

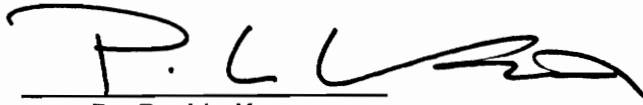
Towards an Understanding of Vernacular Domestic Habitation

by

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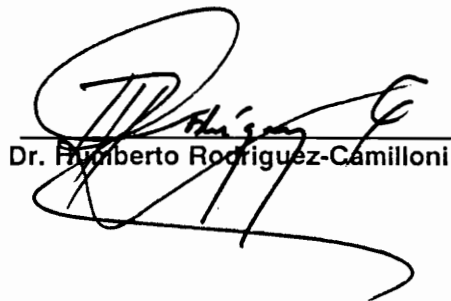
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CHAPTER I

1.0 Introduction and Purpose of the Study:

Over the past two decades the phenomenon of vernacular dwellings and habitat has attracted attention from observers in diverse fields, particularly architecture and planning. Simply defined, vernacular architecture refers to non-formal architecture: non-monumental structures that are erected without professional designs or official involvement. It is an expression of the house and its surroundings which function both as the activity of residing and also, encompasses the manifold cultural aspects of domestic habitation. The threshold of vernacular design primarily focuses on not just the building itself. It looks at the system of the setting including buildings of different types, open spaces, streets and alleys, all of which together create the cultural landscape (Rapoport, 1982a)¹. The system supports the activities of residents in differing and highly culture-specific ways. For architects and social scientists, studying vernacular habitations can be an innovative way to learn the diversities of socio-demographic, cultural and psychological issues of grass root domestic habitation.

Sporadic research during 1900-1960 (Oliver, 1969, Sanders, 1990) helped little to legitimize vernacular settlements as a meaningful area of investigation. On the one hand, there were anthropological studies that looked only at social customs and kinship structures. In others, the emphasis has been on morphological classification. In both cases, unfortunately, the spatial dimension concerning architectural principles received very little attention (Rapoport, 1969, Oliver, 1987, Kent, 1990, et.al.). This obvious gap in the literature yielded new sets of studies (conducted by both designers and social scientists) that integrated different attributes of cultural/social issues and spatial/environmental issues at the same time. The new thrust resulted in a movement that

¹"An Approach to Vernacular Design", Rapoport, 1982a, p.44.

opened the doorways behind the dazzles of chrome and glass architecture. Researchers like Amos Rapoport, Paul Oliver, Bernard Rudofsky became the forerunners, inquiring into something that is simple and natural. This became apparent particularly in the light of domestic dwellings where family members are intimately associated with the buildings, the settlements and the land to reflect their own identity.

Debates and ambiguities revolve around the term "vernacular" to justify its meaning and differentiate from others like "indigenous", "traditional" etc. Section 1.4 provides insights to these terms in order to clarify their appropriate usage.

1.1 Character of the Field and Scope of the Paper:

Literature encompassing the arena of vernacular settlements is a vast one indeed. Design practitioners, including architects, planners and landscape architects are developing an interest to study the differences in built forms existing cross-culturally throughout the world. At the same time, social and behavioral scientists are expanding their horizon of anthropological understandings of the built environment. Searching through the literature, one observes that other disciplines besides architecture, are grappling with same issues, exploring from the same historical and/or cross-cultural perspectives but nonetheless, approaching them from different theoretical orientations and epistemological processes. Such disciplines include anthropology, cultural geography, archeology, environmental psychology and sociology. These "man-environment behavior studies" as one might interpret broadly define the domain of our interest. The character of the field is not limited to strict boundaries of the disciplines. Spatial and temporal dimensions of human behavior necessitate overlappings and exchange of ideas among researchers.

The present paper is positioned to advocate a core concept fostering the central theme

of vernacular habitation. The approach will be interdisciplinary with epistemology (ways of knowing), theoria (ways of theorizing), praxis (ways of acting) and ontology (ways of being-existing) as valid areas of investigation. By presenting a critical review of selected literature this paper seeks to unite different concepts and phenomena, relating implicitly or explicitly to the subject of vernacular habitations.

The primary purpose of the paper is to identify and analyze some of the key issues fundamental to any vernacular domestic habitation. A secondary purpose is to present an interdisciplinary perspective that may lead to a more comprehensive understanding of the topic. Some of the books in the reference list provide a good starting point for the reader who can further cultivate by exploring the network of secondary and tertiary sources. The concluding chapter also refers to other sources that are certainly worth investigating.

1.2 Brief Historical Background on the Evolution and Definition of the Concept:

Nearly two decades ago, Paul Oliver in his book Shelter and Society stated:

"Of the many works in the series of Pelican History of Art, which has published on art and architecture of India, China, Japan, South America and elsewhere, none have seriously considered the non-formal buildings of the countries in question or made a serious study of the other vernacular and folk arts within them, they are still considered with the monumental structures which conform to tenets of large scale architecture"².

Also, as he mentioned, the volume on "Tribal Art" only featured a very insignificant collection of vernacular buildings across the world.

Even James Fergusson's book A History of Architecture in all Countries from the Earliest

²Shelter and Society, Oliver, 1969, p.7.

Times to the Present Day and Sir Bannister Fletcher's book A History of Architecture on the Comparative Method devoted very little attention to vernacular buildings. Fergusson realized that "ordinary shelter is easily provided, but, monumental and ornamented shelter or in other words, architecture, is one of the most prominent of fine arts"(Fergusson, 1874)³. Thus, to some extent the prime element of focus has been size and grandeur. Interestingly, however, Fergusson left the reader a tantalizing clue in his reference to the concept of "ethnology as applied to architecture". He mentioned in his book that, different races produce different forms of dwellings which are expressed through feelings and cultural background. Unfortunately, no further discussions were made in this regard. To this end, Oliver argued that although Fergusson was considered to be one of the founders of architectural history, he dealt only with monumental works and emphasized the designs and forms of the structures. He never dealt with the relationship between the ordinary buildings and the societies that produced them.⁴

On the other hand, Spiro Kostof's book A History of Architecture: Settings and Rituals at least presented historical evidence of ancient "houses" together with architectural features of conventional monuments, temples and churches.⁵ In connection with ancient structures of Stone Age Europe, Kostof presented historical documentation of Neolithic residential communities, discovered in present day Netherlands and Scotland. He also described how settlers normally lived in small individual houses in those days. On a cross cultural level (across different cultures) Kostof did not restrict himself to only monumental architecture. He believed that "history of architecture" must incorporate the story of ordinary dwellings build not only by the dwellers but also for the dwellers.

³A History of Architecture in all Countries from the Earliest Times to the Present Day, Fergusson, Vol.I, 1874, p.4

⁴Shelter and Society, Oliver, 1969, p.8.

⁵History of Architecture: Rituals and Settings, Kostof, 1985, p.27.

Over the past two decades scholars and researchers have put forward different interpretations of vernacular architecture. The following definitions and brief elaborations which constitute a representative sample of the domain will provide an overview of the meaning and evolution of the idea of vernacular architecture.

1.3 Some Popular Definitions of Vernacular Architecture:

Paul Oliver in his book, Dwellings-The house Across the World (Oliver, 1987) perceived vernacular architecture as the folk equivalent of formal architecture. He developed an analogy: "folk architecture is to formal architecture as vernacular language is to the language of the court".⁶ This concept produces the linguistic metaphor of vernacular architecture to architectural theory. According to him, the term has evolved to signify local and regional building forms, especially domestic buildings, that alter with culture and different environmental and climatological set up. Moreover, these buildings do not illustrate so-called technically-drafted design made by professionals, but, rather, depict a powerful command over particular form, pattern and use of materials which the trained architect may not acquire through his sophisticated training (Hitchcock, 1963).⁷ These definitions at least conform at the general level that, the term vernacular (the language or dialect of a particular region), when applied idiomatically to buildings, certainly bear a metaphoric appropriateness.

A respect for local and regional traditions and an affinity towards local conditions, often produce regional vernacular architecture. Both Glassie and Heath pointed out that such architects are influenced by local resources and culture-specific activities of a region. They tend to retain

⁶Dwellings-The House across the World, Oliver, 1987, p.9

⁷Introduction to World Architecture, An Illustrated History, Hitchcock, 1963, p.11

originality by blending regional resources and authentic building form that stems from a purely traditional point of view (Glassie, 1984 & Heath, 1988).⁸ Even history has witnessed the works of Alvar Alto, an ideal in this case as someone who was brilliantly conscious of his origins in Finland. But the question still remains as to what type of buildings are we looking for and if we necessarily equate vernacular with tradition?

Published in 1964, Bernard Rudofsky's book Architecture without Architects used the term "non-pedigreed" architecture in connection to vernacular buildings. He felt the need for a more structured inquiry for vernacular buildings because they are relatively less known and hardly bear a significant figure parallel to formal known structures. He did not volunteer to advocate a suitable terminology, rather, he suggested a generic profile name such as anonymous, vernacular, or spontaneous that applies to all buildings that are designed and constructed without the supervision of architects.

Architects like Lutyens, Voysey, Deutcher and Werkbund were carried away with the romanticized history that catered to the harmony and simplicity of vernacular dwellings (Oliver, 1969).⁹ They focused on European domestic buildings such as the English cottage or the Swiss Alpine house. In the United States studies on Texas Log houses or the Red Barns of Wisconsin also attracted few architects (Jordan, 1982).¹⁰ As early as 1930, conservation lobbies in Europe and United States recognized the value of these dwellings as objects symbolic of a heritage. Also, national surveys and folk architecture museums started documenting and recording regional building forms. Unfortunately, in both cases only a handful of Europeans and Americans ushered in the spirit of this early twentieth century vernacular movement. Perhaps they intended to express

⁸"Vernacular Architecture and Society", Glassie, 1984, p.9 and "Defining the Nature of Vernacular", Heath, 1988, p.2.

⁹Shelter and Society, Oliver, 1969, p.16.

¹⁰Texas Log Buildings-A Folk Architecture, Jordan, 1982, p.11.

the philosophy behind functionalism or romanticism as the guiding factor for construction of vernacular buildings. This movement was just a temporary spark at that point in time, with virtually no proponents to develop a theoretical understanding on the topic.

Idea of vernacularism also inspired Frank Lloyd Wright and Le Corbusier. Although the mainstream of their work did not advocate vernacular habitation in particular, in their own way their work embraced indigenous objects and regional characteristics.¹¹ Therefore, a brief exposition of F.L.Wright's and Le Corbusier's attitude towards vernacular architecture is worth mentioning.

Wright's observation on vernacular forms were publicly acclaimed through his writings and lectures in Europe around 1910 (Oliver, 1969).¹² He realized that study of vernacular forms could help the modern architect by teaching him the innate principles and the perceptions of nature. Critically reviewing Renaissance, Baroque and Rococo architecture, he pointed out that these styles were developed not from within the soul but, for merely representing the meaning of exotic. As a counterpoint, Wright referred to the folk buildings which he felt constituted a growing "response to the actual needs, fitted into an environment by people who knew no better than to fit them to it with native feeling" (Wright,1936).¹³ Wright emphasized the use of materials such as timber, straw and thatch instead of reinforced concrete. According to him, dwellings should be viewed in the open, they should reflect a feeling of what he called "organic" or closeness to nature. However, his writings did not effectively provide directions as to what socio-cultural inquires are essential to comprehend the essence of vernacular dwellings. The extensive use of

¹¹Both of them supported vernacular architecture and wrote about it. Wright's "Prairie Style" was regional in its fit and derivation. Indian and Algerian works of Corbusier often cited local construction techniques and dwelling forms.

¹²**Shelter and Society**, Oliver, 1969, p.16.

¹³"Organic Architecture", Wright, 1936, p.182.

the term "folk buildings" found in his work appear to be synonymous with what is understood as "vernacular forms".

Corbusier's response to vernacular forms were directed at its functional basis. French villages and country houses constituted his sources of inspiration and he felt that vernacular houses reflected the rhythms of life. He admitted that they are built intelligently, economically, and have a friendly and amiable welcoming ambiance. Hierarchy of functions and their distribution over space prevailed in vernacular domestic buildings. Corbusier considered these to be "the stuff of architecture" (Corbusier, 1946).¹⁴ He limited his definition to domestic/residential houses found in the French countryside. He suggested that study of vernacular buildings should be incorporated into regular architectural curriculum but, once again, no mention was made as to how it could be linked to other social science disciplines.

So far, an attempt has been made to establish the idea of vernacular architecture at least, through the perceptions and definitions provided by different scholars. At this point it is essential to briefly elaborate upon the rationale that lies behind the selection of the term "vernacular".

1.4 "Vernacular" - Is it the Most Appropriate term?

In connection with vernacular architecture, terms like "indigenous", "primitive", and "traditional" are often found among popular writings (Oliver, 1987).¹⁵

1.4.1 "Indigenous" in Lieu of "Vernacular":

¹⁴Towards a New Architecture, Corbusier, 1946, p.26.

¹⁵Dwellings-The House across the World, Oliver, 1987, p.9.

The term "indigenous" appears to be less metaphoric and often fails to justify the true meaning. This is because in many cases there are influences of foreign societies on domestic buildings. Also, many forms are carried to a particular region from a different area or have borrowed features that are found in other localities.

1.4.2 "Primitive" in Lieu of "Vernacular":

The term "primitive" appears to be somewhat appropriate at face value, but there are arguments not in favor of its use. On the one hand as Oliver points out, it could imply primitive people who build them and, on the other, it might just interpret a primitive origin to architecture (Oliver, 1987).¹⁶ In either case, vernacular buildings are not always erected in the so called "primitive world" that virtually lacks any development as the ordinary reader would have interpreted. They can be erected by primitive men but, the builder in question or the society as a whole may not be backward (Strauss, 1963). Also as Fitch points out, "primitive" describes buildings of preliterate societies, whether historical or current whose general knowledge comes from the word of the mouth, tools are usually designed of pre- iron age and the industry is mainly handicraft oriented (Fitch, 1960).¹⁷ However, buildings of our interest produce a wide array of styles, a wide spectrum showing that there is more than one way to build.

1.4.3 "Traditional" in Lieu of "Vernacular":

Certain arguments have also been forwarded in connection with the term "traditional". As

¹⁶ibid., p.9.

¹⁷"Primitive Architecture and Climate", Fitch and Branch, 1960, p.133.

Rapoport argues (1989)¹⁸, tradition indicates "old" or "of the past", but it is not quite clear as to what is old or when it is old or even when does it become old? Use of this term is relative and contextual. There are no evidences whether it relates to preliterate, precontact, precolonial or even preindustrial societies.

A primitive or traditional society is not backward or retarded. It is characteristically ancient but simple and rather less complicated than more advanced societies (Redfield, 1947, Levi-Strauss, 1964, Glassie, 1984). Settings of vernacular habitations are mostly non-urban, but not always strictly rural. In Third World countries older parts of big cities, urban peripheries and often old medium sized towns house traditional pattern oriented building forms. Dominant elite families reside in their ancestors' homes that still retain their own cultural-structural set up (with very little intervention of Western or foreign influence on food, clothing, habits of living etc.). Therefore the term is least appropriate to apply to these buildings, suggesting a social condition and economy unlikely to operate where such buildings exist. Discrepancies and controversies as mentioned in all the above cases led to the acceptance of the more popular term "vernacular".

1.5 Evolution of Vernacular Domestic Habitation (VDH) in the Light of "System of Settings":

Amos Rapoport's viewpoint of vernacular design (not architecture or building per se) as a "system of settings" has been based on the preamble that vernacular design is an integral part of any settlement. Together with high style design it forms a system and both are not necessarily mutually exclusive. In the article titled "An approach to vernacular design" Rapoport (1982a) emphasized the use of the term design in lieu of architecture. He felt that the threshold of vernacular design focuses on not just the building itself but a collection of a variety of buildings

¹⁸"On Attributes of Tradition", Rapoport, 1989, p.80.

(of many types and uses), open spaces, streets, all unified in a system of setting. Typically, these vernacular creations comprise the settlement as a whole within which human beings interact with one another and also with nature on a one to one basis.

The systems approach does not inquire into the architectural nitty gritty of any structure in particular. Instead, it considers buildings in association with the settlement to which they belong. To offer an example Rapoport referred to the Acropolis and Agora in Athens. He wrote: "It is the relationship between the high-style spaces and buildings and the vernacular fabric (in the above example the courtyard houses, the narrow twisting streets, the very different materials, colors, ambience, and sensory qualities) which gives meaning to both the high-style and vernacular elements."¹⁹ Dwelling comprises the setting or system of settings in which a particular set of activities occurs. Examined in different cultures it is found that very different systems are involved and one must consider the house-settlement system (1982b).²⁰ The five W's viz. who does what, where, when and including or excluding whom, form the nucleus of inquiry.

Thus the built form can never be looked in isolation from the lifestyles, customs and expressions of the inhabitant's cognitive framework of mind. These inhabitants are continuously engaged in the person-nature dialogue of the built environment. Different cultural groups exhibit their own specific sets of activity patterns which in turn are reflected in their vernacular system of habitation.

Rapoport approached the topic of vernacular design with an aim towards learning new lessons from it. Throughout the paper the focus will be on theoretical issues associated with domestic settlements as a whole and not just any specific structure. Accordingly, the term

¹⁹"An Approach to Vernacular Design", Rapoport, 1982a, p.44.

²⁰"Identity and Environment", Rapoport, 1982b, p.9.

"architecture" might not be appropriate on the ground of misleading to just the structure or forms of houses. Also, "shelter" and "building" carry a rudimentary association and perhaps restrict to just the generic context of an activity.

Based on this perception the term "vernacular domestic habitation" appears to be more appropriate in lieu of "Vernacular architecture/building or shelter". On the one hand, it will encompass the product characteristics of the built form like relation to the site, influence of physical qualities or effect of cultural and societal attributes. On the other hand, it will feature a process component to present an explanatory approach of micro level social, cultural and behavioral characteristics/relations and symbolic meaning that generate the built form. Vernacular domestic habitation incorporates a definition that effectively integrates features of both product and process dimension of the subject. In the following chapters, VDH will be used for brevity. Besides "vernacular", the dictionary meanings of the words "Domestic" (relating to household or the family) and "Habitation" (a dwelling place or settlement)²¹ aptly relate to the central theme of the topic. To this end the following criteria have been established to describe VDH in the light of its dual feature (product/process):

1. Settlements that draw upon contextual or regional elements or employ folk forms.
2. Buildings within the settlements are approached not as an art but as material manifestation of culture, precisely as an artifact.
3. Habitation reflecting patterns of culture, where vernacular forms act as cultural indicators.
4. Settlements are usually historical in nature and recognize the heritage of non-formal building.

²¹The Merriam-Webster Dictionary, p.218 & p.320.

5. Habitations are functional and organizational, they recognize the expression of function, separation of functions and their hierarchies in spaces.

6. Settlements often reflect symbolic expressions of interaction between human and nature.

7. Buildings within the settlements are characterized by an additive quality. Designs are more flexible and open-ended. They can accept changes, variations, modifications and additions when and where necessary.

8. Construction is simple, clear and easy to implement.

9. Socio-psychological/behavioral as well as physical/environmental factors determine the built forms. Of these the former group usually controls the latter.

10. Vernacular domestic habitations are produced by a group for itself, meant for setting daily life and expressing the wants and needs of the group.²²

The criteria listed above are most typically used to describe various vernacular habitations in existing literature. Because of the enormity of the literature, a few representative studies have been selected to address the key theoretical underpinnings of VDH.

1.6 An Integrated Approach to the Review Based on the Selected Texts:

As mentioned earlier, the field of VDH is interdisciplinary in nature. Regardless of the differences that exist among the authors, the consensus of the following chapters calls for the need for such an integration. Although the foci of analysis vary according to the nature of disciplines, all of them deal with mutually relevant concerns of VDH. Therefore, an integrated approach will certainly produce a holistic picture particularly, from the viewpoints of major

²²Criteria presented here are modified after Oliver's "attitudes and responses to vernacular shelter" in **Shelter and Society**, Oliver, 1969, p.25.

contributors.

Rationale for the selection of the material rests upon their inclination towards deep rooted theoretical and philosophical bias, and not mere descriptions of specific building design, site layout and other architectural details of vernacular settlements across the world. The following chapters will present an interdisciplinary review of VDH based on the selected texts. The comprehensive review will be based on the following materials:

- 1."Alternative Theories of House Form" in House, Form and Culture. Author: Amos Rapoport(1969).
- 2."Introduction" in Shelter, Sign and Symbol. Author: Paul Oliver(1975).
- 3."From Container of Women to Status Symbol: The Impact of Social Structure on the Meaning of the House" in Housing and Identity: Cross-Cultural Perspectives. Author: James Duncan(1982).
- 4."Structures and the Habitus" in Outline of a Theory of Practice. Author: Pierre Bourdieu(1977).
- 5."The Concept of Archaisms in Anthropology", "Social Structures of Eastern and Central Brazil" and "Do Dual Organizations Exist" in Structural Anthropology. Author: Claude Levi-Strauss(1963).
- 6."Behavioral Conventions and Archeology: Methods for the Analysis of Ancient Architecture" in Domestic Architecture and the Use of Space. Author: Donald Sanders(1990).

CHAPTER II

PART A:

2.0 "Physical Attributes of Nature": Do They Necessarily Determine the Design of the Built Form?

Main Text: "Alternative Theories of House Form " in House, Form and Culture by Amos Rapoport, 1969.

Architects and planners approach the subject of vernacular built form based on a set of concepts and paradigms developed in the last two decades (Turan, Stea, Fitch, 1990). They started first by studying vernacular design and then expanded their orientation to include questions as to how people and environment interact. This allowed the reader to see vernacular design as a specific aspect, as well as a general approach to a new theory of what the design of built environment is all about (Rapoport, 1976).²³ Works of architects and planners also attempted to build a congruence between culture and housing which reflects the symbolic values that have stemmed from the cognitive schemata. Amos Rapoport, one of the pioneers in this field established the basic parameter that the built form is comprised of not just the building alone but a collection of a variety of buildings and open spaces all unified in a system of setting where human beings interact with one another and also with nature on a one-to-one basis.

In his book House, Form and Culture Rapoport concentrated on the process definition, not just emphasizing vernacular buildings as products of some work. This book still serves as an intellectual guidepost for many researchers willing to explore cross-cultural domestic habitations.

²³"Socio-Cultural Aspects of Man-Environment Studies", Rapoport, 1976, p.9.

By concentrating on the process definition he primarily focused on the adjustments, adaptability and variations of both physical and socio-cultural attributes as and when necessary. Instead of providing a vast listing and description of different built forms, Rapoport made an effort to link the habitations with effect of climate, construction and materials, location and physiography etc.(attributes of variable "nature").

In addition, he also explored their linkage with life patterns, beliefs, desires, world views (attributes of the variable "man").²⁴ This helped him to identify relative positions of physical and socio-cultural attributes in the process of vernacular development. He also realized that creation of vernacular forms becomes even more complex and complicated when physical attributes alone do not become the key contributors and determinants of the built form. Instead, the interaction of many factors, largely a combination of physical (less dominating) and socio-cultural (more dominating) variety, generate the process of VDH over a period of time.

2.1 The Meaning of Identity in VDH:

Rapoport feels that the complexity of the process is further compounded when the issue of "identity" comes into question. Not only habits but rituals, clothing, language, rules of hospitality all account for the cultural identity. Many aspects are latent indeed and the ways in which they associate with the activities become even more complicated. As mentioned earlier, Rapoport's analyses cover the total settlement and not just any individual building as a determinant. For a typical VDH, he perceives the settlement to be more important than the house. He describes the "group identity" as opposed to an "individual identity" (Rapoport, 1982b).²⁵ In the context of VDH,

²⁴House, Form and Culture, Rapoport, 1969a, p.13.

²⁵"Identity and Environment", Rapoport, 1982b, p.11.

represented by a large number of traditional societies, the former is expressed through dwellings. The two forms of identities are not mutually exclusive and individual identity often becomes a limiting case of group identity.

Individual identities such as those of different members are linked to the group by variables such as spaces and places encountered within the family circle, religious setting or social categories which are related to groups and cultures. Through expression of self and group identities, VDHS produce new meanings in their very own environmental setting. According to Rapoport, all forms of identity involve a boundary. Once a particular member within a group is identified, boundaries or domains are set up and the member operates within those limits. The nature of this boundary can be spatial or territorial, thus relating both explicitly and implicitly to the built form.²⁶

Within any VDH, identification of people in their social space creates different zones with specific activities pertaining to each zone. There are polarities and distinctive demarcations of the private/public worlds. Dwellings (of all types) are central to any settlement system and their locations and uses have specific meanings attached to sex group identity. Thus any form of holy shrine such as the temple or mosque can act as a meeting place for adult males; a group identity which is more public in nature. By way of similar analysis, a possible screened courtyard will be considered as an ideal meeting place for womenfolk (Sinha, 1989).²⁷

It appears that contemporary Western modeled houses tend to somewhat loosen up such distinctive identities. But, are not the suburban rows of single family houses or even the detached single family houses portray an identity for a particular class? Not only do they persist in the Western world but also in many newly developed parts of Third World countries. Questions like

²⁶ibid., p.12.

²⁷"Traditional Dwellings in Indian Villages", Sinha, 1989, p.19.

this need clarifications and explanations are needed of many such debatable issues.

In conjunction with built form and identity, VDH ideally expresses distinctions of space, time and location. Temporal (time) distinctions in relation to daily activities are fairly prominent. Physical elements such as space, walls, doors etc. are organized for particular meanings which both reflect and help articulate communication. To this end, Roderick Lawrence's viewpoint on "home" may be of interest (Lawrence, 1987).²⁸ Lawrence states that a house becomes a home when a temporal perspective is introduced to the persisting complementary relationship among socio-demographic, psychological and cultural dimensions of domestic habitations. He suggests that the time dimension helps to provide an insight as to how these variables function during a single day, a month or even in a span of life cycle of different group members.

The next segment of this discussion will provide arguments against the deterministic positions of physical attributes (effects of climate, materials/construction technology and site) over creation of the built form. The main argument against a deterministic view is the need to consider many other factors that are socio-cultural in nature,

²⁸What makes a House Home?", Lawrence, 1987, p.154.

PART B:

2.2 Roles of Attributes:

2.2.1 Climate: Does it Solely Determine the Creation of Built Form?

While both architects and cultural geographers agree upon the effect of climate over built form, the latter have their skepticism and do not deny to question its determining role in the creation of buildings and its surrounding environment. Architects however, justify their reasoning by addressing the fact that extremes of macro and micro climatic factors (direction of sun, wind and nature of temperature fluctuation) have evolved many types of dwellings such as the courtyard form, hearth type, pitched roof, etc. Architectural theories thus support the relationship between climate and design.

On the other hand cultural geographers conducted studies that have shown that even within the same geographical setting extreme differences are observed in house types and settlement patterns as in the case of Old and New Delhi (Rapoport, 1969a).²⁹ Similar observations were also made by him in Greece, where both the Court form and Megaron form of houses exist side by side. The question then arises why the same area with identical climatic conditions has produced different kinds of housing form?

In severe climates, for example in the arctics, the dwelling forms of different groups of people vary widely. This is true for the Inuits and the Athabascans. Although constructed with completely different kind of material, the Eskimo summer and winter dwellings (the tent and the

²⁹House, Form and Culture, Rapoport, 1969a, p.19.

igloo) have identical floor plans with rooms radiating off the central zone (Rapoport referred to a study conducted by Edmund Carpenter in 1966). However, in similar climates this particular form seems to be not in practice among other cultures. One can also argue as to how the design is efficient climatically.

Rapoport points out cases where the way of life has produced almost anticlimactic situations and this is further compounded by religious beliefs and superstitions. For example, Chams believe that shade cast by trees are unlucky and brings misfortune to the family. Therefore houses and streets are exposed to terrible sun. Issues related to family status and modernity indicate hierarchies in the society, and are specially relevant among natives of Africa (Gottman, 1957).³⁰ Studies conducted in parts of Northern Africa have revealed that the elite group of a particular native community insist on living in European style dwellings when, the courtyard house would have been much more comfortable.

No one can really deny that vernacular buildings typically respond to climates. The effect of climate on design and built environment is certainly a crucial factor. There are endless examples to support the fact also. But Rapoport argues whether this variable can be treated as the determining one. Are other variables (comprising of cultural attributes) affecting or being affected in the process? Their roles may be complementary to that of climate or they may be dominating over the physical attributes.

2.2.2 Materials and Construction Technology: Do They Determine the Outcome of the Form?

Rapoport argues that variables like building materials and construction technology help to modify the VDH but do they necessarily determine the outcome of the form? Theoretically,

³⁰"Locale and Architecture", Gottman, 1957, p.20.

forms develop as human beings learn to master more complex building techniques (Rapoport, 1969a).³¹ All forms are a part of the progressive development through numerous steps that have accrued over centuries. However, what kind of form should suit the purpose of its use is also a matter of choice. Rapoport found that the Southwest Pomo Indians prefer temporary brush houses or the tepee style structure for their residential use, whereas more permanent and sophisticated kind of walls and roofs are constructed for other ceremonial purposes.

Invention of new, sturdy, flexible and even more durable materials often act as superficial coverings, with internal space organization remaining the same. This is true for the case of roundhouses among different Indian tribes residing in Southwestern United States. It can be partially attributed to the fact that established social values and customs take precedence over technological advancement.

Literature on industrial development often equates technological advancement with the progress of human civilization (Jack, 1976).³² In practical cases, the social consequences of adapting to such changes (at the micro level of habitation) can be difficult to cope with. Rapoport justified this statement by an example in a Northern African village where, introduction of piped water lines caused dissatisfaction among Muslim housewives. For them, the village well acted as the meeting place and gossip corner, the only chance of experiencing the outside world.

Preference of any particular shape over another (for example, circular hut roofs against rectangular ones) is often associated with symbolic relevances. Reaction to any specific geometric shape is attributed to cultural and/or religious influences and also affected by historical backgrounds. That is why the same materials and technology have produced very different forms in many cases. This is true for vernacular houses among the tribes of Polynesia and Melanesia

³¹ House, Form and Culture, Rapoport, 1969a, p.24.

³² Production and Reproduction, Jack, p.32.

where polished stones and shell adzes have produced a variety of shapes and sizes.³³

Thus materials and methods of construction are not in themselves form determinants, because they seldom decide the shape and form. They can be considered as modifying factors, only subservient to the primary deterministic factors that have evolved through a series of socio-cultural values and ethics. Once the basic outline of the structure is determined, severity and extremity of local climate can impact the creation of structures ranging from no openings on the walls, to only a few openings and finally structures with multiple windows and open courtyards all around. Accordingly, the choice of materials follows only after the basic nature of the house has been determined.

2.2.3 Site Physiography: Does it Determine the Form of the Structure?

Rapoport raised valid questions to see whether site of the dwelling determines what form the structure should have. He points out that no consistent theories have been put forward to determine influence of site or adjustments needed at the time of construction. Appropriate location of site and its orientation has an important role for vernacular builders. Attachment to the land is more of a spiritual nature, an innate noble belief in sentiments and values associated with it.

Rapoport's personal research conducted with the Navajo house and Pueblo cluster (two different American Indian tribes residing in similar site and climatic conditions) reveals totally independent design types (Rapoport, 1969b).³⁴ One observes profound differences between settlement pattern, house forms and the meanings attached to the houses (Figures 1, 2 and 3). In another study he showed that for the Pomo Indians of Southwest California a shift to a new site

³³House, Form and Culture, Rapoport, 1969a, p.26.

³⁴"The Pueblo and the Hogan", Rapoport, 1969b, p.68.

with better accessibility and locational advantage has been far less valuable than the traditional attachment to the original site. The price of the original site can never be evaluated on a monetary scale. For the dwellers, it is more cultural and psychological and perhaps symbolic in nature.

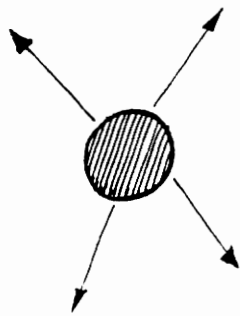
Different types of topography or terrain have yielded similar building forms in many instances. Amazon dwellings that are constructed on swampy or marshy lands have pillars or raised platforms from the ground to the plinth level. Similar observations are made even in many inland area houses of Central and West Africa (Mumtaz, 1972).³⁵ Even different groups of people residing on the same site build their houses either directly on the ground or on raised platforms. Distinctive physiographies like deserts, jungles or mountains may influence the house form but no assurance can be made on its determining role.

Architectural histories of VDH often depict cultural differences in the same site. Thus evolution of Greco-Roman, Turkish, Slavic and other forms are often found in the same place. Mediterranean areas often display crowding and concentration of villages, perhaps reflecting the way ancient Greeks and Cretans desired to live.³⁶ House form of a particular culture or even a country can undergo alterations and changed conventions through foreign invasions and influences from foreign culture. The same site through history can exhibit different forms of dwellings. In Latin America, a gradual shift from "Indian houses" to "Courtyard houses" appeared to be related to the Spanish cultural influence. Both flat and hilly grounds produced courtyard houses, with minor modifications and adjustments in construction.³⁷

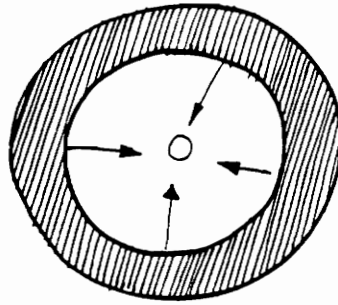
³⁵"Villages on the Black Volta", Mumtaz, 1969b, p.83.

³⁶House, Form and Culture, Rapoport, 1969a, p.30.

³⁷ibid., p.30.

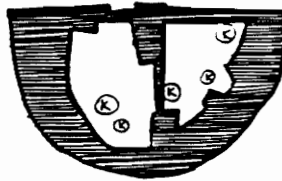
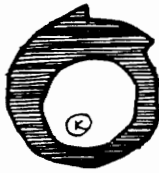


HOGAN



PUEBLO

(K INDICATES KIWA)

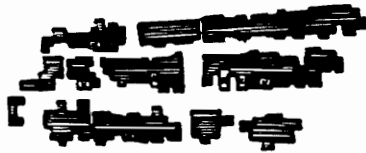


3 ANCIENT PLAZA-TYPE PUEBLOS SHOWING SOME OF THE DIFFERENT FORMS

RECTANGULAR - AZTEC RUIN

CIRCULAR - TULONIN RUIN

D-SHAPED - PUEBLO BONITO



MODERN STREET TYPE PUEBLO

ACONA

(SANTO DOMINGO HAS 7 PARALLEL STREETS)



MODERN PLAZA TYPE PUEBLO
TESUQUE

Figure 1. Plans of Pueblo and Hogan (Rapoport, 1969b)

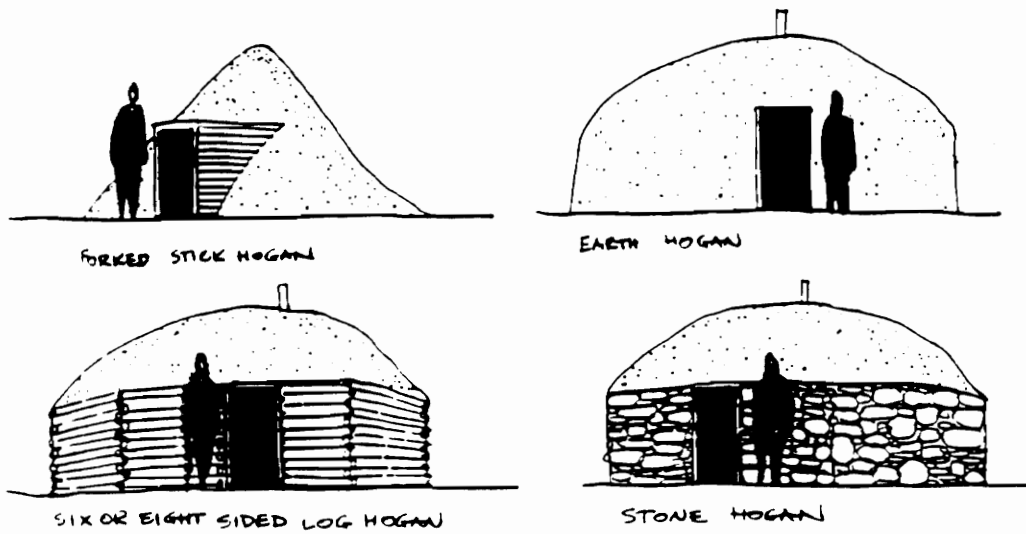


Figure 2. Front Elevations of Different Navajo Hogans (Rapoport, 1969b)

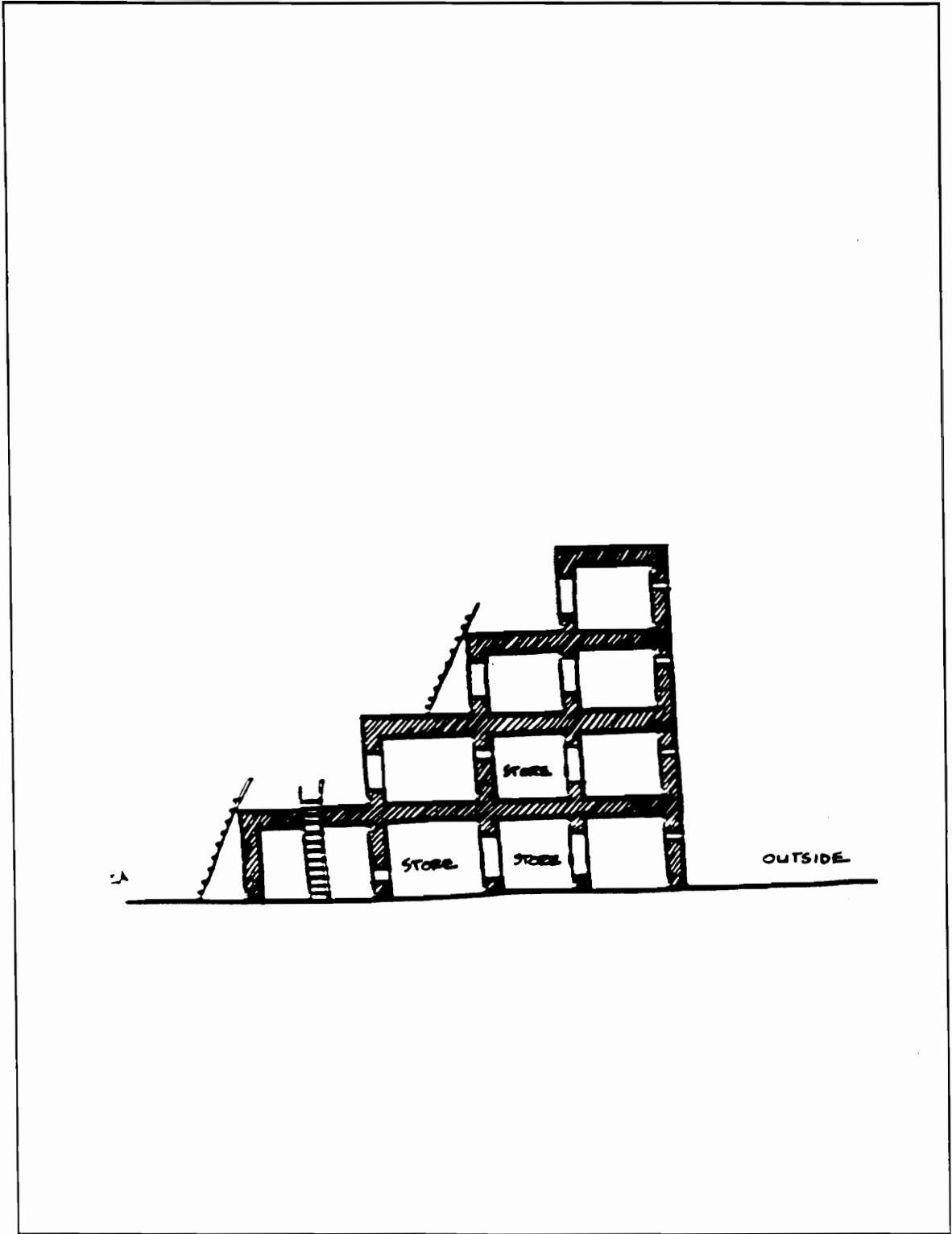


Figure 3. Ideal Section Through Pueblo Terrace (Rapoport, 1969b)

2.2.4 Religion: Does it Really Determine the Built Form?

Regarding the impact of religion Rapoport argues that this factor can affect and influence the plan, form and particular spatial arrangements. However, it can never be treated oversimplistically and attributed to any causality. For Bantu tribes of Africa, house is a spiritual entity. It is a linkage among dwellers, their ancestors and the earth. There are "Sunday villages" in Guatemala and "Ritual villages" in New Hebrides (Rapoport, 1969a).³⁸ Existence of these special villages (a part of the total settlement) can be better understood if the factor of religion is significantly investigated. Religion with its symbolic and cosmological qualities indeed serves as an important variable but, it is not the single factor in determining the creation of the built form. Neither does it qualify to be the primary determinant.

2.2.5 Economic Activity: Does it Determine the Built Form?

One can question the impact of economics over vernacular habitations. In an economy of scarcity, need for survival and maximum utilization of existing resources becomes very crucial. Rapoport addresses that people or societies with similar level of economies may have different levels of moral values and world views. House as an institution is an expression of world views and vernacular builders often become more socially and culturally motivated even in the face of severe economic crisis. Collaborative buildings like the Cebuan dwellings of Philippines may not

³⁸ibid., p.41.

be accounted for in terms of economic needs or avoidance of complexity. Social cooperation and community feelings dominated the socially motivated builders (Rapoport, 1969a).³⁹

Farmhouses in different geographical settings, as he pointed out, portray very different types of physical layout. With the same elements of belongings (house, animal storage, barn and tools) and same economic base (agrarian), there is no single unique type of farmhouse design. Rapoport observed this variation in different parts of France and Northern Italy. He also mentioned other examples to elucidate the fact that societies with similar economic activities and resources reflect different ways of visualizing the setting for life. Although economic development has been a vital input and questioned occasionally in the creation of built form, it poses disputes to be a primary determining factor.

2.3 Physical Determinants Only Provide Alternatives to Built Forms:

Thus it has been established that physical setting with attributes like climate, materials and construction technology and type of site only provide different possibilities. These attributes are not imperatives to the habitation but stem from an underlying theory of "possibilism".⁴⁰ This notion has been reflected in Rapoport's writings through the emphasis that man and his daily life pattern together with the behavioral practices decide what his habitation is actually going to be. Physical factors are modifying and secondary in their roles, only providing options and possibilities. This approach is further supported by Mumford's statement which essentially states that human beings specialized in religion, myth and ritual much before they did so in tool-making

³⁹ibid., p.34.

⁴⁰"The view that the physical environment provides possibilities and constraints within which people make choices based on other, mainly cultural criteria" in "Socio-Cultural Aspects of Man-Environment Studies", Rapoport, 1976, p.9.

and material aspects of culture (Mumford, 1966).⁴¹ Mumford also argued that primitive settlements, a major fraction of VDH, utilized their internal resources through exercising such mythical functions.

The preceding sections suggest that the theory of house form is not a combination of physical attributes alone. Also, the house is more than just "a territorial core". It is a complex entity that defines and is defined by socio-demographic, cultural, psychological, economic and political factors.⁴² Rapoport's arguments against the physical determinist view open doorways for alternative socio-cultural aspects that do have a strong and significant impact on the decision-making process. This process rests on the inhabitant's mind. To express the process Rapoport wrote, "A great variety of forms suggests that it is not climate, site or materials that determine the way of life or the habitat. It is a complex phenomenon for which no single explanation will suffice. Once the identity and character of a culture has been grasped, and some insight gained into its values, its choices among possible dwelling responses to both physical and cultural variables become much clearer. Even where the most severe constraints of climate, economics, materials and technology operate we still find great variations, choice, lack of determinism, and clear operation of cultural factors" (Rapoport, 1969).⁴³

Therefore, questioning the positions of physical determinist realm is a worthwhile endeavour, which has been the focus of Rapoport's theory. Also, the wide spectrum of variations does not divert our attention to any single explanation. He also feels that from the time-tested works of primitive cultures we can learn a lot about our own culture. The concluding chapter "A Look at the Present" thrusts directly into the pragmatic realm of architectural design and planning.

⁴¹"Technics and the Nature of Man", Mumford, 1966, p.49.

⁴²"Home: The Territorial Core", Porteous, 1976, p.383.

⁴³House, Form and Culture, Rapoport, 1969a, p.46-47.

Changes and differences among VDH are accompanied by a complex mixture and interplay of social, cultural, ritual and psychological factors operating within a temporal framework. Added to all these are the presence of physical attributes of nature, which are less influential and act as modifiers. This is the basic hypothesis proposed by Rapoport as a first step towards learning new lessons from VDH.

CHAPTER III

PART A:

3.0 Symbols and Signs-Another Name for VDH:

Main Text: "Introduction" in Shelter, Sign and Symbol, by Paul Oliver, 1975.

Vernacular domestic habitations often seek meaning by presenting a wide spectrum of rites, totems, superstitions and religious practices. These gain expression through two or three dimensional symbols, signs and even in the creation of hierarchy of spaces centering upon the building, village or settlement (Bourdieu,1971, Cooper,1974, Oliver,1975, Rapoport,1982a, et.al).

Discrepancies arise as to what should most appropriately define symbol; how does the concept vary and how does it affect vernacular habitation. Systems of mythology, belief, superstition, magical power and religion all directly or indirectly have their roles in protecting the "world" of the dweller's experience. These factors determine his world view and place him in relation to his environment, both natural and inanimate beings with which he shares the physical world. On the other hand, beliefs in such things provides explanations for mysteries of life and death, answers to questions like why someone is living on this planet, or, perhaps what will the person encounter after his/her death? (Oliver, 1975).⁴⁴ In order to comprehend such understandings human beings invent various patterns of behavior with appropriate spatial expressions that help to identify himself/herself with his own world of experience. Subconsciously,

⁴⁴Shelter, Sign and Symbol, Oliver, 1975, p.8.

a person believes that in this way unknown things will be known, invisible will be visible and incomprehensible will be at least recognizable.

Oliver's arguments in the book are based on his interpretations of a number of studies that had relevance with symbols in conjunction with VDH's. Vernacular settlements usually bear a symbolic reflection of the culture to which they belong. In this matter, the role of regional or vernacular language is certainly important because language symbolizes (act as a symbol) the way in which a particular culture views itself and the world (Heath, 1988).⁴⁵ A brief discussion on definitions of symbols and signs is presented here as a prelude to the following segment of discussion on symbolic expressions of VDH.

Literally, symbolization refers to the process of identifying, naming and associating something with a value and a meaning that signifies it. How the processes have evolved or how the nature of these processes affect the outcome of symbols essentially rest upon philosophical dogmas. There are at least two dimensions to it. First, symbols refer to a particular thing and second, there is an interpretation to it. There can be images, gestures, representations of drawings or sounds to express symbols. Vernacular habitations in many cases illustrate such aspects of symbolization.

By late nineteenth century, with the development of semiology, a plethora of definitions were put forward by researchers who interrelated symbol with sign in many cases. To mention just a few, Hayakawa interpreted symbol with multisituational characteristics. He described symbolic process as the means by which different meanings can be attached in different contexts (Hayakawa, 1964).⁴⁶ On the other hand, Panofsky's fundamental axioms stated that (1) signs and symbols change their meanings across time and (2) different signs and symbols can share the

⁴⁵"Defining the Nature of Vernacular", Heath, 1988, p.3.

⁴⁶Language in Thought and Action, Hayawaka, 1964, p.25.

same meaning at the same time (Panofsky, 1939).⁴⁷ However, his definition and characteristics did not differentiate specifically between symbol and sign. These definitions among many others, indicate the presence of endless disputes and disagreements as to what term should appropriately be used and what is the correct meaning conveyed by either symbol or sign or even both. We are not elaborating further upon this issue, merely referring to the concepts in order to comprehend its association with vernacular habitation. In the light of this confusion, we will focus on Carl Jung's definition. This definition appeared to be most effective specially in the context of VDH.

Carl Jung pointed out that "symbols possess specific connotations in addition to their conventional and obvious meaning" and, "signs do no more than denote the objects to which they are attached"(Jung, 1964).⁴⁸ An outcome of ideological thoughts, beliefs and cultural views are reflected in vernacular dwellings and other related structures that comprise the settlement as a whole. According to Oliver, in most vernacular habitations the architect (or the group as a whole responsible for the development of the built form) becomes a symbol giver and not just a form giver. By adding a particular feature of any symbol/symbols, the designer adds a new dimension to the built form.

3.1 Symbolic Expressions in VDH:

Oliver portrayed many examples in his book to justify his rationale. Among others, the Lakshmi Puja festival in the state of Orissa in India may be of interest. Lakshmi, the goddess of wealth and well-being has been traditionally worshipped by all segments of the population. From

⁴⁷Studies in Iconology, Panofsky, 1939, p.21.

⁴⁸Man and his Symbols, Jung 1964, p.20.

"Brahmins" (highest ranking caste in order) to "Untouchables", the woman in every household performs necessary rituals as a part of the worship. Besides, she decorates the walls with hand-drawn patterns from a mixture of powdered rice and water. It is a competitive process, where intricate and gorgeous patterns are believed to attract the goddess more. Also, the original inhabitants believe that it is a way of feeding the house.⁴⁹ This concept of nourishment as Oliver visualizes, adds a separate dimension to symbolism. Two broad observations in the creation of symbolic built form are summarized as follows:

First, siting of a vernacular society or group is often determined by the nature of subsistence, which in turn provides the reason for selecting the location of the buildings. The source of food, where to grow or the repeating occurrences of a particular natural phenomenon, produce certain properties which tend to indicate that there are god and/or spirit preferences over a particular affair. Human beings observations of the natural world and perceptions of the spiritual world is an important aspect of vernacularism. These things affect the subsistence of economy and subsequently buildings provide the symbolic dimension in terms of position, facade treatment, material, use of color, etc. Each cultural group has its own recognition in a very special way of understanding. Among sub-Saharan tribal groups or even in many villages of India, the priest of the community is usually assigned to designate the site and perform a "house foundation" ceremony.⁵⁰

Second, in vernacular shelters, geometric shapes, lines and patterns are frequently concerned with maintaining the stability of the environment. They often attempt to harmonize with nature. A very familiar and widely observed shape tends to acquire a symbolic significance

⁴⁹Shelter, Sign and Symbol, Oliver, 1975, p.12.

⁵⁰"Traditional Dwellings in Indian Villages", Sinha, 1989, p.25.

(Rapoport, 1969).⁵¹ Thus, a circle or any circular shape becomes the symbol of time. In many vernacular society the shape of a circle is felt to have marked the edge of the world because day and night move in a circle above the sky. The concept of "cosmos" is also perceived symbolically in many vernacular settlement layouts. Hindu societies living in villages often follow the principle of "Vastu Shastra" for the conception of the settlement layout. Shilpashastra or the Hindu manual of building provides principles of town planning and orientation of dwellings with respect to cosmic signs.

Symbols in vernacular shelters range from transcendentalism to realism versus mysticism and even to geometric shapes. All of these interpret different dimensions of nature's fantasies upon which human beings are dependent. Different elements of the built form both within the structure(s) and adjoining territories bear a symbolic relevancy to the builder and to the building. Thus research on a particular vernacular habitation calls for an analysis of symbol not only at its elementary level but also at the multiple levels of meanings it actually conveys.

3.2 Vernacular Language and its Symbolic Significance:

The use of the term vernacular becomes even more pronounced when its linguistic implication bears a correlation with its symbolic interpretation. Oliver argues that words by themselves act as integral elements in the symbolic system of a language. He points out that translation of words from one language to another results in difficulties not because of linguistic classification and diversities but, due to the latent cultural symbols that affect the interpretation. Thus linguistic forms have a tremendous control upon human being's attitude and orientation towards world views.

⁵¹House, Form and Culture, Rapoport, 1969, p.25.

Evolution of new words and concepts are not just limited to conversational usage. Groups develop their very own set of terms that are specific to their architecture. Hopi Indians of the South West United States have vernacular words for different parts of a domestic structure.⁵² These are not just technical translations from any language but carry a deeper symbolic meaning too. Thus a special linkage or correlation is established between the vernacular language and the values attached to the terminologies used for parts of a habitation. In other words, vernacular habitations bear symbolic attributes of the society who builds them. Such characteristics are particularly exclusive and special to non-Western societies in which "vernacularism" is practiced.

A very important issue not completely answered in Oliver's argument is the aspect of scientific basis in studies of symbolism. Symbols and built forms are often recognized among tribal groups. Ironically, there are disagreements and debates whether the tribal mind should be considered "scientific". Anthropologists who are fed by Levi Strauss's theory feel that mythical thought and logic is virtually rigorous and far too complex like any powerful piece of modern science. But what scientific techniques and quantitative methodologies should we expect? Or, can a universal language of symbolism be developed to denote the values of a microcosmic social group? The kind of studies that Oliver referred to are descriptive rather than analytical.

Oliver also mentioned that over extended periods of time symbols of one culture may transmit to other cultures even with changed connotations and new meanings. In some cases symbols can turn to simple signs that seek no explanation. Through other cultural contacts vernacular habitations can often portray new motifs and patterns. Oliver warned the readers against over-simplification of semiological interpretations. Particularly to researchers trained in Western countries symbolic presentations of many African and Asian settlements or even Native American habitats may lead to wrong conclusions.

⁵²Shelter, Sign and Symbol, Oliver, 1975, p.30.

Association of symbolism with VDH is an important feature although it is not common to all habitations that are labeled vernacular. Particular cultures have their own philosophical underpinnings and the design medium virtually reflects these understandings of cultural values.

PART B:

3.3 "Collectivism"- What is it That Holds Any Vernacular Society Together?

Main Text:"From Container of Women to Status Symbol:The Impact of Social Structure on the Meaning of the House" in Housing and Identity:Cross-Cultural Perspectives, by James Duncan, 1982.

Cultural geographers like James Duncan attempted to develop a theoretical framework by linking the concept of collectivistic social structure and the attitudes towards housing in different societies. In his essay, the word housing is used to refer to dwellings or ordinary houses for people to reside. James Duncan's theory on collectivism as opposed to individualism forms one of the fundamental pivots upon which the social network of vernacular habitation revolves.

Through self-investigated research and related anthropological studies, Duncan established the relationship between home and the structure of social relations in different social groups. His conclusions were based on studies conducted in the city of Hyderabad in Southern India during the 1960's. The target populations comprised of two social groups, one of which was the elite with more traditional and orthodox background. The group associated themselves with kin and caste fellowmates. It is more like an extended family type, in which sub-families were closely tied with each other. Socialization with outsiders would be a rare occurrence indeed. On the contrary, the second group, the new elite, largely disregarded traditional Indian life style and modelled themselves on Western ideas. They were a relatively new phenomenon compared to the former. Duncan conceptualized that the first group followed the principle of collectivism

whereas, an act of individualism was more pronounced within the second group.⁵³

3.4 Collectivism and VDH:

The basic premise of collectivism is that everyday activity of individual members acting in groups produces the social structure of the group. Also, the nature of social life and behavioral patterns of the actors play a significant role in shaping the house form. According to Duncan, individuals are treated as the determining variable; and the pattern of everyday lifestyles focuses on the norms that exert their powers upon them. This happens because individuals either allow the norms to do so or the social pressure (customs and rituals) enforces them.

Duncan postulates that there are rational ways of acting which most actors choose. Through everyday performances, these rational ways of acting become institutionalized, thereby making others aware of their importance in the group or the family. These are the norms or established behavioral guidelines and customs that operate both at the house level and the society at large. In societies typically with joint family ownership and/or a tribal kinship structure such norms are usually constrained by social pressures and traditional solutions to problems (Duncan, 1982).⁵⁴

Individuals reproduce these traditional ways of acting again and again and seldom make an effort in producing new ones. These ways of acting, as Bourdieu observed, are produced and reproduced over and over again (Bourdieu, 1977). In the context of vernacular habitation, we are primarily looking at the collectivistic social relations and the use of home. Any study on VDH is based upon this theoretical perception. The principal characteristics of collectivism are presented

⁵³"From Container of Women to Status Symbol", 1982, p.40.

⁵⁴ibid., p.36.

in Table 1.

The characteristics presented in Table I vary in degree among different groups. The more they are intensified, the stronger collectivistic they are. Notion of polarity and segregation among males and females is an important outcome of collectivism. In collectivistic groups, typical of vernacular societies, contrasting nature of action prevails between two sex groups, male and female. Duncan's observation with the elite group revealed that women tend to have a subservient role. Males are usually active in public and women maintain a passive image. Males are publicly oriented towards the group whereas females are oriented towards raising children.

Table 1. Principal Characteristics Of Collectivism

1. Social group in collectivistic society is relatively close knit, composed of known members of the family group.

2. Everybody in the group is aware of each other's duties and rights. Common set of values are shared by the group members. Over a period of time, these values evoke a sense of world view which are pure, natural and often divine.

3. Group interests and necessities supersede individual priorities. A feeling of collectivism prevails everywhere. Individuals produce their own share but material surplus is consumed collectively.

4. In the social order, position and status of individuals are defined clearly (Following Duncan,1982).

3.5 Zones and Designated Areas in VDH:

In vernacular societies the territory and domain of the women is a private zone, more confined to cooking and upbringing of the children. The inner hearth or the interior spaces of houses are usually controlled and dominated by the female group. A mental picture of a traditional vernacular dwelling can be delineated by translating into space firstly, the primary characteristics of collectivism and, secondly, various attributes of male/female duality.

In terms of spatial layout, private and public zones become distinguishable when the norms and behavioral patterns are physically translated into space. The relations between these zones express the administrative, cultural, judicial as well as socio-political rights of the inhabitants (Lawrence, 1989).⁵⁵ As a result, "baithak" (room next to the street meant for visitors) or special men's house evolve, focusing on the male arena. On the contrary, cooking area, the kitchen and adjoining courtyard create the core or the inner realm for the females. Also, transition spaces like foyer and "dalan" (semi-open space mediating the rooms and the courtyard) play significant roles in terms of visibility restriction or visual privacy functions (Lawrence, 1984).⁵⁶ Vernacular dwellers believe that for the women, the house is the pothole of a series of tasks and duties that are performed through daily family affairs. For the men, its functional value lies in its possessive nature for holding valued goods (to be used collectively). Avoidance of, and nonparticipation in the female domain, is instrumental in maintaining segregation.⁵⁷

What Duncan emphasizes is that the philosophical ideology and the spatial arrangements

⁵⁵"Translating Anthropological Concepts into Architectural Practices", Lawrence, 1989, p.90.

⁵⁶"Transition Spaces and Dwelling Design", Lawrence, 1984, p.265.

⁵⁷"From Container of Women to Status Symbol", Duncan , 1982, p.51.

in any VDH revolve around a series of rational responses to collectivism. Roles of different groups and their corresponding interrelationships provide a linkage between housing (built form) and human behavior. There is a significant level of association between the societal attributes (the endogenous factors stemming from different ways in which interaction takes place between members and activities and also among different members in a group) and spatial outcome of these attributes (positioning of covered space, semicovered space and even open spaces).

Concept of men's house, private women's house and even shared house with defined compartments have been outcomes of collectivism. Such observations are examined by the author among traditional Micronesian and Melanesian groups.⁵⁸ These groups also happened to display characteristics of VDH. Where collectivism is valued, private consumption is not rewarded. House as a private object does not serve as a status symbol. It is valued from its functional point of view, as a place where goods, women and children are kept.

Primitive vernacular habitations as studied by Levi-Strauss depict such observations. Also, vernacular characteristics among many contemporary African and Asian non-urban settlements portray segregation between men and women where the built form serves as an important indicator of central structuring relations. In all these cases, group members exhibit a set of structuring relations which orient them towards the group and away from any individualistic display.

Duncan observed that the second group, pursuing an attitude of individualism, illustrated high spatial and social mobility. Individuals in these kinds of groups are free to pursue their self-chosen interests (Duncan, 1982), a conflicting side of collectivism. In individualistic groups the house is more of a status symbol, critical to one's social or personal identity. Also characteristic of individualism is a decline in the degree of segregation between men and women. This outcome

⁵⁸ibid., p.52.

provides a sharply contrasting picture to what we observe in most VDH.

The concept of collectivism as espoused by Duncan does not enquire into why such a phenomenon occurred. Cultural geographers like him appear to believe that the structure of the culture is central to the variation in types of houses and provides a way of knowing about them.

CHAPTER IV

PART A:

4.0 Pierre Bourdieu and the Phenomenon of "Habitus":

Main Text: "Structures and the Habitus" in Outline of a Theory of Practice, by Pierre Bourdieu, 1977.

Pierre Bourdieu, a French sociologist who conducted fieldwork in Algeria, analyzed the social structures, mores and manners of different Islamic cultural groups. His analytic approach to the native society has been basically structural-functional and these groups have been treated as the units of analysis. He studied the economy, family and local organization of these groups. Among others, the Berber-speaking Kabyles (particular peasant community) and their houses, provided background information that was used in order to develop a case for understanding the "Theory of Practice". Through this practice, as Bourdieu understood, the dynamic flow of interpersonal relations can be effectively analyzed. As a first step in the development of such a theory, he conceptualized "Habitus".⁵⁹ Habitus refers to the central tendencies or cognitive schemes that actually guide the intimately varied ways in which people respond to each other and to the immediate environment in a social setting.

Habitus has evolved from a sociological background and can be perceived as a class phenomenon. It is associated with distinctive social classes that are usually differentiated by economic factors, occupations, socio-cultural rituals and customs. Habitus serves to systematize

⁵⁹Outline of a Theory of Practice, Bourdieu, 1977, p.72.

the behavior of persons sharing a common set of experiences by virtue of everyday practices. These practices are attributable to the class in question. It also incorporates the historical process of any social development and exists within the realm of the same. Since it reproduces the conditions that gave its birth, it is both a producer and a product of history.

Bourdieu's writings express that social life itself is a constant struggle for position, as actors seek (consciously or unconsciously) to weave around the formidable constraints that social structure sets against them (Di Maggio & Hirsch, 1976).⁶⁰ According to Bourdieu, purpose and objective of human activity is the accumulation and monopolization of different kinds of capital. To this end, he diverts from conventional economists notions by recognizing that capital need is not strictly economic, to be evaluated in monetary terms only.

Influenced by Gary Becker's essay on human capital (Becker, 1964),⁶¹ Bourdieu implicitly referred to capital as attributes, possessions or qualities of a person that exist in the realm of cultural, symbolic, social or even linguistic domain of human activities. Thus, within a social group, economics of symbolic exchanges take place through transformation of different kinds of capital into one another. He feels that linguistic and cultural capitals play vital roles in governing the ways of acting in early stages of socialization. By linguistic capital he refers to the use of different modes of language and their corresponding relationship to the users. Cultural capital on the other hand, corresponds to an affinity for aesthetic culture and also relates to the styles of interaction among members of society.

4.1 Habitus - A Product of History:

⁶⁰"Production organizations in the Arts", Dimaggio and Hirsch, 1976, p.78.

⁶¹Human Capital, Becker, 1964, p.29.

The concept of habitus has been invoked also, to develop a relationship between objective structure and individual identity. Bourdieu realizes that structures of any particular type of environment (any group, community or society) are always characterized by their class condition. Through habitus, he seeks an explanation as to how human beings internalize their social order and reproduce it in practical activity. He conceives the notion of "practice" as emerging from social and economic conditions and believes that habitus is a product of history. In this characterization, any social class has the tendency of reproducing the objective structures of which they are the product, although, as a class or an aligned group they may change in response to changed external circumstances.

These structures are found in the division and hierarchy of group members or even in their relationships, and also in the daily routine of duties and activities. The thrust of Bourdieu's philosophy however, emphasizes that all these structures and their operations has been predetermined by the past conditions in which they had survived. These structures as he interpreted are a system of "dispositions"⁶² that existed in the past, continuing its way into the present and that tend to perpetuate itself into the future. Each social class has its own characteristic habitus with individual variations. Through early childhood experiences particularly from family socialization, an individual encounters his/her practices within the world. Thus habitus is inculcated by past setting.

In his essays, the element of class perhaps distinguishes him from the social psychologists and conventional ethnographers who, believe that social reality is created ad hoc, only in the context of social interaction (Bourdieu, 1977).⁶³ The class approach focuses not on

⁶²The term "disposition" seems suitable in this context. It expresses the result of an organizing action and also designates a way of being or habitual state (especially of the body), Outline of a Theory of Practice, Bourdieu, 1977, p.214.

⁶³ibid., Bourdieu, 1977, p.85.

specific societies or even micro-societies, tribes or groups but underscores the oppressed, or the ruled class commonly observed among economically handicapped fraction of the society. Bourdieu feels that ethnographic studies often seek to explain everything that occurs in an observed interaction thereby providing answers as to why and how certain spatial positions of the participants have been designated.

Habitus, on the other hand, suggests that a participant's past position in the social structure is the key determinant as opposed to the kind of work he/she is engaged to. At all times and in all places, individuals carry with them these sets of dispositions. Bourdieu's interpretation of everyday practices eventually leads to his often cited use of the term "praxis", meaning the role of action defining socio-spatial order of individuals (Lawrence, 1989).

4.2 Significance of Habitus in VDH:

Examples of VDH, specially in less developed countries, reveal that the deprived social class (agrarian and economically oppressed non-agrarian) in many cases still retain their native cultural modes of patterns in spite of turbulence and dark periods of imperialism and colonialism. From a sociological perspective Bourdieu rationalizes this observation by stating that cultural patterns in different social classes (more among dominated or ruled class and less among dominant or ruling class) are retained because they comply with symbols of pride and resistance in the face of dominance and/or oppression. Revolutions that brought changes in the face of socio-political and cultural manifestations have in fact affected little to alter such practices.

Moreover, repeated occurrences ultimately relate to the objective structure that characterize the actions within their own socio-spatial territory, such as the dwelling and its surroundings. Such a perspective stems from not justifying the reasons but, highlighting the impact of praxis as a continuous phenomenon through past, present and future.

Bourdieu further emphasized how every social class exercises certain principles through

practices, either verbally (through sayings, proverbs, songs, etc) or by relating to everyday performances with objects, or tools within the village, house or elsewhere. Bourdieu perceives this to be a dialectical relationship between the body and the space structured according to mythico-ritual characteristics (Bourdieu, 1977).⁶⁴ It also signifies that in social formations with an absence of literacy, body and mind take control, and appropriate the world views.

4.2.1 The Kabyle Berber House:

Bourdieu visualizes "house" as a component of cultural capital. Given that quality, it also acts as an inhabited space and the locus for what is termed as "objectification" of generating schemes.⁶⁵ It sets up divisions and hierarchies of different objects and, particularly enhances practices. Bourdieu's fieldwork included an analysis of the Berber houses in Kabylia, Algeria. The internal layout consisted of one rectangular room with a low wall dividing the area into two unequal parts (divided one third along its length). The bigger portion, better-lit and with finished polished floor catered to the usage of household members and was slightly elevated than the other. The lower level is reserved for storage of water vessels and stable for animal (ox, cow, donkey) shelters. Symbolically the lower segment corresponded to a zone of darkness, with storage of green, raw objects, wood etc. It is also associated with birth, sleep and death, all part of natural activities.

On the other hand, the elevated portion is significantly more lighted. This zone is associated with all that is noble: activities such as cooking, storing of utensils, welcoming guests,

⁶⁴ibid., Bourdieu, 1977, p.95.

⁶⁵"The meaning objectified in things or places is fully revealed only in the practices structured according to the same schemes which are organized in relation to them (or vice versa)", ibid., Bourdieu, 1977, p.90.

even weaving. For the Kabyle Berber, cooking and weaving are major cultural activities, the latter with the loom or "Wall of the Light" (Bourdieu, 1973),⁶⁶ acting as the symbol of protection. The higher living place symbolizes the honor of the head of the household, and his protection of his wife's virtue. The low dark portion is opposed to the upper portion as female is to male and the darkness assists in practicing intimate relations (Figure 4).

As a social class they believe in metaphorical analogies, antinomies and homologies and, frequently compare the male/female syndrome with the elements of the universe. Physical and symbolic oppositions provide the setting in which the actions are traced in relation to spatial configurations and objects. As a part of customary belief and practices, zones inside the house have been segregated according to objectives and activities performed in these areas. Symbolically, man is compared to the "Sun" because he provides the light of the outside or true light (Bourdieu, 1973).⁶⁷ On the contrary, woman brightens the house, her position is compared to that of "Moon". Movement is directed towards the house for the female and away from the house for the male. Structured on gender principles, the home becomes a metaphor for the organization of the universe.

Bourdieu's philosophical understanding about the Kabyle social class portrays their belief in the universe which attributes an objective intention to everything. To this end, the mind or body space can be conceived as a metaphorical image of a large number of objects, mythically structured and integrated with the cosmic space. The dark end of the house is connected to all that is natural but also secret. The house represents a natural/cultural dichotomy. This physio-psycho-spatial attribute as, one might interpret, forms the basis of Bourdieu's perception of vernacular built form and habitus.

⁶⁶"The Berber House", Bourdieu, 1973, p.100.

⁶⁷ibid., p.100.

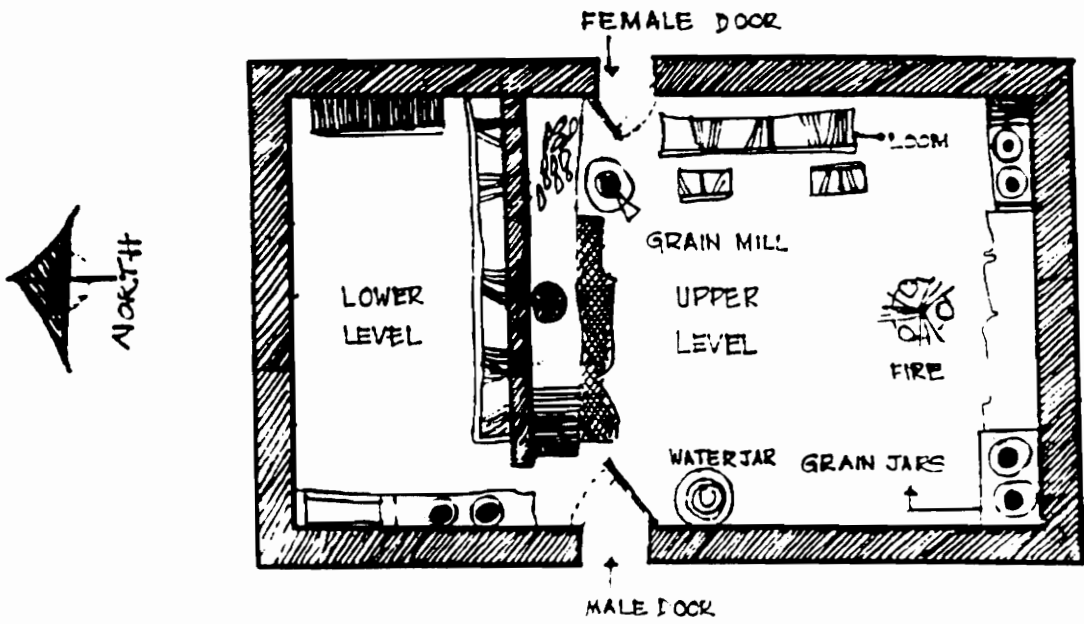


Figure 4. Plan of a Kabyle Berber House (Bourdieu, 1973)

PART B:

4.3 Primitive Societies-Demonstration of a Structural-Scientific Attitude Towards VDH:

Main Text: "The Concept of Archaism in Anthropology", "Social Structures of Eastern and Central Brazil" and "Do Dual Organizations Exist?" in Structural Anthropology, by Claude Levi-Strauss, 1963.

Levi Strauss's book **Structural Anthropology** provides concepts for the analysis of primitive or archaic societies. It focuses on their internal social organizations (the analysis of the forms which make up these societies). The two-volume detailed research focused on a reformulation of cultural anthropology by making it more "structured" in order to provide adequate systematic and scientific basis for the epistemological process.⁶⁸ His theory advocates forms of social organization, primarily emphasizing "kinship relations" within different cultural groups. It also incorporates the study of techniques which implement social life in these societies. Levi Strauss's fundamental rationale for studying specific aspects of primitive societies stem from the premise that these societies in question are not backward. They are small, isolated and homogeneous.

⁶⁸Levi-Strauss argues that the role of linguistics provides a model of scientific method for anthropology. Its approach is objective and language is susceptible of mathematical analysis. Both language and culture are built of oppositions, correlations and logical relations. Language can be treated as a conceptual model for other aspects of culture. (in p.xii, translator's preface) Chapter I-V emphasizes the role of structural linguistics forming the basis of his analysis of kinsip relations. Levi-Strauss himself admits that any model deserving the name struture exhibits the characteristics of a system. "It is made up of several elements, none of which can undergo a change without effecting changes in all the other elements.", **Structural Anthropology**, Levi-Strauss, p.279.

They also have a strong sense of group solidarity. Kinship with its relationships and institutions "are the type of categories of experience and the familial group is the unit of action" (Redfield, 1947).⁶⁹

Levi Strauss repeatedly emphasizes the wrong notion of illiteracy and backwardness commonly associated with many writings about these societies. Instead, he highlights the utilization of religious feeling, synthesis of individual and group aspirations and the complexity of social order that essentially portray a very interesting life style among many early tribal groups across the world. Through a complex system of rights and obligations there has been always the integration of emotional life and a world view. The concept of "archaism" intends to highlight the key internal characteristics of social groups drawn from different primitive societies of Latin America, Asia and Africa. Archaic nature (belonging to an earlier time) prevailing in these groups seems to have regressed from a higher level of culture.

There are distinctive features and characteristics among different primitive groups. Owing to the archaic nature of their institutions and techniques, social structure and organizational distributions that actually existed in the distant past (more than a couple of millennia) seems to be just the happenings of the near past for these groups of people (Levi Strauss, 1963).⁷⁰ Perhaps due to this reason, many primitive societies remain today in the same condition as they used to be in the remote period. New changes and effects have accrued in some cases whereas, virtually no contact with today's world has been established in others.

Levi Strauss's writings never explicitly clarify as to how the lessons from characteristics of primitive societies can be applied to the field of VDH. Interestingly however, his studies reflect implicit associations with VDH through the interface of social organizations and salient aspects

⁶⁹"The Folk Society", Redfield, 1947, p.293.

⁷⁰Structural Anthropology, Levi-Strauss, 1963, p.103.

of primitive societies. Primitive societies with their formation of kinship relations have been established through different levels of conceptualization within his analysis.

The kinship relations with attitudes towards kin define hierarchies of functions and subsequent physical allocation of space within the habitations. At the theoretical level, there are terms communicating various kinds of family relationships in the kinship systems. Individuals or classes of individuals who employ these terms feel bound by prescribed behavior in their relations with one another. These can be respect or familiarity, rights or obligations and affection or hostility (Levi Strauss, 1963).⁷¹ Spatial representations of such attitudes certainly portray the social philosophy of primitive societies, whose built forms are reflected in their VDH. Among others, Strauss's attention focused on institutions of particular tribes of Central and Eastern Brazil. He classified these tribes as very primitive because of their extremely low level of material culture.

4.4 Primitive Society and Different Levels of Kinship Relations:

According to Levi-Strauss, primitive societies constitute organized unities of interrelated structured levels. Different orders or levels evolve, each having different functions and operating mechanisms which are in principle specifiable. These levels produce a network that revolves around the total social fabric. Subsequently, these networks of order develop into the notion of kinship relations which he refers to as an "isolatable level". Principle of reciprocity is one of the fundamental features that form the foundation of the kinship system. For the maintenance of social order, members of the society perform crucial functions at different levels of operation. Individual domain of happenings constitute one level of social form. Within one level either one or more than one member becomes responsible for particular sets of jobs to perform.

⁷¹ibid., Levi-Strauss, 1963, p.37.

The exchange of reciprocity acts as a communication structure between the levels whereby kinship relations produce a strong tie among members of levels. Two important outcomes of the kinship system have direct correlation with the physical mapping of VDH. Mode of articulation between "rule of residence practiced" with that of the "rule of transmission of descent" is very important. The first factor corresponds to the determination of the place of habitation of the children of a marriage, "patrilocal" or "matrilocal". This has direct association with the way different structures are located within the villages.

The second factor corresponds to the respective side assigned to the children in continuing the transmission of descent namely, "patrilineal" or "matrilineal". It signifies particular cultural values, beliefs and world views of either paternal or maternal side, whichever being practiced. The tribal chief decides and has the absolute power and control over his subordinates. When locality and descent follow the same principle, overall spatial layout is considered to be harmonic (matrilocal versus matrilineal or patrilocal versus patrilineal). On the other hand, dysharmonic orientation occurs when they follow opposite principles (matrilocal versus patrilineal or patrilocal versus matrilineal).

The term "dual organization" has been also ascribed to a type of social structure frequently found in Latin America, Asia and Oceania (Levi-Strauss, 1969).⁷² It is characterized by the division of the social group, either tribe or clan or even the village. The two groups are divided into what are called "moieties". According to Strauss, respective members of the moieties have relationships ranging from very friendly and intimate to cold and hostile. The purpose of these moieties can be advocating and controlling the marriage or simply confined to activities related to religious, ceremonial or recreational type. The physical division into moieties are functional. They can be simple such as divided into a pair (two,) or complex, where several pairs

⁷²ibid., Levi-Strauss, 1963, p.132.

of moieties can overlap each other.

4.5 Case Study of the Bororo Tribal Village:

In the Bororo village of South America, Levi-Strauss observed that the men's house is located at the center, serving as the home for bachelors and also a meeting place for married men. This building is strictly inaccessible and forbidden to women. At the core (the center) existed a semi-circular dancing platform that serves as the stage for ceremonial occasions. The family huts form the external circular boundary at the edge of the forest. They were occupied by married couples who live with children. Between the men's house and the family huts there is a big circle of uncultivated scrub-land. There are connecting meandering paths leading to the huts. (Figure 5). (Levi Strauss, 1963).⁷³

Thus the men's house divides the settlement into two identical moieties. Residence is matrilocal and descent, matrilineal, thereby producing a symmetrical harmonic physical layout. Center and periphery bore direct opposition to each other, also signify the opposition between men (owners of the men's house) and women (owners of the encircling family huts). Relationship between center and periphery also justifies dual existence of sacred (center with men's house and ceremonial platform) and profane (domestic activities of women, virtually deprived from mysteries of religion) domains. In ancient days when the villages were more densely populated, the huts formed several concentric circles.

Beyond the relative perception of culture, Levi-Strauss's research helps to reveal human beings responses to the world. Through his analysis of kinship structures one observes that human being as a social animal behaves predictably within the norms of society. At face value,

⁷³ibid., Levi-Strauss, 1963, p.142.

one gathers facts about the organization of a society (primarily primitive), but deep inside it concerns with the truth of the human mind. Key to our point of interest is the aspect of space and time present in nature.

To this end, Levi-Strauss argues that nature is perceived to be comprising of endless events and things. These events are constructed and ordered in a way that recognizes binary oppositions. At the fundamental level, these oppositions include universal polarities of self and society, life and death and male and female. At secondary and tertiary levels, they produce other opposing features like center and periphery, public and private, light and dark, etc. In VDH these twofold concepts certainly bear spatial significance.

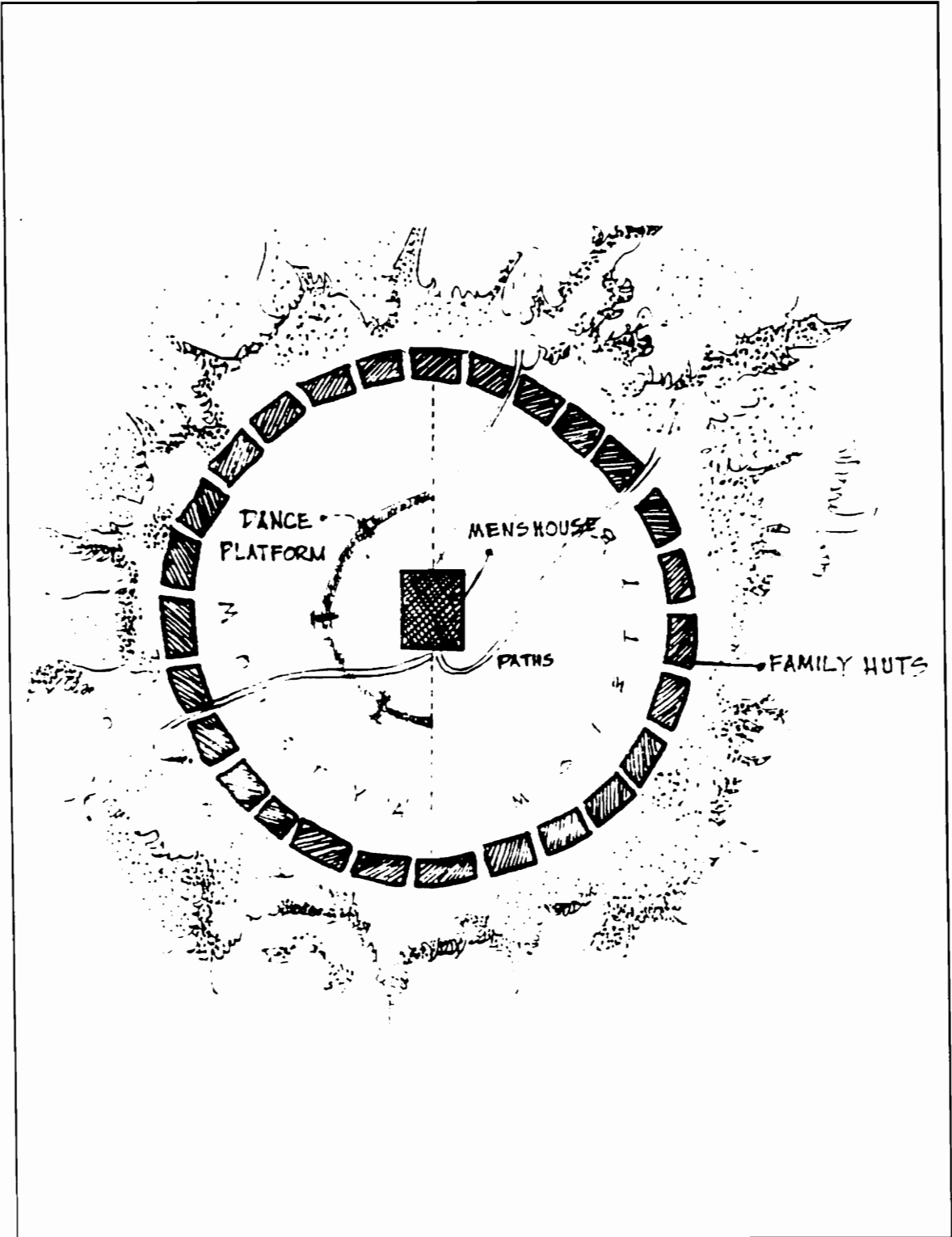


Figure 5. Plan of a Bororo Village (Levi-Strauss, 1963)

CHAPTER V

PART A:

5.0 Interactive Sociological-Ecological Model: An Interface of Archaeology and Environmental Psychology to Evaluate Ancient VDH.

Main Text: "Behavioral Conventions and Archaeology: Methods for the Analysis of Ancient Architecture" in Domestic Architecture and the Use of Space, by Donald Sanders, 1990.

The field of archaeology broadly focuses on cultural conventions of ancient civilizations. To this end, studies related to past behaviors have traditionally contributed to what we imply as VDH. Through remains and ruins of ancient architecture, archeologists examine the interrelationships between past behavioral conventions and the domestic built environment. Archeological theory postulates that excavated remains of any ancient settlement is most likely to retain the original context and use of its architectural characteristics (Sanders, Kent, 1990). Also, domestic building structures (primarily belonging to vernacular societies) as one of the largest subset of the built environment are the most common types of buildings prevalent in any archeological record. They also feel that the domestic built environment is often least affected by disturbances due to any site formation processes.

In his essay, Sanders concentrates on the "interactive sociological-ecological" model (original proponents being environmental psychologists like Proshansky, 1976, Altman, 1975, Canter, et.al, 1975) to evaluate archeological remains through specific behaviors and architectural conditions that may have existed in the past. The interactive model as Sanders proposes, highlights the interdependency and mutually determinative relationship between human behavior

and organization of the built environment. The model stresses this particular issue and also portrays different aspects of changes and modification that may accrue during the course of any architectural development. It also provides a theoretical foundation for architectural analyses in archeological contexts. In archaeology this kind of analyses become effective particularly through the application of research observations and conclusions from contemporary studies to the study of the distant past (Sanders, 1990).⁷⁴

5.1 Seven Factors Influencing Built Form and Domestic Space:

As a first step towards exploring the model Sanders refers to seven factors that influence dwelling forms and their physical location within any settlement. Each of these factors exert certain degree of influence over others. Sanders has grouped these factors into three categories according to their type of influence over the built environment. The first category namely **"Naturally Fixed Determinants"** constitutes climate and topography which, cannot be altered for any particular site. Therefore they remain fixed long before the initiation of any construction. Architects like Rapoport (1969) and Oliver (1987) addressed in their writings that these factors have significant influences over architectural designs, although degree of their influence as primary determinants has been questionable. The second category comprises of **"Culturally Fixed Determinants"** such as cultural conventions and functions. Their roles as Rapoport (1969) argued are fairly dominating in most settlements even, where identical microclimatic environments persist. Archeologists feel that these determinants can vary over an extended period of time but are usually fixed at the onset of any construction.

The third category consists of **"Flexible Determining Factors"** such as available materials,

⁷⁴"Behavioral Conventions and Archeology", Sanders, 1990, p.44.

level of technology and economic resources. These determinants exert variable degrees of influence on the society or group and subsequently on the creation of domestic structures. Materials and technology often depend upon natural resources but their use have been manipulated because of cultural interpretations and values assigned to them. Even under least changing climatic and topographic conditions economic resources like time, funding and energy (both mechanical and human) vary widely and may not have a continuous pattern of use. Also, "utilitarian function and cultural conventions influencing a dwelling's form and use are fixed when comparing houses constructed contemporaneously within the same vernacular context" (Sanders, 1990).⁷⁵ Therefore such comparisons will be based upon variations due to local climatic differences and other components of flexible factors. According to Sanders, within the same society at any earlier period or even at a later period conventions can vary, thereby depicting differences from the former set due to new conventions and flexible factors. Furthermore, he argues that during the construction of these later batch of houses both function and conventions will again become fixed determinants.

Archaeological remains of any ancient civilization (which includes fragments of domestic settlements) reflect a total picture of the following elements:

- * cultural conventions during the time of initial construction.
- * structural changes due to addition and alteration during the lifespan of the dwellings.
- * conventions prevailing at the time of destruction.

Sanders also argues that cultural conventions in VDH usually have a slow rate of change in contrast to the entire lifetime of the dwellings. Therefore, in archaeological analyses, the set of

⁷⁵ibid., p.44.

cultural determinants remain more or less constant.

A dichotomous situation however arises in the archeologist's mind. Although the influence of cultural determinants overrides the other two, archeological documents and records of ancient ruins predominantly depict the effects of natural and flexible determinants over the built form. Thus, professionals trained in archaeology tend to draw inferences based on descriptions of the built environment, observations of materials, structural conditions, spatial arrangements and decor. Interpretations are made on those conditions, easily attributable to climate, topography, kind and level of technology and economic resources of the time frame in question.

5.2 Different Components of Cultural Conventions:

Ancient texts and parallel ethnographic manuscripts often lack complete research information. Ironically, the effects of the most important determinants virtually become least recognizable in the excavated remains of the past world. Like many architects (guided by Louis Sullivan's school of thought) "form follows function" becomes the tool for most archeologists in order to interpret behavioral conventions and related functions in primitive vernacular societies.

To this end, Sanders argues that archeologists must also explore theories that postulate different aspects of cultural conventions relating to the creation of built form. This will result in the creation of a near-approximate picture of what the past behavioral conventions would have been. On the other hand, it is argued many times that functions and corresponding functional activities dictate the outcome of the physical layout of different elements of built form. Functions are moulded and guided by cultural attributes. Prehistoric studies utilise these two perspectives to unfold behavioral conventions of the domestic built form, an integral part of VDH.

In order to do this, archeologist's interpretation of ancient habitations must incorporate in their analysis, the following theories of environmental psychology namely, privacy, territoriality

and personal space. Added to this, is the aspect of semiotics which plays a vital role in understanding past cultural conventions (Sanders, 1990).⁷⁶ The next section will present brief summaries of the four concepts that support archeological analyses.

5.2.1 Privacy:

The issue of privacy is a significant concern for environment-behavior studies. Privacy addresses the means by which individuals regulate their dealings with the social world and make themselves more accessible or less accessible to others (Altman & Chemers, 1980).⁷⁷ The concept of personal space and territoriality act as behavioral mechanisms by which privacy is regulated. Thus a complete understanding of privacy incorporates the other two aspects as necessary functioning tools (Proshansky, 1976).⁷⁸

These issues have received enough attention in the last three decades, thereby expanding the horizon of a vast body of literature. Among others, the most popular studies include works of Schwartz, (1968), Westin (1970), Altman & Chemers (1980), Hayward (1975), Canter (1975), Proshansky (1976) et.al. The very brief overview presented here, will limit itself to particular aspects of privacy, territoriality and personal space, specially those associated with culture and behavioral conventions.

Salient features of privacy regulations are presented in Table 2.

⁷⁶ibid., p.46.

⁷⁷Culture and Environment, Altman and Chemers, 1980, p.99.

⁷⁸"Freedom of Choice and Behaviour in a Physical Setting", Proshansky, 1976, p.174.

Table 2. Salient Features of Privacy

1. Provision of norms of behaviors both for individuals and group members, such as access to any particular area achieved through visual, spatial or even temporal manners.

2. Creating a boundary control process, ie. a preference between isolation and interaction. This is the idea of "selective control" (Altman & Chemers, 1980) by which individuals or groups tend to control openness or closedness as desired.

3. Verbal and nonverbal behaviors and cultural practices function at different levels of privacy. The levels control privacy in multidimensional ways.

4. Privacy exists in every culture; only expressions and regulations vary according to differences in behavioral mechanisms.

5. Nature of privacy varies with respect to the social relationships in which it is involved. Interaction with strangers may be different from that with immediate family members and moreover, the courses of actions vary widely.

6. Cultural practices, space uses, space allocations, distancing and the like are some of the typical behavioral mechanisms or particular ways in which privacy regulation occurs.

7. A sense of reasoning prevails in privacy control. Like culture, one must understand privacy in its own right.

8. Privacy in traditional and vernacular societies has been less flexible in responses. It is assigned through the type of performer (male/female), nature of work, and performer's role in the society. Translated in spatial language such controls naturally exhibit distinctive domains or zones within the house.

5.2.2 Territoriality:

The concept of territoriality has its roots in Zoology in association with possession and/or defensive behavior of animals (Greverus, 1976).⁷⁹ It is a complex concept with many properties. Human territorial behaviors have several facets. It focuses on security, ownership, control, creating visible or invisible boundaries and most importantly establishing cultural conventions towards them. An extensive range of literature exists, in the area of animal or human territorial behavior. Works of Altman & Chemers (1980), Rapoport (1976), Wilson (1975), Canter (1977) are only to name a few.

Some characteristics of territoriality are summarised in Table 3.

⁷⁹Human Territoriality as an Object of Research in Cultural Anthropology", Greverus, 1976, p.145.

Table 3. Salient Features of Territoriality

- 1. Territoriality is owned either by a person or a group.**
- 2. There are personalized or marked "territorial markers". They can be verbal/non-verbal or conceptual/physical or even visible/invisible.**
- 3. These markers or codes govern territorial behaviors and vary from culture to culture. For a particular society these markers have to be accepted by members through everyday practices of cultural conventions.**
- 4. Within the framework of domestic habitation territoriality functions as a stabilizing force balancing both socio-cultural and spatial features of the built form.**
- 5. Homes exemplify "primary territories" which are mostly permanent and central to daily patterns of lifestyles.**
- 6. There are different scales of territories, ranging from a room to an open courtyard and even the entire house.**
- 7. Occupancy of territories without markings are abstract to conceive but observed most frequently in the domestic realm of human habitation.**

5.2.3 Personal Space:

One of the pioneers on theories of personal space has been anthropologist and behavioral scientist Edward Hall. He innovated the term "proxemics" to describe ways by which human beings structure and use space. By proxemics he referred to "how man unconsciously structures microspace...., the organization of spaces in his houses and buildings and ultimately the layout of his towns" (Hall, 1963).⁸⁰ With varying degrees of proximity, proxemics aims at emphasizing the communicative process of behavioral patterns. Like privacy, personal space also changes and shifts with circumstances. Hall's notion of four spatial zones (intimate; 0-18 inches, personal; 1.5-4 feet, social; 4-12 feet, and public zones; 12-25 feet) represent levels of interpersonal contact (Hall, 1966).⁸¹

A second property, central to our interest, poses a cultural dimension to personal space. According to this, cultures use space as a communicative medium and it varies with habits and customs. Analysis of spatial practices can tell us about the culture, particularly through the use of distance (Altman & Chemers, 1980).⁸² Thus, proxemic behavior is a cultural universal.

Although Hall's hypothesis for spatial zones has been supported by more than hundred studies (Altman & Chemers, 1980), researchers like Canter disagree to the rigid measurements as proposed by Hall. Canter postulates that groups within the same culture i.e., different subcultures use their spaces differently based on situations and contexts (Canter, 1975). Irrespective of the disputes between pro-Hall and anti-Hall theorists, following important issues of personal space are indeed worth mentioning. They are presented in Table 4.

⁸⁰"A System for the Notation of Proxemic Behavior", Hall, 1963, p.1002.

⁸¹"The Hidden Dimension", Hall, 1966, p.110.

⁸²Culture and Environment, Altman & Chemers, 1980, p.118.

Table 4. Salient Features of Personal Space

1. Besides the four spatial zones, personal space incorporates non-verbal communication systems like sensory markers (angle of reference or zones), leadership rights, social relationships of the participants or even physical barriers.

2. Basic parameter of proxemic analysis suggest that organization of architectural spaces reflect the builder's cultural attitude even if they are not from the country of origin.

3. Personal Space suggests on space utilization, without seeking an explanation on the spatial need.

4. User's role(s), personality, age, sex and cultural responses illustrate that every space has a meaning attached to it and just not defined by distances.

5. Space within which an individual is aware of another person's presence is known as the co-presence zone. This is divided internally into concentric zones each corresponding approximately to the five senses (seeing, hearing, smelling, contact and reaching) of the universe (Ciolek, 1980).

6. Behavioral conventions and cultural responses can alter the actual measurements of personal space through effects of vision angles (more psychological in nature) which are conceptually abstract.

7. Presence of buffer zones or enclaves have specific characteristics that can be integrated with other factors.

8. An individual's invisible boundaries can be broken into zones of accepted behavior which changes in size according to change in behavioral settings. Boundaries regulate the flow of information in association with privacy.

5.2.4 Semiotics:

Semiotic approaches to architectural analysis is based on the preamble that architecture, like language, consists of a system of signs for communicating information. In a linguistic analogy, this is similar to how a reader responds to culturally accepted meanings (Sanders, 1990).⁸³ Literature on semiology and corresponding linguistic analogy is a vast one. Popular theories, specially the ones conveying meaning of the built environment include Barthes, (1967), Broadbent, (1980), Panofsky, (1977), Jencks, (1980), Rapoport (1982c) and many others (only to mention a few).

The theoretical framework of semiotics is extremely complicated and abstract in nature. Besides the pure utilitarian function, buildings comprise a culturally specific set of conventions or codes (with single or multiple meanings), that need accurate interpretations. These coded meanings may not necessarily be symbols on walls or shape of any particular object. They can be derived from multiple sources including sensory marker, any expected behavior or logic of structure.

As Rapoport stated, "semiotics is the study of the significance of elements of a structured system" (Rapoport, 1982c).⁸⁴ The basic understanding of this statement rests on the assertion that semiotics generates a process by which a particular thing functions as a sign. One of the components of semiotics is the aspect of "pragmatics" Rapoport (1982c).⁸⁵ Pragmatics defines the relation of signs to behavioral responses of inhabitants. Reflection of this relationship is

⁸³"Behavioral Conventions and Archeology", Sanders, 1990, p.46.

⁸⁴"The Meaning of the Built Environment", Rapoport, 1982c, p.37.

⁸⁵ibid., p.37.

important to someone who interprets them as part of the total behavioral conventions.

A fundamental feature of semiotics is that "language conveys its information through the organization of a coded set of signs whose meaning is accepted by cultural convention" (Sanders, 1990).⁸⁶ The relationship between every individual and his immediate environment produces an innate belief about expected behaviors which are translated in space. Major aspects of semiotic analysis of architecture are presented in Table 5.

Semiotic theories are complex and seek simpler explanations. In spite of the strong philosophical dogma attached to them, they provide a linkage between architecture and behavior, specially helpful for archaeological contexts. The heavy theoretical foundation helps to create a mental image of the domestic human world which encounters complex behavioral conventions.

The components of cultural determinants discussed so far, tend to overlap and coincide with each other. Privacy, territoriality, personal space and finally, semiotics are complex and to some extent abstract in nature. However, they certainly help to operationalize any available incoherent data on physical form of settlements, specially the ancient ones. A vast body of literature exists within the spectrum of anthropology, archaeology, psychology and environmental psychology. Behavior-environment studies have incorporated these aspects over and over in numerous studies. The brief discussions on the four concepts are certainly not comprehensive in nature. However, each of them portrays an operational definition of the topics. Therefore, they can be adopted as heuristic devices to understand domestic behaviors of the past for which, there are no living witnesses.

⁸⁶"Behavioral Conventions and Archeology", Sanders, 1990, p.46.

Table 5. Salient Features of Semiotics

1. The total built environment communicates meanings, Inclusive or exclusive of the producer's creation.

2. Meanings are conveyed through sign systems by using the principle of redundancies (gathering additional meanings from other sign systems) Sanders (1990).

3. The coded meanings are generally accepted by cultural conventions and subsequently establish cues for the nature of behaviors (Sanders, 1990).

PART B

5.3 A Look Into the Past-Testing the Architectural Remains of Ancient Myrtos.

Theoretical issues of environmental psychology as interpreted in Part A has been applied for archaeological testing of an ancient civilization. Sanders devoted the second segment of his essay to present domestic architectural characteristics of ancient Myrtos. Myrtos, an Early Bronze Age site is located on the southern coast of Crete. Upon excavation during 1967-1968, 0.14 hectares of land was exposed on top of a hill, onlooking the Mediterranean sea. Peter Warren, together with the British school of Archaeology exposed two habitation levels, each corresponding to an Early Minoan civilization that had flourished around 2411-2170 B.C. (Sanders, 1990).

Of the two habitations, one was preserved in a better condition than the other. It housed approximately eighty discrete spatial structures, divided into two distinct sectors, Northern and Southern. Sanders concentrated on the Southern sector comprising of residences and room complexes. Three residences namely A, B and C were identified, among which residence B happened to be most preserved in terms of construction, artifact content and extent of spatial layout. (Figure 6).

5.3.1 Brief Description of House B:

In archaeological excavations houses are not recognized that easily. Discrete set of spaces or clusters form the basic core for identifying domains of user's activities. At the next step

artifactual materials and other clues lead to the basis for analysis of room function and other behavioral conventions. House B as Sanders referred to was analyzed as a single storey structure with one entrance. The internal corridor of circulation was outlined clearly (Figure 6). Sanders numbered each subzone for ensuring a better understanding of the analysis. Built-in feature such as a working bench was discovered in unit #82. Also, a low divided cubicle and a small enclosure in the shape of letter "J" was found in unit #80.

The main entrance was believed to be in the north-east corner of unit #74. The width of other adjoining areas increased gradually till unit #80. The last room marked #79 formed the external boundary and was located farthest from the entry point. Movement from the door has been steadily downwards and steps were found down from #73 into #81 and also from #81 into #80. Vessels of several sizes, jars, cups, plates and jugs were scattered everywhere. They were found in abundance, specially in units #72, #80 and #82. Also, beads, shells and loomweights were sporadically distributed on floors or benches in other rooms. Shapes of different rooms, largely a combination of squares, trapezoids and rectangles indicated that the plan was compact in nature (Figure 6).⁸⁷

5.3.2 Findings based on Naturally Fixed, Flexible and Culturally Fixed Determinants:

* Little evidence is available regarding climate and topography of ancient Crete. However, extrapolation of current meteorological statistics suggested the presence of strong winds and glaring sunrays. Perhaps, this resulted in more tight and enclosed type of spatial layout. Floors were more or less flat with some areas gradually sloping up to the north.

* From the preserved archaeological evidences Sanders analyzed the kind of materials

⁸⁷ibid., p.62.

that were used throughout the house, together with constructional details and structural designs. Building unit was enclosed by stone walls and these materials happened to be found locally. Three types of materials namely natural (retained in original state with least alteration such as field stone, branches etc), manipulated (altered and shaped to suit purposes) and manufactured (fabricated on purpose) were available (Sanders, 1990). There was evidence of painted plaster in one room. Through measurements and materials Sanders figured out elements of roof construction.

* Regarding level of technology, Sanders analyzed structural detailing of the house. It revealed continuous support elements with no point support or free-standing support. Stones were of mixed shape and size, dry-laid, with uncut repetitive units (Sanders, 1990).⁸⁸

* Furthermore, construction techniques of contemporary Greek island villages were evaluated in order to contemplate the ancient methods of building construction.

The information revealed so far, was not sufficient enough to unfold behavioral patterns of Cretan domestic habitation. It was confined to the generic profile of the built form. Sanders carried out further investigation of the occupant's behavioral patterns, by utilizing and applying concepts of environmental psychology in space.

5.3.3 Determination of Ancient Cretan Behavioral Conventions from Physical Layout of the Built Form:

Sanders hypothesized that creation of sensory markers and privacy regulators, together with territories and subterritories should act as appropriate interpreting tools for unfolding relevant domestic behavioral conventions. Sanders's method of detailed analyses is summarised along

⁸⁸ibid., p.57.

the following points:

- * Location and concentration of built-in furnitures and features together with textures of different surfaces indicated possible functions of the spaces.

- * Distance through which objects were seen was identified. Also, audio-visual range of the circulation path was an important measuring tool for adjoining activities.

- * Door openings and principle spots of interconnecting areas were identified. These included low height openings, windows or even secondary doors.

- * Identification of "smell zones" provided cues for a possible location of the cooking area.

- * Distance between features and walls marked approximate usable spaces and positioning of buffer zones.

- * Clustering of artifacts (heavily or loosely scattered) suggested probabilities of family gathering spots.

- * To what extent internal view of the house was viewed ie., what fraction of the total space appeared to be visible by an outsider entering through the main doorway. This was analysed with the aid of sightlines.

- * Identification of spots where direction of movement, floor surface, smell, sound or even the height changed abruptly.

- * Calculation of the perimeter of the house within the hearing and viewing zone.

- * Options for movement inside the house were sorted out by mentally visualizing positions of boundary markers. Freedom of movement inside the house, angularity of pathways, direction of vision, placement of features, sensory changes such as texture, colour, smell, etc. suggested location of boundaries and privacy regulators (Figure 6).

- * For each unit Sanders developed a correlation between spatial indicators and type and nature of artifact. Thus, doors, steps, floor textures, other openings or symbolic markers were equated to quantity, variation and type of artifacts.

* Conclusions from these correlations yielded a more clearer perspective of each unit's function and corresponding behavioral pattern of the users.

Parallel ethnographic studies of nearby Greek village houses revealed more specific details regarding functional aspects. Two important observations from these studies showed:

a) spaces opening directly into adjacent areas tend to have non-specific functions.

b) spaces with related functional activities usually opened to each other (Sanders, 1990).⁸⁹

Interestingly, such observations were made for House B in conjunction with other guiding elements mentioned above.

Conclusions for the study accumulated rather slowly and were refined in each step through redundancies and re-evaluation of the previous step. One has to always keep in mind that incomplete coverage of excavation or incomplete artifactual remains limit the possibilities of making any absolute prediction. However, these factors do not nullify the fact that inferences can be made from excavated portions of ancient settlements. With theoretical models and analytical techniques the evidences can be better synthesized and reconfirmed. Eventually, explanations for cultural conventions will become more specific and verifiable.

⁸⁹ibid., p.63.

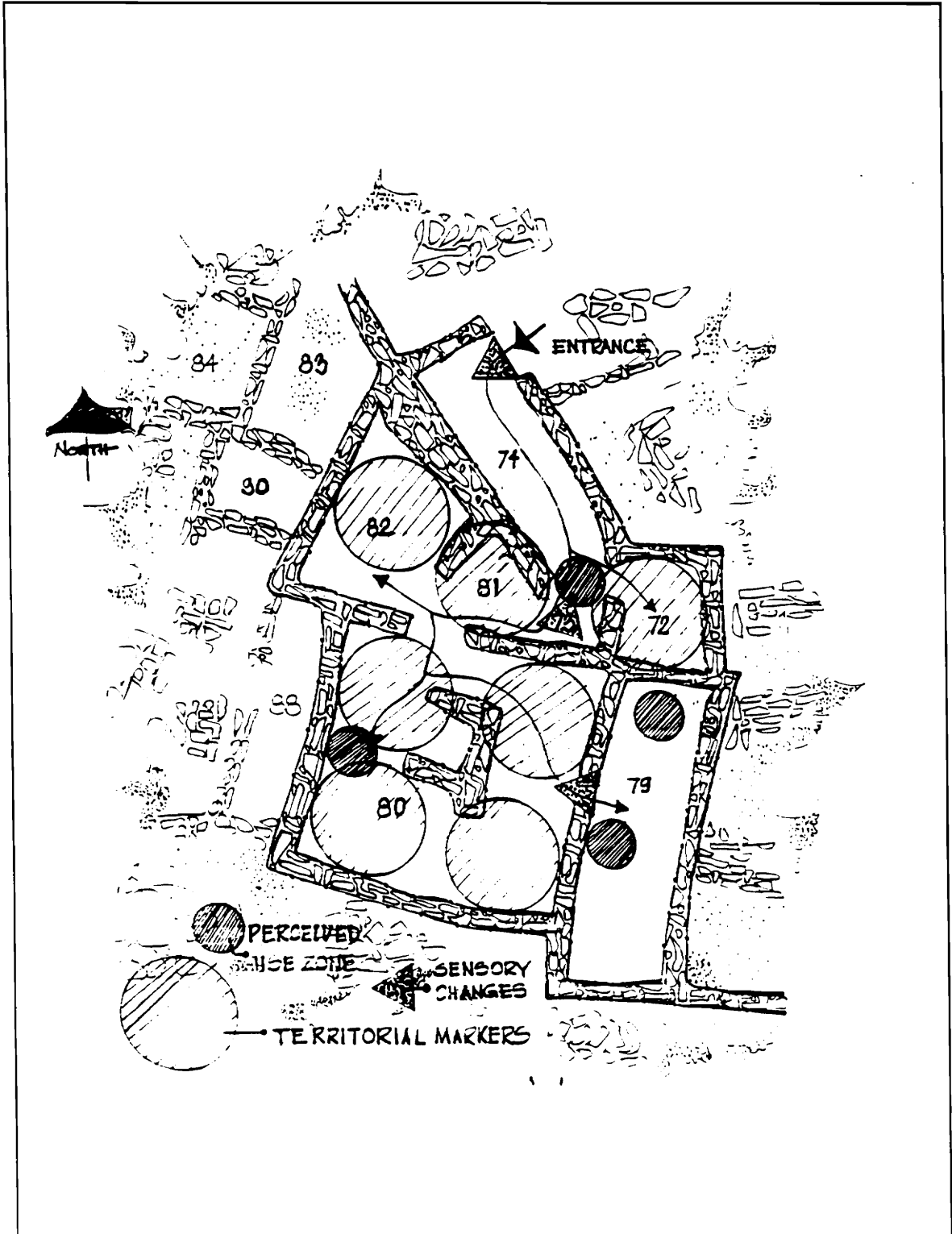


Figure 6. Plan of House "B" (Sanders, 1990)

CHAPTER VI

PART A:

6.0 Overview of Chapter II - Chapter V:

Only a few themes of VDH are broached in this paper. Chapters II-V present summaries of selected notable studies across the board that represents socio-cultural as well as spatial facets of domestic human habitation. These studies have been chosen primarily to demonstrate an interdisciplinary perspective of the subject. The purpose of the review is not to present any unidimensional or single viewpoint through analyses of the materials. Such an outcome is also not expected from studies that involve, not only different kinds of societies, but also, the variations in time periods that are represented in these works. The multi-disciplinary approach enhances each discipline's understanding from angles of theoria, ontology, praxis and epistemology, all of which form the backbone of any research evaluation. The discussions in different chapters indicate that the use of space influences the built form more strongly than the other way around. Boundaries and zones are created from otherwise unbounded spaces and these compartmentalizations depend largely on the culture and time period they occur in.

In this light, Amos Rapoport's hypothesis of VDH, claiming the dominance of socio-cultural attributes over physical ones (Chapter II), or James Duncan's revelation of collectivism in non-western societies (Chapter III) eventually lead to the crux of vernacularism. At the other end, Paul Oliver's compilation of physical expressions of symbolism and/or mysticism portrays a significant feature, typical of many vernacular settlements (Chapter III).

Social organization and elements of dwelling forms have been studied by scholars like Claude Levi-Strauss and Pierre Bourdieu (Chapter IV). In the symbolic analysis of built form, their works are considered to be the ones with most consistently developed theoretical perceptions

(Goddard, 1975). To some critics, development of structuralism since early 1960s has stimulated this new spate of spatial analysis in terms of indigenous cosmologies and symbolic ideas (Donley-Reid, 1990).⁹⁰ The origin of this approach can be traced back to proponents like Durkheim and Mauss(1963),⁹¹ to whom Levi-Strauss paid tribute in his work. Outcomes of Levi-Strauss and Bourdieu's studies depict a system of thought which is charaterized by being analytic, systematic and totalizing (Goddard, 1975).⁹² The structuralist approach postulates an underlying unconcious mental structure realized only through the complexities of socio-cultural manifestations.

Finally, from an archaeologist's perspective, we present Donald Sanders's interactive model in which both ecological and cultural factors are integrated (Chapter V). By incorporating issues of privacy, territoriality, personal space and semiology he provides guidelines for testing ancient domestic habitations, that exist in dust and debris, far beneath the surface of the earth. Rapoport refers to this study as an unique piece of research that is aware of, or at least interacted with, key concepts of environmental and/or behavioral psychology (Rapoport, 1990).⁹³

⁹⁰"A Structuring Structure: The Swahili House", Donley-Reid, 1990, p.115.

⁹¹Primitive Classification, Durkheim & Mauss, 1963, p.22.

⁹²"Philosophy and Structuralism", Goddard, 1975, p.105.

⁹³"Systems of Activities and Systems of Settings", Rapoport, 1990, p.19.

PART B:

6.1 Critical Evaluation of VDH from Design Perspective:

6.1.1 Rapoport's Vision of VDH:

Rapoport's House, Form and Culture is a synthesis of architectural, anthropological and geographical work, ornamented with brilliant observations. Although he repeatedly cautioned the readers not to be oversimplistic, he himself failed to delve deep enough so as to bring an order to this complex field. One must be careful not to interpret the underlying forces as really "determining" the built form. Instead, one must think of "coincidences" and not "causal relations". Both words, "cause" and "determine" are used interchangeably when the contexts demanded. But the reader must understand that effects of attributes do not depict a "causal relationship". As his maiden operation, he admitted that "the relationship of the house to its culture and environment" happened to be his main concern. There has been no attempt to question the historical and/or regional background of the inhabitants. However, in an otherwise well documented piece of work, particularly, the first of its kind, Rapoport has been successful in presenting ways of theorizing the content of VDH. Within the limitations though, readers may seek answers to questions like the following:

What was the historical background of the culture?

Were there any foreign invasions?

Have any major influx of other immigrants taken place in the last fifty or hundred years?

Can the existing pattern of any VDH change due to influences of neighbouring cultures?

Will any change accrue in the vernacular spatial profile (of a society) if the bulk agrarian

work force gradually shift towards secondary and tertiary sectors?

What are the social positions of women?

What are the norms and attitudes related to food, light, air, comfort, privacy, etc?

Such questions, among others, are not dealt with in his book. Interestingly though, his later works have cleared some of the fuzzy areas by developing conceptual frameworks of salient features like "identity" (Rapoport, 1982b), "world view", "life style", "values", "cultures and subcultures" "activities" "communication", and "interaction" (Rapoport, 1976)⁹⁴, etc. Each of these conceptualizations imply different sets of questions and distinct sets of data (even though overlapping at times) corresponding to aspects of human behavior and built environment. By pinpointing these elements, Rapoport makes it even more obvious that single-factor deterministic explanations of the built forms must be rejected. An essay on the "study of meaning" explores how meaning can be transmitted as a non-verbal communication through the built environment (1982c). His later works also include encyclopedic and comprehensive reviews of the literature in environment-behavior studies.

Furthermore, one of his two recent works attempts to narrow the concept of traditionality by providing large set of attributes (1989).⁹⁵ For theoretical reasons these categorisations have methodological advantages. Subgroupings within the major groups tend to differentiate the groups on the basis of certain common characteristics. For example, within the attribute "nature of groups" Rapoport, develops six sub groups each having multiple characteristics. Characteristics within each sub group more or less share a particular area of concentration. Thus, one group has qualities like "ritualistic", "magical beliefs", "sacred relationship to land" and the like, all featuring

⁹⁴"Socio-Cultural Aspects of Man-Environment Studies", Rapoport, 1976, p.25.

⁹⁵"On Attributes of Tradition", Rapoport, 1989, p.83.

on religiosity or attitude towards religion, superstition or even supernatural powers (1989).⁹⁶

On the other hand, by putting together inferences of his previous research materials, Rapoport postulates that culture and built environment do not operate on the same scale. Aspects of domestic habitations reflect the use of space which in turn is a reflection of the culture. Once again, in this scenario, physical environment becomes a broad limiting factor. He revises his "systems of setting" by inducing levels of scale, time and cross cultural comparability. Perhaps this will interpret the "culture specific" and "temporal specific" designs of settlements less problematically (Rapoport, 1990).⁹⁷ However, in either case Rapoport does not present a questionnaire format specifically identifying levels of data (mostly nominal and ordinal) or even a basis for quantifying them. Nevertheless, it is a stepping stone for designers to seek explanations through analytical reasonings and diversify their attention from portraying descriptions of settlements.

6.1.2 More Recent Studies from Designer's Point of interest:

Much of the recent research conducted by architects, planners and geographers, with an interest in VDH adopts Rapoport's hypothesis by exploring the variations and distributions of built forms either within a region or within a culture. Even studies with a cross-cultural perspective are becoming extremely popular. A bigger proportion of these works seek to explain physical features of the built environment like interior plan, exterior treatments, decorative treatments (symbolic and/or non-symbolic), relative positions of structures, by portraying the influence of multiple social and cultural factors of the settlement. More recent ones (only to name a few) besides others

⁹⁶ibid., p.83.

⁹⁷"Systems of Activities and Systems of Settings", Rapoport, 1990, p.11.

mentioned in earlier chapters, include:

African Traditional Architecture by K.B. Anderson, 1977.

4 Villages: Architecture in Nepal by K.D. Blair, 1983.

China's Vernacular Architecture by R. Knapp, 1989.

Once again, these books are only a sample that represent the vast body of case studies (either of a single domestic building or groups of buildings) incorporating both physical and socio-cultural dimensions of VDH in their analysis. Critical analysis of historical and cultural factors together with interpretations of built forms is nicely documented in Native American Architecture by P. Nabakov. This book was published in 1989.

Some popular design-oriented journals (only to name a few) publishing case examples of VDH include Architecture and Behavior, Material Culture, Proceedings of the Environmental Design Research Association, Landscape, Journal of Architectural and Planning Research, Habitat International, Architectural Review etc. Vance bibliographies of architectural series also provide listings of a broad range of case specific vernacular habitations both in the Western world and the Third world. The Center for Environmental Design Research at the University of California Berkeley has recently started publishing a semi-annual journal by the name Traditional Dwellings and Settlements Review. Publications in this journal and conferences organized by the center (together with International Association for the Study of Traditional Environments) cater some of the most recent studies by scholars in architecture, art history, anthropology etc. Needless to say, a variety of published materials, also exist within the domain of geography, anthropology, behavioral and environmental psychology, to be discussed later.

6.1.3 VDH and Architectural Education:

VDH as a tool for ameliorating the practicing and academic interests of architects has

been discussed by Henry Glassie and, Yasemin Aysan and Necdet Teymur. The former presentation "Vernacular Architecture and Society" by Glassie evaluates the professional understandings of VDH through realizations of the trends followed by contemporary Turkish architects. Glassie observes that unlike U.S students and scholars, Turkish designers actually embrace and incorporate lessons from VDH in real life planning of residential developments. For them, case studies are not limited to the creation of historical documentation alone. Aysan and Teymur's presentation "Vernacularism in Architectural Education" briefly traces various ways in which the idea of vernacular architecture has been incorporated into architectural curricula and how it can be actually improved by recognizing the existence of a "neglected bigger world", their cultural practices, artifacts, and know-hows. Specific branches of architectural theory, anthropology, and history are reviewed in order to provide a baseline for new courses that architectural classrooms must include. They also present a brief survey report of British Architecture schools to show the ways in which the schools approach the question of VDH. This is helpful for a researcher to elaborate upon the exact nature of the courses or even design the content or syllabi for undergraduate as well as graduate students. In discussing the "Normative Theories of Architecture", Jon Lang pointed out the role of behavioral scientific research that can contribute in developing a new "architectural theory" to enhance the understanding of the attitudes of designers.⁹⁸

6.1.4 Oliver's Documentation of Symbolic Features in VDH:

In the "Introduction" segment of Shelter, Sign and Symbol Paul Oliver presented some of the important aspects of sign and symbol that are associated with VDH. Chapter II presents a

⁹⁸"Understanding Normative Theories of Architecture", Lang, 1988, p.628.

comprehensive summary together with appropriate questions not expressed or dealt by him. On a broader perspective, meanings adhered to signs and symbols are very complex and elaborate indeed. Often they focus on particular architectural treatments or motifs as mentioned earlier. In other occasions, the emphasis is on cosmology and related structures. The aspect of cosmology and the normative structure supporting it, makes explicit demands on the organization of physical spaces such as the Hindu "Vastushastra" or the Chinese "Feng Shui". Both phenomena illustrate the geometric art form of proper placement of structures (Sinha, 1989 & Lee, 1989).⁹⁹ In other cases, spatial principles are coded in language constituting abstract aesthetic theories like the Japanese theory of "nothingness" (Bognar, 1989).¹⁰⁰ Even studies of Western vernacular habitations such as the one on "American Folk Housing" conducted during early sixties, explains variations with respect to cultural origins, cultural changes and continuities within different environmental conditions (Kniffen, 1965).¹⁰¹

In his book, Oliver argued that shape of the dwelling or any particular feature of the total settlement is often an outcome of symbolism. Interestingly, several studies reveal that rectangular buildings for example, possess an additive quality (helpful for future construction) and tend to be more permanent than circular ones (Rapoport, 1969).¹⁰² Therefore, one can also ask questions like,

Is there a correlation between symbolic significance of any physical dwelling unit and its construction methodology?

Does the fixation over shapes (specially in primitive VDH) primarily cater to cost and

⁹⁹"Traditional Dwellings in Indian Villages", Sinha, 1989, p.18. and "Siting and General Organization of Traditional Korean Settlements", Lee, 1989, p.304.

¹⁰⁰"The Place of Nothingness", Bognar, 1989, 184.

¹⁰¹"Folk Housing: Key to Diffusion", Kniffen, 1965, p.552.

¹⁰²House, Form and Culture Rapoport, 1969, p.25.

construction or a symbolic belief adheres to it? Which factor has a preference?

One can also inquire into the scientific basis of symbolic representations, if one believes in the scientific background of mythical and supernatural beliefs. Designer's perception of symbolism and VDH primarily portrays the metaphoric functions of built form. They get fascinated with the architectural motifs or two or three dimensional special elements that actually express symbolism. Thus their writings illustrate descriptions of those elements/things that are symbolically activated through rituals and religious rights.

On the contrary, interactions between built environment and social organization are better interpreted by social scientists. For example, social symbolic accounts emphasizing communication of built form and social status can be explained through Duncan's postulation of collectivism. At the same time, Levi-Strauss and Bourdieu draw on larger socio-cultural system that has greater theoretical support. Their research have a symbolic approach too. By taking a closer look at the mental structure and process that governs a society, they concentrate on how and why people manipulate the built environment to suit specific social needs.

6.1.5 Studies on "Rituals" Portraying Symbolic Dimension of VDH:

Theories of rituals reveal that domestic spaces in VDH often acquire meanings through ritual performances. Because rituals occur in space, the spatial dimension gains meaning through its association with symbols. To this end, Saile's study on pueblo dwellings is worth mentioning. Saile observed that in pueblo houses "ceremonies are necessary to convert the inert materials of construction into a home, a living place" (Saile, 1985). There are many other studies conducted by anthropologists who necessarily focus on ritual efficacy and how the built environment acquires meaning through ritual performances. Such studies and other ethnographic research can benefit designers and architects for developing better theoretical foundations and normative

structure of physical/spatial symbolisation. Journals like Human Behavior, American Anthropologist, American Ethnology, Environment and Behavior, American Journal of Archaeology, Historical Archaeology, Journal of Anthropological Research, Annals of Association of American Geographers (just to name a few) are possible sources to look for.

6.2 Critical Evaluation of VDH from Social Science Perspective:

6.2.1 Social Organization and Built Forms:

A substantial body of literature exists within the broader domain of social science that refers to the built environment as an expression of social and political structures. A key area of research has focused on the relationship between individual or group identity and habitations. Duncan's thesis on housing and identity represents this character by arguing how different domestic forms together with their landscapes express institutionalized strategies of a particular social group. In connection with collectivism, Duncan argued that influences from Western lifestyles tend to create an individualistic image as opposed to the group oriented collective values. This transformation is reflected in the physical layout of the house with less sexual segregation. In his study Duncan never questioned as to why such a phenomenon takes place.

His interests as a cultural geographer never investigated the causal linkages of sociological and historical antecedents. Duncan's research thus focuses on developing an understanding of VDH as they are existing (an ontological approach). The term collectivism aptly describes the group dynamic characteristic of VDH. It is relevant and meaningful in its use. Also collectivism versus individualism indicates that built forms are integral elements of larger social structures. Such perceptions have broader implications in expanding theories of symbolism and social production.

6.2.2 Bourdieu, Levi-Strauss and the Significance of VDH:

By far the most developed theoretical framework for symbolic analysis of built form has been forwarded by Bourdieu and Levi-Strauss. Their research portray an underlying unconscious mental structure realised in versatile socio-cultural manifestations. The most important outcomes of Levi-Strauss's work are (a) existence of a structured pattern of cultural behaviours formulated through levels of kinship relations and (b) binary oppositions representing universal characteristics of human thought. By applying this approach to spatial organization, Levi-Strauss postulated the polarities of harmonic versus dysharmonic layouts of settlement plans, blended with the complexity of moeity organization. However, Levi-Strauss did not define precisely the techniques by which he selected and manipulated data. Results of his analysis are clear and convincing but there has been a lack of clarity in explicating the actual theory, especially the ways in which "structures" are operationalized. Also, primitive culture is viewed as being static or fixed. It fails to account for the social historical change. Within limitations though, it is an excellent piece of work, a unique creation useful for contemporary social-anthropological as well as spatial-architectural analysis.

Levi-Strauss's dual-organization approach has been used by researchers like Ortiz, Cunningham and others. Ortiz's study concentrates on the Tewa (native American tribe) spatial and social structures (Ortiz, 1969).¹⁰³ In discussing Atoni social relations, Cunningham found that classification of house parts and the floor plan communicated the social structure of the inhabitants. The house like ritual is a means for transferring social structure from one generation to the other. (Cunningham, 1964).¹⁰⁴

¹⁰³The Tewa World: Space, Time, Being and Becoming in a Pueblo Society, Ortiz, 1969.

¹⁰⁴"Order in the Atoni House", Cunningham, 1973, p.209.

Bourdieu's idea of the house as a "structuring structure" rests on the preamble that cultural rules governing symbolic structures are not decided by the inhabitants. Inhabitants use habitus to reproduce existing structure which includes not only "a way of being" but also, the "result of an organizing action" (Bourdieu, 1977).¹⁰⁵ Bourdieu disagrees with the notion of a largely static society. Instead, he makes the reader fully aware of the changing socio-cultural and historical process that brings transformations in societies. He believes that everyone learns not by absorbing mental structures but by imitating the action of others. Thus one can trace out how "actions" socialize in relation to spatial configurations and objects. By focusing on the spatial dimension Bourdieu unites social theory with space and time. Particularly, the relationship between people and spaces poses a changeable pattern of the habitus in the course of power struggles between groups, individuals or even different societies (Donley-Reid, 1990).¹⁰⁶ This is one of the most significant theoretical contribution of Bourdieu.

The reflexive nature of "practices" has been further explored by Giddens who observes that house is both the medium and outcome of social practices. He also states that individuals in power have the right to control settings for activities. They determine the use, form and symbolic meaning and the resulting spaces only assure the positions of the powerful heads (Giddens, 1979).¹⁰⁷ Bourdieu's theory of practice has been applied by other people like Moore who reveals how space acts as a text to describe its meaning and reinforce gender ideologies. The reader may find his book Space, Time and Gender: An Anthropological Study of the

¹⁰⁵Bourdieu explored how symbolic systems were established and maintained through practice ie daily household and ritual activities. According to him, practice gives meaning to "language,dress, kinship, objects, economy, food, proverbs, myths, songs, rites etc. All of these are elements of social organization that structure societies", Outline of a Theory, of Practice, Bourdieu, 1977, p.89.

¹⁰⁶"A Structuring Structure: The Swahili House", Donley- Reid, 1990, p.115.

¹⁰⁷Central Problems in Social Theory : Action, Structure and Contradiction in Social Analysis, Giddens, 1979, p.112.

Marakwet of Kenya, interesting. Readers can also benefit from studying Roderick Lawrence's publications in this field.

6.2.3 Ancient Architecture and VDH:

Unlike anthropologists who pay relatively less attention to the physical form, studies conducted by ethnoarcheologists addresses physical attributes together with social organization of ancient VDH. They focus on the exactness or accuracies that help to draw inferences on behavioral conventions of ancient settlements. Parallel existing/living groups are treated as analogs of the past (Kent, 1990)¹⁰⁸ and conclusions from studies on contemporary domestic built form and social organizations are extrapolated to estimate pre-historic behavioral conventions. To this end, Sanders's study (Chapter V) has been particularly effective in specifying functions and features of ancient Myrtos. These include both spatial variables like rooms, size, type of structure etc. as well as socio-psychological conventions.

Regarding cultural conventions, Sanders argued that VDH is created through a sequence of design decisions and different components of the built environment reflect the encoded world views and cultural values of the builder/s. Like cultural geographers, Sanders believes that within a cohesive cultural group individual domain or places are the product of particular values. This proposition is parallel to Rapoport's original definition of systems of settings. It entails that the total built environment is an expression of ordering behaviour in space. However, this viewpoint does not take in to consideration the role of praxis or the structuring principles of social practices. Instead, it concentrates on a proactive nature of various theories to develop a conceptual framework within which the analysis of ancient domestic architectural features (like Myrtos) is

¹⁰⁸"Activity Areas and Architecture", Kent, 1990, p.44.

feasible. By incorporating semiotic, proxemic and behavior-environment analysis Sanders evaluated ancient architectural elements and patterns, functions of features and nature of expected behaviors of the inhabitants. Since the theoretical concepts of environmental psychology reflect an abstract image, results of their applications only yield a "near approximate" picture. Within limitations though, Sanders's research has been successful in presenting a methodology or research guideline for evaluating ancient VDH. Perhaps, the methodology could have been refined more through sophisticated non-parametric statistical models.

6.3 Conclusion:

From the critical discussions presented here, we observe that inquiries on VDH pose two sets of questions. The first set is more generalistic in nature, dealing with the environmental features like physical components of nature, type of building materials, available technology etc. These factors Turan refers to as "environmental adequacy" (Turan, 1990)¹⁰⁹ differ in various environmental contexts. Moreover, both Rapoport and Turan agree that this is the product component of VDH but, not the only answer to comprehend its actual meaning. As a product it may provide information about physical structure, form or use of material ie the "whatness" of VDH.

The ideas that stem from cultural convictions, specific rituals and patterns of life are non-architectural in nature and provide information regarding the "how" of the actual making. These social-science related issues reinforce the second set of questions mostly depending upon reasoning and understanding. VDH simply as a physical entity presents an incomplete picture and ignores the philosophical questions that arise from the process and relational aspects. Beyond

¹⁰⁹"Vernacular Design and Environmental Wisdom", Turan, 1990, p.14.

representation one has to actually learn about the social origins of knowledge, the importance of history and the historical development and transformation of ideas. Also, one has to explore the cognitive framework of mind of the creators of VDH. VDH is not an isolated phenomenon in society, it reflects a complex socio-cultural picture of both the creators and the society at large. Some of the elements of this complex milieu have been presented in this paper.

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