Bandafassi, the particular spot on the land *Rundé* (a small area in the center of the village). The importance of a personal name is diminished as many people share the same name in this region. The village or place one comes from is therefore the most important aspect in understanding who someone is talking about. Kinship patterns are also an intrinsic part of the way people in Bandafassi conceive of their home place. Social status and leadership roles among people in Bandafassi come about, largely in a kind of ascribed status through kinship.

Gender roles in the community also play a substantial role in the definition of space. Whereas in our own society it may be determined more by wealth, the ability to drive a car or to pay for airline tickets, space in Bandafassi is largely determined by gender. I came to notice this spatial influence while spending large amounts of time filming in certain areas. If I was near the well I got footage of only women, while, as expected, areas around the mosque revealed only elder men. As a young man, in a highly divided community, I found it difficult to break through gender barriers. As a result, the imbalance of information from both sides of the gender divide is apparent in my representation.

Nearing the end of my time in Bandafassi, I realized that I had documented many generalities of environmental perception in the community, yet paid little attention to the role of the individual. *Boutique d'Alfa* is a place where all community news, stories and gossip pass through. The owner, Alfa, directly influences the amount and quality of information people receive. So, understanding him as a person and this flow of information in the community lends important insight into the perceptions, levels of awareness and biases of community members. Alfa has a very strong influence on the town, and in controlling this flow of information, has become a critical social figure. His particular personality therefore is implicit in the formation of local culture. Likewise, certain male members of the elder generations like '*griots*' and '*nyeenybe*', (shamanistic praise singers and musicians) or '*marabout*' (traditional spiritual leaders) are the holders of story and song where within traditions, sacred locations and historical events are shared.

I found individual holders of knowledge offered unique insights. For this reason, I reallocated much of my effort to interviews and the documenting of personal histories and perspectives. I recorded personal stories about the landscape, explanations of how things were

constructed or designed, traditional songs and music, and everyday conversations that helped to bring into focus their distinctive attachment to the place. Deciding how to represent the influence of different individuals in an inclusive manner, nevertheless, became one of my most difficult challenges.

Architecture, Environment and Subsistence

Why is Frank Loyd Wright a household name, renowned for his ability to meld the new house into the wild environment, while the *Bassari* round huts of the *Fouta Djallon* are virtually unknown? In *African Nomadic Architecture* Labelle Prussin reaches past the evident neglect of the African as architect and suggests the unwillingness to see beyond the canons of Vitruvius: “durability, propriety, and beauty” (1995). The buildings of Bandafassi, in the traditional western mind, would seem to lack propriety or beauty. It is not for lack of romantic appeal, but in the foreign obsession with permanence that they fall short. Yet, it is for this very reason that I find the architecture of the region to be more in tune with the landscape. It is an exciting, dynamic, changing architecture in constant need of remodeling—responsive to the ecology of the environment in every way.

Prussin maintains “from the perspective of an architect working and designing in an economy of supreme scarcity” climatic factors are essential in determining the form and construction of the built environment (1995:20). Strong *Harmattan* winds blowing off the Sahara, insects, livestock and torrential rains during the rainy season (*hivernage*) are a constant hazard to the fragile earth buildings. The resulting architectural spaces are innately symbolic of the bridging of environment and culture, and the forms, created with raw earth and plant materials, blur the line between architecture and landscape.

I have made an effort to document some of these intricate, inventive, resourceful vernacular designs—a kind of 're-embracing of the land as an icon'—following an important trend of acknowledging Africans as named architects, designers and artists (see Prussin, 1995). With the documenting of architecture, as with other objects, the tangible serves as a way to promote or preserve the intangible.

“Human beings not only discern geometric patterns in nature and create abstract spaces in the mind, they also try to embody their feelings, images, and thoughts in tangible material. The result is sculptural and architectural space, and on a large scale, the planned city” (Tuan 1977:17).

The idea of planning on a large scale, or even at the village level, however, is not a part of the local design mentality. Landscapes and architecture in Bandafassi were created incrementally and organically in localized efforts. I also found that this distinct character of architectural space is currently in the midst of a shift from circular to rectilinear spaces coinciding with increased contact with the west and standardized western materials. This creates an awkward juxtaposition of forms that seems to upset guiding patterns in the landscape.

While architecture highlights ecology in its careful response to the environment and lay of the land, it is browse, forage and water for animals, and suitable soil for agriculture that is most important to its organization. Family compounds of huts are arranged around small plots of farmable land, whereas larger shared community agricultural fields create the boundaries of the village. Cattle and goats are allowed to roam free in the dry season but are confined by fences in the rainy/planting season, creating large tracts of temporal space. Small paths that seem to have an extremely random alignment in the dry season, in fact, travel between tall stands of corn or follow fence lines during the rainy season.

It is not entirely agricultural circumstances, but instead the relationship between

subsistence agriculture and kinship patterns that forms architectural spaces. One hut is constructed for the man in the family, then after, subsequent huts ring out from that hut depending on the number of wives and children the man has. The practice of polygyny and the resulting organization of space is directly related to agriculture.

“The high value of polygyny evolved out of shifting cultivation societies where women have traditionally done most of the farming work. A single man, or a man with a single wife, has less help in cultivation, and will have less help in doing the heavy work in land preparation” (Mendonsa, 2002).

This spatial organization in Bandafassi now seems to be in a transition. The Boserup Hypothesis claims that shifting cultivation favors polygyny, and that with the introduction of the plow and more intensive forms of agriculture the need for multiple marriage declines (Mendonsa 2002). Other cultural factors that could attribute to a shift in the way family spaces are arranged are the introduction of a cash economy and a western Christian value system wherein polygyny is unacceptable.

In an effort to catalog local people as architects, designers, and artists, my video captured the unique structures that define the spaces in the village. I filmed the construction of several structures, interviewing the masons and thatch roof builders as they worked. I documented different types of huts, fences, shelters, wells, sleeping platforms, and animal enclosures. In this way, I was able to learn some of the intricacy in details of the structures and glean some knowledge of local soils, plants, wind, and solar patterns that are crucial to the construction process. The spatial arrangements of these elements, along with the daily patterns of life and movement carried out within them, assemble in a composition that gives the architectural space its character, its feel, its *sense of place*.

Chapter 5

Application

“If it can be written or thought it can be filmed” - Stanley Kubrick

Many times during the course of my work I had to re-ask myself "why video?" Is it worthwhile to use video to tell the story of a landscape, a genre that seemingly belongs exclusively to painting and drawing? Though similar in concept, the role of landscape in film has a different history. Unlike painting, there is no Landscape film genre, as there is a landscape painting. In its' comparatively brief history, landscape has been important in films, but has primarily remained the setting, as film has focused more on narrative and social implication, and has not been an essentially visual medium. Modernism in painting preceded the birth of the moving picture. As a result, the manipulations of perception and general visual dilemma that modern painting set off was already apparent in early films. However, the ambiguity of this predicament in vision is less so in film because of its stories, which orientate the viewer, and provide visual guidance with narrative organization (see Rhodie 2004). Similar to paintings, however, film has been used both to reinforce and problematize the traditional Western perception of landscape—it is hard to visit a landscape without some reminiscent influence of filmic landscapes.

What allured me about the process of video, and what makes it relevant and appropriate for the project? Martin Jay emphasizes in *Visual Culture*, that the current generation is "visually literate even though this literacy is not in general informed by art historical precedent; still, they have visual technological sophistication in all respects, and this visual literacy allows them to

feel comfortable in talking about images" (Dikovitskaya 2005). Even in some of the World's most remote locations this holds true. Why is something as technologically advanced as digital film appropriate for representing Bandafassi? It is important to understand that modernization is not linear, in Senegal many people have skipped landlines and moved straight to cellular phones, or used solar electricity the first time they turned on a light, and hopefully some parts of the country will be able to pass over dependency on oil by moving straight into the use of other sources of energy. Likewise, people in Bandafassi have nearly simultaneously seen their first photograph and been exposed to the most advanced special effects Hollywood movies have to offer. What is also pertinent about the use of film is its "malleability, its lack of art-historical baggage, its ephemeral nature, and its odd quality of non-objecthood" (Gianelli and Beccaria 2005:4). There is also something innate in its immediacy that allows people to understand it without ever having entered a museum, seen a painting, a perspective drawing, or a map or plan. Showing only a few seconds of video to people in Bandafassi revealed an excitement and appreciation without any understanding of its historical precedents.

"...when an artist decided to use video—like the contemporary decision to use the Internet as a site for creative work—it signified something inherently political. Then as it is today, that decision implied that as an artist, you were reaching out of the traditional boundaries of the art world and engaging a medium with the potential to create direct lines of communication between artists and audiences, ignoring or short-circuiting the power of museums, galleries, and critics" (Gianelli and Beccaria 2005:4).

At the outset of this project I knew that not being a film maker or even knowing how to begin editing film would be a huge investment of time. Admittedly, I labored over the application of digital video, and the software used to edit it—learning to use the *Adobe* video software *Premiere Pro* and *After Effects* made up the bulk of the hours spent on this project. I spent large amounts of time reviewing digital video frames, organizing the flow of sequences

and deciding which clips best communicate what needs to be included. It was this process of inclusion that pushed me to critically analyze and actively excerpt meaning from the landscape. Working in the unfamiliar media of video afforded me a way to breach my ‘normal’ way of thinking about space and landscape. It allowed me to avoid the graphic “tricks of the trade” I was so used to relying on—those that pay more attention to forms already ingrained in my head, rather than the reality of what is actually being represented. In this way, these trials over how to communicate helped center my exploration on the qualities of the place. I found a special understanding that came about as my knowledge of how to represent and my knowledge of what I was representing evolved simultaneously.

Through video, I have attempted to overlay the dynamic qualities of space and time on the flat screen in order to communicate experience. Tuan writes of space and time as separate dimensions and as interchangeable measures of the same experience (1977). In Bandafassi, a storm on the horizon’s *size* is determined to estimate its *time* of arrival. Before a journey, we wonder if there is enough *space* in our bags to hold food for the entire *length* of the trip. The *distance* to the next village is estimated in terms of *time* (day’s journey). I wish that I could have a larger *block of time* to make the trip. Acknowledging this relationship, the challenge of my representation, then, is to provide the *space* (the screen) a clearly articulated and appropriate temporal dimension (sequence) for the *place*—“Although events may be independent, the suggestion of causality once those events are placed in a sequence is powerful” (Potteiger and Purinton, 1998:109).

According to Herb Schaal, ASLA, "We're not spatial designers unless we work in perspective," because perspective, not plan or section, is how people experience place (Sorvig, 2005). In many ways this is true. People move through the landscape as a sequence of vignettes,

bringing together bits of the story here and there, many times without seeing the whole picture as the designer does by way of aerial photograph or plan drawings. Causal order is something we learned as children in cause and effect exercises, allowing us to analyze and organize distinct events or images into a cohesive narrative. However, this is problematic when considering a landscape narrative (Potteiger and Purinton, 1998). Coming from the Latin *gnarus* and the Indo-European root *gna*, “to know,” narrative implies *a knowledge* acquired through action and the contingencies of lived experience (Turner, 1981 cited in Potteiger and Purinton, 1998).

"In a landscape the sequence is determined by the seer; you can read a landscape randomly and have it make sense. In a book the sequence is predetermined by the print, the shape of the language, the way it goes on a page; we expect one thing to follow another toward a goal. We've taken the landscape and abstracted it into words, and have simultaneously taken on the goal of expecting one thing to lead to another and ultimately come to an end. Those of us who were raised on books as the source of knowledge have unconsciously absorbed the idea that knowledge has a beginning, middle, and end." (Jensen 1995:223)

As described above in *Listening to the Land; Conversations about Nature, Culture, and Eros*, it seems landscape architecture has learned to expect narratives in landscapes that follow the limitations of books or graphic boards aligned on a wall. To avoid this problem to some degree, and achieve an experiential way of knowing, involves the learning of complex spatial sequences in the landscape and then relating them to complex spatial sequences in representation. It is a movement in space from “intimate” to “conceptual” experience (Tuan 1977). Unlike in video, however, narration time in the landscape is not as easily controlled by the designer. Viewers watch the video at the set speed with the ability only to pause, rewind, fast forward or stop and watch again later, while visitors to a landscape have a myriad of options for viewing the landscape.

Despite problems of sequence, it can be argued that “Film is perhaps the closest medium to landscape design in terms of potential means for structuring plot” (Potteiger and Purinton, 112). During the course of my research in Senegal, I found many examples of time-altering devices in the landscape. The following examples are adapted from Mathew Potteiger and Jamie Purinton's comparison of landscape to film in *Landscape Narratives: Design Practices for Telling Stories*.

Jump cut	The paved urban roads and concrete buildings in the capital city of Dakar jump-cut to thatched roofs and rural development just outside the city.
Flashback	Images and interpretive signs at historic slave-trading forts on the coast allow visitors to imagine <i>what happened here</i> .
Flash-forward	Upon first arriving in Bandafassi, as I circled around a cluster of mango trees, I got glimpses of the future and final destination. Or along the entry road, signs tell of the places ahead.
Flash-between	The insertion of billboard advertising for powdered milk, iodized salt, or Fanta along the scenic drive is a flash-between, or something that happens between two events that does not belong there. Agricultural fields–Fanta–pasture.
Fade	As the oil lamp burns low and finally dies in the evening, the surrounding village fades out.
Blackout	The tunnel acts as a blackout between one side of the river or mountain and the other.
Freeze-frame	Neighboring Bedik villages that have remained isolated and have not seen some of the technological advances introduced by the west can seem frozen in time.
Slow motion	In the relaxed, unrushed speed of life in the village time can seem to be in slow motion.
Fast motion	Walking through corn crops planted at different times,

in different stages of growth, make the otherwise slow and unperceivable processes of nature visible, and seem to be presented in fast motion.

In medias res Landing by plane in Senegal is a way of entering in medias res or in the middle of the activities of a distant space.

(Potteiger and Purinton 113-114)

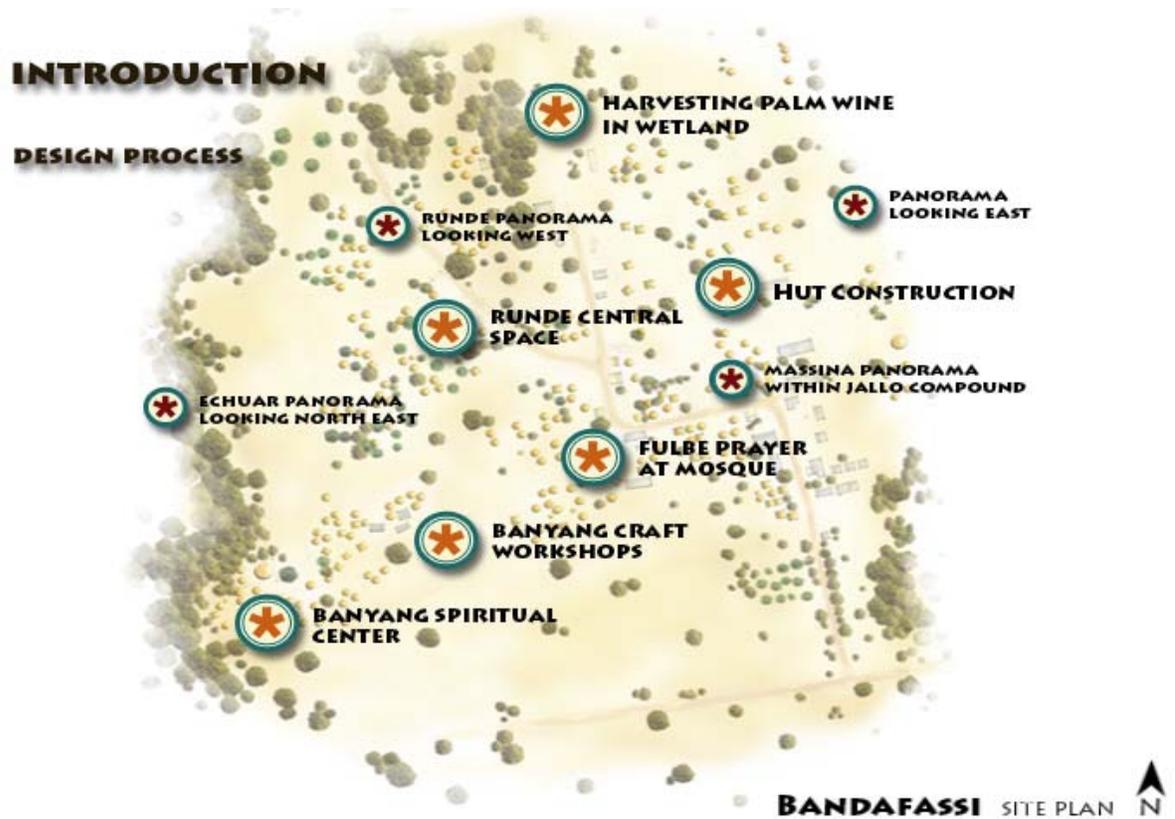
Digital Video Experiment

In traditional landscape architecture, the creation of a map or plan is the fundamental way of conceptualizing spatial relations. With a team of community members during my fieldwork in Bandafassi, I tediously mapped the physical elements of the village. We marked every hut in relation to every well, to every fence to every tree. This exhaustive exercise would seem not only to provide me with an understanding of the physical elements and relationships of the site, but during the process, offer insight into the local perceptions, place-names, stories and cognitive maps embedding these physical elements in the place. However, I found that nearly every means in which I was trained in landscape architecture to represent and therefore think about space was ingrained with Western ideas, dissimilar to those of the community.

I initially struggled with pencil and paper to communicate the ways in which this landscape were lived, experienced and perceived. My drawings seemed to miss deeper meanings in the place and failed to communicate to people in the community. The drawings appeared to have no significance for the people in Bandafassi, and many struggled to make connections between the symbolic forms on the paper and their correlating physical forms in the landscape. I also knew that, while easily understood by landscape architecture's Western society, the symbolic drawings would communicate little of the 'real' experienced place. Using video imagery, on the other hand, seemed to provide me with a spatial liaison between the perceived, experienced landscape in Bandafassi and a Western audience. This is not a move toward total

relativism and a rejection of the rationalistic program of the Western Cartesian tradition—“one that sees peoples relation to their surroundings as objective, stripping it of all figurative and metaphorical conceptions” (see Hirsch, 1985: 16 and Hampshire 1969: 477). The chosen method is instead, a combination of the use of mapping and video which provides, to some degree, a means to overcome the challenge of describing or interpreting a place that does not lend itself to cartographic abstraction and symbolization.

Upon my return, the hand drawn map I created was refined into a digitally rendered map. Video footage captured during my visits was systematically viewed and arranged into sequences describing special events, daily activities, and imagery associated with specific locations in the village. Using video editing software *Adobe Premiere Pro*, hours of footage were cut into what I determined to be particularly insightful and salient clips. In *Premiere Pro*, in conjunction with *Adobe Audition*, sound was edited timed and layered over the video clips. Also in *Premiere Pro*, I applied filters and adjusted color, opacities, saturation and speed of the clips to create the desired look and information included in the video sequence. These sequences were then imported into *Adobe After Effects*. Additional layers created in *Adobe Photoshop* and *Adobe Illustrator* and then imported into *After Effects* are over-layed on the video sequences. These layers are animated to create certain effects (e.g. zooming in to a portion of the plan). The finished sequences were then imported into *Adobe Encore*, DVD authoring software, and linked to buttons on a video menu. The resulting experimental product of this study, a DVD (see Appendix) opens with the digital site map acting as the main menu screen (below).



The menu contains text buttons, *Introduction* and *Design Process* in the upper left, as well as a series of buttons in the form of asterisks positioned in different locations on the menu screen. Large orange asterisk buttons are linked to videos that reveal imagery, activities, sounds and the environmental character of their particular locations on the plan, while smaller red asterisk buttons are linked to panoramas of the site from their specific location. As the mouse (when played on a computer) or arrow (when played on a DVD player) navigates to a button, it is highlighted with an orange ring. This ring then turns green when the button has been selected.

Placed at the top left in bold text, the Introduction is intended to be viewed first. When selected, the text turns from black to green. It begins with a striking image, a close-up sequence of a Bedik woman dancing, thrusting the viewer into another place. The clip is in slow-motion or 'overcranked', while the elements of sound are left in 'real time', to contrast the visual elements of the clip. This creates a time altered perspective that focuses on general atmosphere, combining

with a text layer to introduce the title of the video, *A Place Called Bandafassi: An Exploration of Space, Place and Representation in Senegal, West Africa*. The following scene then moves drastically from the intimate close-up to the openness of the Sahelian savannah. The scene is a depiction of arrival over-layed with a narrative introduction to the site. This begins to create somewhat of a storyline, a landscape narrative—it moves through the scenery in a logical and legible pattern.

The following sequence created by animating layers of aerial and satellite imagery, color fields and text created using *Adobe Photoshop* is sequenced in *Adobe After Effects* to create a progression in context and information. It is a contextual movement from the world, to the country, to the region, to the village, incorporating text, maps and demographic and environmental data.



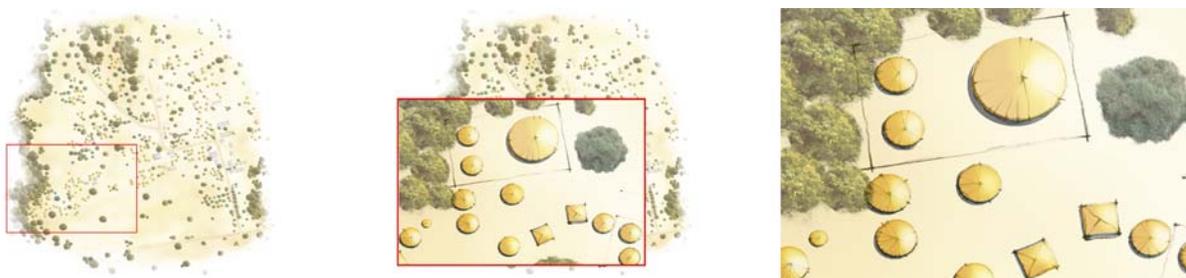
As if to add layers of trace paper to a map, I used standard graphic concepts within Landscape Architecture and adapted them to the temporal nature of video.

Transitioning into a more abstract, non-linear style, the following sequence is a contrasting arrangement of clips which uses two of the most visually powerful and space-altering means in film; the close-up and the montage. The close-up violates perspective and contravenes the stability of scale, while the montage offers sweeping changes of view, the condensation of time and the overlap of spaces. This montage is a layering of cultural, natural and spiritual

elements in the particular landscape, with underlying themes and illusions of more universal ideas. I use transparencies during transitions (see below) to allow clips to relate seamlessly, thus retaining important element/image relationships so not to appear disjointed.



The arrangement of asterisk buttons on the menu is intended to allow viewers to move freely through the 'landscape', getting intimate views in to specific locations, and then stepping back out to place them in the context of the plan. I combine the site map of the village as a reference point, with revealing imagery as experience, thus giving meaning to physical locations in the landscape. Subtext to the right of each button acts as a title describing the location on the map. When an asterisk button on the site map is selected a red box is animated, highlighting and then enlarging the location on the map. The enlarged area then transitions into a video description of that particular location.





This model was inspired by Eric Hirsch and Michael O'Hanlon's book *The Anthropology of Landscape: Perspectives on Space and Place* in which Hirsch outlines a process of mutual implication where 'non-subject-centered spatial knowledge' (maps) are juxtaposed against 'subject-centered forms of knowledge' (images). Understanding this relationship, however, depends largely on the definition of 'map'. I use 'map' as Alfred Gell does, to mean 'any system of spatial knowledge...which takes the form of non-[...] indexical statements about the spatial locations of places and objects' (in Hirsch 1985:18). This includes the cognitive maps reinforced in narratives, songs, memories, place-names and rituals. Images, conversely, are perceptually based in their relationship to a subject. By using this repetitive transition from outside to inside I am contrasting the relationship between the relative position, the more detached space, the external vantage point, with that of the absolute position, the attachment to place, and the sense of inside. In this scenario, 'image' is lived experience and 'map' is the location on the land marking potentialities for happenings—two viewpoints that constantly re-create each other (see Hirsch 1985:19).

Music, voices and recorded atmospheric sound bytes are essential layers throughout the video, contributing substantially to the concurrence of relative and absolute position. Sound captured at the time of filming can offer detailed description of a place, giving the viewer a richer experience than can be offered by visual elements alone. It can give a deeper sense of

inside. Conversely, sound incorporated into a sequence in another fashion has a tendency to distort experiential reality. For instance, when sound layers captured at the time of filming are replaced or combined with music layers, the viewer seems to take a more relative, detached position. Music can also negate a person's awareness of directional time and space—"Rhythmic sound that synchronizes with body movement cancels one's sense of purposeful action, of moving through historical space and time toward a goal" (Tuan 1977:128). In the video I attempt to use sound in many ways; as an artistic expression, an additional layer of information and a mechanism for describing space—a 'soundscape' where the relationship between environment and its representation is not limited to visual forms.

Further Application

In this study I have proposed a method of organizing video clips and sequences as a form of landscape inventory, and then viewing them as a tool of analysis for this specific site. The DVD is not meant as a presentation of every significant location on the plan. It is instead meant as a sample intended to give some carefully selected and detailed descriptions of the community in order to demonstrate the applied digital video method. As additional video is captured and edited, supplementary buttons can be added to the site map describing more and more locations in the community. This comprehensive video inventory of the site can then be re-viewed and re-analyzed to suggest possibilities for design. Yet, the benefits of digital video do not stop here. This type of DVD is not only an effective tool in the site inventory and analysis phases of design, but can also be utilized in design representation. Elements created in *Adobe Photoshop*, *Adobe Illustrator*, *AutoCAD*, models created in 3-D programs or even hand-drawn layers are easily imported into the video editing software *Adobe After Effects*. In this way, proposed elements can

be added to video of existing conditions, creating a dynamic, real-time design representation.

The *Design Process* button included on the DVD menu serves as a glimpse into the potentiality of video as a design representation method. Using footage of myself walking down a path, I added layers representing potential design elements into the video. First, animated wind turbines are brought into the scene and then faded out as trees are added along the path.



This method of representing design has the capability to fit in to many phases of professional practice. With the development of software such as *GIS*, *Google Earth* and other ground-truthing technologies, there are increasing possibilities for their integration with video, affording the potential to create video design animations with ‘real world’ coordinates.

Considering integration between methods and software is important, as with any single form of representation, there are instances where it falls short. For example, video is inherently in perspective and consequently lacks the precision of some other programs and therefore would presumably not be useful for technical analysis or construction document phases. In the future execution of a design project in Bandafassi, I perceive the use of video being limited to the

inventory and analysis phases, the representation of conceptual or schematic design, and as a way of communicating design and thought process to the public and client.

Chapter 6

Conclusion

Designing in a different place is one of the most challenging problems now facing many landscape architects. To do it responsibly will require a re-thinking and re-examining of representation, a sort of "*why-do-we-do-what-we-do?*" within landscape architecture. This step away from the comforts afforded by well trained and automatic skills begins to locate an interface of represented *place* and its' lived experience necessary to the conception of design. In a migration towards a more diverse process of representation within landscape architecture, this thesis searched, through the lens of a video camera, for collective representations of *place*. By chronicling this migration, I have begun to consider vocabulary for dealing with two main issues; the inventory, categorization and organization of space, and the analysis of *place* as more than its physical attributes.

The implications of these issues are threefold. First, it makes known the importance of perception when evaluating landscape. Landscape architecture education has seemed to mistakenly assume that a shared landscape perception exists among people regardless of culture. Through my exploration of video I have found the dynamic and contextual landscape is instead, a 'perceptual surround', that is, there is not one absolute landscape to represent, but a gathering of experiences and perspectives which cohere in one identifiable form: 'landscape as cultural process' (see Hirsch 1985:22). Specifically, it helps bring to the forefront the question of how we, the diversity of human cultures, perceive our world as a matter that cannot be taken for

granted. It must instead, be incessantly re-thought, re-analyzed and re-debated. In this way, landscape architects are obliged to consider the problems of creating the myriad of 'real' experiences for the viewer/listener/reader, testing the ability to rely on environmental and cultural particularities rather than some sort of outside prescribed graphic image.

The second implication is an awareness that traditional responses to, and ways of representing *place* are not innate or universally tied to landscape architecture. I believe any standardized 'style' or technique falls short of effectively communicating all places, no matter how well practiced it is. Representation, therefore, should be more of a process and a way of knowing the world than a memorized technique. Moreover, engaging representation in an unfamiliar medium, and especially in a fashion that responds to experience in the actual lived place, promotes creativity and suggests new representational potentiality.

Thirdly, the duo perception/representation is not entirely imbedded in the physical landscape, but also in the phenomenological. Landscape representation within landscape architecture has been largely based on an emphasis of its visual dimensions—an interpretation that narrows its holistic nature. Consequently, we must decide to seriously consider the elements of the lived landscape, the things that cannot be seen in GIS data, or deduced from a CAD survey, which give meaning and context to an otherwise devoid physical space.

What began as a project aimed at developing a design concept that was 'of the place' with representation as the resulting end product, evolved into a study of representation as the mechanism by which design that is 'of the place' can be achieved. What is presented here, however, remains very much an experiment, an idea, and a beginning, perpetuated by my desire to work in foreign places; and a continuous searching for new methods of communication. Enlivened by the richness of the world we live in and the influence of design language on this

richness, my hope is that this project will inspire and engage its readers/viewers with the meanings of a place. Furthermore, it aims to contribute to a continual rethinking and redefining of a representational vocabulary within the field of landscape architecture with the intent to portray landscapes as dynamic living systems rather than static images.

REFERENCES

- Allen, Barbara
1990 "The Genealogical Landscape and the Southern Sense of Place" The University Press of Kentucky.
- Arnheim, Rudolf
1974 *Art and Visual Perception: A Psychology of the Creative Eye*. University of California Press. Berkley, California.
- Barnard, Malcolm
1998 *Art, Design and Visual Culture*. St. Martin's Press, Scholarly and Reference Division, New York, N.Y.
- Basso, Keith H., and Steven Feld
1996 eds. *Senses of Place*. School of American Research Press. Santa Fe, New Mexico.
- Ching, Francis D.K.
1996 *Architectural Graphics*. John Wiley & Sons, Inc. New York.
- Collier, John, Jr. And Malcolm Collier
1986 rev. ed. *Visual Anthropology: Photography as a Research Method*. Albuquerque: University of New Mexico Press.
- Cosgrove, D.
1984 *Social Formation and Symbolic Landscape*. London: Croom Helm.
- Crandell, Gina
1993 *Nature Pictorialized: "The View" in Landscape History*. Baltimore and London: The Johns Hopkins University Press.
- Dikovitskaya, Margaret
2005 *Visual Culture, The study of the visual after the cultural turn*, The MIT Press Cambridge, Massachusetts 2005
- Dubisch, Jill
1995 *In a Different Place: Pilgrimage, Gender, and Politics of a Greek Island Shrine*. Princeton University Press.

- Geertz, Clifford
1996 In *Senses of Place: from "Afterword"* by Keith Basso and Steven Feld, School of American Research Press. Santa Fe, New Mexico.
- Gianelli, Ida and Beccaria, Marcella
2005 Video Art, The Castello Di Rivoli Collection, Skira editore, Milano
- Gombrich, E.H.
1960 *Art and Illusion; A Study in the Psychology of Pictorial Representation*. The A.W. Mellon Lectures in the Fine Arts, 1956 Bollingen Series/Princeton University Press.
- Hirsch, Eric, and Micheal O'Hanlon eds.
1995 *The Athropology of Landscape: Perspectives On Place and Space*. Oxford University Press.
- Hampshire, S.
1969 'Vico and the Contemporary Philosophy of Language', in G. Tagliacozzo (ed.), *Giambattista Vico: An International Symposium*. Baltimore: Johns Hopkins University Press.
- Haviland, William A.
1996 *Cultural Anthropology*. (8th Edition) Harcourt Brace College Publishers.
- Jellicoe, Sir Geoffrey, and Susan Jellicoe
1991 *Landscape of Man: Shaping the Environment from Prehistory to the Present Day*. Rev. Ed. New York: Thames and Hudson Inc.
- Jensen, Derrick
1995 *Listening to the Land: Conversations About Nature, Culture, and Eros*. Sierra Club Books, San Francisco.
- Kaplan, S.
1987 "Aesthetics, Affect, and Cognition: Environmental Preference from an Evolutionary Perspective" *Environment and Behavior*. 19 (1987): 3-32
- Lévi-Strauss, Claude
1979 *Myth and Meaning: Cracking the Code of Culture*. Schocken Books Inc., New York.
1996 *The Savage Mind*. Chicago: University of Chicago Press.
- Lewin, Roger
1988 *In the Age of Mankind*. Smithsonian Books Washington, D.C.
- Lowenthal, D. and Prince, H.C.
1965 "English Landscape Tastes". *Geographical Review*.

- Marcus, George E., and Michael M. J. Fischer
1986 *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences*. University of Chicago Press.
- Mendoza, Eugene L.
2002 *West Africa*. Carolina Academic Press.
- Myerhoff, Barbara, and Jay Ruby
1982 Introduction. In *A Crack in the Mirror: Reflexive Perspectives in Anthropology*, Jay Ruby, ed., pp. 1-35. Philadelphia: University of Pennsylvania Press.
- Norberg-Shultz, Christian
1979 *Genius Loci: Towards a Phenomenology of Architecture*. Rizzoli International Publications, Inc. New York.
- Nye, Terrell
1997 *Exploring Representation: A Course Toward Creativity in Landscape Architectural Education* The University of Georgia.
- Potteiger, Mathew, and Jamie Purinton
1998 *Landscape Narratives: Design Practices for Telling Stories*. John Wiley and Sons, Inc.
- Prussin, Labelle
1995. *African Nomadic Architecture: Space, Place and Gender*. Washington and London: Smithsonian Institution Press.
- Rhodie, Sam
1990 *Film and Landscape*. www.latrobe.edu.au/screeningthepast
- Sipes, James L
2006 "Image is Everything" *Landscape Architecture*. 7/2006
- Sorvig, Kim
2005 "Drawing the Experience of Place" *Landscape Architecture* 10/2005
- Tuan, Yi-Fu
1977 *Space and Place: The Perspective of Experience*. The University of Minnesota Press, Minneapolis.

APPENDIX