DESIGNING FOR CULTURES: AN APPROACH FOR PRODUCT DESIGN USING

COMPONENTS OF REGIONAL CULTURE

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_____
Joshua Ime Asukwo Ekandem

Certificate of Approval:

_____
Bret H. Smith
Professor
Industrial Design

_____
Tin-Man Lau, Chair
Professor
Industrial Design

_____
Christopher Arnold
Associate Professor
Industrial Design

_____
George T. Flowers
Dean
Graduate School

DESIGNING FOR CULTURES: AN APPROACH FOR PRODUCT DESIGN USING

COMPONENTS OF REGIONAL CULTURE

Joshua Ime Asukwo Ekandem

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Designing for Cultures: An Approach for Product Design Using
Components of Regional Culture

Joshua Ime Asukwo Ekandem

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Signature of Author

_____

Date of Graduation

Vita

Joshua Ime Asukwo Ekandem, son of Mr. Ime A. Ekandem and Mrs. Martha A. Ekandem, was born June 21, 1986, in Atlanta, Georgia. He was raised in Rex, Georgia, and graduated with honors from Morrow High School in 2004. In the fall of 2004, Joshua enrolled at Auburn University in Auburn, Alabama, where he pursued a Bachelors of Industrial Design. During his undergraduate career he had the opportunity to participate in corporate-sponsored studios for Playcore-Gametime, Emerson Tool Company, and the Alabama Bureau of Tourism and Travel. Also as an undergraduate, he was afforded the opportunity to study abroad in Ireland and Taiwan, where he not only studied design but also culture and history. In December 2007 he graduated with a Bachelors of Industrial Design. In 2008, Joshua won the College of Architecture Design and Constructions Most Outstanding Graduate Student award for the Industrial Design department.

THESIS ABSTRACT

DESIGNING FOR CULTURES: AN APPROACH FOR PRODUCT DESIGN USING
COMPONENTS OF REGIONAL CULTURE

Joshua Ime Asukwo Ekandem

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Although much of humanity is tied together by certain fundamental principles
and the sharing of common physical and mental faculties, individuals are inherently
different and have different aesthetic preferences. However, it is commonplace in
product design to develop non-offensive forms that maximize profit by being conducive
to the insipid homogeny of world culture. This study takes the opposite approach,
and is focused on designing for specific cultures using themes and visual patterns that
represent that culture. The American South as defined by John Shelton Reed will
serve as the target culture for this design approach, and a table lamp will serve as the
designed object. This study will comprise of a theoretical inquiry into stereotypes,
traditions, and other distinctive elements of the South. These components will then
be abstracted into themes that drive the design. The thematic basis for design will
then be manipulated according to perceptions of the South, and the study of patterns
that are perceived to make up a Southern table lamp. The result of this study will
be an approach for culture-specific product design.

Style manual or journal used <u>Journal of Approximation Theory (together with the style known as "aums"). Bibliography follows van Leunen's *A Handbook for Scholars.*</u>

Computer software used <u>The document preparation package TeX (specifically LaTeX) together with the departmental style-file `aums.sty` Rhinoceroses 4.0, Adobe Illustrator, Adobe PhotoShop, Adobe InDesign.</u>

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CHAPTER 1

INTRODUCTION TO THE PROBLEM

1.1 Background of The Problem

We are currently living in what some refer to as the digital age (France 2009). This term was first coined in a 1979 Phillips advertisement that appeared in *The Sydney Morning Herald*. The title of the advertisement was "The Digital Age Dawns", and it promoted a digital telephone that provided more functionality than the standard phones of the time. The digital age also, termed the information age, computer age or information era, is characterized by ability of individuals to transfer information freely, and to have instant access to knowledge that ordinarily would have been difficult or impossible to find (ONS n.d.).

The exponential growth of technological developments has allowed products, services and ideas to be transmitted across regions and cultures at speeds unfathomable by previous generations. In an article entitled "In the Digital Age, Can Movie Piracy Be Stopped", Lisa France retells that "Within a week of 'Wolverine's' March 31 leak, more than a million people had downloaded the movie" (France 2009). France argues that due to the internet and relative ease of accessing information from Peer -to peer sharing networks movies are being easily downloaded and uploaded throughout the world even before they hit theatres. The increase in information exchange between geographically remote locations has also contributed to the promotion of cross-cultural interactions. These digital age interactions point to technology's role in fostering a global society.

This global society is closely linked with the term globalization. The *Encyclopedia Brittanica Online: Academic Edition* describes globalization as:

> "a phenomenon by which the experience of everyday life, as influenced by the diffusion of commodities and ideas, reflects a standardization of cultural expressions around the world. Propelled by the efficiency or appeal of wireless communications, electronic commerce, popular culture, and international travel, globalization has been seen as a trend toward homogeneity"

Globalization one of the most fashionable buzzwords of contemporary political and academic debate has been critiqued because of its sociocultural effects on local and regional communities. In *Has Globalization Gone Too Far* Dani Rodrick, a prominent Turkish economist and professor at Harvard University, argues that,"The most serious challenge for the world economy in the years ahead lies in making globalization compatible with domestic social and political stability."(Rodrik 1997) The stability that Rodrik refers to is fair trade ethics and fair trade policies; however, the influence of globalization reaches further than just societal issues, but also into the realm of design.

Although worth mentioning, this study is not aimed at evaluating the merits globalization, but in recognizing the influence and implications of globalization on product design. Recently *Forbes.com* published an internet article by Lauren Sherman entitled "Ten Industrial Design Trends You Can't Ignore". The article lists ten trends ranging from green-design, considering environmental impacts, making products modular, and extreme personalization. One of the rather noteworthy trends Sherman mentions is the trend to "globalize". Sherman states, "global trend concerns consumers living outside of designers' usual markets." Sherman reports examples of

the "South African Q Drum, a rolling container that allows one to easily transport 75 liters of water", and "a bamboo treadle pump, produced in Nepal, which allows farmers to access to water during the dry season."(Sherman 2007)

Figure 1.1: Global Trends in Design

Sherman is not the only person recognizing the global design trends. Clive Dilnot, the Director of Design Initiatives at the Art Institute of Chicago, also acknowledges this trend in Asia. In the article "Which Way Will the Dragon Turn? Three Scenarios for Design in China Over the Next Half-Century," Dilnot reports that Hong Kong is "Separating not only worker from designer within the factory, but locating them on different continents." Len Vermillion editor and chief of the magazine *Product Design & Development*, uses a study performed by Duke University to conclusively state that due to globalization companies are off-shoring, and "increasingly moving sophisticated, mission-critical functions such as product design and research and development to China, India and other offshore locations."(Vermillion 2007) Products are going from Made in Hong Kong to Made by Hong Kong." Hong Kong is not just involved in manufacturing the products for various countries, but also takes care of details from senior management, through marketing and finance, to design.(Dilnot 2003)

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1.2 Problem Statement

In a global economy it is becoming more and more clear that designers do not necessarily have to live in the culture they design for, resulting in the globalization of design services. The frequent trend for design services to go global is paralleled with the emergent tendency to also globalize aesthetic preferences. One perceived benefit of this tendency is that products can be exported without any cross-cultural stigma. Scott Henderson, former director of industrial design for Smart Design (NYC), illustrates this issue by noting that "Designs in different parts of the world seem to be more consistently using metallic paint, curvy forms, plated control-panel buttons, and moldable rubber as part of a predictable pallet of design elements." Henderson argues that the cause for the "predictable pallet of design elements" is attributed to a "recent surge in interest in design... to the creation of a 'global design aesthetic,'"(Henderson 2003) According to Henderson, the global design aesthetic is "a phenomenon that has proliferated over the past 10 years" fostered by "The internet to make the design of products more consistent from region to region."(Henderson 2003)

On their website the Industrial Design Society of America (IDSA) defines Industrial design (ID) as

> "the professional service of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems for the mutual benefit of both user and manufacturer."

The definition of ID suggests that two entities benefit from this professional service; the user and the manufactuer, however, in light of current trends the actual benefit of the user can be called into question. Products that are designed to be "more consistent from region to region" and whose appearance fall under the predictable pallet of design do not take into account the unique differences in regional identity and culture

of consumers. Designers must evaluate core rationales and the design implications of conceding to this trend of conforming to global design aesthetic.

In light of the trend to globalize, there needs to be a shift in focus to deeper investigations of motivation, perception and culture, not just price points. It is important that designers are equipped with ability to recognize distinct cultural elements found in artifacts, institutions, and values. However, difficulty may be confronted in trying to discover and represent these elements in a designed product. According to Franz Boas, a pioneer of cultural anthropology, culture is not static; it is ever changing, and is transformed by, and yet simultaneously transforms, its active participants (Boas 1901). This makes it even harder to understand culture and in light of the current phenomenon of globalization cultural lines are becoming even more obscure, thus making it difficult for designers to clearly identify elements of cultural significance, and represent them in products. The lack of information on regional cultures relationship to design presents an opportunity to investigate the role of regional culture in the design of products, evaluate current cultural research and its appropriateness to the design community, and design an approach for designing for a regional aesthetic.

1.3 Need for Study

In an article sponsored by Cambashi, Ltd., Brian Gott states that in order for companies to be successful in a recovering global economy they need to adopt a product based business strategy. This strategy is focused on "product customization, new technology, an increased range of products, more functionality, better appearance." To justify this statement Gott uses the anecdotal insight that, "As consumers, we recognize our own positive reactions to good-looking products, high quality, enhanced functionality, and innovative features. Although we could shop around, we're often

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willing to pay more for a superior product." Gott's insight may have validity, but it does not delve into the into the deeper reasons of why consumers evaluate products as superior. It is hard to argue that products need to be functional, technologically feasible, and attractive to the consumer. The missing component to this formula is the importance of the visceral feelings evoked by certain products. The visceral feelings which are personal, culturally rooted, and yet difficult to describe. As Pamela Danziger, the president of Unity Marketing and author of the bestselling *Why People Buy Things They Don't Need: Understanding and Predicting Consumer Behavior*, states that "consumer behavior is not based solely on reason and logic, but driven by heart and emotion...Design of products, packaging, advertising, and logos resonate on an emotional level."(Danziger 2004) These emotions are not easily described with generic terms like good-looking, and are not solely attributed to the appearance of a product. These emotions are "complex, highly individualized, and very personal; it takes a unique approach to get inside the hearts of the consumer" (Danziger 2004). According to Danziger, it can be inferred that an appeal to these visceral feelings are what make products sell and what make brands stand the test of time.

Thomas Friedman in his international bestseller *The World is Flat: A Brief History of The Twenty-First Century* hints at this notion by stating that, "If you are an American, you better be good at the touchy feely service stuff, because anything that can be digitized can be outsourced to either the smartest or cheapest producer, or both"(Friedman 2007). This statement comes from a conversation between Friedman and an Indian business associate; the context of the conversation being Indias emerging role in the global economy. Equipped with the ability for various nations to design and develop, products and services for the world the question arises, "What will Americans have left to do?" As Friedman said in *The World is Flat* "you better be good at the touchy feely stuff." Friedman is partially correct. There needs

to be a more concerted effort to get good at the "touchy feely", and as pointed out by Danziger; however, Friedman makes a misstep by making it exclusive to "service stuff." Service is already being outsourced. As stated by Charles A. Rarick, a professor in the Andreas School of Business at Barry University, "Not only are clerical and customer service jobs being outsourced to India, increasingly the outsourcing has moved up the job food chain to include financial analysis and medical support tasks" (Rarick n.d.). The issues of outsourcing are already present; there is no putting the genie back in the bottle. However, an understanding of visceral feelings or as Friedman terms, the "touchy feely", and their evocation are under our control.

For US companies to stay competitive in the global economy, attention needs to be directed to the visceral feelings to which products and services evoke and the context in which these feelings are manifested. Industrial Designers cannot magically conjure up these visceral feelings, but through the insightful design of products and environments these feelings can be evoked. Therefore it is important that designers examine not just the consumer, but also the context in which the consumer works, lives, and plays. In discussing his work in consumer research, Bill Moggridge, co-designer of he first laptop computer and founder of the acclaimed international design firm IDEO, states in Design Interactions that,

> " 'Observation' was the label we used for the best way to learn about people in the context of a particular design problem, implying that you needed to look at what people really do in a situation, rather than rely on the conventional technique of asking them about what they think and do"(Moggridge 2007).

Moggridge addresses the importance of context to the understanding of consumers. Everyday activities are performed behind a quilt of contextual frameworks, and it

would be nonsensical to promote the contrary. Toyota took note of this, and Dan Lienert, senior editor of Forbes magazine and automotive columnist, wrote that in an attempt to gain a better understanding of the American consumer the Japanese automaker Toyota had resorted to "driving its engineers around the parking lot at a Dallas Cowboys football game in order to study the vehicular preferences of average Americans." The conclusion of this matter is that Toyota not only acknowledges the pertinence of technical factors that are attributed to performance, but also recognizes the importance of understanding the sociocultural context of their product. The consideration and design for local and regional distinctions that are manifested in economic structures, values, institutions, and histories make a great contribution to the success of any company. In discussing the importance of this type of contextual framing to product differentiation, Michael E. Porter, a world renowned strategic economic analyst,argues

> "The competitive advantage is created and sustained through a highly localized process. Differences in national economic structures, values, cultures, institutions and histories contribute profoundly to competitive success.(Porter 1990)

Economic structures, values, institutions, and histories provide a unique context of interactions between consumers and products. These interactions occur at home, work or school, and represent the culture of a specific group of people.

Visceral feelings that are attributed to many consumer decisions are inseparable from their culture. Products that touch consumers on a cultural level are highly significant. As consumer researcher Grant McCracken points out

"Consumer goods have a significance that goes beyond their utilitarian character and commercial value. This significance rests largely in their ability to carry and communicate cultural meaning(McCracken 1986).

As the world becomes more and more interconnected, understanding the role culture plays in the design process is a crucial. Currently there is not enough substantial information regarding the role culture plays in product development and how to develop or maintain cultural elements in products. This study is aimed at elucidating the significance of regional culture to product design. This study also develops a framework that aids designers in recognizing regional cultures and designing for those cultures.

1.4 Definition of Terms

Culture - The unique relationship and adaptation of a group of people to their environment, established institutions and social structure, and to their beliefs and values.

Cultural Meaning - Feelings and concepts shared by and generally understood by a specific group of people.

Design Method - A group of formalized techniques and process used in the design of products, systems, and services.

Meaning - Intended to convey, indicate, or refer to feelings or concepts.

Metaphor - An object or thing representative of something else.

Semiotics - The study of signs and symbols and their use or interpretation.

Shape Grammars - A system of rules that determine how a shape will be transformed or manipulated.

Sign - An object or quality whose presence or occurrence indicates the probable presence or occurrence of something else.

Southern Culture - The unique way people in the geographic region of the southeastern United States relate and adapt to their environment, established institutions and social structures, and to their beliefs and values.

Symbol - A material object representing something abstract.

Regionalism - Theory of practice to where regional culture systems are used instead of centralization.

The South - a regional distinction that refers to the commonalities existing between South Carolina, Georgia, Alabama, and Mississippi, and parts of Louisiana.

1.5 Assumptions

This study makes a few assumptions. One assumption that will be made in this study is that referenced materials are accurate. Another assumption is that cultures are different, and this contributes to unique regional cultural identities. It is also assumed that cultural understanding will enhance and enrich the design of products by allowing consumers to achieve higher levels of gratification through products that reflect their lives. It is assumed that the results from this study will be scaleable, and will be able applicable for product development, on a much larger scale. Lastly, it is assumed that the methods used will be able to be used across various cultures.

1.6 Scope and Limits

The scope of this study is the region of the United States of America called the Deep-South. The Deep-South as referred to in this study uses the criteria set out by professor and founder of Center for the Study of the American South at the University of North Carolina, John Shelton Reed. This "South" consists of Alabama, Georgia, Mississippi, South Carolina and parts of Louisiana. Price and location of purchase will not be important factors of consideration in this study. The research will specifically deal with the visual elements of a product, i.e. styling, color, materials.

1.7 Anticipated Outcome

The anticipated outcome of this study is the development of a framework for identifying and abstracting components from a regional culture and designing products using these unique cultural components. The framework will then be tested by designing a table lamp for the Deep South region of the United States. The cultural components used in the study will be defined and evaluated using specific guidelines. This approach is a starting point for cultural product design; however, this topic is one that would benefit from further research. In future developments, it would be encouraged that the guidelines and approach be used and manipulated to design products in other product categories. The deliverables will include a computer generated 3-D example of the lamp designed using cultural components, a presentation on the findings, and a thesis. This research is expected to aid others in developing cultural products that will promote regional heritage and aid in product differentiation.

CHAPTER 2

LITERATURE REVIEW

2.1 Design Methods: Overview

For centuries draftsman and craftsmen have been using methods to aid in designing products. John Christopher Jones, the author of *Design Methods: Seeds of Human Futures*, terms these methods as traditional and states that they were "set out in no book" and were "not scientific"(Jones 1980). Traditional design methods could be considered "one-off", and highly intuitive. Although, Norman Bel Geddes is noted with publishing a 300 page empirical study on train conducts in the the 1938 Forbes article, "Niether Fish Nor Foul," a unified effort to formalize methods did not fully emerge until after the publishing of Zwickys Morphological Method in 1948.

Fritz Zwicky was an astronomer and professor at the California Institute of Technology in Pasadena, and he is most known for his work in morphological astronomy and morphological methods. The concept of morphology as Zwicky describes is "to achieve a schematic perspective over all of the possible solutions of a given large-scale problem." The Figure 2.1 is an example of Zwicky using the matrix to evaluate the relationships of features on a telescope by representing "the qualitative and quantitative parameters which are relevant to the problem"(Zwicky 1948).

Zwicky uses letters and there subscripts to show relationships: (A) to represent a given parameter, (B) to represent the recording instruments, and (C) to represent interaction of the light with the optical parts of the telescope. The advantage of the morphological method was that it provided an orderly way of looking at things by
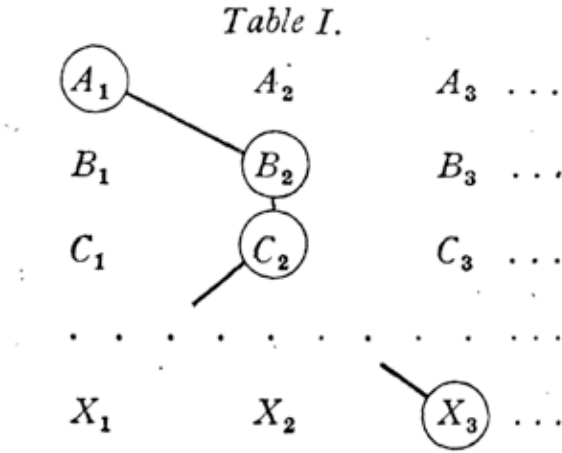
Figure 2.1: Zwicky's Morphological Matrix

centering itself around a design matrix (Zwicky 1948). Zwickys approach is ideal and is still being used in design today. However, after Zwicky's publication, it took over ten years for the design community to recognize the need for a systematic process for design.

On September 19, 1962, "The Conference on Systematic and Intuitive Methods in Engineering, Industrial Design, Architecture and Communications.", the first conference of design methods convened in London. According Nigel Cross, professor, author and president of the Design Research Society, this event marked an event that resulted in substantial academic recognition for the design methods community. (Cross 2007). However, shortly after the "The Conference on Systematic and Intuitive Methods in Engineering, Industrial Design, Architecture and Communications." there still lacked a unified approach to solving design problems. The discordancy in perspectives of engineering, planing and architecture greatly contributed to this dilemma.

Although, after the 1962 conference on design methods, many were unified in intents of using a systematic process for solving problems through design and planning,

there still remained a number of discordant theories of how to appropriately frame the design problem. Influential figures in advancing design research and methodological theories, shortly after the conference, were John Christopher Jones, Christopher Alexander and Horst Rittel. The scientific based design methods of Jones often termed first generation, the planning methods of Rittel often referred to as second generation, and the architectural Pattern Language of Alexander independently differ in perspective of how to frame design problems, yet when grouped together concomitantly provide a unified approach for solving design problems. These three theories contributed to the development of the design methodology used in this study, and the subsequent examination will be aimed at defining and weighing the conceptual foundations of these methodological theories.

In 1970, John Christopher Jones produced his seminal work *Design Methods: Seeds of Human Futures.* Jones, one of the main proponents of the formalization of design methods, describes traditional methods, outlines their limitations, and then states the need for new methods using scientific and systematic processes. (Jones 1980) In 1972, Rittel suggests in his "On the Planning Crisis: Systems Analysis of the First and Second Generations. that the classical problem solving paradigm be shifted. Rittel argues that, though, the problem solving methods native to the sciences and engineering are effective in laboratories and controlled environments, these methods do not solve the more complex problems of humanity (Rittel 1972). In the 1977 book *A Pattern Language: Towns, Buildings, Construction* Alexander concludes that the solution to such difficult problems in humanity, is to reduce the problem into recurring patterns, that can be found in nature, but more often in architecture (Alexander 1977). Jones is more focused on a linear approach to design problem solving, Rittel endorses a circular and argumentative process, and Alexander can be typified as a reductionist, breaking down patterns into smaller patterns of understanding.

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These three viewpoints share a commonality, their acknowledgment of the inherent difficulty in solving the problems presented in everyday life using current methods. Although, these authors have different backgrounds from engineering, to community planning, to architecture, each explicitly states the need to question traditional methods in light of the complexity that exists in the present world. These authors then create strategies for dealing with such complexities.

2.1.1 First Generation Design Methods

The basis of Jones's conceptual foundation is made clear in his publication *Design Methods: Seeds of Human Futures.* Jones argues that the traditional methods such as "design- by-drawing" used by draftsmen and the craftsmen's practice of blending "know-how and ignorance" have to be reevaluated according to four questions:

1. How do traditional designers cope with complexity?

2. In what ways are modern design problems more complicated than traditional ones?

3. What are the interpersonal obstacles to solving modern design problems?

4. Why are the new kinds of complexity outside the scope of the traditional design process? [pg.27 *Design Methods*]

These questions provide the foundation for the argument Jones poses for the need for new methods. In *Design Methods*, Jones defines traditional designers as those design "not only with the recent tradition of design-by-drawing but also with the much earlier method of craft evolution"(Jones 1980). Jones, discusses the methodology or lack thereof of craftsmen and draftsmen.

In just a few pages following of Jones's discussion of how traditional designers

coped with the complexity of designing, Jones addresses some of the interpersonal obstacles facing modern designers. These problems include designing by or with a committee which "are likely to be troublesome when design changes that are needed cut across the interests of those people who are expected to collaborate." Another problem is, designing for sponsors who "are likely to have too narrow a financial interest and insufficient influence upon other system operators whose collaboration is needed." Other interpersonal difficulties arise when production costs which are "difficult to predict with any accuracy the cost of proposed design changes *before* the detailed manufacturing specifications have been worked out". Jones also notes interpersonal problems that may arise with distributors and states, "Distributors do not always have a vested interest in the existing product design." Though discussion of the questions Jones presents, are not thoroughly discussed in this study, they aid in supporting Jones's argument of the need for new design methods. However, Jones's most compelling question is "In what ways are modern design problems more complicated than traditional ones?" This question will be addressed later in this review, but first an evaluation of Jones' conceptual foundation must be presented.

The first building block of Jones's conceptual foundation is the view of designers as glass boxes. The glass box view that Jones refers to is the concept of clearly seeing and understanding the processes that occur in designing. Jones contrasts this view with the assumed "black-box" view of designers that portray the "designer as [a] magician.", and that the,

> "most valuable part of the design process is that which goes on inside the designer's head and partly out of reach of his conscious control" (Jones 1980).

In *Design Methods*, Jones describes that one of the main functions of the new design methods is to externalize the design process, whether by words, mathematical symbols or diagrams. The reason for externalizing design processes "is to make designing more manageable." Jones supports this glass box view of the designer in *Design methods* by taking the stance that

> "The majority of design methods are concerned with externalized thinking and are therefore based on rational rather than on mystical assumptions"(Jones 1980).

Although, Jones does acknowledge that designers make intuitive decisions he is more focused on an approach that makes the discussions clear and communicable.

The second building block of Jones' conceptual foundation is the advocacy of a linear design process. Jones suggests the linear design process has two benefits. The first, linear systems convert problems into a flow systems enabling components to be systematically designed. The second, linearity allows consequences and reactions to be predicted from afar. Jones refers to the flow system as an assembly line and states that linearity allows designers to first design "interchangeable standardized components." Jones then states that by doing this

> "dependencies and incompatibilities between assembly layout and component details are limited to a few predictable and stable rules governing the attachment of one standardized component to another" (Jones 1980).

The second benefit of allowing consequences and reactions to be predicted from afar rest in Jones belief that, "the addition of research actions of greater generality before or during a glass box procedure", provides the designer the ability to extend and predict critical sub-problems.
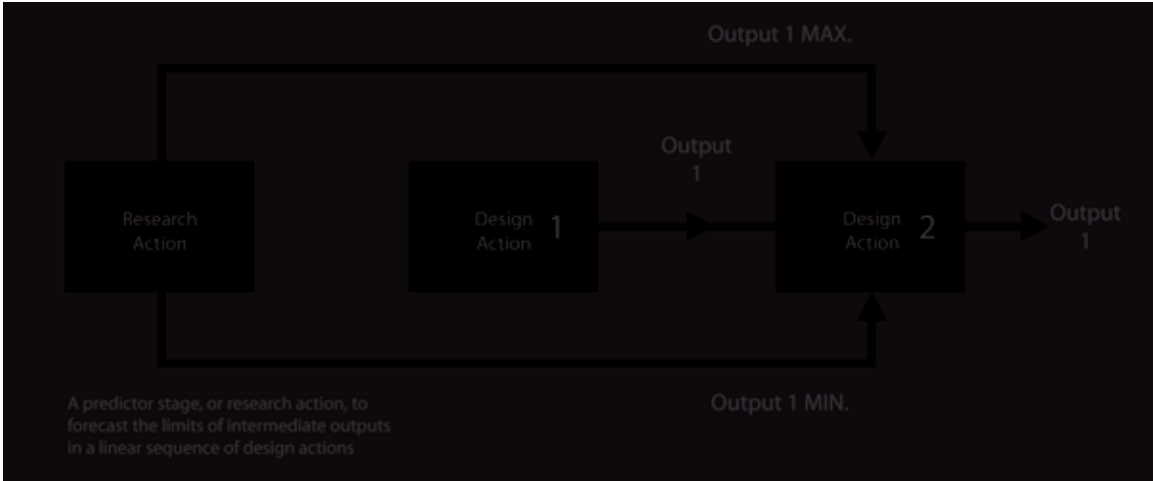
Figure 2.2: Jones' Linear Design Process

Jones states that, "Research actions can be regarded as predictor stages that determine the range of feasible outputs from each stage in a glass box process before that stage has been carried out" (Jones 1980). This approach has its strengths when the constraints are well defined and the relationships of problems to their subsets are clear and predictable (Jones 1980). Jones suggest that one of the problems of circularity is it "implies that critical sub-problems may be undiscovered until late in the process and may cause for revision of the major decisions or even a cancellation of the project" (Jones 1980). In linearity, problems can be spotted early before much time and effort has been put into designing (Jones 1980).

The third building of Jones's conceptual foundation is related to the question, "In what ways are modern design problems more complicated than traditional ones?" Jones states that some of these new complexities stem from many of the "man-made things" found in industrialized countries. Jones gives an exhaustive list of complexities,

"e.g. traffic congestion, parking problems, road accidents, airport conges-
tion, airport noise, urban decay and chronic shortages of such services as
medical treatment, mass education, and crime detection"(Jones 1980).

Jones describes that one difficulty in solving the new complex problems lies in the perspective of the designer. Jones argues that the traditional view of a stable and rigid system has to be shifted to take into account new possibilities. Jones uses this as a platform to introduce his concept of the emergent trend of flexibility. He states that in this new state of flexibility inhibitors of change and sources of continuity are not the physical limitations of hardware but the ideas, values, opinions, and beliefs of individual person" (Jones 1980). Jones stresses the importance of close attention to the cognitive functions of individuals when considering methods and predicts technological choices will be dependent on political concepts of light and dark and of moral and religious beliefs.

In order to successfully deal with complexity of the "new flexibility" Jones states that the design process needs to be extended to

" embrace, and inform the forces and uncertainties of politics, morality
and religion" (Jones 1980).

The ideologies of light and dark, good and bad that Jones describes exist on a contin-uum. Although Jones perceived this emergent trend of flexibility, he did not explicate his concept. Although Jones points out the need to consider possible future devel-opments, the majority of his work focused on systemizing design methods based on existing needs.

2.1.2 Second Generation Design Methods

After Jones's first publishing of Design Methods in 1967, a contemporary of Jones, Horst Rittel proposed the need to revise these methods so that they could be used to address what he termed wicked problems. Rittel identifies four specific problems that the first generation of Jones does not address.

- The concept of a subjective problem statement

- The concept of tame and wicked problems

- The concept of an argumentative design process

According to Jones, a narrow perspective and rigidity in standards of belief and values make it difficult for designers to solve complex problems. Rittel elaborates on Jones's theory by suggesting that the complexity of the "new age" planning and design problems are based in ill-defined problems that are deeply embedded into networks of societal systems. Rittel terms as these problems as 'wicked' (Rittel 1973). To further clarify his argument, Rittel uses the occurrence of poverty as an example of one of the ill-defined problems that are embedded into networks of societal systems. In "Dilemmas in a General Theory of Planning" Rittel asks,

> "what would be necessary in identifying the nature of the poverty problem. Does poverty mean low income?...But what are the determinants of low income? Is it deficiency of the national and regional economies, or is it deficiencies of cognitive and occupational skills within the labor force" (Rittel 1973)?

One major complication of wicked problems is the difficulty in defining the problem. Rittel argues that definitions of problems are subjective. He points out that the typical definition of a problem often involves a discrepancy between what is, and what

ought to be based in the subjectivity of the definer. According to Rittel, the misdiagnosis of many critical issues is a result of the limited perspective maintained by the specialists, called in to solve such problems. Aside from this difficulty, Rittel suggests that yet another predicament arises when trying to define a problem, "Learning what the problem is IS the problem" (Rittel 1987).

Rittel elaborates on the problem of poverty with a myriad of possible causes and solutions, and states that if poverty is a deficiency of cognitive and occupational skills then,

> " the problem statement and the problem solution must encompass the educational processes. But, then, where within the educational system does the real problem lie? What then might it mean to improve the educational system? Or does the poverty problem reside in deficient physical and mental health? If so, we must add those etiologies to our information package, and search inside the health services for a plausible cause. Does it include cultural deprivation? spatial dislocation? problems of ego identity? deficient political and social skills?–and so on" (Rittel 1973).

As illustrated by Rittel the next complication of the WP is separating the perceived problem from the complex causal networks. In many instances, the true problem is so interwoven or embedded in a system of problems or related occurrences that one thinks they are resolving the problem when they are only soothing a symptom (Rittel 1972).

In light of the gloom and doom of solving these WP's using traditional linear methods, Rittels suggests that they can be resolved through a circular and argumentative design process and coins the phrase 'design thinking'. In Rittel's 1987 article "The Reasoning of Designers", Rittel offers great insight in the process of design

thinking. Contrary to the clear linear problem-solving approach often adapted and commonly used by engineers, mathematicians, and scientists, the designer's thinking and problem-solving processes is more circular and argumentative. The circularity of designers is contrasted with the

> "*classic* problem solver, who first defines his problem in clear terms, obtains the information deemed necessary, and subsequently searches for a solution in the then well-defined 'solution space'"(Rittel 1987)

Unlike the linear scientific model of the past, in order to solve these 'wicked problems', one must develop a conceptual solution and work backwards to define the problem and its related factors. When solving such 'wicked' problems Rittel states,

> " There is no clear separation of the activities of problem definition, synthesis, and evaluation. All of these occur all the time...because the understanding of what ought to be accomplished, and how it might be accomplished is continually shifting

The information needed to understand the problem depends upon one's idea for solving it. In Rittel's paper "The Reasoning of Designer's" Contrary to Jones's argument for linearity, Rittel emphasizes in his paper "On The Planning Crisis: System Analysis 'First and Second Generations'", that linearity does not consider 'wicked' problems which are ill-defined, extremely problematic, and involve societal issues (Rittel 1972). Rittel suggests that, "WP's [wicked problems] have no definitive formulation." and that, "the box-car train of phases 'understand the problem' before you go on and solve it" proposed in linearity will not suffice in the real world. Rittel elucidates the problem of total linearity by rhetorically suggesting that,

> "you cannot understand the problem without solving it, and solving the problem is the same as understanding it . But how can you understand

the problem if you cannot have sufficient information without solving the problem" (Rittel 1972).

To better understand this statement, Rittel's "Dilemmas in A General Theory of Planning" can be referenced, "great many barriers keep us from perfecting such a planning/governing system: theory is inadequate for decent forecasting; our intelligence is insufficient to our tasks; plurality of objectives held by pluralities of politics makes it impossible to pursue unitary aims" (Rittel 1973).

It is imperative to mention that Rittel does not deny the usefulness of the linear process, but claims it is only effective when dealing with 'tame' problems. The problem with applying a linear approach to these 'wicked problems' is that linear approaches are dependent upon explicit facts and figures, and lack insight into the unpredictability of societal systems. Unlike the tamed problems that are easily tackled by most traditional methods of operational system engineers, these wicked problems (WP) involved a new level of complexity. Rittel makes the point that WP's "cannot be simulated in a laboratory settings" or recreated in a controlled environment, so it it is difficult to determine the effects of stimuli. For this reason, processes involved in solving WP's include a constant back and forth of choices, and possible alternatives. Designers are put into situations where they not only weigh constraints and data, but also have to consider creativity, innovation and aesthetics (Rittel 1987). Wicked problems requires a different set of skills, hence the circularity of the planning and designing process.

2.1.3   Pattern Language

In addition to the first and second generation design methods of Jones and Rittel respectively, Alexander's concept of a Pattern Language (PL) also contributed to the methodological framework of this study. In the late 1970's, Alexander developed a schema for architectural design knowledge he calls, "Pattern Language." Alexander states, that "a pattern describes a problem which occurs over and over in our environment, and then describes the core of the solution to that problem" (Alexander 1977). Alexander's Pattern Language is based on the premise that all design problems can be broken down into a series of smaller problems (patterns), which can be solved individually and independent of each other. With this approach, a solution to a given design problem is the synthesis of solutions found on the lowest level of decomposition.

The representation of all patterns follows a unified approach. First, a picture gives a typical physical example of the pattern. Next, links to related patterns of a higher abstraction level are provided. A short description of the problem as well as empirical investigations on that topic follows. Then, the solution to the problem is given. Finally, pointers to patterns of a lower abstraction level might show the necessity for further decomposition of the problem.

Each pattern expresses the relationship between a problem, the context of the problem, and the solution to this problem. To solve a high-level problem like the design of an entire building, garden, or city, one has to start with the closest observable pattern. Jones suggests that the closest observable pattern will include references to related patterns on a lower abstraction level. The lower abstraction level patterns serve as building blocks to the large scale pattern. This results in an automatic decomposition of the high-level problem based on hierarchal relationships.

[Step 1]physical example of pattern

4 AGRICULTURAL VALLEYS*
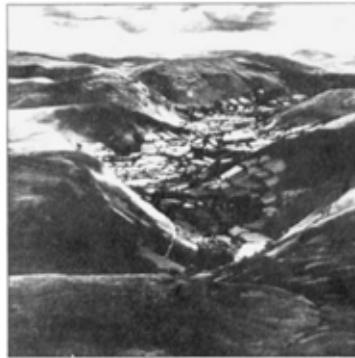
[Step 2]links to patterns of a higher abstraction

[Step 3]empirical investigation]

[Step 4]Solution]

Figure 2.3: Steps of Decomposing a Pattern-*(Alexander,1977)*

The strengths of Alexander's argument lie in his ability to provide a strict definition of PL and provide context. In *Pattern Language*, Alexander specifically defines pattern as a problem which occurs over and over in our environment. A one-time phenomenon would not be applicable to the PL, because it cannot be observed or recognized in multiple instances. The next step is providing a context. Alexander is not focused on tackling societal issues or 'wicked problems' he is exclusively focused on the design of towns, buildings, and construction. This contextual constraint provides structure by regulating what can and cannot be achieved using this language.

To support the theory for the process of decomposition and synthesis, Alexander and his colleagues specified 253 patterns that describe design problems ranging from large scale (cities) to small scale (sleeping in public). Alexander's argument is feasible for architecture, where man-made patterns can be observed and manipulated. However, where the pattern language fails is that the PL rests on a single coherent view of design. According to past president of the Semiotic Society of America, and architectural history professor Donald Preziosi, a highly mechanized view of the world does not allow for relational invariance (Preziosi 1979). The structure provided through Alexander's 253 patterns allows for little to no variance in meaning or relationships; which occur naturally. For the sake of an example, sleeping in public might have a particular connotation in one culture that does not lend itself to be identified or decomposed by the pattern language of another. The rigidity of the PL limits its applicability to a select set of patterns. The Pattern Language grants an a-priori premise for the truth of its patterns and likewise for the solutions to these patterns; independent of their context. Therefore, although Alexander's process is theoretically logical for the development of certain architectural components, his premise as-is of a well defined world is not practical outside the scope of certain architectural components.

The design process needs the possibility for constant revision of objectives, goals, and solutions on all levels of abstraction. Therefore, the pattern language in its as is totality will not suffice. However, what can be commended of Alexander is his recognition and approach of breaking down patterns to reveal causation and relationships.

2.1.4   Summation: Design Methods

In developing a framework for the design of products using cultural components, it seems most necessary to examine and discuss current methods and processes so that redundancy can can be minimized and theoretical gaps filled. This particular examination of design methods is aimed at presenting some of the key advancements in methodological processes and pointing out concepts that are particularly applicable to this study.

In examining the methods presented in this chapter, on their individual merit, it becomes clear that all of these methods have value to this study. The approach of the first generation methods is highly systematic and applies a type of scientific method approach to design problem. The benefit to this study, is Jones's concept of structuring and systematically solving problems, as evidenced in the careful systematic examination of not just culture, but of related theories, and structuring a linear process for the framework to follow.

The benefit derived from Rittel's second generation method, is his elucidation of 'wicked problems'. Rittel describes and evaluates the characteristic of such problems, and also proposes ways of resolving such problems. The understanding of how to solve wicked problems provide a framework for understanding how culture changes, and the problems that are faced when identifying culture. Alexander's approach is great for identifying patterns. The concept of identifying and decomposing patterns and determining their relationship to other patterns is what drives the decomposition

of culture in this study.

The holistic overview of the design methods presented in this chapter make clear the various benefits and shortcomings of design methods. It is also made clear that design methods have to be flexible and communicable. The first generation methods were clear and communicable, just as Alexander's pattern language. However, both Rittel and Jones point out the need for flexibility to emerging trends, ideas and technologies.

2.2   Culture

There are many elaborate cultural theories, rooted in several conceptual frameworks that try to establish the characteristics, components, and some type of definition of: culture. As in study of of a critical concept, this study examines the etymology of the word culture. The origins of the word culture, has three part definition, which indicative of the breadth of its concept. The word culture can be traced back to the Latin present active conjugation of the word *colo*. According to the Latin definition *Colo* means to: till/cultivate, protect and nurture, or praise/worship. The importance and value conveyed in the root of the word culture is still perceived today. However, as suggested by Klucholhn and Kroeber culture is an everchaning, living, and yet dependent entity (Kroeber 1952). The meaning of the world culture has evolved to include some common connotations. An examination of these connotations show that: to till and cultivate has a relationship with the concept of 'high culture', to protect and nurture has a relationship with the protection of culture as suggested by Boas (Boas 1901), and the praising and worship connection exists in the complex beliefs held by cultures (Boas 1901).

In contrast to the three part definition of the root, there are well over a hundred

different definitions and concepts of culture in cultural anthropology alone. Revered in the field of cultural anthropology, Kroeber and Kluckhohn investigate the concept of culture in the 1952 publication of *Culture : A Critical Review of Concepts and Definitions*. Kroeber and Kluckhon's thorough investigation of the definitions and concepts of culture shed light on how disjointed and arrayed they actually are. Kroeber and Kluckhohns investigation provide an exhaustive list of over 164 concepts and definitions accompanied by brief commentary of over 200 pages.

For the industrial designer, a more direct approach towards culture is needed. As a linguist and anthropologist, Roger Keesing points out, in the article "Theories of Culture" Kroeber and Kluckhohns holistic view of culture "includes too much and is too diffuse to separate analytically. Though Kroeber and Kluckholns investigation is vital to the body of work that relates to study of culture, and provides a great springboard into further research and commentary, the industrial designer needs more than a loosely connected overview, but rather a directed and specific view of culture.

The arduous task of trying to make sense of the concept of culture is due in part to the various connotations surrounding word *culture*. As anthropological pioneer Clifford Geertz states, "The challenge in recent years has been to narrow the concept of 'culture' so that it includes less and reveals more" (Keesing 1974). Geertz argues that "we must cut the culture concept down to size into a narrowed, specialized, and theoretically more powerful concept" (Geertz 1973). In today's colloquial vernacular, culture is used to denote particular stylistic tastes, as in high culture; or a system of shared beliefs, symbols and languages, as used by the social sciences; it can also be used in conjunction with other words *e.g. organizational-culture, consumer-culture*, often referring to or describing the environment to which organization or consumer exists. The overuse of the word culture, has contributed greatly to the deviation

from the true essence of its meaning, resulting in over 100 viable concepts and definitions. An examination of the conceptual foundations is needed to properly frame the concept of culture used in this study.

2.2.1 Cultural Theories

According to dominant and widely accepted perspectives, current cultural studies can be divided into three different groups.

Biologically Based

The first vantage point of cultural theories that will be discussed are those based in an adaptive viewpoint. This viewpoint is deeply rooted in a biological background which applies an evolutionary model of natural selection to cultural constructions. This perspective views culture as originating and maintained by a unique adaptation to surrounding environments.

Institutionally Based

The second vantage point is based in perspective that ideas, symbols, and mental structures contribute to the formation of institutions that serve as the driving forces in shaping human behavior.

Idea Based

The third vantage point that cultural theories are based in can aspect can separated into three avenues: cognitive, structural and symbolic.

- In the cognitive system of the idea based view of culture the principle is maintained that; specific knowledge that one possesses and uses is empirical and develops over time with experiences.

- In the structural system, the principle is maintained that culture exists under shared symbolic systems. The concept proposes that people think about the world in terms of predetermined binary opposites such as high and low, inside and outside, light and dark, person and animal, life and death, and that every culture can be understood in terms of these opposites.

- In a symbolic systems approach, the idea that culture is actually a system of shared symbols and meanings that serves as the fundamental principle driving this perspective.

An understanding of the idea based view of culture is quintessential to the thematic approach taken in this study. The importance of the ideational perspective lies in the fact culture equates to the concept of a shared schematic experience. Culture is a particular viewpoint of life by a certain group of people (Shen and Prior 2006). This particular viewpoint is influenced by, and also influences all aspects of life from politics, religion, and for our case and purpose, design (Kroeber 1952). Often designers hardest problem is that of obtaining the right viewpoint. As a designer, one cannot simply guess how other people's lives actually work. People are complex and do not fit into simple neat categories such as consumers and users. However, people can be loosely grouped based on culture and similar unifying cultural themes (Aaker 2000).

The method used in this thesis to study culture is based in a search for meaning. Geertz proposes the best fundamental reasoning guiding the study of culture when he stated that the analysis of culture should not be an "experimental science in search of law but an interpretive science in search of meaning (Geertz 1973). Dr. Clotaire Rapaille, a renowned anthropologist, takes this interpretive approach in his 2007 book *The Culture Code*.

The Culture Code takes an interesting approach in defining culture and explaining national behavior. Rapaille suggests that people around the world are different not because of variants in genetics but because of a difference in 'culture code'. As defined by Rapaille, a culture code is "the unconscious meaning we apply to any given thing" (Rapaille 2006). The definition of the culture code shows much similarity to studies in semiotics that suggest individuals code the world around them using 'meaningful' iconic signs (Chandler 1994). Rapaille also suggests that experiences can be broken down into a system of national archetypes, and that these archetypes are a part of a system of meaning that shapes individual perspectives. In order to understand why and how a group of people think, act, and perceive, an understanding of the 'code' is imperative (Hanft 2008).

The concept of a cultural code is not new, as is evident in Peterson's *Revitalizing The Culture Concept*, in which he reviews related cultural theories and points out that people use culture to organize and normalize their everyday activity (Peterson 1979). Where Rapaille differs from traditional anthropologists in his approach for discovering the archetypes that make up the 'culture code'. Rapaille's method for uncovering deeply rooted archetypes is based on a three-step process for manifesting imprints on the unconscious.

The First Step: Finding the Essence

This step is focused on stripping objects of connotations and is focused on identifying meaning.

> "In the first hour, I took the persona of a visitor from another planet...I asked for help understanding the product, believing their descriptions would give me insight into what they thought of it" (Rapaille 2006).

The Second Step: Pictorial Discourse

This step is highly interpretive and allows objects or concepts to be framed in their proper context with the aid of pictures that serve as metaphors.

> "In the next hour, I had them... use scissors and a pile of magazines to make a collage of words describing [the object]...The goal here was to get them to tell me stories with words that would offer further clues" (Rapaille 2006).

The Third Step: Uncovering Experience and Emotion

Unlike the first two steps that involved the identification of meaning and perceived context, this step is focused on identifying emotions attached to the object of concept.

> "In the third hour,...I asked them to think again and recall their earliest memory of it, their most recent experience with it, and their most significant memory of it" (Rapaille 2006).

2.3   Culture Meets Design

The definition of Industrial Design implies that designers need to be "jacks of all trades." Successful designers are to understand business, human sciences, art, history, cultural anthropology, ecology, manufacturing, etc., and incorporate their understanding of these areas into a well balanced product (Ashby 2002). However, the designers' skill does not just lie in merely knowing and understanding these things; they must effectively process and communicate their findings via a preferred medium (3-D model, product, or interface). There are many external considerations that must be attended to when designing products, though some designers make the mistake of focusing too narrowly on product characteristics. Successful design is a seamless integration of external constraints and a holistic approach to solving the design problem

as made evident in the review of first and second generation methods. Examples of this holistic outlook go far beyond products' aesthetics, but they imply the careful consideration of usability factors and functionality. This scope also includes but is not limited to the business strategy of the product, the marketing of the product, and how the product relates to the context of the proposed socioeconomic framework.(Gotzsch 1998, Jordan 2000) However, substantial energy should be dedicated to the attention of cultural influences and how this culture impacts the product.

We see products everywhere; they define us as a culture and we define them as a culture. Artificial or man-made artifacts are a great gauge of cultural beliefs, values, and traditions (Preziosi 1979). Culture contributes greatly to the shape and form, color and aesthetic elements of a product (Gotzsch 1998). However, culture also influences more than these mere physical qualities. As pointed out earlier in this study, McCracken states,

> "Consumer goods have a significance that goes beyond their utilitarian character and commercial value. This significance rests largely in their ability to carry and communicate cultural meaning (McCracken 1986).

The cultural meaning that McCracken discusses here specifically refers to the 'frequently recurring and widely shared aspects of life'. Culture grounds meaning and gives a context for interpretation and understanding. As suggested by Spiro,

> "meaning is based upon the interpretation of some type of object or event evoked in people as a result of their similar life experiences" (Spiro 1994).

This premise that a shared schematic experience and the particular viewpoints of life connect specific groups of people is validated by Rapaille's culture code (Rapaille

2006). Cultural meaning can be deduced from the existence of certain attributes and elements designed into a product. These specific attributes and design elements are unique cultural characteristics that can be embedded into a product both for the "enhancement of its identity in the global market and for the enhancement of the individual consumer experience" (Lin 2007). The 'shared viewpoint' of a group of people is in a sense the foundation for 'cultural meaning' which can be manifested in products. It is more than clear that an understanding of this 'shared viewpoint' is pivotal to the design of products. This 'shared viewpoint' is influenced by all aspects of life from politics to religion. This fact circuitously goes back to the concept of the concomitant relationship between culture and design. As stated earlier, our material world is directly influenced by and influences our 'particular viewpoint of life' or culture. The difficulty for the designer is often times clearly identifying and examining the constructs of this 'viewpoint'. Designers cannot simply guess how specific groups of people actually live and work. People are complex and do not fit into simple neat categories such as consumers and users; therefore, groups need to thoroughly researched and examined (Aaker 2000). Therefore, as this review suggests, in order to solve the problem of culture specific design, a sound methodology must be developed and clear understanding of culture must be attained.

2.3.1   Summation: Culture

Culture in its holistic view is humanity's adaptation and relationship to its environment, institutions, and structures (political, economic, or social), and their beliefs. However, there are different types of culture. For example, organizational culture is the relationship and adaption of the previously stated interactions of an organization. Consumer culture would be specific to the culture of consumerism and consumption. There is also regionalism, which identifies and describes aspects of regional culture

and influences.

Regional culture is based on spatial relationships and place. In the era of glob-alisation it has often been commented that we need better notion of 'place' that is stable, secure, and unique. According to Relph, if places are

> "sources of security and identity for individuals and for groups of peo-ple, then it is important that the means of experiencing, creating and maintaining significant places are not lost"(Relph 1976).

Regional culture as suggested by Franz Boas, is consists of regional people's rela-tionship and adaptation to three components: environment, each other, and their thoughts. For this study, it seems most logical to examine regional culture as it re-lates to the physical elements of products, and also examine how regional culture relates to the semantic experience of products.

Culture is manifested in man's relationship with, and adaptation of these three things.

Environment	Man	Thought
Architecture & Food	Economy & Education	Religion & Values
Southern Taste	Southern Institution	Southern Principle
senses	structure	philosophy
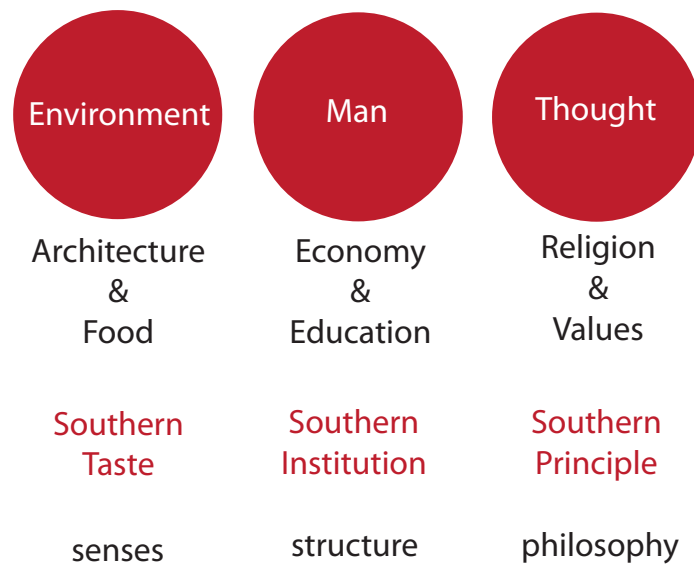
Figure 2.4: Concept of Culture

CHAPTER 3

CULTURE AND DESIGN: CASE STUDIES

3.1   Case Study: Adaptive Path

Core-77, an internet magazine and design resource, featured an article about a cultural specific research project done at Adaptive Path, a company on the cutting edge of design research. Research was conducted in Kutch, a rural area of India. The research was geared toward the study of mobile technologies in emerging markets. Adaptive Path (AP) observed the cultural context of mobile phones in rural India. Cultural adaptations and how well metaphors and symbols were translated were key points of the study. As many of AP's findings point out, many of the metaphors and symbols that are currently used in mobile phones were irrelevant and meaningless to the Indian consumers. As Hinman suggests,

> "What does an address book mean if your home doesnt have an address
> and you are unable to recognize alpha-numeric organization? What does
> an icon of an envelope mean if youve never received a piece of mail? Many
> mobile phone features are built on models and concepts that people in ru-
> ral India have never experienced; an abstract icon used to represent these
> concepts often compounds the problem instead of providing a solution"
> (Hinman 2009).

Designers need to design for cultural relevance as well as considering and honoring established relationships. Another problem arose from the fact that current mobile
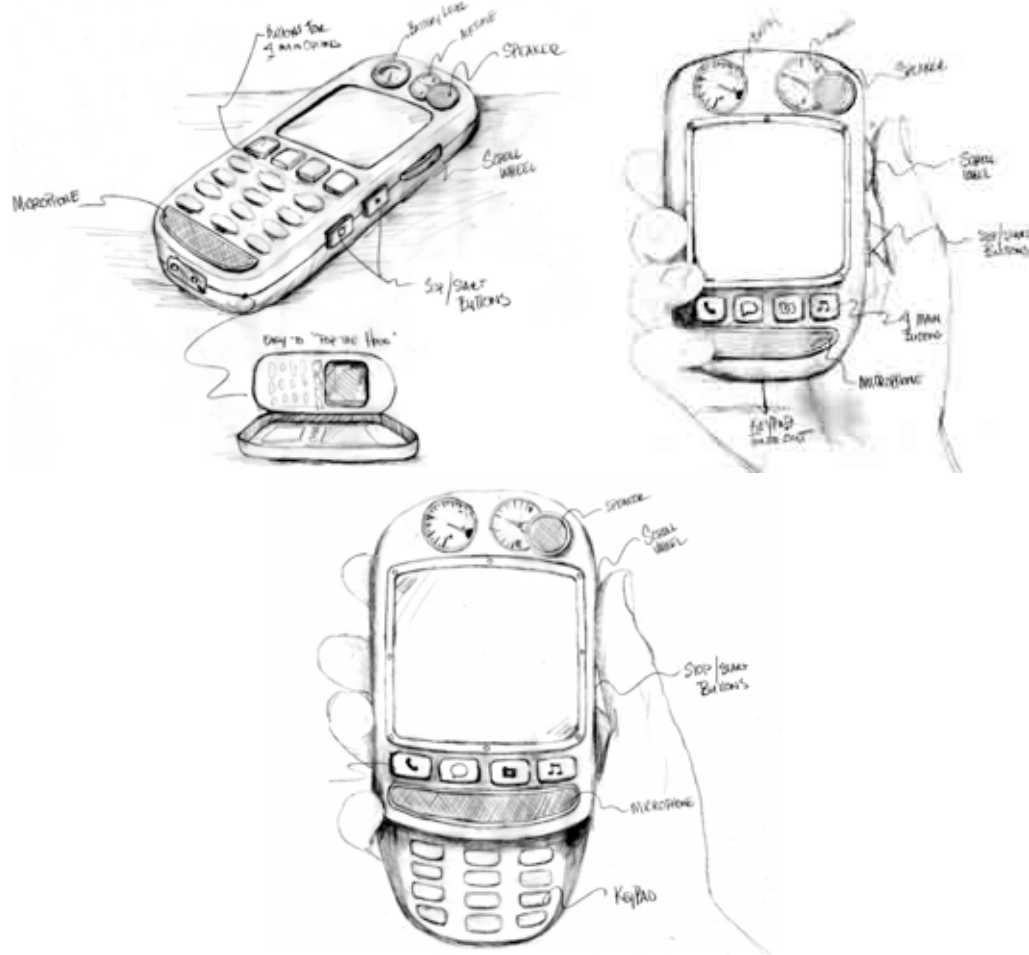
Figure 3.1: Steampunk: Mobile Device Concept

devices were not conducive to the pattern of life typical to rural Indians. The system and structure of cell phones is designed mainly for a westernized perspective. Figure 3.1 is a concept for mobile devices that incorporates some key insights of AP. The concept focused on reducing feature sets and amplifying what was most important to rural Indians: calling, texting (using voice to text or with assistance), music, camera, microphone, speaker, airtime, battery level. The exaggeration of these features also ties into the strong physical interfaces that are prevalent in Kutch, i.e knobs, buttons, and gauges.

3.2 Case Study: Cross-cultural Product Design Model

Industrial designers are often engaged in identifying the current trends in consumer culture and also generational variants, which are important aspects of research. However, these approaches tend to be rooted in a marketing agenda (Danziger 2004). An understanding of the role of culture in the context of design is no easy feat for the designer. In a survey of literature on current methods of cultural design, it is evident that the bulk of studies on cultural design come from a Taiwanese perspective. Rung- Tai Lin recognized the need for cultural design, and developed a design model for implementing cultural elements into the design of a product. In his 2007 paper "Transforming Taiwan Aboriginal Cultural Features into Modern Product Design: A Case Study of a Cross-cultural Product Design Model," Lin proposes a model that serves as a good starting point for culture conscious design.

Lin constructs a model reliant on Leong and Clarks framework for studying cultural objects that distinguishes three special levels of study: the outer tangible level, the mid behavioral level, and the inner intangible level. In this model the outer layer is associated with (1) physical or material culture, including food, garments, and transportation-related objects, the mid layer is associated (2) social or behavioral culture, including human relationships and social organization, and the inner layer is associated with (3) spiritual or ideal culture, including art and religion.

The schema of Figure 3.2 encompasses the fundamental aspects of culture, and initially this framework is useful in defining the components of culture. Lins approach examines an artifact peculiar to a specific culture, and then (re)designs a product with the set of proposed cultural design elements (Fig. 3.3). However, the framework suggested by Lin where only products are examined is contrary to the holistic approach that Leong suggests (Leong 2003). The basis of Lin's approach is the identification of
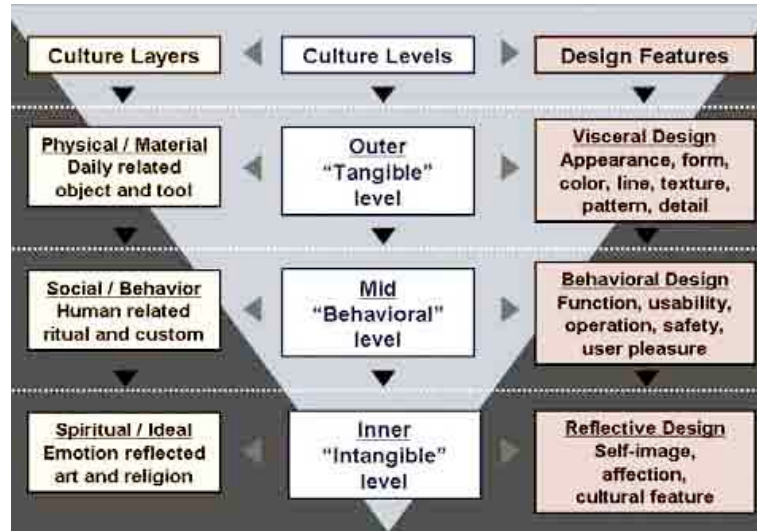
Figure 3.2: Levels of Cultural Objects and Design Features

Figure 3.3: Lin's Metaphor Abstraction

cultural features in an original cultural object. This approach is insufficient because it only considers material culture lacks details speak to beliefs, values and institutions held by a certain culture. Although this approach has some effectiveness, it does not address objects that are universal in nature that lack cultural refinements.

Some of the weaknesses of Lin's approach lie in his transferring of metaphors into product form. Lin's approach to the abstraction of themes and metaphors is highly

formalized. However, the process for applying the themes and metaphors lacks the same level of formalization. The latter portion of Lin's model seems unclear and undeveloped. Lin is focused on retaining and or even promoting cultural elements in modern products, but does not do so holistically, but rather through the narrow avenue of material culture. Lin's approach is exemplary, and serves as a pattern worthy of replicating, but it needs to be remolded with an emphasis on culture, and not just a part of culture.
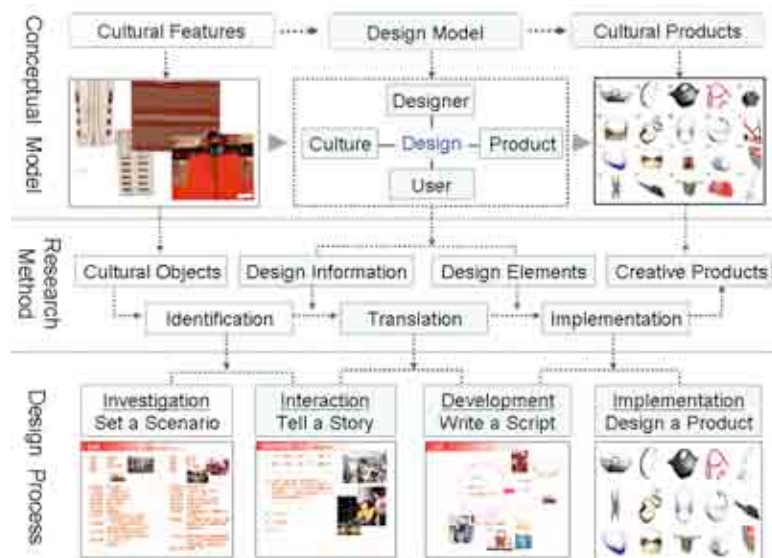
Figure 3.4: Lin's Process for Designing Cultural Features

3.3 Case Study: Center for Cultural Design

Another advancement in the study of culture and design is the *Center For Cultural Design*(CCD). Although much of the CCD perspective on cultural design differs from that of this study, significance is drawn to the fact that the CCD acknowledges the need for culturally sensitive and culturally specific designs. The CCD is located at the Rensselear Polytechnic Institute in Troy, NY, and is a research group focused on creating personalized and easily localized solutions for various user groups. The CCD's focus is on the investigation and promoting of subculture especially of those who are typically marginalized in social power (e.g. by race, class, and gender). As their website states, they "strive to develop solutions that make technologies appropriate for their social context." The insight into the various participatory methods of user research employed by the CCD are of great value to this study. The CCD uses participatory methods for design which they call "social design," "user-centered design," or "design for democracy." They use these and similar strategies in which the user is directly involved in the entire innovation process.

An example of one of their projects is the SUNY project focused on inner city students, designing a back pack that reflected their culture. This participatory research seems to be successful when identifying patterns of behavior and aided the designer in understanding the 'user meaning' of the backpack. According to their website, user-centered design methods and participatory exercises help to design products relevant to the users culture. The emic approach is advantageous for acquiring end results that the user-designer recognizes as being an expression of their culture. In talking about cultural design, Audrey Bennett of the CCD states that often,

Figure 3.5: CCD'S Participatory Backpack Redesign, with Students from Harlem, NY.

"Traditional modes of designing tend to have the designer (instead of the audience) in control of the designed-object (from conception to production). These designer-focused processes tend to yield visual/creative products that are not interpreted by the audience the way the designer intends. The reason for this may lie in the designer's neglect of the audience's cultural nuances" (Bennett 2003).

For this reason, the CCD takes a more participatory stance towards designing. CCD's research into culture and design is of great value. However, careful constraints must be applied to these user-centered methods; if not then, methods will be difficult to replicate and the final product will lend itself to extreme customization (Jones 1980). In effect the concept of a shared meaning will be overly simplified and individualized.

CHAPTER 4

RELATED THEORIES

Developing a framework for designing for a regional culture is not an easy task. Many obstacles confront this study, such as accurately defining the region, properly identifying this region's culture, and using the proper methods. These are the 'top' level problems, however; a host of issues crucial to the development and translation into product form exist below the surface. Some of the issues that lie below the surface are picking the right product, understanding meaning, and translating this meaning into metaphors that are manifested into design elements. These issues must be addressed. While conducting this study, there were a number of theories and concepts that contributed significantly to the structure and conceptual foundation of this study. Though not discussed to the degree of design methods and culture, it is imperative that these peripheral theories and concepts be addressed to provide a clear understanding of the processes of the conceptual framework of this study.

4.1 Semiotics

Semiotics is the study of sign processes, also known as semiosis. Semiotics is also used to refer to the study of signification and communication, signs and symbols, both individually and grouped into sign systems. It includes the study of how meaning is constructed and understood. In design, semiotics has been of particular interest to areas of graphic design, architecture, product design, and industrial design. In certain facets of designing products, semiotics has been used to describe something

that can added to a product, but, like culture, meaning is not designed. Meaning is understood, manifested, and manipulated. The same object formation will have variant meanings and behavioral associations in different contexts, or even in the same context at different times (Preziosi 1979).

Although, the concept of semiotics can be applied to an array of disciplines, this study will be focused on the study of semiosis closely related to design. In the study, the concept of general semiotics is going to be simplified and made applicable to designing cultural metaphors into products.

4.1.1   Designing Metaphors

It can be concluded that the art of design consists of a creative-intelligent thought (a combination of empirical knowledge and creativity) and effectively communicating that thought (Rittel 1972). Designers metaphorically use colors, shapes, and forms to stylize and express various uses, feelings, and culture (Norman 1998). These metaphors attempt to encapsulate and represent signs, symbols, or abstract ideas.

Anything can be a sign or symbol as long as someone interprets it as 'signifying' something - referring to or standing for something other than itself.(Chandler 1994). Signs are all around us, but the interpretation is solely dependent on two things: epistemology and empirical knowledge. As Chandler points out, meaning is highly interpretive. The concept that meaing is highly interpretive and is defined by cultural constructions dates as far back as the late 1600's is suggested by Locke in his 1690 *An Essay on Human Understanding*(Locke 1690).

The common school of thought is that for metaphors to be clearly interpreted, there has to be an understanding of the objects represented (Chandler 1994). The question that waits at the door is "What happens when objects represented are not understood?" This question is addressed in the paper "Towards Culture-Centered

Design": "Too often metaphors are applied out of context or they are overarching misinterpretation" (Shen and Prior 2006). This misinterpretation occurs when the designed object does not represent itself to the user in the language the user understands (Johnson 1997).

When designing, it is important that products communicate in the language of the user. Linguistics, the study of language, elucidate the problems that occur during translations. When words get translated from one language to another, sometimes meanings will be altered or diluted. This occurs because some meanings are native to one language and one language only. Occasionally when a word is translated, it loses its exactness and is interpreted using a word similar to that of the first language (Wallraff 2000). In a cross-application of this principle, it becomes evident that that the purest and most non-adulterated meaning will be culturally rooted. The emphasis here is not in linguistics, but the language of culture as discussed in the book *Cutlure Code*.

The language that best communicates metaphors is one that is localized and culturally rooted (Evers 2002). Culturally rooted metaphors have the strongest symbolic meaning and are most easily interpreted by the culture within they lie (Barber 1998). There is a significant difference in the metaphors used by different cultures as suggested by Shen, Woolley, and Prior in their 2006 paper on culturally rooted factors within user interface design. The metaphors that are used by designers infuse a product with meaning; meanings are based on and deeply rooted in a specific culture (Shen and Prior 2006). Metaphors that are culturally based are very effective and serve as a powerful communication tool if implemented properly.

4.1.2   Designing Meaning

Meaning is not transmitted to us; we actively create it according to a complex interplay of codes of which we are normally not aware (Preziosi 1979). As McCracken points out, "Consumer goods have a significance that goes beyond their utilitarian character and commercial value. This significance rests largely in their ability to carry and communicate cultural meaning (McCracken 1986). For products to carry or communicate cultural meaning, they must be designed to do so, and without attention to this aspect of design then the design of the product will be open for misinterpretation. No matter how visually appealing a product may be, if it is misinterpreted then it is not going to be used correctly. Therefore, the designed function of the product cannot be reached. This concept is also expressed by the usability theories of Donald Norman and Patrick Jordan. It is clear that the meanings of products must be considered. In the case of misinterpretation, form does not follow function for the user. In the case of culturally designed objects, form is explicative of not function but shared meaning and values (Geertz 1973).

4.2   Shape Grammars

In this study, a recurring motif of applying structure to objects and elements emerges. For example, when examining culture the development of codification techniques or language is encouraged (Keesing 1974). In Alexander's *Pattern Language* another type of language is developed. Much of design is formed around a communicable structure; this structure is most commonly referred to as and understood as a language. The key components of language are signs, syntax and meaning. The structure of these signs, syntax, and meanings are more widely known as grammars. Grammar is the whole system and structure of a language in terms of communication.

An interesting finding that emerged from this research is that of the shape grammar. A shape grammar is a set of rules that define the manipulations that can be made to a specific shape. Many computer-aided software packages are based on a complexity of interwoven grammars (Cenani 2007). The earliest connection to the concept of a shape grammar comes from the Li Jie in his pinyin translated *Yingzao Fashi*(1100). Andrew Li's "Yingzao Fashi In The Information Age" explicates the purpose of the *Yingzao Fashi*. The *Yingzao Fashi* is technical treatise on architecture and craftsmanship and its purpose is to develop a 'grammar' that provides a unified set of architectural standards for builders, architects, and literate craftsmen, but especially for engineering agencies of the government. The need for the implementation of such a system was initiated by the technical and structural inconsistencies surrounding the design of government buildings (Li 2003). In response to such inconsistencies, Jie developed a pattern that limited the possible variations that could be attributed to a specific style of building. The significance and usefulness soon spread to many Chinese municipalities (Li 2003).

The radical innovation behind this concept lies in Jie's approach to formalize building projects by standardizing specific constraints, but Jie also allows levels of creativity and differentiation. The value of Yingzao Fashi and its development of shape grammars is unquestionable. From the basis of computer-aided modeling programs, architectural and construction techniques, to even the *Pattern Language* of Alexander have all significantly benefited from the development of shape grammars.

The concept of shape grammars is used in this study as a method to formalize what shapes and proportions are to be used when designing for a specific culture. Not to say that these shapes and proportions will not change, but the formalization will provide structure that will represent the starting point for form development and iteration.
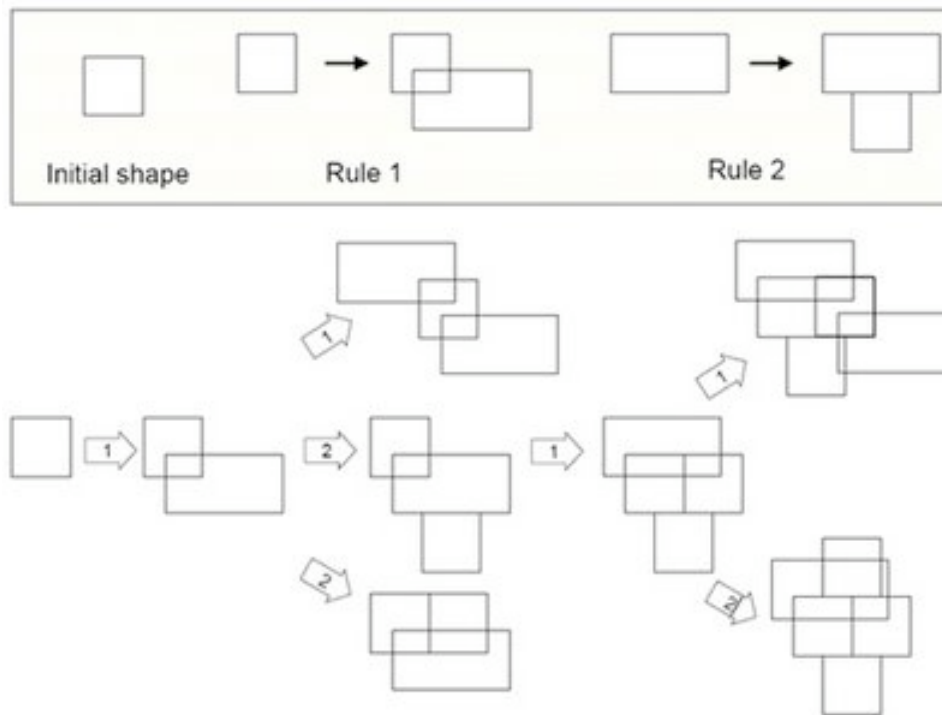
Figure 4.1: Illustration of a Shape Grammar

CHAPTER 5

SOUTHERN CULTURE

There is more to a place than latitudes and longitudes, provinces and territories, or temperate and tropical climate. As Paasi points out, "Embedded within the concept of place are layers of sedimented meaning derived from memory, sentiment, tradition and identification with a spatial location" (Paasi 2003). The concept of location or place can be difficult to grasp when making reference to things outside the scope of geographic coordinates. A facile knowledge of the United States makes evident the fact that states are divided into unique geographic regions. These divisions are not merely physical, but are divisions of sedimented meaning and tradition that make the South unique. The location of culture that will be examined in this study will be limited to the geographic and cultural region of the Deep South.
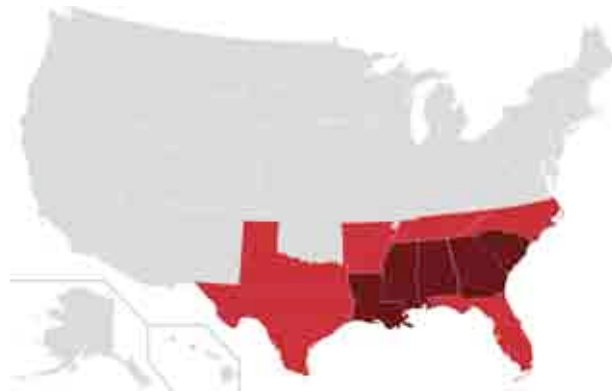
Figure 5.1: The South As a Geographic Region

The South most commonly refers to 10 states: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas. However, this study is focused on the Deep South. As John Shelton Reed points out, the cultural Deep South is characterized by the unique and consistent heritage of five states: South Carolina, Georgia, Alabama, Mississippi, and parts of Louisiana. The states that are omitted from the classification of Deep South are the outlier states of Arkansas, Florida, North Carolina, Tennessee, and Texas. These states are not as culturally unified as the states of the Deep South and share strong cultural ties to the Midwest or Northeast United States or, as in the case for parts of Florida and Texas, a totally different culture (Reed 1990).

In examining the South it is more than clear that the South is different. There are notable physical differences between the South and other regions of the United States. The physical differences are connected to climate, natural environment, and proximity to the ocean or gulf. The unique climate of the South is characterized as being hot and humid. The topography is diverse, ranging from a sandy loam soil of the Mississippi Delta, to the fertile yet mountainous soil of Northern Georgia. However, the Southern region contains more than physical diversity; it also has a diverse heritage (Beck 2007). The unique blends of heritage and tradition provide great variety within this region.

The South is unique because of the presence of the regional environmental conditions. However, there is more about this location than meets the eye. The South maintains a unique culture that sprouts from a shared heritage and tradition. Southern culture is considered a sub-culture of American culture (Allen 2009, Huntington 2004). This Southern sub-culture is often characterized by Confederates, slow living, and racism; the South in a few words is a very complex region. Not to say that other geographic regions do not share some of these commonalities, but holistically

the South's uniqueness is more than subtle. There are many theories that try to address what makes the South the South, but what links these theories together, is the pattern of unique relationships that occur in the South.

Therefore, a narrow perspective is not feasible for Southern studies. As suggested in Joyner's 1999 book, *Shared Traditions: Southern History and Folk Culture*, the study of southern culture cannot be limited to the study of one group of peoples, but the South is comprised of a "complex interaction of three major cultural groups- white, red, and black" (Joyner 1999). These complex interactions and relationships between Europeans, Native Americans, and African/ West Indians serve as pivotal spheres influences in the development of this region. However, in spite of all these different and unique entities that make up the South, a gestaltian principle emerges, and as W.J. Cash points this out in his statement "If it can be said that there are many Souths, the fact remains that there is also one South" (Cash 1941).

Figure 5.2: Southern Livin'

This holistic and unified view of Southern culture is supported by the findings previously presented in this study and will be further supported by subsequent examination. The amalgamation of various heritages, dialects, music, cuisine, clothing, and institutions provide a general way of life for Southerners. This study will take into account the Southerners general way of life: architecture, culinary tastes, education, economic institutions, southern beliefs and values. These facets of Southern culture will be examined under the structure of Alexander's pattern language.

First - A pictorial representation of a Southern connotation

Second - Empirical information, and literature to support connotation

Third -Themes that emerge from data.

CHAPTER 6

ENVIRONMENT

The first tier of Southern Culture that will be examined is the relationship and adaptations Southerners to their environment. The relationship and adaptation of a people to their environment is important aspect of culture. The two most recognizable adaptations and relationships are environmental in nature, and can be readily observed in Southern food and shelter. Through further investigation, it becomes clear that environment contributes greatly to the uniqueness of culture. Regions are different, so resources are different, causing products to be different. The American South will offer different resources than the American Southwest, etc. so it would only make sense that Southern products look, feel, and mean differently than those of other geographic regions of the United States.

Humanity's adaption and interaction with its environment is evident in all physical products. A mere glance of the world around us will show that various regions offer different resources. Certain artifacts are peculiar to specific cultures. For example, the use of chopsticks serves as a tool for eating in Asia. The mud hut of the Ibo and the igloos of the Inuit serve as examples of how different cultures shelter themselves. Each of these structures addresses the concept of shelter relative to climate (Boas 1901). In many instances, these differences are described as differences in culture. Thus culture comes to connote simply a difference in environment.

Humanity's adaptation to its natural environment is not only observed in the way it deals with shelter, but also its food. As John Burrison points out, "Arising

from locally available resources and the combined culinary tastes of the early population, no realm of folklife is more evocative of a region than its foodways" (Burrison 2007). Food is a great medium for transmitting culture with respect to tradition. For this same reason, cultures are many times distinguished and classified by their foods (e.g. Creole, Tex-Mex, soul food) (Beck 2007).
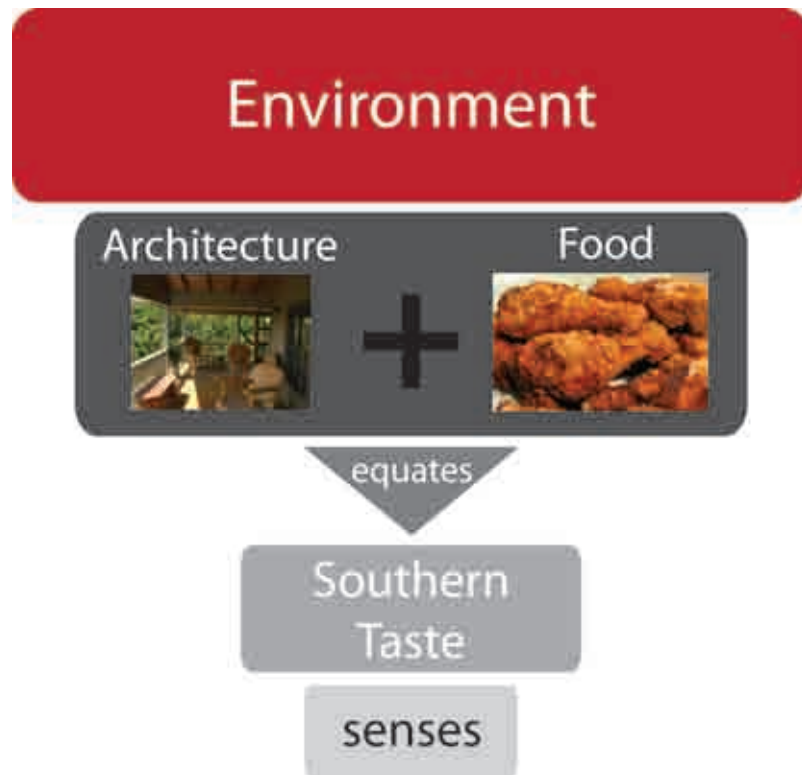
Figure 6.1: The Relationship With Environment

6.1 Architecture

Figure 6.2: Sittin' On The Porch

From skyscrapers to cell phones, shoes to automobiles, all objects are made tangible by some form of natural resources; Southern architecture is no exception. As Burrison states,

> "Southern folk architecture capitalizes on the region's rich timber resources by emphasizing wood construction, with walls of corner- notched horizontal logs or wood shingles. This is in contrast to my Mid-Atlantic home area where masonry (stone and brick) construction was far more prevalent (Burrison 2007).

Southern architecture is unique in that much of its expressive style can be linked to its adaptation to not only resources, but also climate. Although resources are important to Southern culture, it seems that climate is a greater influence. Due to the hot and humid climate, Southern homes had to be open in the sense for air circulation and

ventilation, but this is not the only sense of open that is characteristic of Southern homes. The climate of the South made veranda's more prevalent and promoted a sense of 'outside living'.

> "No antecedent for the front porch, as it is commonly found in the South, can be found in England or elsewhere in northern Europe. The experience of tropical heat and humidity inspired such additions, and verandas are common to African house design" (Burrison 2007).

The porch is an adaptation to climate that serves as more than just a physical protrusion for providing shade. The porch opens up the Southern welcome to all. Southerners sit on porches and talk to the passerby, and the unique structure of the veranda allows them to extend their living quarters. As renowned writer, Alice Walker puts it, "A yard is not just a yard. it is like an extended living room (Walker 1994). Southerners adaptation of shelter is very open, in the sense that Southerners bring the in-home lifestyle to an outdoor setting. These outdoor settings facilitate unique practices such as the reciprocal neighborliness, known as house and barn-raisings, and the social significance of the porch swing (Burrison 2007).

Figure 6.3: Example of Southern Porches and Veranda's

6.2   Food

Figure 6.4: Southern Eatin'

As previously mentioned, Joyner states the South is comprised of a "complex interaction of three major cultural groups- white, red, and black" (Joyner 1999). These relationships are manifested in dialects, in architectural designs, and in culinary styles. Southern food is a blending of different cultural tastes and traditions combined to provide for one taste. As Beck points out,

> "Southern cuisine is a blending of the culinary traditions and the ingredients of three primary groups: Native Americans, immigrants from the British Isles, and West Africans"(Beck 2007)

Collard greens, known as a traditional Southern food, can be linked to many stews of Western Africa. These stews consist of sizable portions of collard greens and some sort of meat (usually goat), and spices.

"The influences of Native-Americans, Africans, Caribbeans, and English settlers have resulted in what we call a core cuisine in the South that one can find from Virginia to Texas" (Beck 2007).

Fried chicken, the Southern preparation of collard greens, and sweet tea, serve as examples to the unique flavor of Southern foods. The culinary tastes of the South are heavily influenced by history and environment. Some know it as the Republic of Porkdom (Beck 2007, Burrison 2007). However, pork is not what unifies the Southern taste. The common thread that links these tastes together is the use of seasoning." frying, roasting, and grilling were all popular cooking techniques and tastes ran to strongly seasoned food"(Beck 2007). Southern food is characterized as being strongly seasoned or in some cases overseasoned. A historical account of Southern food preparation illustrates that,

"The air would be thick with smoke...the smell of sage and pepper, and cooked meats...greasy tables littered with salt and pepper."(Beck 2007)

Figure 6.5: Examples of Southern Cuisine

The empirical investigations of Southern food provide evidence that suggests the theme unifying Southern food is that the food is often strongly seasoned by using combination of spices such as black pepper and seasoning salt, and the cooking techniques of frying and grilling. In some cases, and in some cases these cooking techniques and seasoning are considered to be overly done, resulting in food that is overseasoned.

CHAPTER 7

MAN

The Deep South is often characterized by Confederates, slow living, and racism, but the South in a few words is a very complex region. Not to say that other geographic regions do not share some of these commonalties, but holistically the South's uniqueness is more than subtle. There are many theories that try to address what makes the South so unique. What stands out is the uniqueness of the types of relationships that exist in the South.

One of the threefold components of culture is the relationship between individuals. These relationships are manifested on many levels and in many instances. However, relationships can be easily observed and are primarily manifested in the form of institutions (Geertz 1973). Oxford English Dictionary defines an institution as "An established law, custom, usage, practice, organization, or other element in the political or social life of a people." Institutions are well-established or familiar practices that serve as facilitators for abstract ideas. For example, financial institutions facilitate the exchange of value (value in this sense meaning a consideration of worth) with value being a concept. Institutions can either be financial, social, or academic.

The institutions that will be examined in this study are those of economy and education. Comparable to the uniqueness of environment, there also exists a similar uniqueness in Southern institutions. One statement that can be made of Southern institutions is that they possess embedded complexities. Some institutions are reliant on and therefore embedded into the framework of a larger institution. The peculiar

institution of slavery was embedded and reliant on the "King Cotton" economic institution (Beck 2007, Calhoun 1837). The complexity of these institutions is not only hierarchal and internal, but also lateral with the economic institutions influencing Southern education. Southern states have a unique way of dealing with academic institutions. Subsequently, core themes of Southern education and economy will be presented after careful examination of these institutions.
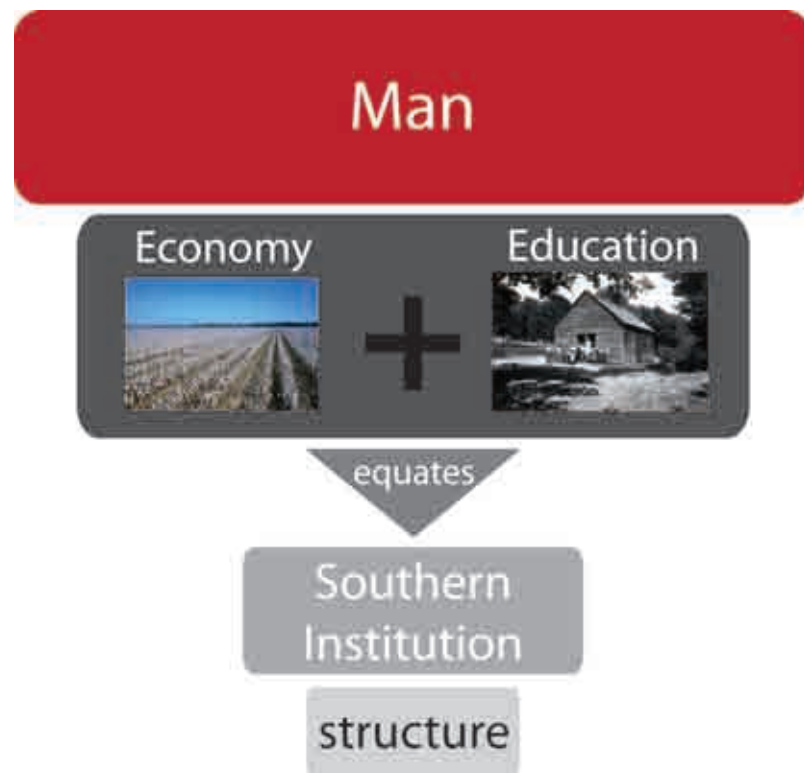
Figure 7.1: Relationship Between Individuals

7.1 Education

Figure 7.2: Southern Knowledge

The South is often stereotyped as being slow, backward, and generally uneducated. A common connotation is that Southerners are ignorant (Beck 2007). In chronicling Southern media, Kirby suggests,

> "The 'allurement' of Dixie spread beyond physical aspects to produce inevitably a mental lassitude as wellThus southern laziness has long implied more than veranda sitting and catfishing. It has meant the absence of thinking, too(Kirby 1986).

These stereotypes do not take into consideration the likes of the Southern writers Twain and Faulkner. However, in spite of the achievements of these men and others, there remains the fact that Southerners are portrayed negatively in reference to education. These connotations cannot be refuted entirely either. As Figure 8.3 points out, in the South 'traditional' education is still lacking. The majority of people 25 years or older without a high school diploma or equivalent are in the tan areas, which interestingly enough makes up all of the Southern states.

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Figure 7.3: People 25 and Older With A Highschool Diploma or Equivalent

The unique way that Southern states dealt with traditional education was simply they did not.

> "Southern states did not have a tradition of public education to build on, as the North did, and in fact, it was well after the Civil War before the South legislated for state supported schools" (Cheek 2009).

This traditional education that Cheek references is one based in a traditional Western perspective. The westernized view of being educated is built on the the view that city culture is 'civilized' and rural culture is 'uncivilized' (Beck 2007). The difference in Southern education is that its unitary aim was directed towards agriculture. It is hard to separate the state of Southern education from the Southern economy. The little education that was received was often not liberal but directed in practical fields of agriculture. In many instances, the South was more concerned with agricultural cultivation than mental cultivation. It was also believed that the "Most important training a child receives is in the home where he/she is inducted into the values of the society he/she is about to enter" (Cheek 2009).

Another reason traditional education did not flourish in the South was because,

"The population was more dispersed than it was in the North, making it difficult to find enough children in one area to justify a school" (Cheek 2009).

In looking at many of the connotations surrounding Southern education it becomes clear that a unifying theme of Southern education is simple. Simple is not meant to be used in the strictest terms, but representing a form of education that is unitarian in aims, typically agrarian based, and lacks depth primarily due to the tradition of it being domestic in nature. As Fig. 8.3 suggests, Southern education is dilapidated and in dire need of renovation and repair. For the above mentioned reasons, southern education is not characterized as non- existent, but insufficient and simple in nature; not complex, sometimes lacking depth and focused on a specific type of development, contrary to the traditional style of education that was liberal in subject matter.

Figure 7.4: Southern School Children

7.2 Economy

Figure 7.5: Cultural Theory Adapted from Boas

According to the *Oxford English Dictionary*, economy is the management of money or financial resources. The institution of economy existed long before the South was even a confederacy. The South's contribution to the concept of economy was their adaption of it to fit their needs. Historical data shows that the southern economy was agrarian-based, and that this economy flourished due to climate, soil type, and slave labor (Beck 2007, Joyner 1999). The geography of the South is conducive for growing various crops. As a result, the South was financially supported by their crops. However, there was more to Southern farming than it being merely a way to make money.

"Farming was not merely a way to survive, it was the best way to live" (Beck 2007).

Southerners did not consider farming just as a way of life, but an exemplary way of life. In commenting with regards to influence of European manufacturing in the colonies, Thomas Jefferson stated in his *Notes on the State of Virginia* that,

"Those who labor in the earth are the chosen people of God, if ever he had a chosen people" (Jefferson 1853).

Jefferson, like many Southerners, believed that an agrarian based society was far better than an industrialized one.

Figure 7.6: Mississippi plantation: late 1800's

The South was characterized by a reliance on the export of natural goods: cotton, tobacco, pork. The pre-Civil War economy of the South was highly reliant on agriculture facilitated by slaves. Cobb expresses that this agrarian ideal is expressed exsisted until the Civil War.

"the antebellum South was a premodern agrarian society bludgeoned to submission by a northern industrial behemoth and reduced thereafter to little more than an agricultural colony for the nation's industrial core" (Cobb 1988).

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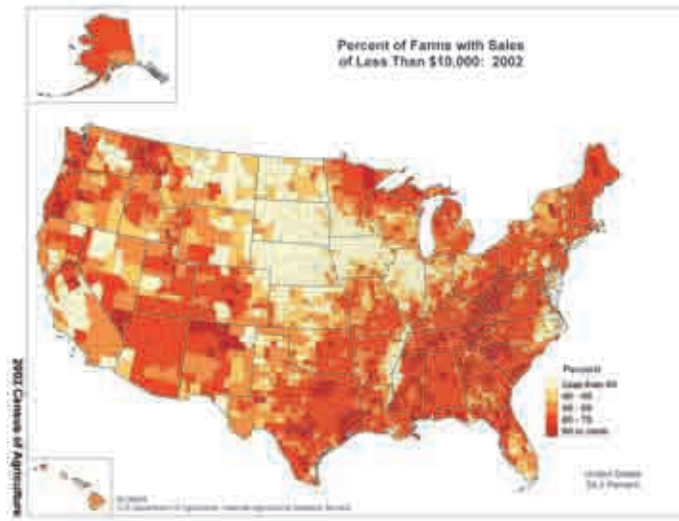
Figure 7.7: Percent of Farms with Sales less than 10K: 2002

Southerners did not create the societal institution of economy; they were born into it. The uniqueness of the southern economy exists in their unique familial relationship with the natural resources.

> "For almost three hundred years, agriculture was the major livelihood of most residents of the American South, and rural lifestyle was the shared experience that tied together a region(Beck 2007).

Although, much of the the post-Civil War South changed after the abolition of slavery and the beginning of Reconstruction, there still remained the shared experience of agrarian life. Figure 8.6 illustrates that the majority of the small farms worth $10,000 or less are concentrated in the South. The economy of the Old South contributed to much of the Southern culture today. From the data provided in this section, an agrarian theme is heavily manifested in the Southern economy.

CHAPTER 8

THOUGHT

The discussion so far has been directed towards the visible elements of culture. Man's relationship with their environment and each other are important parts of culture. These interactions are visible and are manifested physically through perceivable manipulations of environment (e.g. architecture, food, products, etc.), or through explicit structures(e.g. economies, education models, etc.) The manifestations of these two interactions/ adaptations make identifying them, quantifying them, and understanding their relationships to culture relatively easy. However, these are only two aspects of culture; the most difficult to grasp and yet most powerful in influence is the relationship of man to their thoughts.

Inspired by the scripture found in Proverbs 23:7, James Allen's work entitled *As A Man Thinketh* provides anecdotal statements about the power of thought. Allen states that,

"As the plant springs from, and could not be without, the seed, so every act of man springs from the hidden seeds of thought, and could not have appeared without them" (Allen 1902).

Thoughts, ideas, beliefs, and values are the foundation of culture. As Allen suggests, all physical artifacts and organized institutions begin from the "hidden seeds of thought." W.J. Cash also realized the importance of thought , and in his seminal and most prolific work *The Mind of the South*, Cash tries to identify the Southern mind. The title of Cash's book is not referring to biological or physical mind, intellect, or

cognitive processes. Cash's book describes a mentality, a way of thinking, and a way of living that characterizes the South.

To make a sweeping generalization that a certain group of people think the same may appear to be a fallacy; notwithstanding, there exist a substantial amount of truth behind such statements. As Kiesler points out,

> "The class to which one feels he belongs to determines many of his beliefs and actions" (Kiesler 1970).

Also in this same text on conformity, Kiesler states that the most significant form of conformity is the " psychological group- called a reference group." One of the criteria of a reference group is when

> "the person feels that the others in the group are significant to him (them) (emotionally or cognitively)"(Kiesler 1970).

This psychological reference group of the Southerner is what Cash attempts to examine and describe in *The Mind of the South.*

As previously stated, an understanding of a cultures adaptation and relationship to their subjective ideas is a cornerstone in understanding the culture as a whole. Cash elucidates the reasoning behind much of Southern culture. The Southerners' interaction with their thoughts in the form of belief and values will be examined in this study. These two elements provide much of the cultural meaning and serve as the foundation to which many of the Southern institutional practices are built upon, and to a great degree affect many of Southerners' material culture.

The implications of Kiesler's and Cash's work suggest that Southerner's have to share a common mind, because if they did not, then they would only be Southern in name or location, but not in the totality of culture. For this reason it pertinent

that a careful examination of Southern beliefs and values which are components of Southern 'thought' be conducted.
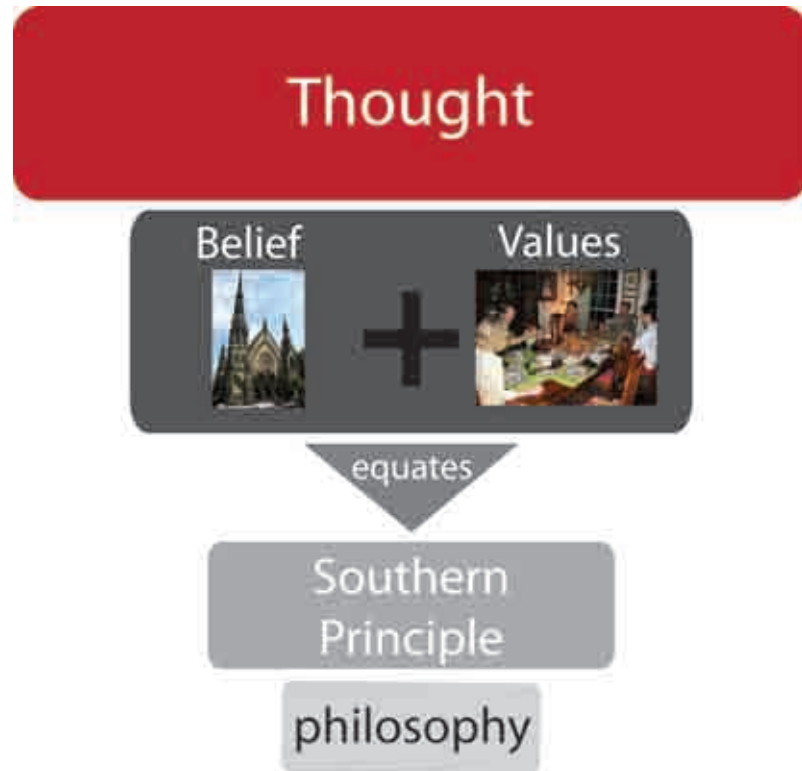
Figure 8.1: Components of Thought

8.1 Belief

BEING SOUTHERN IS THINKING OF CHURCH AS A HABIT, LIKE PUTTING ON SHOES OR SETTING YOUR CLOCK;

Figure 8.2: Church Sundays

Belief is trust, faith, or confidence in someone or something. In looking at the South, it becomes clear that Southerners believe in religion. Southerners do not just believe in any religion, but a specific kind of religion. The South is often characterized as being the land of zealous evangelically Protestants (?Goldfield 2008).The people of the South

> "Are arguably some of the most religious folks in the country if not the world, and the religion they profess and often practice is Christianity, primarily the Protestant version of Christianity" (Beck 2007).

This type of Protestant Christianity permeates Southern Culture.

> "Southern Protestantism,...is inextricably bound to the culture of the people" (Goldfield 2008).

Figure 8.3: Various Christian Denominations in the USA

The Bible Belt is the term used to denote the area of the U.S. in which socially conservative evangelical Protestantism is a dominant part of the culture. The denominational Southern Baptists are a great example of the type of Christianity that characterizes the Bible Belt. According to the data presented Figure 9.3 Southern Baptists are the largest religious majority in the Southeastern United States. One testament to the strong influence that Christianity has in the South is John A. Burrison. In *Roots of a Region: Southern Folk Culture*, Burrison points out,

> "One of the first things I noticed about Atlanta was how many churches there were in the city, and how many of them were Protestant. This, I soon discovered was a reflection of the larger region where Protestant Christianity, often interpreted in a fundamentalist and evangelical way, is by far the dominant faith (Burrison 2007).

This South is centered around the fundamental unity of a Judeo-Christian perspective of life. This perspective and belief permeates the South from its laws to business practices to education. This unified Christian belief serves as a code of ethics for the Southerner and heavily influences a vast majority of activities performed in this region. For example,

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Figure 8.4: Southern Churches

"Evangelical Protestant prayers are routinely recited at ball games and graduation ceremonies with no thought of offending anyone or violating Supreme Court decisions" (Beck 2007).

Southern belief is solid. Solid in this sense of this study is representational of sturdy and immovable foundation on which other objects are built. Just as the formation of a solid cornerstone is the beginning of structural development, the foundation of Southern culture is a solid Judeo-Christian belief system that effects much of the Southerner's perspective of life.

8.2 Values

Figure 8.5: Characteristic of Southern Values

The final examination will be the evaluation of Southern values. Oxford English Dictionary defines value as "to estimate or regard as having a certain worth." The word value has many connotations, but notwithstanding the value discussed in this chapter will be geared towards value that appears in cognitive value systems. Value's are not stand-alone entities but are relative concepts of right and wrong, what not to do, and what to do. (Keesing 1974).

Southerners' values are most visibly manifested in the form of manners. Southern manners are distinctly unique, and in many instances are perceived to be far superior to any region of the United States.

> "For as long as some people have thought of themselves as Southerner's, they have believed that their manners were better than (or at least different from) those of other Americans" (Reed 1990).

Manners are heavily influenced by Southern beliefs of couth and uncouth. These beliefs can be linked to the Christian value system of the solid South.

> "On the positive side, genuine Christian values may help account for the hospitality, and courtesy(Burrison 2007).

This Southern courtesy and hospitality as described by Reed and Burrison are trademarks of the South. Courtesy and hospitality are cornerstones of Southern education (Reed 1990). A cursory look at Southern culture will provide evidence that Southerners are inviting. This anecdotal summation is a different approach from that of the majority of the study, but it provides rich information. Although Reed and others describe the unique and inviting nature of Southerners, mere words do not convey the spirit of Southern values. Aligned with the framework of Geertz, it is true that Southern values can be fully experienced by being an active participant in southern culture. Life is made richer in the South because of the warm and inviting nature of the people that live there (Beck 2007). The above-mentioned descriptions and practical experience support an inviting theme can be associated with the characteristics of Southern values.

Figure 8.6: Inviting Southern Values

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CHAPTER 9

DESIGN APPROACH

The research into design methods, culture, and related theories and concepts provides a theoretical rationale for the method developed for cultural design. This framework uses the information presented in the body of work to verify the steps and procedures so that this approach is repeatable, scalable and flexible. The problem at hand is designing a product that fits a specific culture. This fit goes far beyond physical properties and ergonomic considerations, it involves understanding and display of meaning that can be identified by the user.

The approach taken in this study has strong conceptual ties to the conceptual framework of Lins approach. However, with the exception of material culture, Lin either superficially delved or did not delve at all into the main components of culture. As a result, little translation and synthesis occurred in the mid and inner level hierarchies of his cultural constructs. This study proposes to weigh all elements and aspects of culture equally and combine them in a method so that the product will be a holistic representation of a particular culture.

In surveying design methods, it is clear that the best methods are the ones that solve or resolve the problem at hand. In addition to that, being flexible (being able to withstand time and circumstance), systematic, and scalable are also key features. Therefore, the first step is to provide framework for the study of culture. This was inspired by Franz Boas and similarly proposed by Rin Lin. The next step is to decompose the framework and identify its unique components, inspired by Alexanders pattern language. After the identification of the unique cultural components, they are

extracted and metaphorically represented in the designed product. The subsequent chapters will provide further examination of the developed approach.

- **Step One**- The first step is to actually define culture and then proceed to investigate a specific culture.

- **Step Two**- The second step in this approach is to determine the reason for designing for the specific culture.

- **Step Three**- After determining the reason for design the product needs to be chosen if not done so. Consideration must also be given to the product's location in the Product Life Cycle.

- **Step Four**- The next step is to gather information, recognize patterns, and synthesize information.

- **Step Five**- The design should be developed and finalized in this phase.
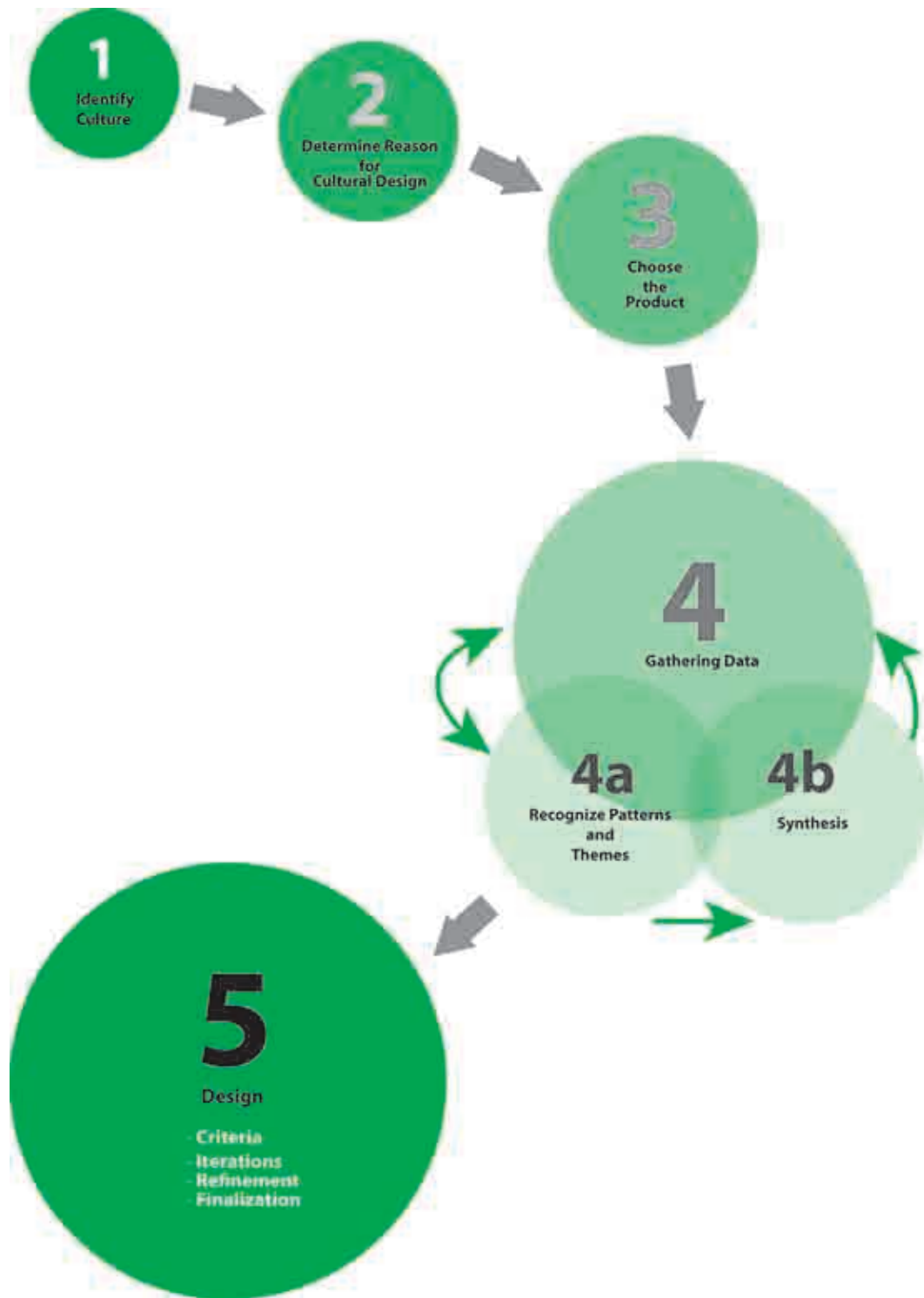
Figure 9.1: Flow Chart of Cultural Design Process

CHAPTER 10

IDENTIFY TARGET CULTURE

The first feat that must be undertaken in designing for regional culture is to identify a specific regional culture. Although, this step might seem as simple as picking a predefined region and identifying culture; it involves a deeper understanding. As pointed by Reed, in the examination of the American South, what is often termed as the geographic region of South differs from the cultural region of the South. For this reason cultural nuances need to be considered. In identifying a target culture and recognizing these nuances it is pertinent that consideration is given to the ways in which language, religion, economy, government and other cultural phenomena vary or remain constant in regions. This is done by observation, performing demographic research, an evaluation of related literature.

Decide on Region – Since this study is primarily focused on regional culture, the first step is to define the region. To define the region the designer needs to be given a proposed region to design for or choose one geographically. If the designer is not given a region to design for by a client or other entity, then they can choose a region by first: choosing a country, identify geographical regions of that country by recognizing areas of common climates, topography, natural barriers, etc.

Demographic Research - Although geography is important, more culturally relevant data can be assessed through demographic studies. Demographic studies

aid in the recognition of spatial commonalities that exist in areas of economics, society, and values.

Observation -When identifying a target culture observational differences should be noted. For example, if the designer is in the culture they should observe how people talk, pace of lifestyle, clothing, rituals, etc. Even if the designer's not an active participant in this culture they can recognize differences and similarities pictorially via web; images of clothing, architecture, etc. This step is not a close analyzation of the culture, but serves as another aid in understanding the the spatial limitations of regional culture.

In this study, Southern polls and demographic maps, in conjunction with the previously defined working definition of culture aid in recognizing and classifying cultural nuances, and also in accurately identifying a target region.

Where Is The South?

	People Who Say Their Community Is In The South	
	%	# of respondents
ALABAMA	98	717
SOUTH CAROLINA	98	553
LOUSIANA	97	606
MISSISSIPPI	97	431
GEORGIA	97	1017
TENNESSEE	97	838
NORTH CAROLINA	93	1292
ARKANSAS	92	400
FLORIDA	90	1792
TEXAS	84	2050
VIRGINIA	82	1014
KENTUCKY	79	582
OKLAHOMA	69	411

John Shelton *Reed South Polls: Southern Values*.
Journal of Southern Cultures (1990); Chapel Hill, NC

Figure 10.1: People That Say Their Community Is In The South

CHAPTER 11

DETERMINE REASON FOR CULTURAL DESIGN

There are many avenues to take when designing for regional cultures. The second step in the approach for designing products that resonate with a specific regional culture is to decide in what manner the product is to be designed. As made evident by the literature review there are three possible ways that one designing culturally.

The first avenue involves redesigning a product that already resonates with a specific culture. In Lins *Transforming Taiwan Aboriginal Cultural Features into Modern Product Design: A Case Study of a Cross-cultural Product Design Model* an example of this this type of design is provided in his redesign of the Taiwanese cup. As stated earlier this type of design is focused on redesigning specific artifacts that are already have a significant cultural relationship to a group of people.

The second avenue that can be taken when designing for regional culture is the approach stated in the introduction to the problem. This second avenue is on that is often refereed to as designing for the other 90 percent. As previously presented this approach is deeply rooted in the concept that Western design is dominant, and is non-inclusive of the rest of the world. Therefore, techniques need developed to design for other nations. This approach focuses on recognizing and understanding needs of a specific culture, and then designing products that are functionally relevant. Examples of this type of design are the Q-drum, Bamboo Treadle, and the Steampunk mobile phone concept presented in the main research. All of the products involve introducing a new product to an existing culture that provides function relevant to the culture.

The third avenue in designing for specific cultures is the approach that uses characteristics of regional culture to redesign products. This approach for product design uses various components of regional culture to design products that are culturally resonant to a specific culture. A theoretical example of this type of design would be taking a house, and using various techniques to evoke the feeling of Pueblo culture, West African culture, Mediterranean culture, etc. This type of design primarily focuses on defining and organizing stylistic elements that are native or characteristic of a specific culture to design products that culturally resonate with a specific regional culture. This type of approach for cultural design is used and refined in this study.

Although, there may be a host of other motives for clearly establishing a reason for designing products centered around culture, the most obvious is the need for direction. When the specific avenue of culture centered design is determined the designer will have have insight into the type of considerations that need less or more attention. For example, If a designer is focused on using cultural characteristics to redesign a product then empasis will be given to the visual and tactile elements more than to functionality. Another example, would be of a designer that is designing for the other "90 percent" might want to pay a substantial amount of attention to the evaluation of local resources, and usability issues. Designers must clearly identify the reason for designing. If this step is neglected, then one might waste time or spend too much time researching an area, that will not have a significant role in the design of the product.

CHAPTER 12

PRODUCT SELECTION

After identifying the regional culture to be designed for, and assessing the proper avenue for design the next step if not already predetermined is deciding on the product to design. In this study since we have no predefined product to design, and we are not designing for a culturally specific functionality we will use the PIPD to aid us in designing a product that will be most appropriates for the cultural redesign.

12.1   Product Life Cycle

Designing for a specific culture is more than understanding the culture of a group of people through empathic studies or using metaphors; it is also important that the right product is developed. When attempting to pick a product to design for this study, it became clear that not just anything would be suitable for a design with a cultural emphasis. The amount to which cultural diversity is reflected in differences between products and product forms depends on the type of products, the situation, and cultural habits.

For example,

> "television sets and ballpoints are typical examples of products where differences, due to cultural diversity, are almost absent. The reason is obvious: the very nature of the production process of mass-produced industrial products does not allow for much variation between batches, and

consumers throughout the world apparently use these products almost in the same way" (De Leur 2006).

In some cases, however, ethnic-cultural variation seriously conflicts with the uniformity principle of mass-production (De Leur 2006). The concepts of the Product Life Cycle (PLC) and the Psychological Indexes for Product Design (PIPD) aid in evaluating the feasibility of designing a product using cultural metaphors.

The concept of products having a life cycle was first introduced by renowned economist, Raymond Vernon, in his 1966 publication "International Investment and International Trade in the Product Cycle," which addressed issues concerning the understanding and prediction of trade and investing. The PLC theory supports the idea that there are four stages that products go through: introduction, growth, maturation, and decline (Vernon 1966). The introductory stage is where product awareness is developed, and the specific market is developed. In the growth stage, the firm seeks to build brand preference and increase market share. At maturity, the strong growth in sales diminishes, but competition may appear with similar products. The primary objective at this point is to defend market share while maximizing profit. During the decline phase, Vernon suggests that the firm's options are to maintain the product by possibly rejuvenating it by adding new features and finding new uses; harvest the product by reducing costs and continuing to offer it; or discontinue the product completely by liquidating the remaining inventory or by selling it to another firm that is willing to continue the product.

12.1.1 Psychological Index for Product Design

An interesting modification of PLC is offered by Luh in the 1994 publication of "The Development of Psychological Indexes for Product Design and the Concepts

Figure 12.1: Vernon's Product Life Cycle

for Product Phases". Luh uses an approach reliant on Vernon's concept of PLC and Maslow's concept of predefined psychological states to help designers understand how consumers perceive products they as through their life cycle.

Figure 12.2: Maslow's Hierarchy of Needs

The insight gained from the PIPD is that there are specific times in a product's life that are more conducive for redesigning with a cultural approach. According to

Luh, when a product is in the maturity and decline phase it is best that the product is meaningful with the appearance of the product "relating to the consumer's cultural knowledge" (Luh 1994). Luh suggests that in reference to appearance in these phases the "form of elements of [the product] must be symbolic." What can be gathered from the concepts of PLC and PIPD is information pertinent in deciding on the feasibility of redesigning a product using cultural metaphors.

Characteristics	Introduction Phase	Growth Phase	Maturity Phase	Decline Phase
Function	Superior	Stable	Class-Conscious Status-Reflecting Appropriate Satisfactory	Workable
Operation	Safe	Capable	Individual Flexible Self-Expressive Fascinating	Amusing Theatrical
Appearance	Novel	Acceptable	Symbolic Storytelling Aesthetic Intuitively Understandable	Symbolic Storytelling Aesthetic Intuitively Understandable

Figure 12.3: Luh's Product Psychological Index for Product Design

The PIPD suggests that products in the decline to mature phases of their life cycle will better connect to the user on psychological level, by being more symbolic and storytelling in appearance. By using the PIPD in this study it was determined that table-lamps have reached the mature/decline phase. However, a special note must be given to those who design for the other 90 percent. Although, it can be done it is suggested that, due to the functional emphasis of the design, it would be best to

gather more information about the culture (*Gather Data* phase) before determining

a the type of proposed solution.
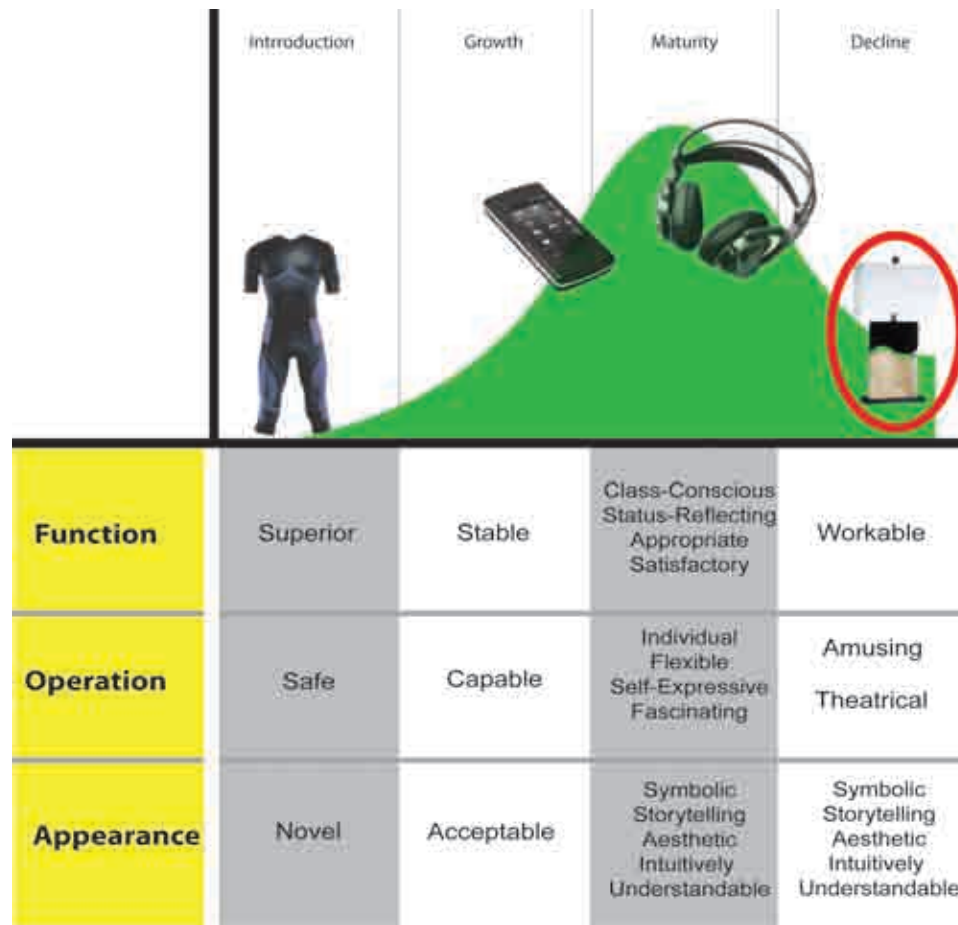
Figure 12.4: Table Lamps' Position On PIPD

CHAPTER 13

GATHER DATA

In the this model gathering data is an ongoing process and can be broken down into two categories. The first category of information, relates to the acquisition of information specific to the physical product, which will be termed technical data, for the purposes of this study. The second category of information, relates to the acquisition of information specific to the regional culture, which will be termed as cultural data, for the purposes of this study.

13.1 Technical Data

The technical data includes anthropometric information, technology requirements, performance criteria, possible usages of the product; product landscapes, to which various products are compared; an evaluation of the possible parts of the product that can be manipulated for redesign, and any other information needed to design the proposed product. However, for the avenue of cultural design taken in this study,the two most useful pieces of technical data are consists of information gathered from the product landscape chart and the evaluation of possible manipulable parts.
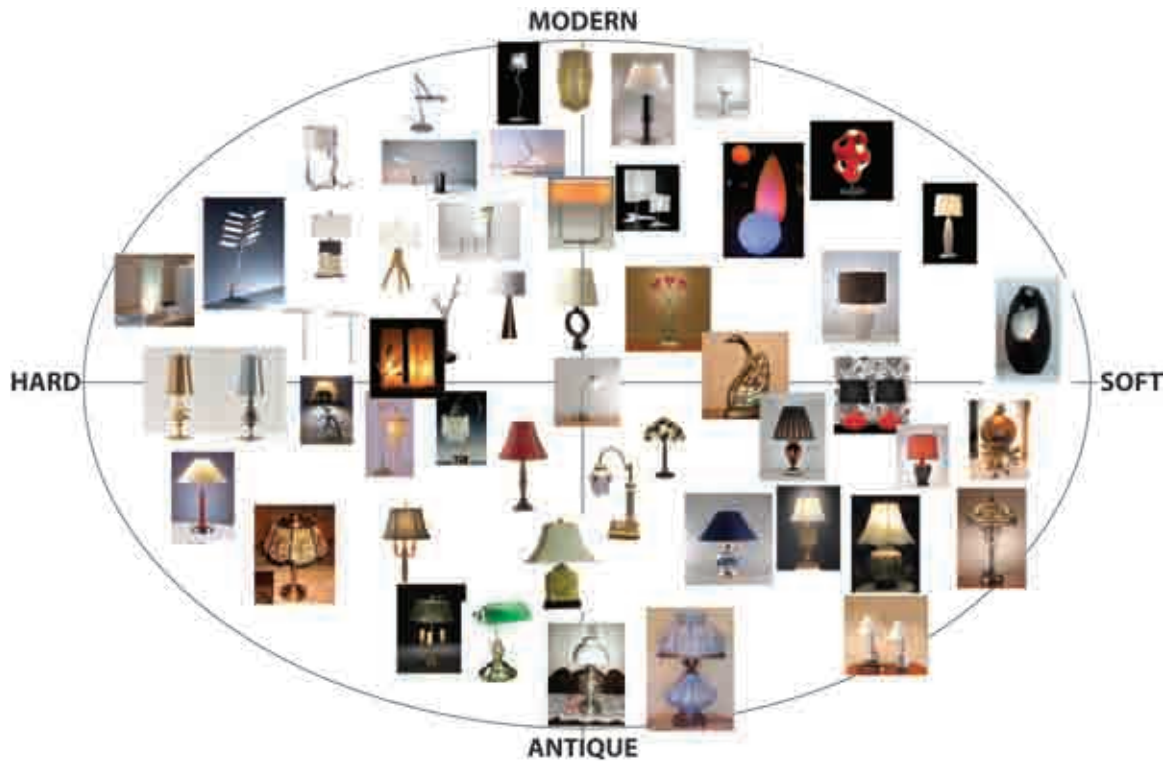
Figure 13.1: Visual Position Chart of Lamps

13.2 Cultural Data

Cultural data can be gained by using emic or etic research techniques, or a combination of both. When emic techniques are used the cultural group defines themselves through interviews, surveys, and questionnaires. Examples of these emic research techniques are used in empathetic design by IDEO, and portions of QFD

13.2.1 Empathic Design

The concept of emphatic design is presented by Leonard and Rayport's "Spark Innovation Through Empathic Design," featured in the winter 1997 Harvard Business Review. In this article, the concept of emphatic design is one where the design is heavily geared towards observing consumers in their everyday, normal context (Leonard

1997). The article states that many user research and observation techniques are marketing-based. The problem presented by this is that these techniques do not address unarticulated user needs or intangible attributes of products. Therefore, Leonard suggests that a more anthropological method be used in designing with an empathic approach.

The IDEO, an international design and human factors consulting company, launched Method Cards in 2003. The cards provide a refined compilation of several user research techniques on which the company bases its own research activities. Most of the techniques described by the Method Cards can also be used to clarify the emotional domain of user-product relationships. The basic argument that shapes the tools and techniques used in IDEO's empathic design approach is to achieve an emotional fit between users and products (Leonard 1997). Even before IDEO's method cards and
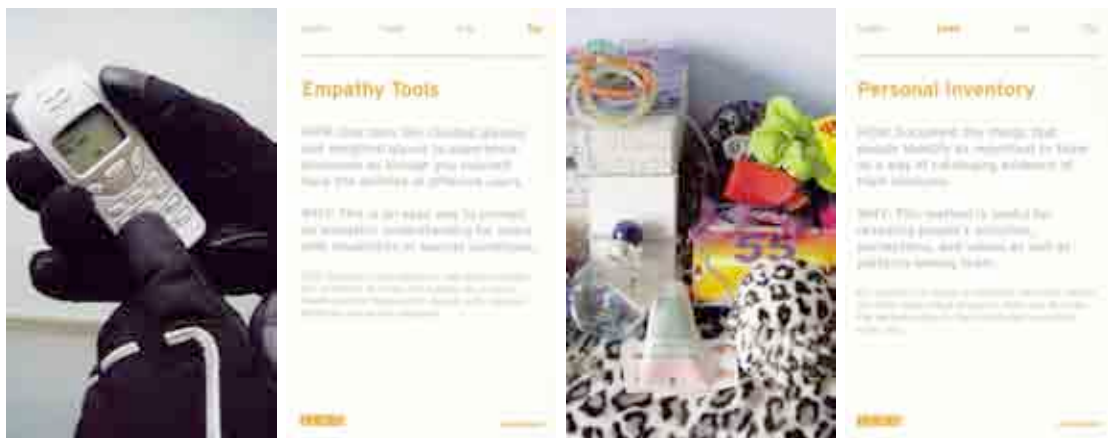

Figure 13.2: IDEO'S Method Cards

Leonard's et al. article, a similar concept of forming a close connection between the user and products existed. Quality Function Deployment (QFD) is a method that transforms user needs and demands into design quality(Terninko 1997). More frequently used in the realm of business and engineering but aligned with the original

intents of design methodology, QFD was originally developed in Japan by Yoji Akao. In 1966, Aako combined his work in quality assurance, quality control points, and function deployment to develop QFD Producing quality, and perceived quality was the crux of Aako's focus. What Aako argues is that in many corporations the user gets lost in the shuffle of marketing, design, engineering, and manufacturing. Only when the customers' needs and wants are truly met can a product can be deemed successful. QFD proposes not only asking, or observing, but actually walking in the users' shoes. Due to the fluctuations of culture, emic techniques are extremely helpful in acquiring an accurate representation of the current state of a culture, when one is unfamiliar or geographically not connected with the culture they are designing for.

In contrast to the emic techniques, when etic techniques are used the designer defines the culture through observation, demographic studies, and written histories and related literature. In this study, etic techniques are used as the main method for gathering relevant cultural data. The information gather includes statistical data, demographical information, commentary on the South, and Southern histories, which is helpful when trying to understand the meaning of certain events, rituals, and objects. This information is very similar to the information obtained in the first phase of this approach however, this phase requires a more detailed, and thorough examination into why there exists differences in regional culture, and not just a mere statement of the difference. Emic techniques usually tend to be more descriptive in classifying a regional culture, while etic techniques provide more prescriptive information for defining a regional culture. However, a combination of both techniques can be used to get a good representation of a specific regional culture. In this study the cultural data used is the information gathered from the section on Southern Culture.

13.3   Recognize Patterns and Themes

While gathering technical and cultural data, the designer can also if they choose begin to evaluate the information in order to discern patterns in products, and themes in culture. While those who will be redesigning existing products that are culturally resonant, and those designing for the other "90 percent" may want to pay more attention to patterns of function and use. Designers that have decided to design using characteristics of regional culture should pay close attention to visual, and tactile elements. Examples of this would be consideration of proportion of elements to each other, colors, shapes, sizes, materials and textures, and any special design elements. The first pattern observed in this study, is that lamps within the antique/soft region resonated with concepts of Southern culture. After coming to the conclusion that lamps in this region were culturally resonant to the South, the next step is to decompose the pattern in an attempt to understand the common elements that made these products culturally resonant. For this study, particular attention was given to visual elements and proportion. An example of this is Figure that not only shows the decorative elements, but also the the proportion of the lamp shade (black) to the base of the lamp (brown), with each brown piece representing the height of the shade without decorative element

Also while gathering data designers can recognize themes in culture. In this study, culture was decomposed to three significant interactions, the adaptation and relationship between humanity and their environment, each other, and their thoughts. These categories were used to aid in classifying cultural themes, as explained previously in the section of Southern culture.

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BULBOUS OR TAPERED SHADE

CURVACEOUS BASES

DISTINCT BASE
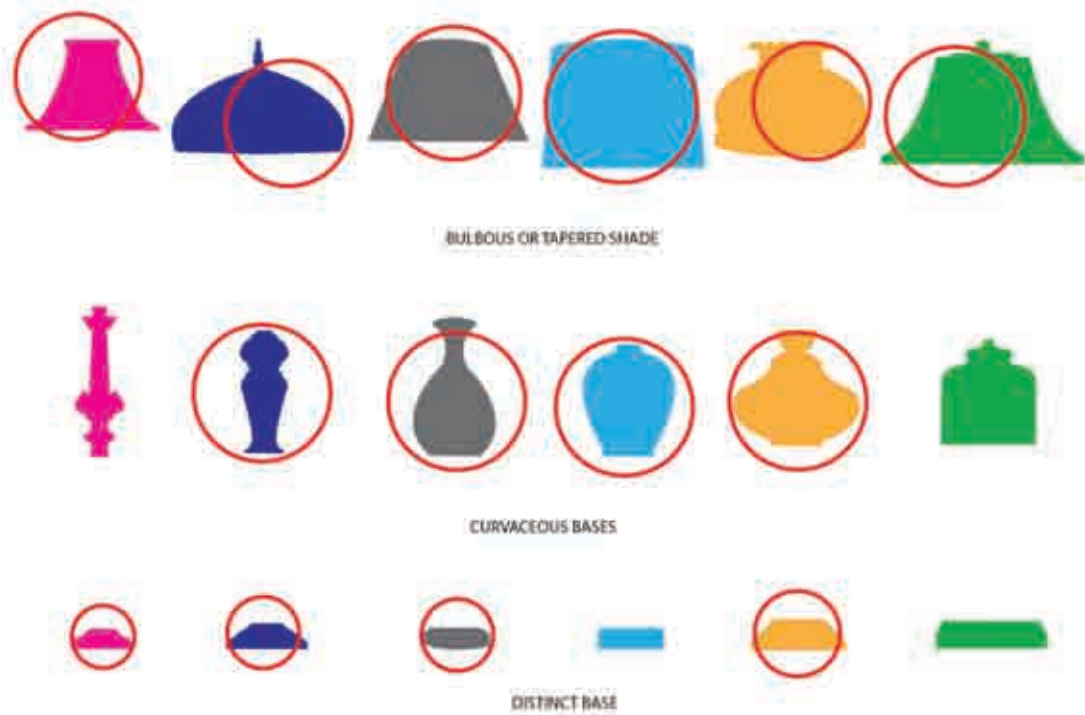
Figure 13.3: Product Patterns In The Antique/Soft Region

13.4 Synthesis

The synthesis phase can occur while and after recognizing the patterns in products and cultural themes. The synthesis phase gives flexibility to the designer and allows them to interpret the data collected and come up with possible solutions for designing. During this study, the synthesis phase involved using conclusions gained after the the recognition of pattern and themes, and coming up with possible design solutions to incorporate this information into the final design of the table lamp.

Examples of the solutions gained from the synthesis phase are that tapered shades

ORNAMENTAL DESIGN ELEMENTS

PROPORTIONAL RATIO OF SHADE TO BODY & BASE

Figure 13.4: Decorative Elements and Proportion

should be used in the final design due to their prevalence in the lamps that are resonant with Southern culture. Another example of the synthesis in this study is the combination of the open theme observed in Southern architecture with the ornamental pattern in the final design. Sketches are used during this process so that concepts could be clarified. These sketches were performed during a brainstorming session. The focus is to get preliminary ideas down on paper so that an initial design direction can be put in place.

Brainstorming

The themes of open and overseasoned, simple and agrarian, inviting serve as metaphors for elements to be considered in the design elements of the table lamp.

Figure 13.5: Concepts from Brainstorming Sessions

CHAPTER 14

DESIGN

The last phase in the design of products using components of regional culture is the actual physical design of the object. The design phase uses previous information gained in the previous phases to provide an insightful and culturally relevant design.

14.1   Design Criteria for Table Lamp

The creation of a design criteria is imperative to producing a final design. The design criteria, just like deciding the appropriate reason for designing, provides direction to the designer. The criteria is a list of all required features for the final design. For this design, the required features are centered around the integration of cultural themes and product patterns with the table lamp.

- Include a Tapered Shade

- Bulbous and Curvaceous Body

- Distinct Base

- Decorative Design Element/ Ornamentation

- Include as many as the cultural themes possible -agrarian(revolving around farming) -seasoned (well seasoned, and sometimes overly seasoned) - open (bringing the inside to the outside) -inviting(welcoming in nature)

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14.2 Design Iterations

After the features have been defined then the process of form iterations begins. Iterations of a proposed concept unlike the brainstorming session have some structure. Using the principle of shape grammars, various designs are developed by modifying the base form within the given parameters. The given parameters are merely to not compromise the proportion and structure of the base form that was decided upon. Iterations were made to the base form to incorporate the the Southern metaphors. The various iterations attempt to reflect metaphors for open, over-seasoned, agrarian, simple, solid, and inviting. However, consideration was given to the concepts of traditional and conservative.

Figure 14.1: Various Iterations Of The Lamp's Shade
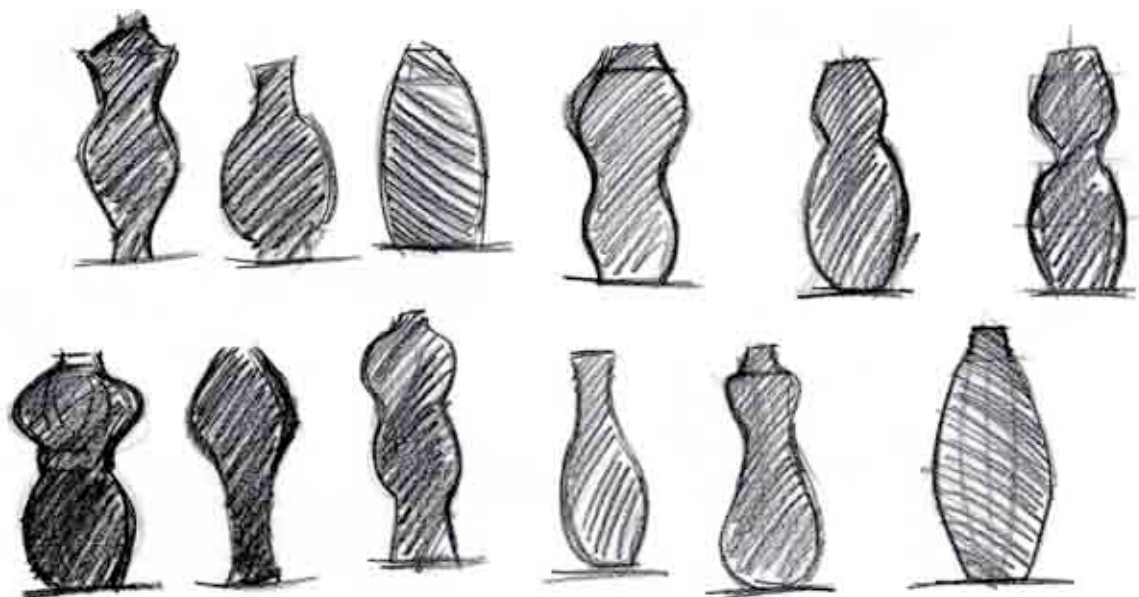
Figure 14.2: Various Iterations Of The Lamp's Body
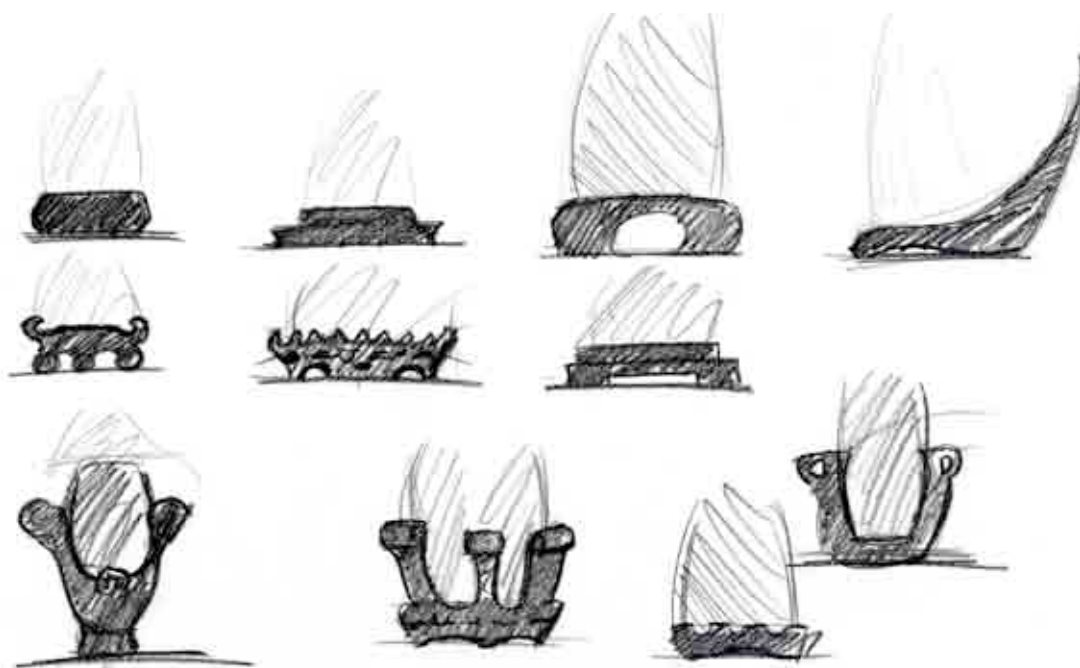
Figure 14.3: Various Iterations Of The Lamp's Base

14.3   Design Refinement

The design refinement focused on the technical features and dimensions of the product as well as production details that would enable the concept to be manufactured.
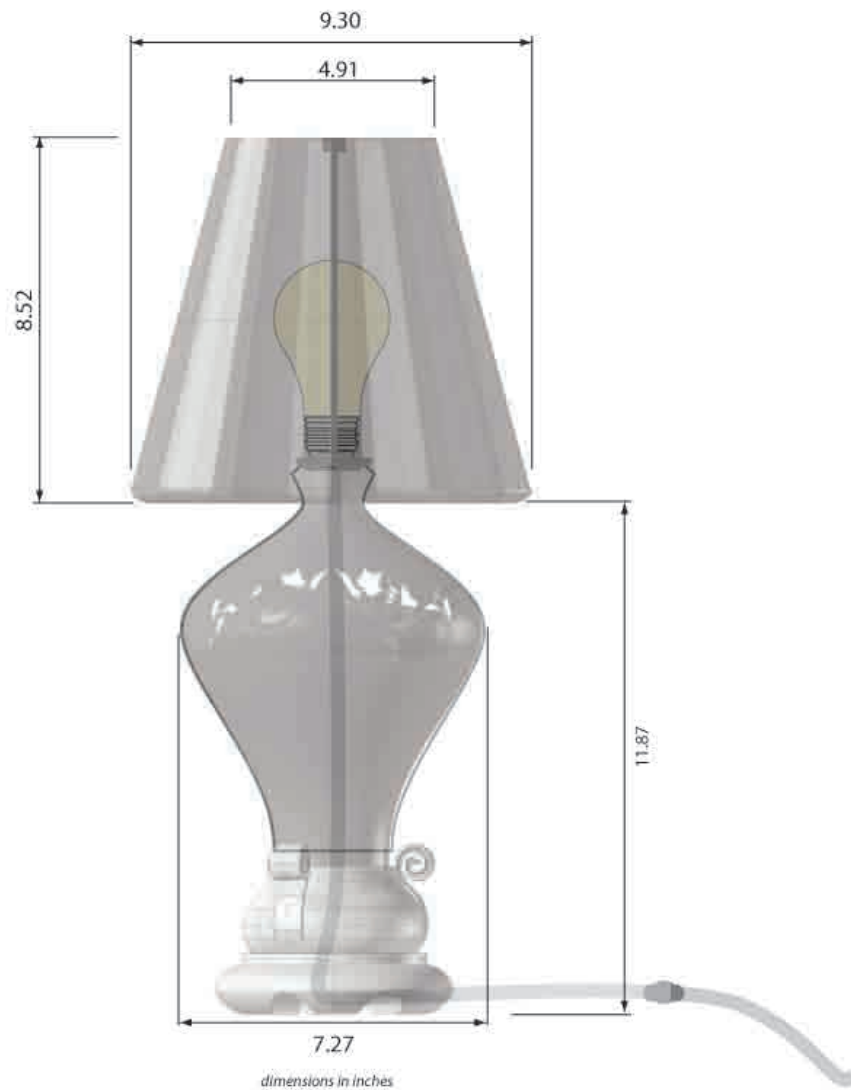
Figure 14.4: Refinement: Key Dimensions of Table Lamp

14.3.1 Final Design

Figure 14.5: Final Design: The Southern Lamp

The final design the design reflects the quality of open in the decorative openings in the base, the peppered decorative openings in the body of the lamp also demonstrate the application of the seasoned theme. The use of natural materials such as mahogany and maple in the body, and woven shade represent the agrarian connection that many Southerners can identify with. The theme of inviting is represented in the soft emission of light from the lamp.

CHAPTER 15

CONCLUSIONS

Although, a framework was developed in this study to assist all industrial design-
ers in designing for regional culture it became apparent in the study of the South that
one should be an active participant in the culture they are designing for. Cultural
anthropologist Clifford Geertz suggest that the study of culture is an interpretive
science in search of meaning. Therefore, without a understanding of the back-history,
and "why things are the way they are" a cultural study will lend itself to nothing
more than a accumulation mere observations.

The framework for identifying the components of culture provide structure for
cultural studies by the industrial designer. However, some difficulties were noticed
in the synthesis and application of two themes. The hardest themes to apply to the
lamp were the themes that centered around the solid Christian based belief system,
and the inviting Southern values. The difficulty arose due to the substantial amount
of subjectivity needed to sum up Southern beliefs and values with such few words.
Words like Christian and Baptist were considered because they effectivley communi-
cated the concept of the Southern belief. However, these words are very specific and
do convey the essence of Southern belief, and do not demonstrate how the Christian
based belief system permeates the lifestyle of many Southerners.

Therefore, further study into to the effectiveness of this framework is needed.
Ideally the next step in validating this framework would be to apply it to the design
of a product in another geographic region and then perform a market survey on the
effectiveness in communicating regional culture.

If successful, then this approach will be of great value to those in the business and marketing sector, who already acknowledge the need for connecting to the consumer on a visceral level.

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Survey of Southern Manners

	Residents of the South		Residents of Non-South	
	Then (%)	Now(%)	Then(%)	After(%)
Do as told by adults	98	93	95	89
Call adults "Mr." and "Mrs."	91	85	80	72
Call grownups "sir" and"ma'am"	82	80	52	46
Write thank-you notes	77	80	72	79
Were taught/teach their children to call grownups "sir" and "ma'am"				
Region of Residence				
Deep South	90	90		
Peripheral South	78	76		
New England			46	31
Middle Atlantic			60	58
East Central			55	45
West Central			45	45
Mountain States			45	36
Pacific Coast			42	39

John Shelton *Reed South Polls: Southern Values* .
Journal of Southern Cultures (1990); Chapel Hill, NC

Suvery of Southern Manners

Survey of Religious Tendencies
(North Carolina, California, Ohio, Massachusetts)

	NC	CA	OH	MA
Total # Polled	649	655	661	655
	% of those polled			
Raised Roman Catholic	8	33	28	59
Roman Catholic now	6	26	27	48
Raised Baptist	43	11	15	2
Baptist now	39	10	13	4
Present religious affiliation same as one raised in	74	63	70	73
Never had any other affiliation	66	58	67	70
Attended church "hardly ever" or "never"				
-at age 10	2	9	6	4
-at age 20	23	41	41	40
-now	20	43	38	40
Never been two years without going to church	61	41	56	49
Religion "very important " in life	68	47	53	37
Pray daily	69	55	61	45
Read Bible in last year	79	59	69	40
"Born again" (asked of Christians only)	66	39	41	22
Believe Bible is literal word of God	62	38	45	25
Own religious views are shared by				
-most of family	81	68	76	73
-most of daily contacts("don't know" excluded)	68	50	57	51
Most close friends go to same church as respondent (asked of churchgoers only)	21	15	17	13
"Feel close" to many				
-relatives	42	39	43	38
-friends from school	15	15	17	17
-coworkers(asked of employed only)	49	37	42	34
-who go to same church (asked o churchgoers only)	45	37	42	34

John Shelton *Reed South Polls: Southern Values* .
Journal of Southern Cultures (1990); Chapel Hill, NC

Survey of Religious Tendencies

Survey of Values
(North Carolina, California, Ohio, Massachusetts)

	NC	CA	OH	MA
Total # Polled	649	655	661	655
	% of those polled			
Politically "conservative" or "extremely Conservative"	38	29	31	27
Agree that questioning old and accepted ways just causes trouble	29	19	19	16
Agree that labor unions have too much power	67	51	53	52
Believe government should spend				
–less on welfare	62	45	50	46
–more on defense	35	22	20	22
–more on protecting environment	92	90	86	92
Believe abortion is always wrong	35	26	34	21
Believe abortion to limit family size is not always right	60	44	61	46
Believe cheating on taxes is always wrong	80	64	72	62
Agree that the husband should have the main say-so in marriage	42	27	26	19
Agree that local news is more interesting than national and international	43	37	35	31
Has more respect for someone locally established than for someone well known, but without local roots	49	38	38	36
If able to live anywhere, would choose to live in same community	59	48	47	40

Survey of Southern Values

Where Is The South?

	People Who Say They Are Southerners	
	%	# of respondents
MISSISSIPPI	90	432
LOUSIANA	89	606
ALABAMA	88	716
TENNESSEE	84	838
SOUTH CAROLINA	82	553
ARKANSAS	81	399
GEORGIA	81	1017
NORTH CAROLINA	80	1290
KENTUCKY	68	584
TEXAS	68	2053
VIRGINIA	60	1012
OKLAHOMA	53	410
FLORIDA	51	1791

	People Who Say Their Community Is In The South	
	%	# of respondents
ALABAMA	98	717
SOUTH CAROLINA	98	553
LOUSIANA	97	606
MISSISSIPPI	97	431
GEORGIA	97	1017
TENNESSEE	97	838
NORTH CAROLINA	93	1292
ARKANSAS	92	400
FLORIDA	90	1792
TEXAS	84	2050
VIRGINIA	82	1014
KENTUCKY	79	582
OKLAHOMA	69	411

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Survey of Where The South Is Geographically Located