National Library of Canada

Bibliothèque nationale du Canada

Acquisitions and Bibliographic Services Branch

Direction des acquisitions et des services bibliographiques

395 Wellington Street
Ottawa, Ontario
K1A 0N4

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file Votre référence

Our file Notre référence

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30, et ses amendements subséquents.

Canada

UNIVERSITY OF ALBERTA

House, Society, and the Embodied Mind

In

Eastern Indonesia

BY

Timothy J. Byron

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Arts.

Department of Anthropology

Edmonton, Alberta
Fall 1995

National Library of Canada

Bibliothèque nationale du Canada

Acquisitions and Bibliographic Services Branch

Direction des acquisitions et des services bibliographiques

395 Wellington Street
Ottawa, Ontario
K1A 0N4

395, rue Wellington
Ottawa (Ontario)
K1A 0N4

Your file Votre référence

Our file Notre référence

THE AUTHOR HAS GRANTED AN IRREVOCABLE NON-EXCLUSIVE LICENCE ALLOWING THE NATIONAL LIBRARY OF CANADA TO REPRODUCE, LOAN, DISTRIBUTE OR SELL COPIES OF HIS/HER THESIS BY ANY MEANS AND IN ANY FORM OR FORMAT, MAKING THIS THESIS AVAILABLE TO INTERESTED PERSONS.

L'AUTEUR A ACCORDE UNE LICENCE IRREVOCABLE ET NON EXCLUSIVE PERMETTANT A LA BIBLIOTHEQUE NATIONALE DU CANADA DE REPRODUIRE, PRETER, DISTRIBUER OU VENDRE DES COPIES DE SA THESE DE QUELQUE MANIERE ET SOUS QUELQUE FORME QUE CE SOIT POUR METTRE DES EXEMPLAIRES DE CETTE THESE A LA DISPOSITION DES PERSONNE INTERESSEES.

THE AUTHOR RETAINS OWNERSHIP OF THE COPYRIGHT IN HIS/HER THESIS. NEITHER THE THESIS NOR SUBSTANTIAL EXTRACTS FROM IT MAY BE PRINTED OR OTHERWISE REPRODUCED WITHOUT HIS/HER PERMISSION.

L'AUTEUR CONSERVE LA PROPRIETE DU DROIT D'AUTEUR QUI PROTEGE SA THESE. NI LA THESE NI DES EXTRAITS SUBSTANTIELS DE CELLE-CI NE DOIVENT ETRE IMPRIMES OU AUTREMENT REPRODUITS SANS SON AUTORISATION.

ISBN 0-612-06329-1

Canada

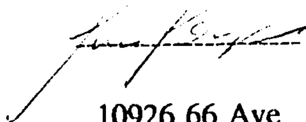
UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR:	Timothy James Byron
TITLE OF THESIS:	House, Society, and the Embodied Mind in Eastern Indonesia
DEGREE:	Master of Arts
YEAR THIS DEGREE GRANTED:	1995

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as hereinbefore provided neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.



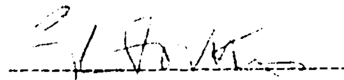
10926 66 Ave
Edmonton, AB. T6H 1J5

10 May 1995

UNIVERSITY OF ALBERTA

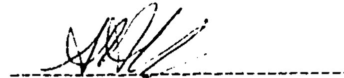
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled House, Society, and the Embodied Mind in Eastern Indonesia, submitted by Timothy James Byron in partial fulfillment of the requirements for the degree of Master of Arts.



Dr. G. Forth

Dr. J. DeBernardi



Dr. S. Niessen

10 May 1995

ABSTRACT

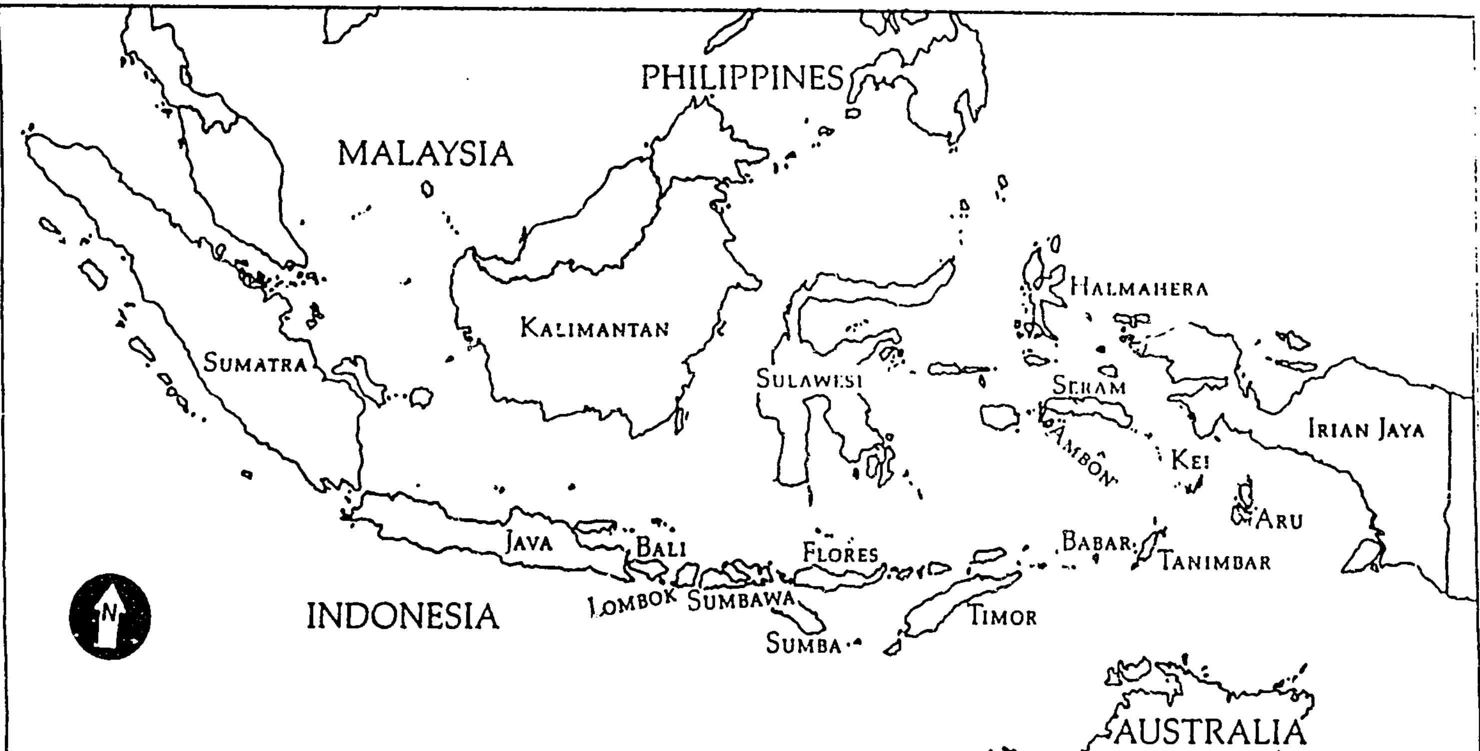
The categories comprising common eastern Indonesian understandings of human dwellings, including, in addition to the general category 'house,' categorizations of parts and locations within a 'house,' evince a cognitively basic kind of cultural knowledge. Such knowledge can be shown to be cognitively basic inasmuch as it displays features of 'basic-level' and 'kinaesthetic image-schematic' structure. The cognitive structures abstracted, as such, from eastern Indonesian categorizations of domestic space and architecture, are indicative of motivated meanings deriving from the preconceptual, that is, embodied nature of experience, hence, the "embodied mind" in the title of this thesis. I argue, moreover, that eastern Indonesian categorizations of the 'house,' and, by metaphorical extension of such categorizations, social relations evince the kind of knowledge most likely to attain a wide distribution spatio-temporally within an 'oral tradition,' or within a set of geo-historically contiguous and linguistically related oral traditions, such as those comprising the eastern Indonesian 'ethnographic field of study.'

Acknowledgements

I would like, first and foremost, to thank Professor Gregory Forth for introducing me to the ethnography of eastern Indonesia, and for the consistent advice, encouragement, and editorial offered to me throughout the writing of this thesis. I must thank Dr. Forth, as well, for bringing to my attention, and providing what would otherwise not be readily available, a number of unpublished works of his and others included here.

I thank the instructors in the department of Anthropology at the University of Alberta who have guided my theoretical interests (which are either implied or declared in this thesis), especially: Professor Michael Asch (for insights on Functionalism, Structuralism, and Marxism); Professor Jean DeBernardi (for encouraging me to study the staggeringly difficult work of Pierre Bourdieu and Anthony Giddens); and, again, Professor Gregory Forth (for his critical guidance on theories of semantics, semiotics, and cognitive science).

Finally, I would like to fondly thank Kirsten, my wife, for her patience, criticism, and 'Word Perfect' program savvy, and our child, Geoffrey, a little anthropological example who provided me with the impetus for studying a domain of psychology which is pertinent to this thesis, cognitive development.



Map 1 The Indonesian archipelago

Map 2 The Eastern Lesser Sunda Islands

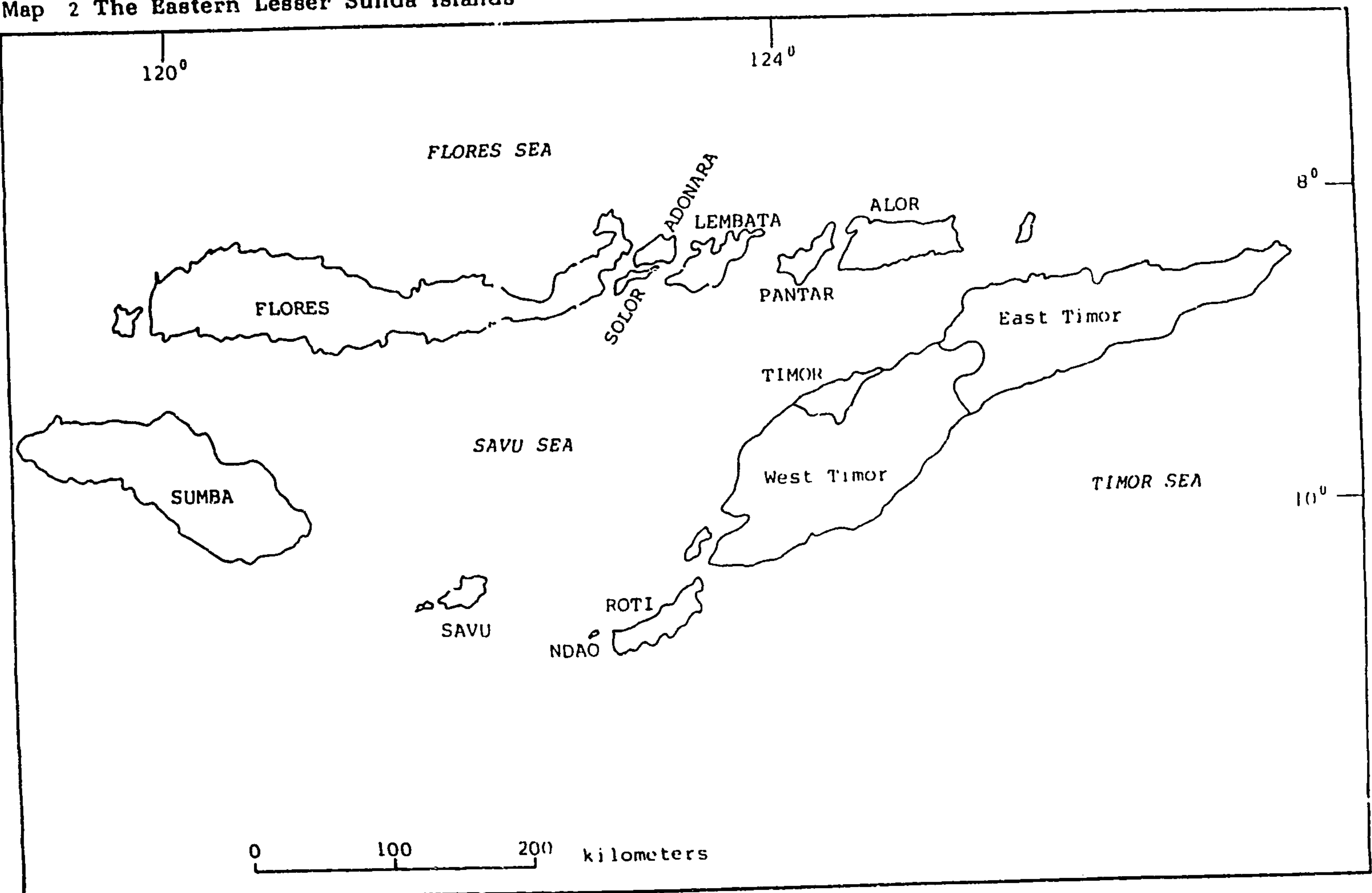


TABLE OF CONTENTS

INTRODUCTION 1
Notes 13

CHAPTER ONE: THE HOUSE 16
Inner/Outer, Central/Peripheral 19
Asymmetric and Concentric Dualism 31
Gendered Space 40
Vertical Space 43
Notes 51

CHAPTER TWO: HOUSE AND KINSHIP 56
Elder/Younger 60
Trunk/Tip 62
Notes 64

CHAPTER THREE: HOUSE AND MARRIAGE 66
Notes 81

CONCLUSION 82

BIBLIOGRAPHY 85

ILLUSTRATIONS & TABLES

FIGURES
Figure 1, The Atoni House 24
Figure 2, The Tanimbarese House 26
Figure 3, The Tana Wai Brama House 28
Figure 4, The Nage House 29
Figure 5, The Sumbanese House 34
Figure 6, Orientation of Building Components in the Kedangese House 35
Figure 7, Orientation of Building Components in the Sumbanese House 35
Figure 8, Orientation and Spatial Order of the Atoni House 39
Figure 9, Vertical Partition in the Rotinese House 47

TABLES
Table 1, The Gender of a Number of Eastern Indonesian Houses 41
Table 2, Vertical Space and Value Inside the Eastern Indonesian House 48

INTRODUCTION

This thesis is intended as a contribution to the social and cognitive anthropology of eastern Indonesia, comprising an interpretation of several regional ethnographies and specific papers. The focus is on eastern Indonesian categorization, paying particular attention to categories that refer to features of the house, and to kinship and marriage. The category 'house' will, however, be the main focus, as it can be used with reference not only to a physical dwelling, but also to a group of kin, or an exogamous unit. As Fox (1980:11-12) indicates, "'house' is a fundamental cultural category used in eastern Indonesia to designate a particular kind of social unit. Although remarkably flexible in its range of applications, the category has certain associated characteristics." The category 'house' subsumes several related categorizations, which comprise its total sense, and which can be inferred from significations about the architecture and spatial organization of the house. These categorizations account for the diverse ways by which a number of notions relating primarily to the 'house' can be effectively used to metaphorically structure an understanding of social life.

I offer an account of eastern Indonesian cultural categories that accords with the theory of "embodied cognition" (Varela 1991, Johnson 1987, Lakoff 1987), which explains conceptual structures as founded upon preconceptual structures rooted in motor-perceptual experience. I also argue that, inasmuch as eastern Indonesian cultural knowledge evidences motivated structures of preconceptual understanding, which are enacted in social practices, it accords with the kind of knowledge most likely to attain a cultural level of distribution within an "oral tradition" (Sperber 1985:74).[1]

I start here with a very general statement regarding the ontological status of culture, the answer to which is critical for understanding the categorical orientation of this thesis: *the most basic cultural objects are categories*. Culture is minimally comprised of categories of experience and, in addition to these, relations among categories. Cultural knowledge is thus, in large measure, the product of cognitive processes of human categorization.

As regards the broader conditions of existence of cultural categories, I argue that culture cannot exist independently of the knowledge of social agents, and that cultural objects are dependent upon the processes by which they are known by agents. In other words, culture is a product of the cognition of *social* agents.[2] Insofar as categories evidence embodied and situationally enacted understandings, moreover, they are not reified as things, that is, as signs existing apart from, or external to the agents who enact them. Cultural categories 'exist' only as the medium and outcome of communicative processes in interaction. Of course, the communication of categories would not be possible without signification (Eco 1976:8-9), that is, without the presentation of objective sign-vehicles, the recognition of which depends upon perception and memory. Cultural categories 'exist,' on the one hand, as embodied memory traces, and, on the other hand, as such traces are instantiated in social practices involving perceptible signs, such as natural objects, artefacts (linguistic, physical, spatial), and bodily states and appearances (see Giddens 1984:25-34).

It follows, then, that, although it is possible to theoretically objectify categories by 'bracketing off' their conditions of existence, if such conditions are forgotten then an objectification can become transformed into a reification (see Bhaskar 1979:119). Such reification is to be avoided insofar as it hinders an understanding of the enacted nature of cultural knowledge. As Varela (1991:179) states, cultural knowledge is to be found neither in the mind of the individual, the rules of society, nor in cultural artefacts, but rather, in their total interface: "the knowledge does not preexist in any one place or form but is enacted in particular situations." The objectification of cultural knowledge will inevitably involve some abstraction and construction, because the categories comprising such knowledge are theoretically, because not wholly perceptibly, real: that is, they can only be empirically identified according to their effects, and do not exist independently of those effects, because of their peculiar ontological status as "recursively grounded" (Giddens 1984:31) in processes of social communication and signification.

Returning to the issue of cultural knowledge, we can theoretically infer it as being minimally comprised of cognitive objects, whether tacitly or consciously realized, called categories. Having initially identified the main objects of the investigation, it is reasonable to inquire about their nature. Following Peirce, we can succinctly state that categories, as embodied signs, stand *for* something *to* someone *in* some respect or capacity, and this constitutes their meaning. In other words, although human categories inhere a sense, or relational meaning, they also involve a reference, and always in relation to some person situated within a sociocultural context.

A cognitive scientific theory about categorization posits that human categories are the products of perceptual, motor-active, emotional, social, and in humans, historical and linguistic "experience" (Johnson 1987:xvi, also Deely 1982:107-123). There is a broad consensus within the field of cognitive science, however, that categorization begins with a basic, bio-organismic capacity, without which an organism could not function within its environment, which is always a *categorized* environment:

> One of the most fundamental cognitive activities that all organisms perform is categorization. By this means the uniqueness of each experience is transformed into the more limited set of learned, meaningful categories to which humans and other organisms respond. (Varela *et al.* 1991:176)

The ability to categorize is evidenced in the "pre-linguistic," "zoosemiotic" capacities for functioning in an environment common to humans and animals, capacities which allow "cognitive structures [to] emerge from the kinds of recurrent sensorimotor patterns that enable action to be perceptually guided" (Varela *et al.* 1991:176). Properly "anthroposemiotic" modes of categorization, which are "post-linguistic" in nature, depend upon the more basic zoosemiotic dimension of experience: "Proximate to language ... is the larger semiotic web of human experience that intricately interweaves linguistic semiosis with perceptual semiosis shared in common with other

biological species" (Deely 1990:28, Sebeok 1994).[3] Implied in the theory of embodied cognition is "*an integral model of human experience* in which language has its place and decisive place within anthroposemiosis, but without being absorptive of all that precedes and follows upon it in experience - a model [including] ... the larger perspective of semiosis as a phenomenon of nature" (Deely 1986:xiii). Human categorization, therefore, cannot only be the product of linguistic consciousness: as Jackendoff states,

> An essential aspect of cognition is the ability to categorize: to judge that a particular thing is or is not an instance of a particular category.... We should note at the outset that categorization judgements need not involve the use of language: they are fundamental to any sort of discrimination task performed by dogs or rats or babies.... [T]he ability to categorize is indispensable in using previous experience to guide the interpretation of new experience: without categorization, memory is virtually useless. Thus an account of the organism's ability to categorize transcends linguistic theory. It is central to all of cognitive psychology (1983:75).

If categorization is central to cognitive psychology, then it must also be central to cultural anthropology, because culture is comprised of categories. All cognition is principally an activity of enacting categories of knowledge, and cultural categories are distinguished, 'more or less,' from individual categories principally by their wider distribution geo-historically.

Human categorization takes place in bio-psychological, social-communicative, and physical (material and spatio-temporal) environmental media that together form the ecological context sustaining the products of categorization, that is, categories. An embodied account of cultural categories is therefore ecologically oriented inasmuch as it assumes the following: "Cultural phenomena are ecological patterns of psychological phenomena. They do not pertain to an autonomous level of reality ... nor do they merely belong to psychology" (Sperber 1985:76).[4] Conceived as ecologically embedded psychological objects, cultural categories can be understood as being recursively grounded in communicative processes of social interaction, as stated above.

Culture is a general phenomenon that has as one of its necessary conditions the presence of a number of individuals who regularly interact and thereby communicate in more or less predictable ways, supposedly on the basis of discoverable patterns and regularities. Broadly stated, assuming that those individuals occupy a common region of proprietary space (see Harré 1980:205) within which they reproduce over time, they will comprise a population or society. A cultural category can be generally defined, therefore, as a category that has as its optimal, albeit counterfactual, condition, a perfectly homogeneous distribution within a society (see Keesing 1976:141-142, and Sperber 1985:74).

It may be asked then, why there are those categories that, on the one hand, have as their necessary condition an intra-individual existence and yet, on the other

hand, manifest an inter-individual distribution that is more or less homogeneous? We need to explain such distribution over the space and time of a population. The explanation must be found, at least in part, in a set of retention criteria. Given that cultural phenomena are ecological patterns of psychological phenomena, and *not* an autonomous level of reality, it would follow that the retention criteria would indicate a set of at least partially external constraints that enable certain categorizations to reach a cultural level of distribution.

The basic problem with standard social science explanations of cultural phenomena is that they assume generally that culture is an autonomous realm of symbols, *sui generis*, "*Omnis cultura ex cultura*" in Lowie's words, or that man is quintessentially "the [arbitrary] symbol-making animal" (cf. Sebeok 1994:33-37). I exclude Lévi-Strauss's structural anthropology from such a characterization because his model of culture is explicitly ecological, that is, naturalistic, and "ontologically stratified" in the sense that he distinguishes, albeit not without privilege, the reality of 'surface' phenomenal appearances and 'underlying' generative structures (see Lévi-Strauss 1985). Malinowski's functionalism is also an exception for essentially the same reasons. But certain structural-functionalist, post-modern, and hermeneutic theories of culture are, generally speaking, variations on the standard social science model. Even those theories that attempt to explain culture in extrinsic terms, such as certain sociobiological, Marxist and cultural-materialist theories, are missing a fully articulated view of that frequently "uninvited guest," the human mind.

What accounts for the past success of structural anthropology is that Lévi-Strauss always tried to integrate knowledge and theory from diverse fields of investigation, such as ethnography, linguistics, cybernetics, biology, and psychology. The theory was convincing inasmuch as it was conceptually integrated with findings from other disciplines. As the scientific knowledge upon which structural anthropology was based changed, so did structuralism lose some of its appeal, although it has not been entirely discredited. Apart from the sceptical turn evidenced by recent post-structuralist and post-modernist theories, a realist, 'structurationist'[5] theory is emerging in the field of anthropology, deriving especially from the broadly similar theories of Bourdieu (1990) and Giddens (1984).[6] 'Structurationist' theory is more contemporary, and hence also more comprehensive than Lévi-Strauss's structuralism in terms of its conceptual integration with other fields of knowledge.

The broad mutual agreement upon which such integration is founded derives from such diverse fields as evolutionary biology (Lewontin 1983, 1988 and Gould 1977), artificial life science (Varela 1991, 1992), continental influenced philosophy (Merleau-Ponty 1962, Dreyfus 1979, 1982) semiotics (Sebeok 1994, Deely 1990), sociology (Bourdieu 1990, Giddens 1984), and cognitive science (Clark 1989, Churchland 1989, Lakoff 1987, Johnson 1987, Rosch 1978), to name a few. What distinguishes each of the investigators cited is an effort to produce a conceptually integrated, mutually consistent approach across disciplinary fields, albeit not without producing some productive differences. The result of such cross-disciplinary communication is a disciplinary ecology that furthers scientific understanding in each discipline. Alternative conceptually integrated frameworks for explaining culture, or

"competing paradigms," exist as well (Barkow 1989, 1992, Sperber 1985), but their "cognitivist," or sociobiological approaches do not agree with 'structurationist' theory.

To reiterate a central point, cultural phenomena are ecological patterns of psychological phenomena that, in their most basic form, are categorizations of experience. The one notion that unifies the ecological view of categorization is *embodiment*: that is,

> the idea that the properties of certain categories are a consequence of the nature of human biological capacities and of the experience of functioning in a physical and social environment. It is contrasted with the idea that concepts exist independent of the bodily nature of any thinking beings and independent of their experience. (Lakoff 1987:12)

An embodied account of categorization characterizes the meaning of categories and, by extension, the meaningful patterns of categories in culture, according to the embodied, preconceptual structuration of experience.

Cultural phenomena should not be thought of as belonging to an entirely autonomous level of reality because culture itself is demonstrably embodied. Even the relatively more abstract concepts that form part of what any culture is are derived from and reflect their source in embodied cognition. As Lakoff states, "conceptual structure exists and is understood because preconceptual structure exists and is understood. Conceptual structure takes its form in part from the nature of preconceptual structures" (1987:267). Conceptual structure, however, is not completely derived internally from preconceptual structure. Concepts are also structured externally, relationally, or positionally by a background of other concepts or signifieds which are themselves to some extent preconceptually structured. Lakoff can therefore account for the fairly obvious fact that "structure ... cannot arise from something that has no structure whatever" (1987:267). Thus, "If conceptual structure arises from preconceptual experience, that preconceptual experience must itself be structured" (1987:267).

The bio-psychological theory of enaction, or embodied cognition, accounts for how organisms are enabled to enact a world according to a learned repertoire of experiential categorizations that are constrained both by the nature of the organism and the environment in which the organism acts and perceives. The organism enacts its environment on the basis of "cognitive structures [that] emerge from the kinds of recurrent sensorimotor patterns that enable action to be perceptually guided," a view pioneered in Piaget's theory of *genetic epistemology* and elaborated in Merleau-Ponty's phenomenological psychology (Varela 1991:176). Cognitive structure emerges from recurrent patterns of sensory motor activity, as Dreyfus states: "sensory motor skills underlie perception whose basic figure/ground structure seems to underlie all "higher" rational functions [in which] individual features get their significance in terms of an underdetermined anticipation of the whole" (1979:255). The appeal of this account of embodied cognition is that it explains abstract conceptual structure

ontogenetically as an emergent phenomenon, and not a phenomenon that is obscurely derived *sui generis*.

There are basically two classes of structure in preconceptual experience: (1) basic-level structure; and (2) kinesthetic image-schematic structure. These two classes of preconceptual structure are "directly meaningful" and provide the basis for more abstract conceptual structures that are "indirectly meaningful." As Lakoff indicates, "the basic level is primarily characterized by gestalt perception (the perception of overall shape), by imaging capacity (which depends on overall shape), and by motor interaction (the possibilities for which are also determined by overall shape)" (1987:36). "Basic" here refers to cognitively basic: "Basicness in categorization has to do with matters of human psychology: ease of perception, memory, learning, naming, and use" (Lakoff 1987:38). In terms of a classical taxonomic ordering of categories "the categories that are cognitively basic are 'in the middle' of a general-to-specific hierarchy. Generalization proceeds 'upward' from the basic level and specialization proceeds 'downward'" (Lakoff 1987:13).

The other class of preconceptual structure, kinesthetic image-schematic structure, emerges from recurrent forms of sensorimotor activities and interactions. Image-schemata evince, according to Johnson, "gestalt structure ... [that is] an organized, unified whole within our experience and understanding that manifests a repeatable pattern or structure" (1987:44). Inasmuch as image-schematic structures are recurrent they can "contribute to the regularity, coherence, and comprehensibility of our experience and understanding. [Such a] gestalt ... constitutes a recurring level of organized unity for an organism acting in its environment" (1987:62). One of the appeals for anthropological research of the notions of basic-level and kinesthetic image-schematic structures is that they are modifiable through experience and are therefore bound to be slightly different across cultures and even across the experience of different individuals (Johnson 1987:62, Lakoff 1987:37).

Preconceptual structures thus emerge from our embodied experience, out of recurrent, repeatable patterns, shapes, and regularities in our actions and perceptions. These structures are the first to be learned and memorized as basic categorizations of experience in cognitive development, and they continue to be functionally necessary, albeit in an unconscious and automatic fashion, for the life of the individual (McShane 1991:138, 326, Lakoff 1987:6). Preconceptual categorizations of experience are reducible to a micro-biological dimension as well, because they are arguably laid down in robust patterns of excitation and inhibition in neural networks. The theory of embodied structure can be substantiated in the neurophysiological model of learning and memory called connectionism, or parallel-distributed processing. As Clark explains,

> These models depend on networks of richly interconnected processing units that are individually very simple. The network stores data in the subtly orchestrated morass of connectivity. Some units are connected to others by excitatory links, so that the activation of one will increase the likelihood that the other is activated. Some are inhibitorily linked. Some

> may be neutral. The overall system turns out to be an impressive pattern completer that is capable of being tuned by powerful learning algorithms. (1989:2)

And in the words of Churchland,

> one's basic cognitive apparatus consists of a very large network of interconnected units, which admits of variation among the weights of its myriad connections. The character of one's perception, one's cognition, and one's behaviour is determined by the particular configuration of weights within the network. (1989:131)

This biologically based theory of memory is, again according to Churchland, appealing because it is at once

> (a) naturalistic, (b) reductionistic, and (c) capable of explaining both the radical plasticity of human consciousness, and its intricate dependence on the extended cultural surround.... It even makes firm contact with some of the major themes of the continental tradition in philosophy, such as the inarticulate or nonpropositional character of the bulk of human knowledge, and the primacy of being an endlessly active agent in a world of practical exigencies. (1989:130)

Connectionism thus provides a theory of learning and memory that, as a biologically based model of micro-cognition, is broadly consistent with the anthropologist's description and
interpretation of cultural phenomena and with the cognitive scientist's macro-cognitive theory of embodied cognition.

One of the questions that arises from the previous outline of preconceptual structure and connectionism is, how are more culturally specific abstract conceptual structures derived from basic-level and image-schematic structures? According to Lakoff and Johnson's theory,

> There are two ways in which abstract conceptual structure arises from basic-level and image-schematic structure:
> A. By metaphorical projection from the domain of the physical to abstract domains.
> B. By the projection from basic-level categories to superordinate and subordinate categories. (Lakoff 1987:268)

Lakoff and Johnson's theory of preconceptual structure as "experientially basic" provides cultural theory with a heuristically useful, *infrastructure-superstructure*, or stratified, model of categorization and conceptualization.[7] Preconceptual categorizations and their structures emerge out of embodied experience within a

physical and social environment, which, in turn, compose the basis for more abstract conceptual structures. If demonstratively embodied categorizations and structures are really basic, and if we can determine their (more or less) homogeneous distribution in various cultural contexts, then we can reasonably conclude that cognitively basic categories and structures are also culturally basic (see Lakoff and Johnson 1980).

If the previous hypothesis is correct, then the theory of embodied cognition can *explain* why some categories attain a cultural level of distribution within a population. The theory of embodied cognition can also account for the meaning of cultural categories in ways that previous theories could not, particularly those theories in which concepts and thought are disembodied and cut off from sensorimotor experience. The notion of embodiment implies a set of retention criteria for cultural phenomena, especially within a population that does not store some of its knowledge in written texts, that is, an "oral culture."

As Sperber states, "In an oral tradition, all cultural representations are easily remembered ones; hard to remember representations are forgotten, or transformed into more easily remembered ones, before reaching a cultural level of distribution" (1985:86).[8] There are only the objects in the social and physical environment, artifacts and natural phenomena, that serve as 'external memory' in an oral tradition. The remainder of an oral culture's knowledge will be stored, therefore, in the embodied agent, who must repeatedly enact her or his knowledge in particular situations, and in doing so must either reproduce that knowledge or transform it (see Giddens 1984:25, Varela 1991:179, Bhaskar 1994:92). The main point, however, is that knowledge in an oral tradition is primarily "situational" and "operational", rather than socially and practically abstract and disengaged, and it is enacted in terms of basic level objects and interactions (see Ong 1982:49-57).

Given that basic-level and kinesthetic image-schematic structures are cognitively basic in terms of perception, function, communication, and knowledge organization it would follow that such structures would account for much of the knowledge that is retained by individuals at a cultural level of distribution. It makes sense then that the knowledge that survives in an oral culture will be relatively easy to learn and remember, apart from those special cases where the relevant human capacities are developed to a prescribed level of expertise (see Lakoff 1987:38). The knowledge transmitted in an oral tradition, whether tacit and perceptual or discursively conscious, will probably, therefore, consist mostly of a *motivated*, rather than an arbitrary kind. The reason, in Lakoff's words, is that *"it is easier to learn something that is motivated than something that is arbitrary*. It is also easier to *remember* and *use* motivated knowledge than arbitrary knowledge" (1987:346). Motivated categories attest to a natural cognitive economy at work in culture (see Benjafield 1990:70, Law & Lodge 1984:48). Motivation operates on the basis of preconceptual structures that, through further motivated associations of a metaphoric (iconic) and metonymic (indexical) kind (evidenced in Connectionist models of memory and learning), show culture to be an embodied phenomenon.

In fact, the traditional psychological theory of the 'association of ideas' by contiguity, similarity, opposition, primacy, recency, frequency, and vividness (Drever

1978:20)—originating with Aristotle's (384-322 BC) *De Memoria* and developed by John Locke (1632-1704) in his *Inquiry of the Human Understanding* (1690) (Hearnshaw 1987:22, 76)—which lost some favour with the growth of "cognitivism" (or "computationalism") (Varela 1991:92), has recently regained its former plausibility because of the remarkable correspondence between connectionist and associationist theories of learning and memory. As McShane (1991:340) states, "a connectionist architecture provides a plausible account of the formation and structure of concepts and the associative character of memory" (see also McShane 1991:323-330 & Eco's "model Q" 1976:121-125). The notion of embodied cognition, and by extension embodied culture, becomes even more thorough in the light of these theories, for connectionist models correspond closely to actual biological systems, and because such models "facilitate a return to a behaviourist orientation," which avoids the pitfalls of "commonsense, mentalistic constructs," and allows for an understanding of human cognition as a process emerging itself from the interaction of biological, motor-perceptual, and linguistic features of experience (see Deely 1990:28-32, Lakoff 1987:26-30, Varela 1991:92, 157-171, Varela and Bourgine 1992:ix-xvii).

In a period of human science characterized according to some by "a crisis of representation," (Marcus & Fischer 1986), a response is perhaps in order. Firstly, one of the advantages of a theory of embodied cognition is that it confronts an important aspect of what it means to be objective, involving what Bourdieu calls "the objectification of the generic relationship of the observer to the observed" (1990:15). Objectivity and scientific theory can be shown to be grounded in basic-level and image-schematic structures, just as our (scientific) understanding of structures in general is grounded in those cognitive structures: according to Lakoff (1987:283), "image schemas define most of what we commonly mean by the term 'structure' when we talk about abstract domains. When we understand something as having an abstract structure, we understand that structure in terms of image-schemas." Moreover, we derive our knowledge of such structures by recognizing from our own experience that we can "distinguish concepts that are relatively stable and well defined, given the general nature of the human organism and our environment (e.g., basic-level and image-schematic concepts) from those concepts that vary with human purposes and modes of indirect understanding" (ibid:301).

Any theory, and especially one about the human mind, must involve some kind of *transdiction*, that is, "inference from 'experience' to what is in principle beyond experience" (Manicas 1987:10).[9] Transdiction allows us to "infer from what is observed to what is unobserv*able*, and in principle unobservable" (ibid.). Flanagan (1984) describes the main features of transdictive inference as involving a Kantian style transcendental argument, or, better described, "eliminative induction," which utilizes cognitively basic kinds of experience, presented as "facts," for the purpose of arriving at "transfactual," but nonetheless *real*, objects, such as causal laws, generative mechanisms, and structures. An outline of the process is described in the following procedural steps:

> 1. Start with a fact or set of facts.
> 2. Ask how the fact or set of facts could be as they are. That is, ask how the state of affairs in question is possible, how it could have come to be the way it is.
> 3. Calculate the contribution observable events and processes make to the solution of the "how is this state of affairs possible" question. If the observable events and processes provide a satisfactory solution, Stop. Otherwise, proceed to (4), the transcendental deduction proper.
> 4. Cautiously infer the necessary unobserved or unobservable events and processes to fill out the answer to the "how is this state of affairs possible" question. (Flanagan 1984:182-183)

The theory of embodied cognition is based upon such transdictive inference, and it is that theory which, in turn, allows us to fashion an epistemology for a realist science that is reflexively modified, because it is in part naturalized, in the light of findings from cognitive science.

According to certain branches of cognitive science, the nature of knowledge turns out to be broadly characterizable as "radial," with some types of knowledge being more central, more prototypical, than others, and with the latter, less central instances being motivated by the more prototypical kinds of knowledge. As Lakoff states,

> The best examples of knowledge are things that we know about basic-level objects, actions, and relations in the physical domain.... We get our basic knowledge of our immediate physical environments from our basic-level interactions with the environment, through perceiving, touching, and manipulating. (1987:297)

Positivist and empiricist (phenomenalist) theories of science[10] derived much of their persuasiveness from the appealing tangibility of prototypical kinds of knowledge. But the critical breakdown of positivist strictures entails, along with the radial model of knowledge, the inevitability of transdiction in scientific investigation, and it implies that scientific models must abstract from, and yet incorporate, basic-level categories and image-schematic structures in order to be intelligible.

The radial model of knowledge, like other scientific models, is presumably a "real" or "*iconic* model" (see Harré 1972:174), which utilizes our direct knowledge of things and processes and, by reasoned analogy, posits similar things and processes of which our knowledge is less direct. In other words, iconic models evidence the kinds of conceptual abstraction indicated by Lakoff, that is, metaphorical projection of image-schemata and the formation of super- and sub- ordinate categories from basic-level ones. Iconic models are central to scientific theory, because they provide investigators with a means by which to *explain* phenomena, to extrapolate and abstract from phenomenal, 'taken-for-granted,' categories so as to form relatively abstract, theoretical categories which inform, and are in turn informed by, empirical materials.

There is thus a mutual interpretation of the phenomenal and the theoretical in scientific investigation, which can be characterized as a kind of hermeneutic circle, a reflexive and progressive process of interpretation and description, wherein it is assumed that knowledge, and by extension, reality, is *"stratified"* into two broad classes, corresponding to different modes of reality: "surface" phenomenal (factual) events and objects, and "subsurface" theoretical (transfactual) mechanisms and structures.

The main issue to contend with, *vis-a-vis* the crisis-in-representation people, is the problem of the partial identity of the subject and object of knowledge. As Deely (1982:117) states, "It is not always possible to separate out in experience what is the contribution of the subject and what is the contribution of the object to the experimental structure of a given interaction situation." This problem has its origin in the recognition that, as Varela (1991:3-4) writes, "we reflect on a world that is not made [by us], but found, and yet it is also our structure that enables us to reflect upon this world. Thus in reflection we find ourselves in a circle: we are in a world that seems to be there, but that world is not separate from us." As disconcerting as this "fundamental circularity" may be for those who seek positive, nothing-less-than-certain knowledge, the case for scientific realism yet survives (see Bhaskar 1994:18-45).

Through mutual consistency with other domains of science, through critical philosophy, through cross-cultural and historical comparison of human practices, communication and signification, and through a personal recognition of the status of different kinds of experience and understanding, we can arrive at an agreement, which must always be fallible, regarding a domain of objects which exist and act independently of the knowledge of which they are objects.

****

In the chapters that follow the motivated features of eastern Indonesian cultural categories will be described, features that attest to the embodied dimension of processes of categorization. 'House' is the most important category in the entire thesis. In eastern Indonesia, 'house' appears to be a basic-level category in relation to the more abstract, general and superordinate category 'building,' and in relation to the more specific, subordinate category 'ceremonial house' (core-, source-, centre-house).[11] The latter generally refers to the specific house from which a 'lesser' house is reckoned to be derived through kinship.[12] I explain this in more detail in the chapters that follow. The main point here is that 'house' is a basic-level category which, by metaphorical projection from the physical domain, refers to something more abstract than a physical entity, that is, a social unit.

The metaphorical projection of the basic-level category 'house' onto social units preserves, in addition to a rich mental image, other, more basic preconceptual, image-schematic categorizations such as *containment*, *up-down* and *whole-part*, as I will explain. The basic-level concept contains image-schematic structure: as Lakoff states, "rich mental images [i.e., those associated with basic-level concepts] are structured by image-schemas" (1987:280). Of course, "the mental image is more than

the sum of the schemas'" (ibid.) but what is pertinent to conceptualizing an abstraction such as a social segment, is the image-schematic structure by which it can be understood.

Insofar as society is understood by social actors according to a set of cultural categories and their image-schematic structures, and inasmuch as those categories are enacted in situated practices involving time-space routinization (Giddens 1984), society is an objectively structured phenomenon. The enactment of cultural categories in regular contexts, and according to rules and conditions of use, indicates the efficacy of structures of signification in social life. Cultural categories are, therefore, social resources, often materially present in the form of objective artifacts, drawn upon by social actors and utilized in ways that both reproduce, and transform, social conduct, and which, in turn, function to reproduce, and transform, culture. Society and culture are therefore embodied, both cognitively and practically, as well as materially embodied in artifacts, and each recursively involves the other in a mutual sustainability.[13] While understanding that the relations among practice, cognition, communication, and signification are complex, it is still possible to "bracket off" a thorough analysis of their mutual determination and concentrate on a single aspect of their existence. In this thesis, I focus on cultural categories, without, however, completely ignoring the fact that such categories are materially and practically sustained in human bodies, artifacts, and regular interaction settings.

The eastern Indonesian category "house" is the central, organizing category of this thesis. Each chapter revolves around it as a focal point, while gradually moving away from it centrifugally, in terms of social topography. The first chapter begins with the house considered as a physical entity, ritual site, and dwelling place, outlining its spatial organization and what this means in terms of basic-level categories and image-schematic structures. The second chapter expands on this to consider the house as a social unit, primarily familial, in the domain of kinship. The "social space" of house clusters is there shown to preserve certain meanings conveyed in the architectural space: meanings, which again, display definite image-schematic structure. The third and final chapter considers the house as an exogamous unit. Marriage relations among houses are ordered in terms of categories that continue to evoke the meanings described in the previous chapters.

ENDNOTES

1. The appellation "oral tradition" is useful only in contrast to a "literate (chirographic) tradition," each of which refer primarily to a distinct means of linguistic communication, but imply a set of predictable, extra-linguistic consequences relating to cognition, culture, and society. Both an oral and literate tradition obviously produce and reproduce cultural knowledge on the basis of more than verbal language. An overemphasis on the function of language in the constitution and transmission of culture, or "verbo-" or "glottocentrism" (Deely 1986:x) is, therefore, not necessarily implied by these terms. As Preziosi (1986:44) states, "a communicative act such as verbal utterance does not normally exist *in vacuuo* (except perhaps in the fictitious atmosphere of certain recently fashionable linguistic models); rather, speech acts are invariably co-occurent with communicative acts in distinct signalling media" since it is evident that "each of the isolable sign systems evolved by humans has been designed from the outset to function both semi-autonomously and in deictic concert with other sign systems." Nevertheless, as Deely states, "relative to the distinctively human cultural traditions and developments of civilization, language is the proximate enabling medium and sustaining network of semiosis." But all signs are fundamentally categorizations of sensorimotor experience, and the meanings of the articulated sounds of language indicate this "pre-linguistic" ("zoosemiotic") experiential dimension. Any cultural tradition of knowledge, whether characterized as primarily oral or literate, is obviously transmitted by other media besides verbal language. As Giddens (1984:26) states, "knowledgeability [of social agents] is founded less upon discursive than practical consciousness." Oral production is only one means by which to constitute the human organism's socio-historical "habitus" as experienced by social agents both objectively and subjectively (Bourdieu 1990). Deriving from medieval 'psychological' theory, "the term 'habitus' ('pre'-disposition) was for Aquinas (1225-1274) [as it is for Bourdieu,] an'omnibus' term embracing traits of character, acquired knowledge and beliefs, skills and even bodily characteristics" (Hearnshaw 1987:44). "Habitus" includes, therefore, the interaction of both "pre-linguistic" and "post-linguistic" features of experience (Deely 1990). An oral tradition of knowledge is, hence, also a "practical" (sensorimotor, operational, technical, situational, economical) tradition made up of different kinds of knowledge ranging from the more or less tacit or procedural to the conscious or declarative (Best 1989:6-10, Law and Lodge 1984:101-102). Orality implies, therefore, not only verbal production, although this is obviously its primary reference: orality implies, in addition, a concomitant set of (re-) productive factors or means by which to store, recall, and communicate cultural knowledge. Obviously, oral and literate kinds of knowledge can be "present not only in the same societies but in the same individuals" (Goody 1977:148).

2. Following Bhaskar's (1994:92-93) conception, we can think of "human agency or *praxis* as transformative negation of the given...; and at the same time as both enabled and constrained by and reproductive or transformative of the very conditions of this praxis, so that these conditions are *activity-dependent...*, *conceptualized* (concept dependent but not concept-exhausted) and *geo-historically dependent*." According to

this view of agency in relation to society, "Society is both the condition and outcome of human agency ... and human agency both the production and reproduction (or transformation) of society...." (ibid.).

3. Deely (1982:112) writes, "'experience' can be *either* pre-linguistic or *both* pre- *and* post-linguistic (though not post-linguistic without also being pre-linguistic), and ... this is the proper contrast between zoosemiotics and anthroposemiotics taken in their fullest amplitude."

4. For Sperber, the 'psychological pnenomena' to which he refers are "representations," a word I prefer to avoid, given its "cognitivist", "information-processing," "Fodorian" connotations, connotations which, by the way, Sperber accepts. For a critique of the notion of representation in cognitive science see Varela (1991:134-140, Deely 1982:115).

5. The neologism 'structurationist' here encompasses rubrics such as Gidden's "structuration" and Bourdieu's "structuralist constructivism" or "constructivist structuralism," of which the essential concern is with "the dialectical process in which practice, structure, and consciousness are produced" (Ritzer 1992:430). 'Structurationism' refers to a class of theories which, although they are concerned with abstracting structures from observable relationships—organism-environment, subject-object, cognition-behaviour, agency-locale, addresser-addressee—provide a privileged role to notions of embodiment and practice.

6. See Ritzer (1992:427-440) for Bourdieu's and Gidden's "comparable" perspective on agency and structure.

7. The base-superstructure model stratifies cognition in such a way that some cognitive processes are more basic than others, but the others are not entirely reducible to the basic mechanisms. In other words, this is a model of *emergence*. As Collier (1994:110-111) states, "emergence theories are those that, while recognizing that the more complex aspects of reality (e.g. life, mind) presuppose the less complex (e.g. matter), also insist that they have features which are irreducible, i.e. cannot be thought in concepts appropriate to the less complex levels ... because of the inherent nature of the emergent strata."

8. See previous footnote on the term "representation."

9. As inference from the observed to the unobserved, transdiction "includes induction [—inference to what is not observed, as opposed to what is in principle *un*observable(see Manicas 1987:10)—] and transduction [—inference from closed to open systems (Bhaskar 1986:30)—], retroduction [—'inference to posited explanatory structures, generative mechanisms and transfactually efficacious laws' (Bhaskar 1994:30)—] and retrodiction [—'inference *via* {the latter} to possible antecedent causes' (ibid:30)—]" (ibid:1994:259).

10. I am assuming that the category "science" has a sufficient referential capacity in the present context, insofar as it refers to a set of practices, discourses, and institutions that bear 'family resemblances.'

11. It is interesting from a comparative perspective to note that, in contemporary 'Western' culture, 'house' is arguably less of a basic-level category than the category 'home', probably because of the greater diversity of dwellings in our experience. 'House' is only a type of home, albeit a privileged type in relation to others, such as apartment, cottage, or duplex. 'House' is an instance of a "prototypical" (see Lakoff 1987:40) category because, of all the home types, house is likely to be considered a better representative of a home than the other types.

12. In another sense, that is, a non-taxonomical, more sociological sense, 'ceremonial house' is superordinate to the category 'house' inasmuch as those categories are understood metaphorically with reference to social units. As I show in chapter two, a ceremonial or 'source house' metaphorically encompasses a cluster of other 'houses' or households, just as an actual house contains persons and objects.

13. In the present context, the term 'recursive' refers to a kind of feedback relation between an outcome and the medium of that outcome. Thus, according to Gidden's structuration theory. society is essentially constituted by a "duality of structure," wherein "the structural properties of social systems do not exist outside of action but are chronically implicated in its production and reproduction" (1984:374). Recursivity applies, moreover, to the theory of embodied, cognitive schemata: quoting Neisser (1976:56) Johnson (1987:21) writes, "the schema is not only the plan but also the executor of the plan. It is a pattern *of* action as well as a pattern *for* action." The recursive notion is, again, implicit in Bourdieu's concept of the *habitus*, "the system of structured, structuring dispositions" (1990:52).

CHAPTER ONE: THE HOUSE

The aim of this chapter is to provide a comparative account of the 'typical' eastern Indonesian house which concentrates on certain features of its *cultural design*, that is, the organization of categories referring to the articulation of internal space, and to the main features of architecture. The focus will be on aspects of "the nexus between image, object and location" (Fox 1993b:144)[1] inside the eastern Indonesian house. I deal with general similarities, rather than variations, paying the greatest attention to image-schematic structures of categorization, and interpreting examples deriving mostly from a dozen or so ethnographies to show how those structures are given practical expression.

One of the key theoretical assumptions of my exposition comes out of cognitive science ("metacognition"). As Lakoff (1987:5) states, "There is nothing more basic than categorization to our thought, perception, action, and speech."[2] Sociocultural life is based, from the standpoint of consciousness, on the human capacity for categorization. I hope to show, in particular, how an understanding of the main categories of the domestic domain can lead to an understanding of eastern Indonesian culture and society. Many details from the ethnography will be excluded, of course, but the material I have selected should serve to identify the major categories by which agents orient themselves inside eastern Indonesian houses.

The categories introduced in this chapter are communicated within and across a variety of social contexts and levels and are thus not restricted to the house. As "a repository of cultural memory" (Fox 1993b:144) the house functions as a kind of *text* and so generalizes to other domains of social life.[3] In other words, the cultural design of the house functions as a structuring agent for social relations outside the domestic domain. This functional capacity partly justifies, therefore, an expository order of chapters that begins with the house.

The aim of my exposition in this chapter leads me to exclude certain facts about the house which would otherwise be of interest. Thus, as a material work of architecture, some eastern Indonesian houses are certainly remarkable in terms of techniques of construction and detail of craftsmanship. Every aspect of the building process, from the conversion of raw materials into building components to the combination of those components, entails serious, cosmologically significant considerations. The architecture of the house is thus a necessary infrastructural medium, so that proper construction is as much a concern of durable physical construction as of correct cultural design. It is mostly from the cultural design, that is, the main categories of space and architecture, however, that I will derive my comments and suggestions.

The cultural design of eastern Indonesian houses is principally a matter of a combination of dual spatial categories—left/right, front/back, east/west, north/south, above/below, inner/outer, center/periphery—and architectural features, such as hearth, loft, platform, post, and beam. The spatial categories form pairs which provide the fundamental means for classifying locations and ordering objects dyadically inside the eastern Indonesian house.

Spatial categorization inside houses is used to order value relations among the things, objects, and locations perceived in the built environment. The latter functions, in a sense, as a major component of the 'perceptual infrastructure', the material basis of higher level cultural elaborations. The unequivocal 'primary functions' denoted in the built environment include such matters as concealment and privacy, protection from unwanted or dangerous intruders including animals and enemies, shelter from the elements, storage and containment, and sustenance and provisioning, provided by material structures such as walls, floors, platforms, beams, posts, rooms, enclosures, verandas, and so on. It is this set of functional attributes and material features, moreover, that defines the house in its role as a family dwelling and as a 'household' associated with material production and consumption. The cultural elaborations arise as a related set of connotative 'secondary functions'[4] added to the more basic attributes and features.

Thus, the categories used to order house space can be treated as a set of contrasts that may be coded in terms of another set of contrasts. The nexus of image, object, and location, and the order it inscribes in relation to the built environment is expressed in various ways. For example, the categorization of house space can be shown definably to relate to the categories and classificatory principles operative in the domain of social relations. As Waterson (1990:168) states,

> Certain spatial oppositions will always present themselves as potential means of encoding opposed social categories: front/back, right/left, high/low, inner/outer are contrasts which can be made to apply to virtually any kind of architectural form or socially constructed space. Certain kinds of social contrast will also be of varying relevance in any society: male/female, married/unmarried, senior/junior, close/distant, kin/stranger, and so on. These categories can be given visual expression by mapping them on to spatial contrasts.

In the following subsections of this chapter, I will treat spatial categories as basic in relation to others, and suggest why the visual expression offered in terms of the built environment can be an effective means for order and classification in general. In broad agreement with Cunningham, then, I argue that "the house is one of the best modes available to a preliterate society to encapsulate ideas, given the absence of literature and the sporadic occurrence and varying degree of participation in ritual" (1973:235).[5] The house has, as Ellen (1986:28) remarks, a pre-eminence which stems from "a combination of sociality and physicality." The classification underlying its order indicates social and more generally pragmatic concerns, since categories are, in part, stipulated according to socioculturally derived dispositions (internalized norms, values, and ideas). The categories making up a classification, moreover, derive much of their sustainability from their materialization in artifacts, such as the house.

The principles of classification, however, while often expressed through objectified, material sign-vehicles, are only fully material when understood in terms of

bodily experience. As Bourdieu writes, "the body is ... constantly mingled with all the knowledge that it reproduces" (1990:73).[6] He argues, moreover, that

> an institution [such as a classification] ... is complete and fully viable only if it is durably objectified not only in things, that is, in the logic, transcending individual agents, of a particular field, but also in bodies, in durable dispositions to recognize and comply with the demands immanent in the [social] field (ibid:58).

The categories used to order relations between objects and locations inside houses thus have a material dimension in a double aspect: as concrete objectifications given externally and visually in terms of building components and their spatial arrangement, and as schemes of perception and apperception experienced by way of the body.

In this respect, it is probably not fortuitous that the eastern Indonesian house is given anthropomorphic attributes: it has a head, hair, tail, womb, torso, ribs, legs, feet, and a right and left side. The house is given some of its orientation in terms of a metaphorical projection of the human body, which also contributes to its personification as a living being (see Hicks 1976:60-65, Barraud 1979:57,93, Kana 1980:228, Ellen 1986:3, Forth 1981:32, Fox 1993b:151, Howell 1989:426-427, Waterson 1991:129-32, Vischer 1992:209-210). The categories of the house's orientation are rooted in embodied perception and experience, making the sense of the house continuous with the sense of the body. The significance of house order is not only analogous to the body; it is integral to it.

James Fox reports a situation during his initial fieldwork on Roti when, after having repeatedly accosted his adopting 'father', the latter "in exasperation at my probing of what was obvious, got down on all fours and told me to look carefully at where his ribs, and his legs were. This, he felt, was sufficient to make clear the structure of the house" (1993b:151). As an oriented structure, the house as body is contextualized and integrated with the wider cosmos of which it is a part. Thus, "Any house with its head turned in the wrong direction courts misfortune." The 'head' must face east, connoting 'male', 'life', 'front', 'outer' and the sun, while the 'tail' is turned toward the west, connoting 'female', 'death', 'rear', 'inner', and the moon. The right and left sides of the house-body correspond to south and north which, moreover, are also associated with 'male' and 'female', respectively. From this cursory and partial description of the Rotinese orientation system one can understand how the house functions symbolically both as a macrocosm for the human body, and a microcosm for the cosmos (see Fox 1993b:142). And as Clark Cunningham points out, the house is not only a model for the cosmos, or the body; "it is more than simply analogous to the universe; it is integrated with it" (1973:220).

The spatial coordinates bearing on the orientation of the eastern Indonesian house

> may be either external or internal to the house itself or, in fact, both. Where they are external, they represent a wider orienting framework—often a cosmological orientation—within which the house must be

> positioned. Where, however, links to a wider cosmological orientation have been severed or are no longer considered relevant, houses may still be ordered in terms of a set of internal orienting principles. (Fox 1993a:14)

In the following pages, I will be focusing on the set of internal orienting principles operative in terms of the spatial categories used to designate locations and objects inside the house. The wider context of village, 'domain', and cosmos will be mostly ignored, although this should not inhibit the overall intention of the exposition, which is to concentrate on concordances of structure between domestic space and conceptions and practices of kinship and marriage. The latter will be dealt with in the following chapters.

INNER/OUTER, CENTRAL/PERIPHERAL

Dyadically contrasted features of space in eastern Indonesian houses, such as center/periphery and inside/outside, display a number of interesting interactive effects. These effects relate to cognitive-semantic congruences and dissonances among compared spatial categories. In the following paragraphs, I outline Mark Johnson's description of the image-schemata, first, for *containment* (*in-out* orientation), and, next, for *concentricity* (*center-periphery* orientation). I then go on to show how the two can be understood in combination. This will serve as a preparation for further exposition pertaining to the eastern Indonesian category 'house'.

Inside and outside are categories defined in terms of a *containment* schema or *in-out* orientation. As Johnson (1987:21-22) states, "Our encounter with containment and boundedness is one of the most pervasive features of our bodily experience": such experience involves

> repeatable spatial and temporal organizations. In other words, there are typical schemata for physical containment. If we look for common structure in our many experiences of being *in* something, or for locating something *within* another thing, we find recurring organization of structures: the experiential basis for *in-out* orientation is that of spatial boundedness. The most experientially salient sense of boundedness seems to be that of three-dimensional containment (i.e., being limited or held within some three-dimensional enclosure such as a womb, a crib, or a room).

The containment schema can be extended metaphorically to define relations between more abstract entities, such as classes or categories: "if we understand categories metaphorically as containers (where a thing falls within the container, or it does not), then we have the claim that everything is either P (in the category container) or not-P (outside the container)" (ibid:39). This describes the logical principle "law of the excluded middle". In any case, categories or classes are said to *contain* members, as in a taxonomical order where a *genus* contains a *species*.

The same can be said of *part-whole* relations in general, or what Dumont (1980:240) calls *"the encompassing of the contrary"*:[7]

> This hierarchical relation is, very generally, that between a whole (or set) and an element of this whole (or set): the element belongs to the set and is in this sense consubstantial or identical with it; at the same time, the element is distinct from the set or stands in opposition to it.

Encompassment of the contrary is, essentially, a relation between container and contained. The relation is metaphorically *hierarchical* because the part is abstracted from the whole, the part can only be thought of by way of the whole which is of a *higher* order of abstraction. Dumont uses the relation of encompassment-of-the-contrary to represent anthropological value. Further into this chapter I will show why hierarchy, understood in terms of *whole-part*, *container*, and *up-down* schemata, is only one possible manifestation of anthropological value.

An example of conceptual encompassment occurs between the categories 'space' and 'place'. Usually, the term space is the whole, or container, of which place forms a part. Place is usually defined as location-*in*-space. Not to confuse the issue though, one could just as easily assert that a space can be located within a place if that place is three-dimensionally bounded (see Miller & Johnson-Laird 1976:58, Forth 1991b:1-4). As a pair, then, the categories 'space' and 'place' display a *"reciprocal* relationship" (Benjafield 1992:6).[8] Thus, space can be located in place, or *vice versa*:[9] the general point to be derived from this is that *location* is a spatial concept based on an *in-out* orientation or *containment* schema.

Ultimately, being in or out, whether perceptually or conceptually, is an orientation that first emerges through bodily experience. A relation defined by *location-in* relies on a "basic-level categorization" rooted in the experience of our bodies in terms of containment: "the body can take up the role of the 'thing contained' or the 'container'. But, in either case, we seem to develop our sense of *in-out* orientation through a host of bodily movements, manipulations, and experiences" (Johnson 1987:33-34).

Another orientation that is closely related to *in-out* is given in terms of a perceptual structure of *center-periphery*. The latter is important to our conception of space. Our perceptual space is such that we perceive "*our bodies* as perceptual centers" wherein we define "a domain of macroscopic objects that reside at varying distances from us" (Johnson 1987:124). The indexical relation by which we, as perceptual centers, judge objects to be 'here' or 'there', 'near' or 'far', "presumably generalizes to spatial relations between other objects, and seems consonant with the plausible and widely held view that our conception of space depends on our motility in it" (Miller and Johnson-Laird 1976:59).

Perceptual space is bound up with a broader *experiential space*, a projection of the former whereby "In my 'world' some things, events, and persons are more important than others—they loom larger in my experience and are more central to my interactions. Others are relatively peripheral at a given point in time" (Johnson

1987:124). Thus, a relation of center and periphery "shows itself not only in the structure of my perceptual field but equally important as a structure of my social, economic, political, religious, and philosophical world. Those objects that stand forth as significant in my experiential field are both concrete *and* abstract entities toward which my interest is directed" (Johnson 1987:125).

Johnson's representation of experiential value in terms of the *center-periphery* orientation is interesting because it seems to be at odds with Dumont's idea of conceptual value as a relation of encompassment. Dumont's representation could be interpreted as privileging the periphery, as the boundary of a whole-container, over the center, as part-contained, but this contradicts the usual 'axiology' (value logic) of the *center-periphery* schema; one could also posit, conversely, that if the whole is taken to have a sense of centrality, then the peripheral part would be 'encompassed'. The latter structure seems, however, to present contrary perspectives, because a center is something which is, by definition, spatially encompassed by a peripheral background .

This might explain why, among the Atoni of Timor, the term *nanan* can be used alternatively to refer either to "inner" or "center": with regard to social etiquette Cunningham writes, "respect to guests is mandatory, and the hosts must strive to reverse this primacy of the "house center" by stressing the *nanan*, as subordinate "inner" opposed to outer rather than superordinate "center" opposed to periphery" (1973:228).

A *center (superordinate)-periphery (subordinate)* schema, strictly speaking, is, therefore, not iconic with a representation of value as "the encompassment of the (subordinate) contrary." It is an empircal question, then, regarding whether indigenous representations actually create such perspectival confusion. On the other hand, if the confusion is not an indigenous creation, but rather the outcome of the anthropologist contradicting the indigenous reality, then the model cannot be claimed adequate.

Johnson has argued, however, that containment (encompassment) and concentricity *are* commensurate, but only in a sense where a center is superordinate, and attributed the combined qualities of extension and boundary.

> We almost always superimpose a CONTAINER schema on our CENTER-PERIPHERY orientation. Where we draw the bounding container will depend upon our purposes, interests, perceptual capacities, conceptual system, and values.... When such a CONTAINER schema is superimposed we experience the center as *inner* and define the *outer* relative to it. Likewise, we perceive this same INNER-OUTER orientation for objects existing in our perceptual field, and, by extension, to certain abstract objects (e.g., models, theories, geometrical figures). (1987:125)

It may be that Dumont prefers the representation of conceptual value as superordinate whole over subordinate part so as to emphasize its opposition to the implications of the Western, ideological valuation of the individual, as primary creative *center*, over

society, as secondary *peripheral* product. It seems just as appropriate, however, to represent anthropological value in terms of encompassment as in terms of concentricity,[10] since both representations are grounded in predictable, experientially grounded categorization processes. The choice of one representation over the other, to repeat, will depend upon in its descriptive adequacy according to the case at hand.

As Fox comments with regard to eastern Indonesian dwellings, "houses are ordered structures that minimally distinguish the categories of 'inside' and 'outside' and more generally establish a progression of designations within a defined internal space" (1993b:141). The difference between inside and outside is objectively articulated in terms of the physical boundary of house materials--wood, bamboo, and thatch--that constitute and surround the house frame--jointed and tied beams and poles of wood and bamboo. This physical boundary, which can exist as a wall and roof, or just an extended thatch roof, acts as a sign-vehicle for a conceptual boundary which marks the place where one space begins and another ends. Moreover, because the physical boundary is continuous and closed, apart from its interruption by a door or a window, the difference between inner and outer can correspond to the difference between closed and open space. The closed space inside a house is, therefore, a contained space, so that the attribute of containment further defines inner space relative to outer space.

The categorical contrast inner/outer as applied to houses in eastern Indonesia is entirely predictable and obvious given that it defines a basic, universal perceptual experience:

> we are physical beings, bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside us. Each of us is a container, with a bounding surface and an in-out orientation. We project our own in-out orientation onto other physical objects that are bounded surfaces. Thus we also view them as containers with an inside and an outside. Rooms and houses are obvious containers. (Lakoff and Johnson 1980:29)

The container characteristic of dwellings, moreover, makes them suitable signifiers of the unity and boundedness of more complex social groups, known as 'houses', which comprise a localized organization of several minimal family households.[11] Cunningham writes of the Atoni house, "The wall and the roof ... mark the unity of a house and the social groups it comprises, and the house, viewed from without, is an almost solid circle and dome with no windows and one small entrance" (1973:232). On the island of Flores, moreover, "The Ata Tana Wai Brama liken their lepo [house] to a mother hen under whose wings her chicks are sheltered" (Lewis 1988:159). The house is also a 'container' in that it serves as a safe and proper depository for 'sacred' objects, heritable, "inalienable" wealth associated with the ancestors, and indeed, is a shelter for the ancestors themselves and sometimes specific 'house spirits' (see Mitchell 1981:55, Ellen 1986:6, Traube 1986:70,75, Howell 1989:427, Forth 1991b:8, Vischer 1992:218). The ancestors may metaphorically take on characteristics of a

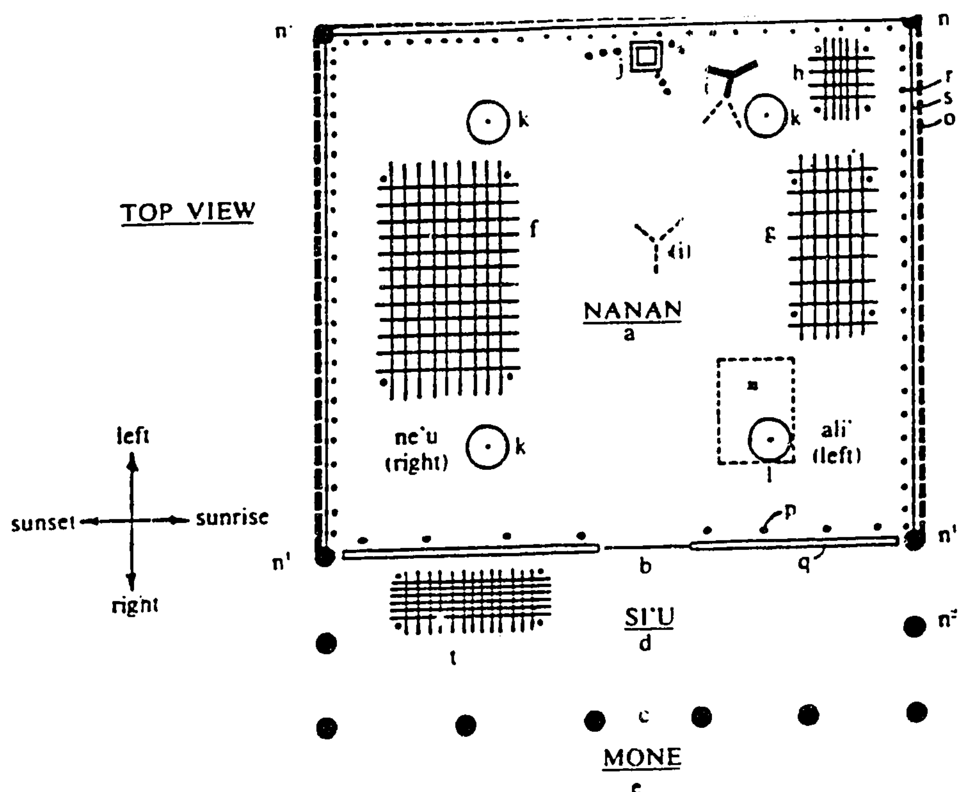
container, as on Sumba, "by virtue of the close connection between the house and the clan ancestor." Both are described as "*maii*, 'shelter, protection,' i.e., as things which provide protection from physical and spiritual dangers" (Forth 1981:32).

Returning to the inner/outer distinction, the space inside eastern Indonesian houses is further partitioned in terms of those same categories, so that the inside encompasses another, more specific, inner/outer opposition. One could call the specific 'inner', a "concealed interiority" (see Fox 1993a:16), which represents a purer state of 'innerness' than the general 'inner'. Another way of describing such a relation is to assimilate it to the semantic principle of recursive complementarity: "anything that is categorized according to one component of a complementary pair can *potentially* contain elements of its complement" (Fox 1989:46).[12] The category 'inside' thus contains its complementary opposite, 'outside', but in a reduced or recessive state. It remains arguable, however, that the house is principally connotative of innerness.

Inside and outside are obviously opposed in a relation of asymmetry. It might seem as though 'inside' is *hierarchically* opposed to 'outside', although, in terms of image-schemata, hierarchy implies an *up-down* orientation which is distinct from an *in-out* one. The relation between the so-called *super*ordinate element 'inside' and the *sub*ordinate element 'outside' can hardly be described, moreover, as "encompassment of the contrary", although the innermost part of the house is more significative of the whole house than the outer. That association is related to an image of centrality, which also seems to be involved. House space is understood as being concentric; it is ordered in terms of the distinction between center and periphery. The latter pair corresponds analogically to the categories of inside and outside so that inner:outer::central:peripheral. Rather than treat this relation as one between whole and part, which readily lends itself to the image of encompassment, it could be represented as a relation between pure (homogeneous) and impure (heterogeneous) so that center:periphery::pure:impure::inner:outer.[13] Cunningham, for one, supports this idea: "The 'inner' section is the ritual center ... [and] spiritual matters are considered superior to secular ones. When spiritual matters are at hand, the idea of *nanan* as 'center' is expressed.... [T]he nearer the 'center', the greater the purity" (1973:228).

As I have indicated above, the image of encompassment is amenable to a part/whole representation, but when an inner/outer orientation is posited along with center/periphery, the relation of pure/impure seems more consistent than whole/part (see Johnson 1987:125). It may well be, however, that the inconsistency among schemas and their metaphors is to be expected, given that they often contradict one another in experience.[14]

The Atoni of Timor express the categories of centricity and purity in terms of a relation between the spatial opposition inner/outer, and the social opposition 'close' relations/'distant' relations: "the further into the house one moves, the greater the rights and obligations .... The *nanan*, or inner section, is reserved for agnates of the householder, while the *ume nanan*, [general] house center—the whole area under the roof—is for agnates, affines, and guests" (Cunningham 1973:226,207 [see p. 24, fig.1])[15]. Cunningham also states that the seating pattern of guests and relatives



key:

a	*nanan*	inside; center (inner section)
b	*eno*	door
c	*toi*	entrance
d	*si'u*	elbow (outer section)
e	*mone*	outside; male (yard)
f	*harak ko'u*	great platform
g	*harak tupa'*	sleeping platform
h	*harak manba'at*	agreement platform (serving platform)
i	*tunaf*	hearth
(i)	*tunaf*	hearth (alternate place)
j	*nai oe teke*	fixed water jar
k	*ni ainaf*	mother post
l	*ni ainaf (nakan)*	mother post (head)
m	*toi*	entrance (attic)
n[1]	*ni manu*	chicken post (corner)
n[2]	*ni manu*	chicken post
o	*haef*	foot
p	*haef mese*	first foot
q	*piku*	wall
r	*rusi*	inner wall post
s	*rupit*	wall slat
t	*harak*	platform

Figure 1. Floor Plan of an Atoni House
(Cunningham 1973:208)

"expresses covertly the importance, unity, and closeness of those nearer the 'house center'" (1973:227). This surely relates to the fact, noted by Gregory Forth, that

> place commonly transcends a purely spatial referent in so far as, in many languages, words that translate as 'place' also denote sociological notions such as 'role', 'status', and 'position'. Frequently, too, physical location, whether absolute or relative, is linked with social position, either symbolically or causally.(1991b:3)[16]

Similar ideas about degrees of social inclusion (sameness, homogeneity, purity) and spatial innerness are expressed elsewhere in eastern Indonesia (see Hicks 1976:60, Barraud 1979:56, Forth 1981:40,376, 1991:14, Fox 1973:344-45, 1993:155-57, Kana 1980:229, Lewis 1988:155,161, McKinnon 1991:87, Mitchell 1981:56, Waterson 1991:168, Vischer 1992:208). It could also be said that the inner/outer contrast corresponds to the distinction of public and private, both within the house, and with the whole house in relation to the outside.

The concentric space inside some eastern Indonesian houses also articulates a general spiritual (religious)/temporal contrast. The central area correlates with the place where rituals are performed that are specific to a house group's members, orienting their ritual labour in common. In the Tanimbarese house, the *tavu* or central altar complex refers to such a ritual center: the *tavu* complex, located at the center of the house, "provided permanent places—the altar panel, the skulls and neck bones, the small statues, the heirlooms, as well as the offering plates—where humans could maintain contact with the spirits of their ancestors" (McKinnon 1991:94 [see p. 26, fig.2]).

The house serves, moreover, as a medium or channel by which the group associated with it can communicate with its ancestors. Often, that medium is given by way of a specified object or location inside the house.

> Most houses ... possess what may be called their 'ritual attractor'. It may be a specific post, beam, platform, niche, altar or enclosure that has a pre-eminence among the other parts of the house and, as such, represents, in a concentrated form, the house as a whole. (1993:1)

One commonly encounters in the literature on eastern Indonesia reference to the center of the house as a privileged place, alerting residents and members of their obligation to the source of their unity and being. Rituals are performed with attention to a central house element in recognition of the ancestors. Among the Ata Tana 'Ai, on the island of Flores, the house (*lepo*) is "the place to which the ancestors of the clan are summoned on ritual occasions and the place wherein the living and the dead commune" (Lewis 1988:153). Furthermore,

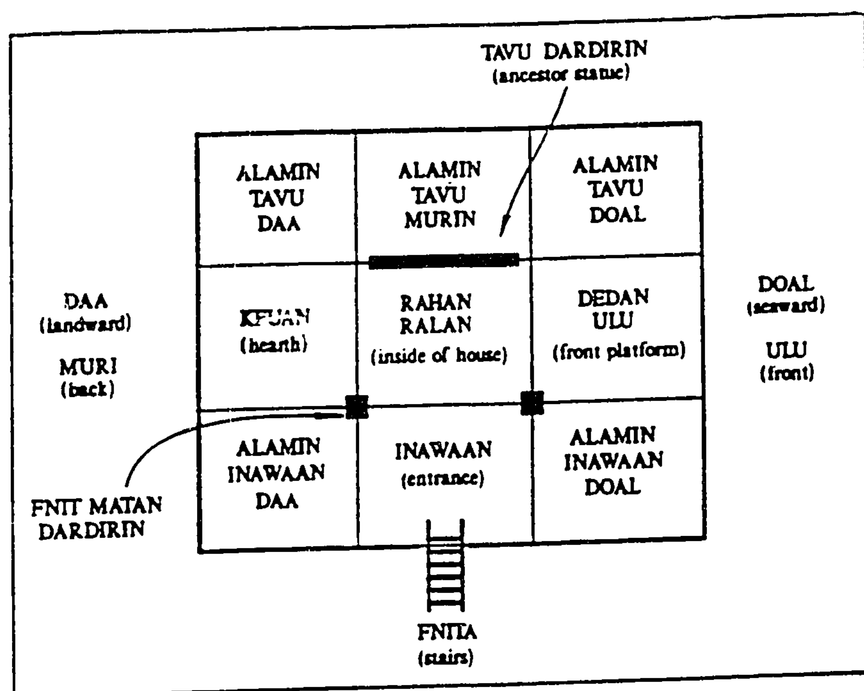


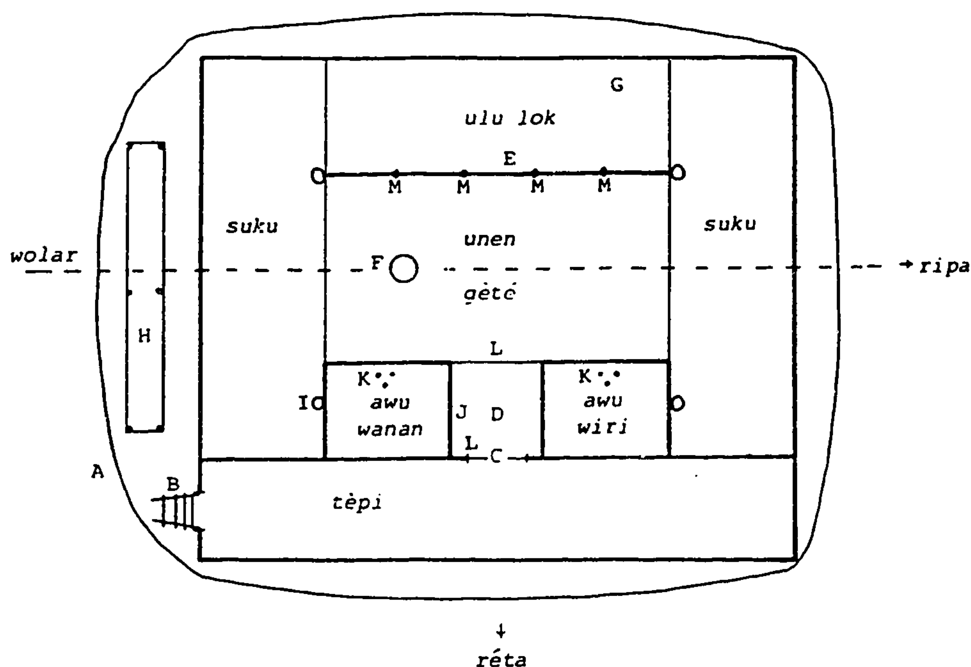
Figure 2. Floor Plan of a Tanimbarese House
(McKinnon 1991:86)

> The identity of the lepo as a historical entity with a diachronic existence is confirmed in that it houses the hair, fingernails, and other relics ofthe ancestors of the group.... In the rituals of the house, the presence of ancestral spirits who are an integral part of the composition of the lepo is acknowledged, and the ancestors are invoked by name. In the chants of invocation, particular ancestors are associated with specific parts of the house. Invocations are made by ritual specialists who descend to the lèwu (the clean earth below the house) and address the liri pu'an, the "central" or "source" post of the house. (Lewis 1988:162 [see p. 28, fig.3])

In another Florenese society, the Nage, the 'ritual attractor' is designated as the hearth-piller, "the place where humans communicate with spirits", located in a section of the house known as the *lo*, a term that can denote the trunk of a tree. With regard to its status as a trunk, moreover, the *lo* contrasts with the more peripheral parts of the house which are "comparable to the branches of a tree" (Forth 1991b:17 [see p. 29, fig.4]). It is worth remarking how well the trunk/branches contrast corresponds to an image of concentricity, such that trunk:branches::center:periphery, an analogy which could also include the opposition inner:outer (see Forth 1991b:17). The contrast of trunk and branches also implies a spatio-temporal distinction between a unitary source (the ancestors) and a multiple issue (the descendants). For other examples of notions of centricity and ancestry in relation to a particular part or place in the house one might refer to Barnes (1974:74-75), Hicks (1976:63), Ellen (1986:10-13), Forth (1981:27,38), Mitchell (1981:59-62), Traube (1986:70), Vischer (1992:216), McKinnon (1991:89), and Fox (1993b:158, 1973:346).

Why are the notions of centricity and innerness accorded a privileged value in eastern Indonesia? To simply answer that it is because they are associated with the ancestors begs certain questions. Without going into detail, it may be sufficient to suggest that the categorical distinctions inner/outer and central/peripheral correspond to some fundamental aspects of human experience, and their consideration might suggest at least a partial explanation. Johnson's account provides a useful summary of how center/periphery, and inside/outside relate to other pervasive categorizations in our experience such as near/far, subject/object, self/other, and the mine/thine valuation. Each of these contrasts can be superimposed upon the others, and it is "by superimposition of schematic structures, which can metaphorically be understood at a number of different levels, [that] we develop a host of complex meaning structures central to our experience and understanding" (Johnson 1987:125).

A particularly salient instance of such experience is found in everyday self/other interaction: "The relationship between selves is a relationship between a self and an other in which one is subject to himself and an object to the other and the other is subject to himself and an object to the initial self, simultaneously" (Perinbanayagam 1985:158). The self is always located at the perceptual and conceptual *center* of space, "at the zero-point of the spatiotemporal coordinates of the ... deictic context" (Lyons 1977:638) and yet the self could not become constituted as



Floor plan of a lepo

A	témo 'lepin	boundary of roof eaves
B	dan	house ladder and outer door
C	gèbi wa	inner door
D	plebin	space between hearths
E	dolan	floor beam demarcating ulu lok and unen gèté
F	sopé or wélut	reliquary baskets
G	to'o balik	elephant tusks, gongs, patola cloths, swords, and other wealth of the house
H	klèdar	sitting platform outside the house but under its roof
I	liri pu'an	central house post
J	arun	jaws of animals hunted in the forest hung over the awu wanan
K	li'at	hearth stones
L	plèbeng	floor beams supporting the hearths
M	tilun bunga	posts supporting the lower roof
	ulu lok	area for entertaining guests
	unen gèté	central living area
	suku	sleeping area
	awu wiri	left-hand hearth
	awu wanan	right-hand hearth
	wolar	principal roof beam
	tépi	raised verandah

Figure 3. Floor Plan of a Tana Wai Brama House (Lewis 1988:156)

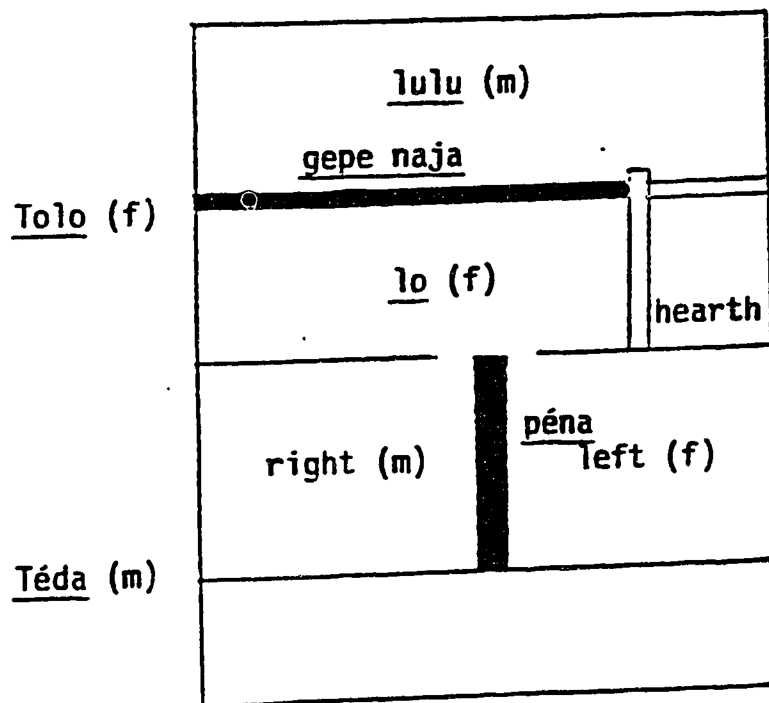


Figure 4. Floor Plan of a Nage House
(Forth 1991:10)

central without a knowledge of that which is not central. According to the theory of dialogism, the self "may be conceived as a multiple phenomenon of essentially three elements ...: a center, a not center, and the relation between them" (Holquist 1990:29).

The self/other distinction in human interaction implies a subject\object orientation, which in its turn implies an inside\outside designation. The subject-self is the interior ground for the creation of 'outsidedness', and therefore of objectivity. "In order to be perceived as a whole, as something finished, a person or object must be shaped in the time/space categories of the other, and that is possible only when the person or object is perceived from the position of outsideness" (Holquist 1990:31). These personal distinctions may relate, moreover, to Ong's (1982:72-73) discussion of the different kinds of experience associated with the senses, particularly the visual and auditory senses: sight is generally analytical and objective, it is oriented to the exterior of the body, while sound is more "unifying, centralizing, [and] interiorizing," that is, synthetic and subjective.

The cultural value accorded to centrality and innerness is already inscribed in everyday human communication, and it only requires some metaphorical elaboration to become imparted to the objects in our social worlds. The center/periphery distinction is perhaps one of our most pervasively experienced contrasts:

> We experience our bodies as having centers (the trunk and internal organs) and peripheries (fingers, toes, hair). Similarly, trees and other plants have a central trunk and peripheral branches and leaves. The centers are viewed as more important than the peripheries in two ways: Injuries to the central parts are more serious (i.e., not mendable and often life threatening) than injuries to the peripheral parts. Similarly, the center defines the identity of the individual in a way that the peripheral parts do not. A tree that loses its leaves is the same tree. A person whose hair is cut off or who loses a finger is the same person. Thus, the periphery is viewed as depending on the center, but not conversely: bad circulation may affect the health of your hair, but losing your hair doesn't affect your circulatory system. (Lakoff 1987:274)

It is reasonable to conclude that "the nature of our bodies, the constraints on our perception, and the structure of our consciousness give prominence to the CENTER-PERIPHERY organization of our experienced reality" which, in turn, can be superimposed upon a number of other related experientially based notions such as containment, the inner/outer contrast, the subject/object orientation, and the self/other distinction.

Such cognitive tendencies are probably related to the common understanding of the house in eastern Indonesia as a person possessing a kind of 'self-hood' about it, which ties in with its status as a metaphorical human body and as an 'embodied' locus for the ancestors. And the house can also be conceived of as a moral person, that is, a

social being (see Barraud 1979:93). As an oriented structure, likened to that of the human body, the house can be given the body's experienced attributes through metaphorical extension. On Roti,

> Not only is the house conceived of in terms of the physical categories of 'body'; its internal structure also conforms to the major categories that define the 'person.' In Rotinese, *dale(k)* refers to the inner core of a person, the seat of both cognition and emotion.... Like the 'inner house,' the inner person is intimately distinguished from what is publicly expressed. (Fox 1993b:160-161)

Related to this is the widespread belief in eastern Indonesia, and more generally in southeast Asia, that the house is a living being, possessing a life force that it shares with its inhabitants (see Barnes 1974:74, Vischer 1992:210, Forth 1991b:8-9, Waterson 1991:115-122, 1993:223-224).

ASYMMETRIC AND CONCENTRIC DUALISM

In this section, I discuss the major internal orienting principles operative within eastern Indonesian houses, in particular, the *combined* principles of asymmetric dualism (as in right/left, front/back), and concentricity (center/periphery, inner/outer). The pervasiveness of these principles can be partially accounted for in terms of metaphor, cognition, and the human body, which is why I found it relevant to include references to the eastern Indonesian house as a body.

What does the body have to do with asymmetric dualism? The horizontal plane of perception is always experienced asymmetrically, given the structure of the human body. The front/back orientation is asymmetrical because, in humans, the principal organs of perception are directed toward the front, we normally move in the direction ahead of us, and we often communicate with others by facing them (see Lyons 1977:690-91). Likewise, the right/left asymmetry, due to the normally greater dexterity of the right hand, is a part of most people's experience. Of course, this does not entirely *explain* why, in eastern Indonesia or anywhere else, directional opposites are accorded a cultural value:

> Organic asymmetry in man is at once a fact and an ideal. Anatomy accounts for the fact to the extent that it results from the structure of the organism; but however strong a determinant one may suppose it to be, it is incapable of explaining the origin of the ideal or the reason for its existence. (Hertz 1973[1909]:6)

It is beyond the scope of this thesis to search for any such origin; however, "organic asymmetry" is not entirely irrelevant to the study of eastern Indonesian cultural classifications, for, what is already coded in terms of the body can contribute to the construction of an ideology (see Bourdieu 1990, Johnson 1987, Lakoff 1987).

The dual opposed categories of right/left and front/back carry a significance analogous to the relations of inner/outer and center/periphery inside eastern Indonesian houses. In other words, each of the above contrasts display the same types of relation: hierarchical and asymmetric opposition. Their common principle of relation, and the mutual interpretation implied by each of these categories shows that their interrelation is far from simple, and that their "meaning is derived not from a crudely fixed polarity ... but from an interweaving of shifting sets of contrasts" (Waterson 1991:183). Each contrastive pair implies the other, because each is a part of a common cognitive universe, demonstrably operative in terms of a shared set of principles,[17] which ultimately derive from the embodied nature of human cognition.

> Right and left are not simply opposed in an abstract, static relation. In the first place, the right-left pair is not definable in itself but *only in relation to a whole*, a most tangible whole, since it is the human body (and, by analogy, other bodies). The fact is familiar to the physicist, who sets up an imagined observer in order to be able to speak of right and left. How can 'symbolic analysis' ignore this fact? (Dumont 1986:228)

One could just as well state, however, that the human body represents a tangible *center* for orientation in terms of a real or imagined 'point of view' since we experience our bodies as "perceptual centers" (see Johnson 1987:124). The very condition of possibility for distinguishing 'right' and 'left', either really or symbolically, is related to the fundamental cognitive capacity for *orientation*. As Johnson points out,

> There can be no orientation (either spatial, temporal, or metaphorical) that does not involve a perspective from which the orientation is viewed. The very structure of orientation is perspectival. (Johnson 1987:36)[18]

The perspective presupposed by the distinction of right and left is first established in bodily experience. Right and left, therefore, are ordered according to an asymmetric structure that is understood in terms of the combination of a part/whole and center/periphery relation, right standing for the whole and the center, left for the part and the periphery. Of course, on one level of understanding, an individual's self perception entails seeing one's own body as a central whole, and the appendages equally as peripheral parts. On yet another level, the asymmetry of normal handedness has to be taken into account. The cultural valuation of right-handedness, however, requires a combination of these two levels of experience. Thus one spatial structure given as laterality is understood in terms of another spatial structure, centrality, so that right:left::center:periphery::whole:part. In effect, a "conceptual space" is created by a conflation of analytically distinct spatial structures already given in preconceptual experience.

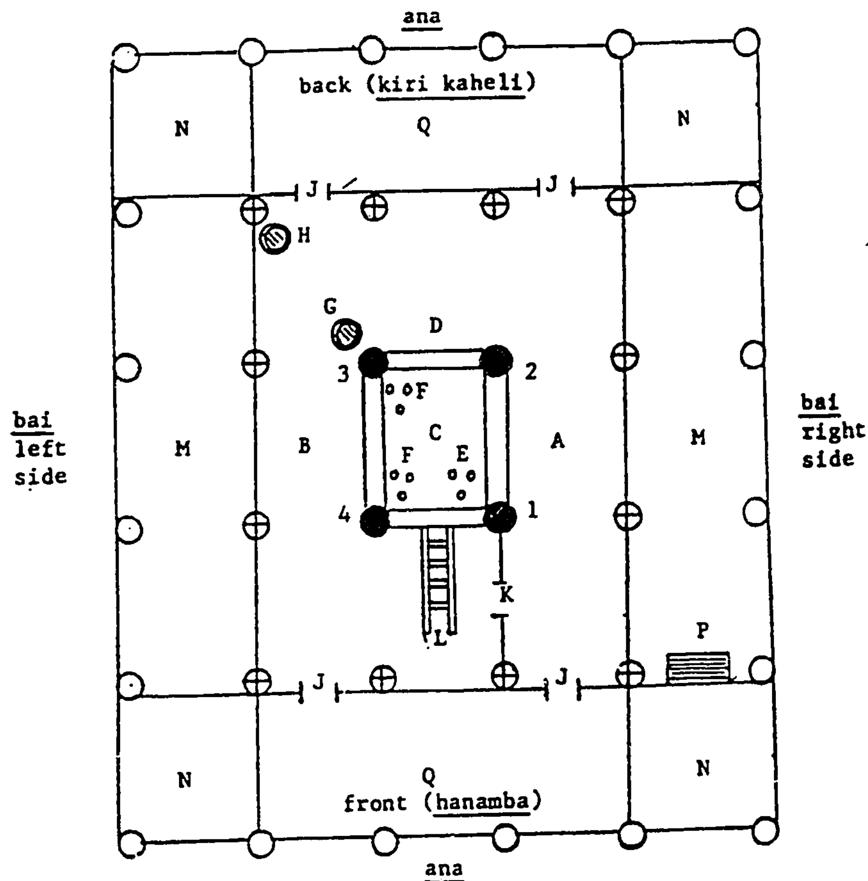
The 'right' is fairly consistently privileged over the 'left' in terms of the partition of space inside eastern Indonesian houses (see Barnes 1974:70, Barraud 1979:57, Kana 1980:230, Fox 1993a:20, Kruyt 1973:88-89, Cunningham 1973:22, Mitchell 1981:66, Vischer 1992:209). The general division of house space into right and left is often further divided. In the Atoni house, for instance, the "right side generally" contains the more specific "right side of the inner section". This latter "section" is accorded a special significance as is evidenced in social terms: "the right side of the inner section contains the 'great platform' where males, elders, and wife-giving affines are seated, all with superordinate status" (Cunningham 1973:223 [see p. 24, fig.1]). One also finds in the ethnography on eastern Indonesia that the coincidence of 'inner,' or 'central,' and 'right' produces a positive value in terms of ritual and cosmological significance, as in Eastern Sumba where the divine, ritual post is located at the right front corner of the quadruple of central hearth posts (Forth 1981:27 [see p. 34, fig.5], also Hicks 1976:60, Mitchell 1981:59, Vischer 1992:216)[19].

Perhaps related to the fairly constant, manifest association of 'right' and inner (central) is the ritually prescribed motion, found in a variety of eastern Indonesian ceremonies (marriage, house construction, ancestral communication), whereby the participant(s) are required to 'move to the right.' What is particularly pertinent in these instances is that the movement 'to the right' often conforms to a circular pattern given in terms of house space. Among the Kédangese, Barnes reports that in house construction

> major vertical beams and rafters in the building must preserve the natural orientation of the piece from which they are made ['trunk below, tip above']; and major parts lying horizontally must be put in place according to the imperative *wana pan*, 'travel to the right'. By this last phrase is meant that the tips of the boards and poles must all point counter-clockwise around the rectangle of the building. (1974:68 [see p. 35, fig.6])

Forth observed the same principles of orientation in house construction in Rindi, on the island of Sumba. He represents this diagrammatically as "a conceptual, anti-clockwise movement around the building from *pingi* [trunk] to *kapuka* [tip]", noting as well that "the *pingi* of each piece is to the left and the *kapuka* to the right" (1981:33-34 [see p. 35, fig.7]). It is according to the latter association that the proper horizontal placement of beams and cross-pieces is described as *palua kawanangu*, 'to move to the right.' Vischer's observations of house construction among the people of Palu'é, an island just to the north of Flores, are in complete agreement with those above, which indicate rules employing the notions of 'trunk' and 'tip', and "'following the right hand' ... in a counter-clockwise direction" (1992:210, also, see Kruyt 1973:88, Mitchell 1981:57, Fox 1993b:155).

The coincidence of 'right' and 'trunk'[20] suggests a semantic affinity between the asymmetric values attributed to the lateral distinction, right > left, and the



- ● main posts *(kambaniru lundungu)*
  1. *kambaniru uratungu*
  2. *kambaniru mapaberingu*
  3. *kambaniru mat'ungu uhu wei, pàni manu*
  4. *kambaniru mataku*

- ⊕ secondary posts *(kambaniru hawunjilu)*
- O tertiary posts *(kambaniru lambanapu)*

A big floor *(kaheli bokulu)*
B cool floor *(kaheli maringu)*
C hearth *(aü)*
D hearth lining *(kadu aü)*
E male hearthstones *(tuluru mini)*
F female hearthstones *(tuluru kawini)*
G ancestral water jar *(mbàlu marapu)*
H female water jar *(mbàlu kawini)*

J doorways *(pindu)*
K hatch *(ngaru domuru)*
L ladder *(panongu)*
M interior platforms *(nggala)*
N exterior platforms *(nggala kambàku)*
P rack *(hindi maringu)*
Q verandahs *(bangga)*

Figure 5. Floor Plan of a Sumbanese House (Forth 1981:26)

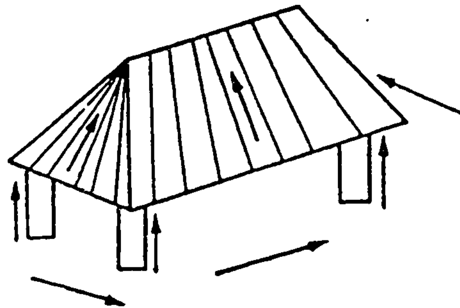


Figure 6. Orientation of Building Components in the Kedangese House (Barnes 1974:68)

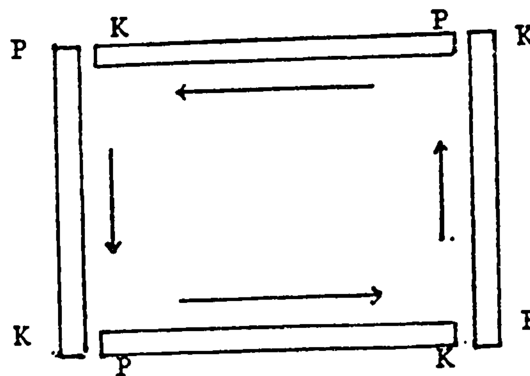


Figure 7. Orientation of Building Components in the Sumbanese House (Forth 1981:33)

concentric distinction, center>periphery. I would suggest further to this that the message right≈center is signalled with a redundancy in the above examples, because 'movement to the right' is also an encompassing movement around or about an implied center. This is not the same as claiming that 'right' symbolically, and hierarchically "encompasses" 'center,' but rather that the combined meanings of 'right' and 'center', however latently implied, are consonant and coordinate in this context.

The Tana 'Ai of Flores are perhaps more explicit with regard to the purported affinity of 'right' and 'center,' particularly when it comes to entering a house (*lepo*):

> The act of entering a lepo is viewed as a movement from the "forest" outside the periphery of the house yard, across a series of boundaries ... and through a series of more and less peripheral and central spaces .... But the entrance into a house is also viewed as being in keeping with another kind of movement, a ritual movement. All ritual in Tana 'Ai is said to "move to the right" within the orientation system, a movement to the right is physically a circular or spiral movement in an anticlockwise direction (as viewed from above). (Lewis 1988:158)

Similar principles of oriented ritual movement apply in the construction of a house among the 'Palu'é'. Every newly constructed house must be ritually consecrated. In one phase of the consecration, called 'trimming the roof',

> Following 'the rule of the right hand' a male member of a wife-taking group ... trims the ends of the elephant grass roofing at the eaves and levels it. Before doing so he brings conceptually male goods .... These goods are accepted by a male member of the house and taken into the inner chamber. (Vischer 1992:215)

In a later phase of the ritual called 'to set the concave stone' (the house altar)

> the orientation is shifted and the ancestral place of origin is taken as a point of reference.... The altar stone ... is placed in its assigned spot at the *hulu pitu* in the right hand corner of the inner chamber....At the setting the senior male member of the House makes an offering of ceremonial rice kernels. He begins sprinkling rice at the *hulu pitu* and proceeds in a counter-clockwise movement to the corners of the inner chamber. (Vischer 1992:216)

It is noteworthy that the sprinkling of the rice conforms to a spiralled pattern, recalling Lewis's description of Ata Tana 'Ai ritual motion. There is a difference, however, in that the spiral Vischer observes is dynamically centrifugal, while Lewis describes an apparently centripetal force, toward the center. 'Trimming the roof,' as Vischer reports, could likewise be represented as a centripetal movement. Of course,

both expressions operate in terms of a common opposition, namely, a center and a periphery.

An alternative, or supplementary explanation of the inward-centripetal and outward-centrifugal orientations is that both have in common the implication of an encompassing relation when, in combination with an orientation to the right, they simultaneously effect a transformative mediation between the conflicting value schemata of *center/periphery* and *containment*. The message of such a transformation would be something like "right=center=whole".

'Movement to the right' is at the same time a concentric movement, indicating that the intention, in essential terms, is toward that which represents wholeness.[21] This recalls, of course, Dumont's general observation that "the right-left pair if not definable in itself but *only in relation to a whole*," whereby the 'right' is superordinate by virtue of its metonymic association to the 'whole'.

If the category 'whole' possesses a semantic affinity with the category 'center', by virtue of a concentric container schema,[22] and if an asymmetric pair can be conceptually "mapped onto" that schema, then it seems plausible to suggest the following general principle of anthropological value: 'an asymmetric dyad of indigenous categories will derive its asymmetry from an image-schema that is asymmetric, such as a *center-periphery*, and/or a *whole-part* schema, each of which is fundamentally dyadic *and* asymmetric.'[23] I should add that, in the case of hierarchy, a *whole-part* and *up-down* schema are combined to represent binary value relation.

Forth's (1991b) analysis of eastern Indonesian houses evidently supports the foregoing hypothesis on value. In his comparison of principles of order in the Nage (central Flores) and eastern Sumbanese house, he posits "a fundamental opposition between concentric and diametric dualism" (1991:2). The Nage house is constructed so that, on the one hand, its physical structure "manifests a principle of diametric division," while on the other hand, in its apparent conceptual order, "the entailed contrast of centre and periphery reveals an element of concentricity" (1991:19 [see p. 29, fig.4]). By contrast, "the eastern Sumbanese house is quite the inverse, since here a concentric physical structure is largely represented in terms of diametric dualism" (1991:19 [see p. 34, fig.5]). Overall, the superficial differences between Nage and eastern Sumbanese spatial order in the house "reduce to the general inclusive contrast of diametric versus concentric dualism" (1991:47). This suggests, moreover, that there is some *structural affinity* between the two kinds of conceptual dualism.

The location and ritual significance of the hearth and ritual post or pillar in Nage and eastern Sumbanese houses illustrates the simultaneous presence of principles of diametric and concentric dualism. In both types of building the hearth "occupies a relatively central place" (1991:44). This position is fairly obvious in the eastern Sumbanese house, where the hearth occupies the geometric center of house space. In the Nage house, however, the hearth's central location is contrived rather than given: it is the result of "the recurring application of the opposition of front and back, and comprises the *lo*, the front part of the back section" (1991:39). The *lo* is in a sense intermediate in relation to 'front' and 'back,' in the innermost section, and it is there that one will find the house hearth. But it is in "the righthand half of the *lo*"

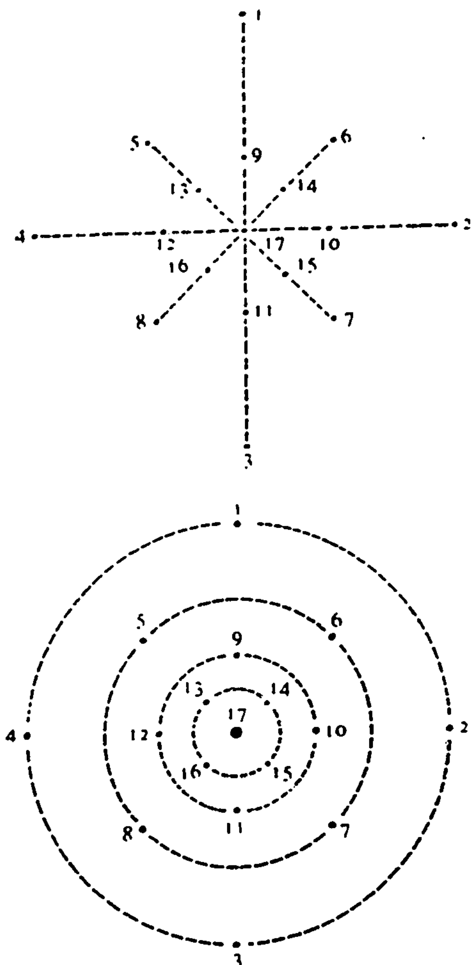
(1991:46), and not 'actually' central. The ritual hearth pillar, left of the hearth but also not physically central, is nonetheless "sometimes referred to as the 'centre post'" (1991:42). And the Nage hearth pillar is privileged in a way similar to "the principal house-post" of the eastern Sumbanese. The latter post is, however, specifically "located in the right front corner of the hearth" (1991:42), recalling that the hearth itself occupies the central position. Thus, where in the more obviously diametric house type, exemplified by the Nage, the ritual hearth pillar is contrivedly situated as 'central,' in the other, concentric house type, exemplified by the Sumbanese, the principal house-post is located in terms of the articulation of dual, antipodal contrasts, i.e., 'right/left' and 'front/back.' Why is the center contrived among the Nage and neglected by the eastern Sumbanese? The main clue is perhaps found in the manifest fact that "In eastern Sumba ... the centre is given; in Nage it must be created" leading to a curious appearance: "It is as though each house makes up symbolically for what it lacks physically" (1991:48). And this is true generally for each type of house: "the opposition of centre (*lo*) and periphery (*téda* plus *lulu*) is more salient symbolically in the [manifestly diametric] division of the Nage house," while in eastern Sumba, "a concentric physical structure is represented symbolically in diametric terms" (1991:47-48). This suggests that the two houses can be "compared and viewed as variations on a single basic structure" (1991:45), i.e., the opposition of diametric and concentric dualism.

If concentric (asymmetric) and diametric (symmetric) dualism are essentially in a relation of opposition, then, it is plausible to treat asymmetric dualism as mediative[24] between the concentric and diametric varieties. Lévi-Strauss certainly suggests this when he writes

> most diametric structures, in apparent contradiction to their nature, present an asymmetrical character, one which places them *midway* between those rare diametric forms that are absolutely symmetrical and the concentric forms, which are always asymmetrical. (1963:140) [emphasis added]

The eastern Indonesian house structure exemplifies the opposition of diametric and concentric dualism, as well as the mediation of that opposition through dual asymmetric categories. For another particularly apt example, one may refer to Cunningham's model of the Atoni house, which he reduces to a representation in terms of "*(a)* concentric circles, and *(b)* intersecting and concentrically arranged crosses in the form + and ×", configurative principles that "continually recur in Atoni symbolism, ritual usages, and conceptualizations of the social and political order" (1973:216 [see p. 39, fig.8], also Ellen 1986:13-15).

The dyadic categories used to order space inside eastern Indonesian houses also serve conceptually to create dyadic closures or containers. These dyadic containers possess a center, and it is clear in the case of 'right' and 'left' that the category with greater value, namely 'right', is associated with the category 'center'. 'Right' is also associated with 'containment' and wholeness', and can therefore be imagined as



Orientation and spatial order of house

key:

1–4 compass points
5–8 corner "chicken posts"
9–12 water jar, sleeping platform, door, great platform
13–16 mother posts
17 hearth

Figure 8. Orientation and Spatial Order in the Atoni House
(Cunningham 1973:217)

containing or encompassing 'left' as is suggested in rituals employing the rule 'movement to the right'.

Dual categories can thus be attributed a contrastive value according to their imaginative placement within a particular asymmetric schema (or superimposition of schemata), in this case, *center-periphery* and, alternatively, *container-contained* and *whole-part*. Categorical dualism does not, of itself, suggest an asymmetry: all that is minimally required to understand a dualism is some notion of a *link*, that is, a schema that connects two distinct members of a pair. The *link* schema is symmetrical and static, given the following basic logic: "If A is linked to B, then B is linked to A" (Lakoff 1987:274). Another schema must be added to *link*, to introduce an asymmetry into a pair: that is, an asymmetric schema, such as *container-contained*, or, as Lévi-Strauss argues, *center-periphery*, according to the connotations of which each category is understood as being unequal. Varying with the context, which will often have a perceptual dimension, the value relation of a pair of categories can be specifically understood on the basis of, what is in part, a perceptually motivated image-schematic structure that is asymmetric.

GENDERED SPACE

The partition of house space is frequently given in terms of the categories of 'male' and 'female,' which may correspond in varying ways with other dual classifications such as 'front/back,' 'right/left,' and 'inner/outer.' 'Man' and 'woman' are basic-level categories and therefore are highly contrastive: as Lakoff (1987:52) indicates, "at the basic level, categories are maximally distinct—that is, they maximize perceived similarity among category members and minimize perceived similarities across contrasting categories." Simple cultural distinctions frequently involve basic-level, that is, "sensible" and "practical" kinds of experience. As Jenkins (1993:37) notes,

> the distinctions which provide the basis for making distinctions—which are in part constructed by analogy with gender and, by further analogy, illuminate other classificatory oppositions—are in some sense *real*. Up and down, back and front, left and right, hot and cold, for example, are all sensible from the point of view of the embodied person: they are 'logical and biological', 'bodily dispositions' which make sense out of and because of sensation. They are both real (natural) *and* arbitrary (cultural).

Gender is itself *"real"* in terms of basic-level categorization. The basic-level contrast of man and women is given in terms of their distinct, albeit interdependent, body structures, capacities, and activities. The extrapolation to categories of gender, that is, 'male' and 'female', as the model for other binary distinctions within culture is partly explainable in terms of their generative capacity as a basic-level contrast (see Jenkins 1992:37). 'Male' and 'female' easily lend themselves to metaphorical elaborations that express notions of difference, dualism, and complementarity. Forth writes of the Rindi, for example, that "the distinction of (symbolic) gender may be paradigmatic of

the relation of inequality inherent in all instances of complementary opposition" (1981:415), which relates to his more general observation that "paired terms like MALE and FEMALE serve a kind of analytical function. That is, they appear as 'classifiers' whereas many other binary terms, more often than not, figure as what is classified" (1991a:1).

The most general instance of a spatialized 'male/female' contrast pertaining to the house is coded in terms of the most general spatial contrast, 'inner/outer.' There are a variety of contextual factors that make the coding seem inconsistent from the wider perspective of the house considered as part of the wider spatial order of village, domain, island, and cosmos. The contextually specific meaning of categories such as 'male' and 'female' would, however, fully support a view of categorization in terms of embodied cognition since, according to an interactive, ecological view of mind, "knowledge does not preexist in any one place or form but is enacted in particular situations" (Varela 1991:179). Categories will thus be shown to be related to one another in contextually specific ways but their relations will, nonetheless, be understood according to a fairly universal set of preconceptual structures.

The categories of 'male' and 'female' relate in a variety of contextually specific ways within each eastern Indonesian society. I will merely compare several societies with regard to a single context: that of the house, considered internally, and as a whole, in relation to all that is external to it. I demonstrate how 'inner/outer' and 'female/male' predominately apply from the perspective given by the whole house considered as a metaphorical *container*, defined by an *in-out* boundary. The table below illustrates the correspondence between the said general categories, where '+' (conjunction) signifies female and '-' (disjunction) male in relation to INSIDE. I assume, furthermore, that the table is statistically representative of what gender the eastern Indonesian house is commonly thought to be. Although the table is not exhaustive of all the ethnography, it is exhaustive of the *available* material.

HOUSE GENDER	SOCIETY	ISLAND
+	Roti	(Roti)
-	Wanokaka	(Sumba)
+	Tana 'Ai	(Flores)
+	Atoni	(Timor)
+	Savu	(Savu)
-	Tanimbar	(Tanimbar)
+	Tanebar Evav	(Kei)
+	Nage	(Flores)
-	Rindi	(Sumba)
+	Nuaulu	(Ceram)
+	Tetum	(Timor)
+	Orang Palu'é	(Palu'é)
+	Kédang	(Lembata)

(Table 1: The gender of a number of eastern Indonesian houses)

(see Fox 1993b:158, Vischer 1992:208-209, McKinnon 1991:88, Forth 1991b:12-13, Lewis 1988:159, Ellen 1986:19, Forth 1981:40, Mitchell 1981:60, Kana 1980:229, Barraud 1979:56-58, Hicks 1976:65, Barnes 1974:77, Cunningham 1973:226).

The pattern derived from the available material represented in the table indicates that the inside of the house, understood as a whole, is considered 'female.' Several of the authors cited above report indigenous comparisons of the inner house to a womb. The inside of the house as a whole may even be referred to as a womb or as feminine, in contrast to the outside (see Fox 1993b:158, Vischer 1992:208, Forth 1991b:12-13, 1981:41, Traube 1986:80, Hicks 1976:60,65). It is interesting to note that most of the societies given in the table are, in terms of kinship and marriage, predominately agnatic (patrilineal) and patrilocal, except for the Tana 'Ai (Lewis 1988), who nonetheless conform to the statistical norm.

The preponderate association of 'female' and 'inner' is certainly related to the fact that women commonly work in the 'inner' portion of the house where the hearth is located. On Roti, "the hearth is the defining feature of the woman's side of the house" (Fox 1993b:164). The hearth is placed in "the closed 'inner house' at the western end of the building [which] has the strongest female associations" (1993:158). Likewise, among Nage, while in the house, "women spend most of their time inside the *tolo*, where the hearth is of course located" (Forth 1991b:14). For other examples of this association of 'inner' 'female' and the hearth, one may refer to Lewis (1988:159), Ellen (1986:130), Cunningham (1973:210), and Hicks (1976:61).

'Male' and 'female' space is partly coded in terms of the distinct activities in which men and women engage while inside eastern Indonesian houses. Lewis describes for the Ata Tana 'Ai, a "sexual organization that characterizes the utilization of the various parts of the house.... [The] hearths are principally the domain of women. In contrast, the ulu lok is principally a male space" (Lewis 1988:159). Likewise, among the Nage, "The symbolic contrast [of 'male' and 'female'] is ... consistent with different ways men and women use the house" (Forth 1991b:14). The Savunese house, similarly, is divided into "a male half and a female half and ... men's activities are carried out on the duru [male] side and women's activities are carried out on the wui [female] side" (Kana 1980:229). The gendered order inside eastern Indonesian houses can be quite extensive, and often goes beyond a single dual partition into 'male side' versus 'female side'. In this regard, Kana's detailed account is particularly exemplary and interesting. Although the Savunese house is generally divided into a 'male' and 'female' side, there are also a number of more specific 'male' and 'female' partitions given in terms of a tridivisional space proceeding horizontally from the front of the house to the back, and vertically from lowest to highest "platform" (Kana 1980:227). Similar horizontal and vertical divisions in terms of gender apply in other eastern Indonesian houses as well (see Cunningham 1973:222, Fox 1993b:164, Forth 1981:37-44, Ellen 1986:17-19, Vischer 1992:208).

VERTICAL SPACE

Every previous subtitle in this chapter is given in terms of dual categories, 'inner/outer', 'center/periphery', 'right/left,' and so on. Yet, the vertical division of house space is not always given dualistically as 'above/below.' When and where dualism is employed in the vertical dimension, nonetheless, it seems often to find expression in terms of 'male' and 'female', and 'sacred' and 'profane' in some sense. In eastern Sumba, for example, "the spiritual and temporal realms [that is, the domestic and religious, or mortal and divine] can be regarded as symbolically male and female respectively. The contrast is most clearly apparent between the upper and lower sections of the house, i.e., between the peak or 'upper house' (*uma dita*) and the lower, inhabited floor (*kaheli*)" (Forth 1981:37, also see Mitchell 1981:55). The division is marked by social proscriptions that pertain to house members in particular, and gender in general. In the Rindi house, "only mature men may ever enter this part [the peak] of the house: all women and children are absolutely forbidden to do so" (Forth 1981:37). In the Wanokaka house, likewise, "only the priest of the house may enter the attic for the sole purpose of removing the sacred ritual objects for the annual calendrical ceremonies" (Mitchell '98':55). In both cases, the house peak is the "main part" of the building located at the center of the house in the symbolically innermost dimension, as it is the place containing the spirits of the patrilineal ancestors. Inside the peak is the attic in which sacred patrimony and ritual objects are stored. These points concord with the idea that "the house is inextricably associated with the patrilineal group that owns it" (Forth 1981:40, see also Cunningham 1973:213, Traube 1986:70, Ellen 1986:15-16, Howell 1989:427, Forth 1991:8, 36-37, McKinnon 1991:92).

It would seem a curious inconsistency then that, in most eastern Indonesian houses, unlike those of eastern Sumba, the uppermost part of the house, variously translated as loft, attic, or top, is not the sign-vehicle for that which exclusively connotes 'maleness,' but rather, is a place designated as the exclusive domain of women, and seemingly in spite of the fact that the upper house is also considered the precinct of patrilineal ancestors. On Savu, for example, the "loft platform" is restrictive of access for all except "the woman of the house" who is the proper mediator between the *Bàni Ae* ('Great Woman'), and her 'children', the members of the house and, more broadly, the village. The 'Great Woman' is "associated with prosperity and protection," she is "the hidden figure who is considered the giver of rain and seeds, the being who makes agriculture possible" (Kana 1980:229). This example highlights a widespread symbolic association in eastern Indonesia linking the uppermost part of a building with women, fertility, prosperity, nurturance, and agriculture. This significance is obviously related to the fact that the loft or attic is often the place where agricultural products such as seeds, grain, and rice are stored (see Fox 1993b:158, Vischer 1992:208, Waterson 1990:185-191, Ellen 1986:15, Barnes 1974:76, Cunningham 1973:220).

The association of the loft or attic with women is also connotatively related to the 'inner-female' connection, since that part of the house is also considered to be the innermost space (see above). Why is it the case then that 'inner,' 'upper,' and 'center'

portions of the house are also accorded, in different contexts, some 'male' significance? Certainly this is what one might expect, given that, symbolically, 'male' is often superordinate in relation to 'female' in a variety of situations, and given that the majority of the societies thus considered are, in terms of corporate membership in local house groups and clans, and in terms of land and property inheritance, primarily agnatically ordered and, if at all lineal, 'patri-' rather than 'matri-focused' (see Barnes 1980b). Thus, although the house as a whole may be considered feminine in relation to all that lies outside it, being an icon of interiority, containment and inclusiveness, that same house aptly stands as a sign-vehicle of 'unity' for the agnatic group of kin primarily affiliated to it, further emphasized by the fact that it serves as a repository for the spirits of agnatic ancestors and their heirlooms. The latter fact is complemented by the idea that the innermost space of the house is feminine, often likened to a womb, which is where, of course, the ancestors and their patrimony are placed. The house as a whole, and 'innerness' in general, is 'female', because these associations are consistent with the *perspective*, which treats the house as a metaphorical container. Clearly, in this case, the contained, 'male,' is superordinate in relation to the container, 'female.' And this is confirmed in terms of another, related perspective given by the 'center-periphery' schema, which places the ancestors and house agnates nearer the center than other affiliated persons.

Forth (1991a:6-7) notes, in apparent contradiction to what is stated above, that, for the Nage, "within the generally 'female' space that is the house, it is the 'female' member of any given pair that represents the superior value .... A related point is that, within the house (a female entity), the 'female' sections of the building are, either spatially or conceptually, 'central,' while it is the complementary 'male' sections that are peripheral." I hazard to take the analysis further, however, in pointing out that, as Forth himself indicates elsewhere (1991b:8): firstly, that "rites of offering to ancestors and other spiritual entities ... take place in the symbolically most feminine part of the building;" and secondly, "such rites concern ancestors ... who are mostly male. Other entities addressed in such rites, especially the 'house spirit' (*ga'e sa'o*), are also largely conceived as male, or masculine, beings." It is also noteworthy that "such rites are always performed by male priests ... conducted on behalf of a corporate group, membership of which is ... patrilineal" (1991b:8). The conclusion I would wish to draw from Forth's observations is that, as stated above, the *center-periphery* schema is most pertinent here, in that it functions to privilege the agnatic core, the central 'male', characteristic of the house. 'Female' is, therefore, *ultimately* peripheral. This arguably follows from the psychological tendency for superimposition of the *center-periphery* and *containment* schemata, discussed earlier. In other words, the house is a metaphorical container, like a womb, and like all containers it must contain something. Given the fact that containment and 'female' are associated notions, it would be reasonable to conclude that, since masculine ancestors and spirits are associated with the innermost sections of the house, and since they are associated with the central, ritual hearth post, 'masculine' derives part of its superordinate value from its characteristic 'centrality' and 'innerness.'

The valency of gender is not, however, always so clear, and there does seem to be evidence in some eastern Indonesian expressions about houses of ambivalence regarding the essential being of the house in terms of gender. Thus, on Roti, although the loft is the "'female' precinct" where food and valuables are stored, it is also the place of the ancestral spirits. The loft is also characterized as the "elevated extension" of the inner house, the "inner sanctum" where the spirits of the dead are hung as "specially shaped lontar leaves" and where the ancestors are given "appropriate offerings" (Fox 1993b:158). These spirits are known as the "*nitu bei-baï*, 'the spirits of (the male and female) ancestors' or they are the *nitu dalek*, 'the inside spirits', 'the center spirits.' Their most common name is *nitu uma*, 'the spirits of the house'" (Fox 1973:346). In one domain on Roti, the lontar leaves representing ancestors are distinguished so that "the *baä* [lontar leaves] that represent the male ancestors are hung on the east side of the house and the *baä* of the female ancestors are hung on the west side of the house" (Fox 1973:347).

The Nuaulu roof space, likewise, combines 'male' and 'female' features of articulation. On the one hand, the loft at the west end is 'female' and is used for storing "mundane articles, such as baskets, but it is here also that are found large quantities of *penesite*, pig and deer jawbones and cassowary breastbones, of which it is forbidden to dispose" (Ellen 1986:15). On the other hand, the loft at the opposite end is 'male' and is "also used for mundane objects ... but the half towards the mountainside of the house is devoted entirely to *mone* ["things sacred or prohibited"] ... [and] baskets containing valuables in which the spirits of the immediate ancestors (*saruana*) invoked by spirit-mediums are said to reside" (Ellen 1986:15).

In the Atoni house, "the attic is used for storing unpounded maize and rice and also contains the altar stone" used in agricultural ritual. From the perspective of gender, what is noteworthy about the attic is that "The elder male and female in the household usually manage it" (1973:213). Cunningham also states of the attic, "Dome-shaped as it is, it represents *neno* and all that it implies", and one of the implications of the *neno* is its ambiguity as regards gender: the "female Lord", a divine being invoked in many eastern Indonesian societies (see Van Wouden 1968). Similarly, on Flores, in the Lio house, "In the roof over the *lulu* [ritual compartment] is the offering stone, the 'plate', for the Supreme Being Wula Leja (Moon Sun)" which is likewise ambiguous with regard to gender (Howell 1989:427).

As a final case, McKinnon's analysis of the Tanimbarese house provides a particularly positive, determinative example of 'male' and 'female' inside, and 'upside' eastern Indonesian houses. Heirloom valuables were at one time kept in a "small chest (*dolan*) stored on the roof beam above the altar panel [*tavu*]" (McKinnon 1991:88). These same valuables are represented in carvings on the altar panel that "evoke both male and female associations":

> The *tavu* complex represented not so much gender ambiguity but rather the unity of both male and female aspects of the house. The gender unity of the *tavu* complex was represented more realistically by the carved figurines—often in male-female pairs—that were placed on the

> shelf above the altar panel. It was also represented socially, by the conjunction of male and female figurines on either side of the *tavu* panel. (1991:93)

Thus, what McKinnon's analysis, along with several others, suggests is that, although the eastern Indonesian house may be a divided entity, its division is often given in terms of complementary, yet asymmetrically, related categories. Thus, when the principle of complementarity is emphasized, dualism implies unity. It seems as though the principles of dualism and complementarity find expression as unified dualism in the combined 'inner', 'central', and 'upper' spaces of eastern Indonesian houses, where dual partitions of space tend to converge. This convergence connotes, in other words, a fundamental unity of 'male' and 'female', a common third element, which fundamentally mediates the pair. As I argue in chapter three, this implicit monism is characteristic of all dualisms in eastern Indonesia.

Finally, it is worth noting that vertical space is frequently classified, not only in dual terms, but as well according to a tripartite scheme of 'low,' 'middle,' and 'high.' Refering to the Rotinese, Fox states,

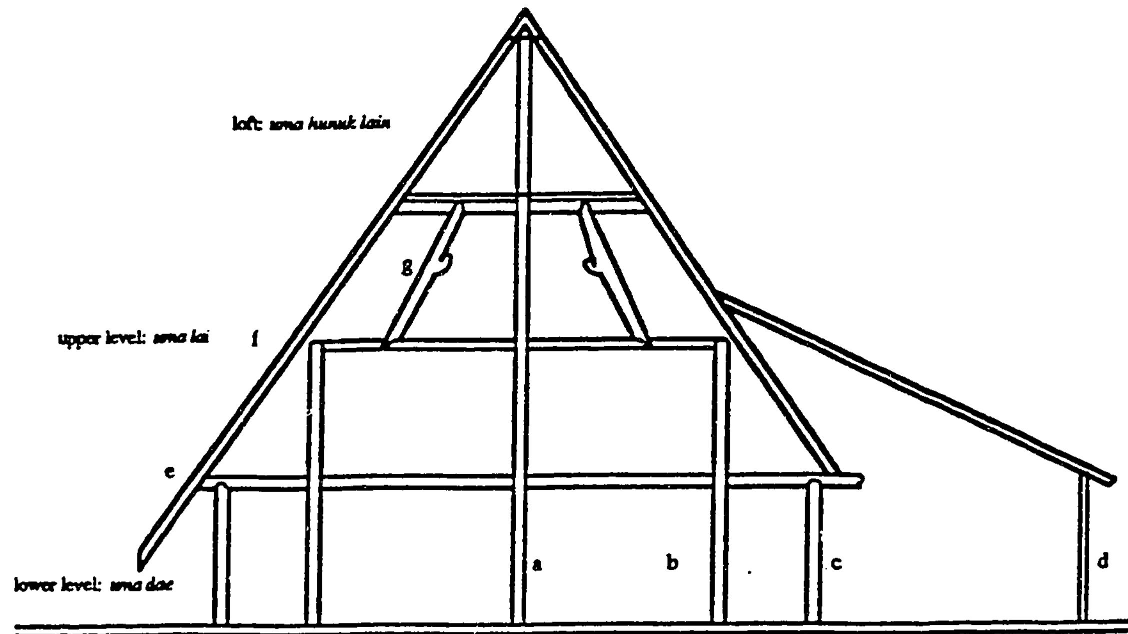
> the levels of the house may be considered as either a dichotomy or a trichotomy. Conceived as a dichotomous structure, the house consists of a 'ground level' (*uma dae*) and a raised 'upper level' (*uma lai*). This division is based on coordinates, *dae*//*lai*, 'above'//'below' or 'earth'//'sky' and the entire raised portion of the house is regarded as a single unit. Conceived as a trichotomous structure, however, the 'upper level' is seen to contain the loft (*uma hunuk lain*) which can only be reached by an internal ladder from within the upper middle world between the loft and the ground. (1993b:155 [see p. 47, fig.9])

Associated with these house levels are social 'levels' of inclusion.

> Humans as well as animals, particularly dogs and pigs, occupy the space at the ground level of the house.... A number of raised resting platforms (*loa-anak*) are set at this level and used for everyday activities.... [W]hen guests visit they align themselves in a rough order of precedence [on these raised platforms].... The raised level of the house is the private area. Only family members, relatives and guests at certain rituals are allowed up into the house. The 'inner house' is an even more intimate precinct than the 'outer house'. In the 'inner house' is another ladder that leads up into the loft, which is the most closed and intimate section of the entire structure. (Fox 1993b:155-57)

I want to suggest that, in addition to the social precedence, which pertains to living human persons, there is an implicit *ontological* hierarchy in this scheme of levels which, nonetheless, is still metaphorically related to social classification. That

Schematic representation of the house (side view)



a *di to'ak* posts supporting the ridge-pole (*to'ak*)
b *di papauk*: posts supporting the cross-beams (*papauk/semak*)
c *di lungus*. posts supporting the floor-beams (*lungus*)
d *di istuk*: post supporting the perimeter roof
e *lungus*: beams supporting the floor boards
f *papauk*: cross-beams (ritual language - *semak*)
g *dengak*: struts that support the floor-beams of the loft

Figure 9. Vertical Partition in the Rotinese House
(Fox 1993:154)

ontological hierarchy is given in terms of animals, humans, and spirits, whereby animals occupy the 'lowest level', both metaphorically and spatially, humans the 'middle level', and spirits, the 'highest level.'

According to Fox's scheme it seems plausible to abstract just such a hierarchy of being, a 'great chain of being.' The ontological order is provided in terms of the following code:

HIGH	MIDDLE	LOW
spirits (ancestors)	humans	animals[25]
non-guests	ritual guests	everyday guests
innermost	inner	outer
sacred	(ambiguous)	profane
purest	pure	impure
most closed	closed	open

(Table 2: Vertical space and value inside the eastern Indonesian house)

Ellen's description of vertical space in the Nuaulu house, likewise concurs with Fox's account of the Rotinese house. Ellen points out that,

> in vertical section there is a clear contrast between the loft space and floor, and the floor and the underfloor.... The underfloor is the area for refuse and coprophagous dogs. Nothing may be stored under the house. This space is the depository for children's faeces, fussily pushed through the split bamboo flooring, food scraps dropped and swept through for the dogs, chickens and the occasional staked feral piglet.... By contrast, the ridge is the most sacred part of the house viewed in vertical section.... There is a movement in the house from BELOW to ABOVE, as if the house 'grew' in the same manner as a plant. This [is a] movement from things impure to things sacred.... The fact that the house is above the ground is significant in Nuaulu thought, since sleeping on the ground is associated with animals; even in the bush a bivouac [temporary night dwelling] will contain a raised platform for sleeping on. (Ellen 1986:16)

One theme that Ellen's account brings to the fore is that of nurturance and growth. The latter point is brought out even more explicitly by Traube in her account of Mambai conceptions of the house and those who benefit from its life-giving qualities.

> It is described as an enclosed shelter and frequently likened to a woman who draws her cloth around her nursing children and 'moulds' (*lum*) them with her milk. Nor are human beings the sole beneficiaries of the house's maternal qualities. Beneath the house, at the 'base of the enclosure,' the area marked off by the house pillars, pigs and dogs feed upon refuse that falls through the cracks in the floor above. Mambai say

> that the various children of the house nurse in their own ways, some from above, some from below: *Hina nor maena susu sai-sai*, 'Women and men nurse up-up', *Haiha nor ausa susu du-du*, 'Pigs and dogs nurse down-down'. (Traube 1986:79)

One finds essentially the same conceptions implied regarding vertical space, ontological precedence, and nurturance and growth in a number of other ethnographies about eastern Indonesian houses (see Forman 1980:155, Forth 1981:41, Mitchell 1981:43-55, Howell 1989:426-28, Forth 1991b:36-37, Vischer 1992:205-207).

The above associations bring out more clearly why the house as a whole is considered feminine, and add to the previous mention of the widespread conception of the house as a personified protector and shelterer, given its attributes as a container. One point that should perhaps be given in addition to the above relates to the principle of hierarchy contained in the ideas and values commented upon in this section. Growth and nurturance are conceived in terms of precedence, which is further represented in a spatial imagery that is vertically oriented. This complex of ideas concords entirely with the botanical representations of 'trunk' and 'tip,' and 'root' and 'branch,' already mentioned. The essential notion to be abstracted here is *organic order*. An organic, or 'natural' order is oriented and unidirectional, in terms of spatial and temporal metaphors, so that there can be no possible alternative to its proper progression.

'Organic order' is in the nature of things, it is a principle of cosmological order, properly connecting all things within the natural cosmos, existing as the natural analogue of society itself. The evidence for this order is readily discovered in such things as the growth of plants and their relation to earth and sky, the relations between humans and animals, humans and ancestor spirits and divinity, parents and children. The vertical dimension is already perceptually inscribed in this evidence, which makes the category 'above' a principle of superordination in relation to 'below.' Plants could not grow without the nurturance of sky divinity, humans would not exist were it not for their parents and ancestors, domestic animals would not survive were it not for their caretakers. As for non-domesticated animals, they live 'naturally' on the ground, unlike humans, attesting to their lower rank in the order of things.

It is not merely for practical reasons that agricultural products are stored, in many eastern Indonesian societies, in the loft of the house, and that the loft is the precinct of women. Even in those societies which store agricultural goods in special buildings, such as granaries, as is the case for Kédang (Barnes 1974), Rindi (Forth 1981), and Nage (Forth 1991b), the same essential idea is expressed that nurturance, and therefore existence, derive from divinities associated with the realm of spirits and ancestors. Nurturing products derive, ultimately, from *above*, just as humans derive from the wombs of their mothers, *before* them. 'Before' and 'above' are mutually implicative in this context. Nurturance and growth are processes which suggest an upward and outward movement, as from 'trunk' to 'tip', but the condition of possibility for that movement is given *from* 'above.' It is this kind of spatio-temporal logic that underlies notions of social precedence among agnatically and affinally

related houses, as subsequent chapters will show. Precedence is the essential conception that accounts for the understanding of socially referred categories such as 'trunk' and 'tip', and 'elder' and 'younger,' which imply "a temporal order of succession that is also an order of status" (Traube 1986:68).

****

The categories and preconceptual structures introduced in this chapter will be further discussed by extending their reference to social relations in the following two chapters. The house is a privileged site for the storage of cultural knowledge in eastern Indonesia, and this is further indicated by the metaphorical presence of the house, both as a single category and as an organization of multiple categories, in the domains of kinship and marriage.

ENDNOTES

1. I take this sentence to mean a relation between a mental representation (image) or idea-sign, a *thing*-object, and a location-object, the latter two also having the status of *signs* since "an object can represent another than itself, and thus be a sign" (Deely 1986:15). This interpretation relies on the distinction between "signs which make possible the existence of objects cognized [,ideas, concepts, or mental representations, which are] ... the foundation or basis for relations of cognition to objects ... and signs which must be perceived as objects even in order to function as signs. Both types of signs, those which are such precisely because they are not what we directly apprehend and those which are such precisely as part of what we are aware of, function *as* signs in exactly the same way, to wit, to bring to awareness another than itself" (Deely 1986:17).

2. As Jackendoff (1983:75) makes explicit, "An essential aspect of cognition is the ability to categorize: to judge that a particular thing is or is not an instance of a particular category.... We should note at the outset that categorization judgements need not involve the use of language: they are fundamental to any sort of discrimination task performed by dogs or rats or babies.... [T]he ability to categorize is indispensable in using previous experience to guide the interpretation of new experience: without categorization, memory is virtually useless. Thus an account of the organism's ability to categorize transcends linguistic theory. It is central to all of cognitive psychology."

3. "*Text* usually refers to a message that has a physical existence of its own, independent of its sender or receiver, and thus composed of representational codes" (O'Sullivan 1994:317).

4. I am using Eco's terminology here, which may need some explanation. He writes that "the title *function* should be extended to all the uses of objects of use ... for with respect to life in society the 'symbolic' capacities of these objects are no less 'useful' than their 'functional' capacities". And as regards denotation and connotation "the connotations would be founded on the denotation of the primary *utilitas*, but would not diminish their importance" (Eco 1980:24, v. also, Eco 1976:55-56).

5. Also, see Bourdieu (1990:76), "Inhabited space - starting with the house - is the privileged site of the objectification of the generative schemes, and, through the divisions and hierarchies it establishes between things, between people and between practices, this materialized system of classification inculcates and constantly reinforces the principles of the classification which constitutes the arbitrariness of a culture."

6. Deely (1982:117) writes, "stipulations, when successful, pass into customs, and customs into nature. Thus, sign-systems arise out of nature in anthropoid experience, become partially 'conventionalized' in the sphere of human understanding, and pass back again through customs into continuity with the natural world as it is experienced perceptually by human and non-human animals alike." This partly explains why the

body can function as a powerful "mnemonic device upon and in which the very basics of culture, the practical taxonomies of the habitus, are imprinted and encoded.... [T]he habitus is inculcated as much, if not more, by *experience* as by explicit *teaching*" (Jenkins 1992:76).

7. I do not clearly distinguish between *part-whole* and *container* schemata because they appear to be very closely related: thus, the "basic logic" for *containment* reads "everything is either inside a container or out of it - P or not P", whereas the basic logic for *part-whole* is "If A is a part of B, then B is not a part of A. It is irreflexive: A is not a part of A. Moreover, it cannot be the case that the WHOLE exists, while no PARTS of it exist. However, all the PARTS can exist, but still not constitute a WHOLE.... If the PARTS are destroyed, then the WHOLE is destroyed. If the WHOLE is located at a place *P*, then the PARTS are located at *P*." There are, then, some differences between the two schemata and it may be important to distinguish them in certain instances.

8. Incidentally, it is the reciprocality of many hierarchical oppositions that forms the basis for *deconstructive* critiques of oppositions such as *writing/speech* (Culler 1979:169). Another example of reciprocality relates to the 'vulgar' Marxist notions of material infrastructure and ideological superstructure: as Max Weber has argued with regard to Protestantism and Capitalism, the material base can not be said to be the decisive factor in history, for its development can be linked with *"irrational"* value-commitments belonging to a religious ethic. Actually, such value-commitment probably possess at least a *practical* rationality with a definite material dimension. As Bourdieu (1990:95) states, "religious actions are fundamentally 'this-worldly' (*diesseitig*), as Weber puts it; being entirely dominated by the concern to ensure the success of production and reproduction, in a word, survival, they are oriented towards the most dramatically vital and urgent ends.... [T]hey apply a practical logic, produced without any conscious intention by a structured, structuring body and language which function as automatic generators of symbolic acts". Value-commitments are therefore materially *embodied* and transmitted, which goes to show that the material dimension need not be restricted to the sphere of the "economic", and, moreover, the materiality of religious ethic can take priority in relation to economy.

9. It is because of such reciprocality that Forth has proposed that "in the interests of comparison and translation (both linguistic and cultural) ... 'place' must be defined, initially at least, with reference to space, and more particularly as location in space" (Forth 1991:1). For an interesting philosophical argument in support of this view, one should consult Johansson (1989:145-149).

10. Allen (1985:25-27) makes just this point when he writes: "To represent the subordinate element in a hierarchical opposition as peripheral rather than central has the advantage of conforming to much English usage, both everyday and analytical, as

well as to conceptions common to most cultures".

11. The category 'house' "defines a social group which is not necessarily the same as the house's residential group. The house as a physical entity and as a cultural category, has the capacity to provide social continuity. The memory of a succession of houses, or of a succession within one house, can be an index of important events in the past. Equally important is the role of the house as a repository of ancestral objects that provide physical evidence of a specific continuity with the past" (Fox 1993:1). The category 'house' can thus stand for the unity and continuity of a social group not coincident with the individual dwelling.

12. Recursive complementary has to be distinguished from the notion of recursivity as described in the introduction. The essential notion of *return* is, of course, preserved in both conceptions.

13. It appears somewhat incongruous when Dumont states in *Homo Hierarchicus*, "The opposition pure and impure appears to us the very principle of hierarchy, to such a degree that it merge with the opposition of superior and inferior; moreover, it also governs separation. We have seen it lead at many levels of *seclusion* and *isolation*. The preoccupation with purity leads to the *getting rid of* the recurrent personal impurities of organic life, to organizing contact with purificatory agents and abolishing it with *external* agents of impurity, whether social or other" (1980:59-60)[emphasis added]. Dumont appears to be "mixing metaphors" here, and the implications of inner/outer, center/periphery schemata interferes with his privileging of the containment schema.

14. Mixed metaphors often imply a shifting of spatial perspectives resulting in a kind of "metaphorical motion sickness" as Pesman (1991:225) puts it. "In everyday life, we constantly shift from metaphor to metaphor in our quest for understanding situations" (ibid:227).

15. To avoid any appearance of inconsistency in my presentation, it perhaps should be noted that *ume nanan* can be translated alternatively as "house inside", rather than "house center", depending upon the context. Suffice it to observe that the term *nanan* is used to refer to the "inside;center (inner section)" which is, in fact, the approximate physical center, while the *ume nanan* surrounds that. Thus, there is an implicit distinction between a general center - *ume nanan*, "the whole area under the roof" - "for agnates, affines, and guests", and a specific center - "the center part opposed to the outer part of an area; or the center part opposed to the periphery of a circle" - where "guests should not enter" (Cunningham 1973:207-8).

16. Johnson provides a similar point when he discusses a "common type of metaphorical projection [that] treats social or interpersonal agreements, contracts, or obligations as bounded entities.... Being bound in these cases involves something metaphorically akin to being in a physical space where forces act on and constrain

you. If you enter *into* an agreement, you become subject to a (moral or legal) force that acts within the abstract space contained by the agreement. So, to *get out* of such a contract or agreement is to be no longer subject to its force, since you are no longer within the 'space' where that force acts upon you (1987:35).

17. This is not to deny, of course, the analytical importance of identifying specific contexts, situations, and levels in the data.

18. In the words of Nietzsche, "There is *only* a perspective seeing, *only*, a perspective 'knowing'; and the *more* affects we allow to speak about one thing, the *more* eyes, different eyes, we can use to observe one thing, the more complete will our 'concept' of this thing, our 'objectivity' be" (*On the Genealogy of Morals*, section III, p.12).

19. v. Forth (1991:26-28), where, among the Nage, "the lateral division has symbolic relevance in the front half of the house but not (or not so much) in the back". Nonetheless, the back section contains the inner *lo*, on the right side of which is located the hearth where the ancestors are addressed on ritual occasions (1991:22).

20. Please note that 'trunk' versus 'tip' is a contrast similar, although not identical, to the 'trunk/branches' opposition. The latter is more obviously concentric in a spatial sense, while the former, 'trunk/tip', relies more upon a temporal distinction: the trunk is representative of a stable origin, from out of which the tip extends in space and time. The image would be entirely restricted to the vertical dimension were it not for the implied metonymy of singular 'tip,' with plural 'branches,', and, by extension, 'peripheral parts.' Let it be stated unequivocally, however, that both representations are essentially spatio-temporal.

21. The conception of wholeness in this case accords with Dumont's definition as "internal interdependence and consistency" (1986:254).

22. I clarify the semantic affinity of *whole-part* and *containment* in the third chapter.

23. This principle of anthropological value represents a variation on Lévi-Strauss's claim that asymmetric dyads presuppose concentric dualism (1963[1956]:151). Maybury Lewis notes that, for Lévi-Strauss "there is an apparent contradiction in hierarchical (asymmetric) dual organization, which [he] attempted ... to resolve by means of the diametric = symmetric : concentric = asymmetric analysis" (1960:41). Lévi-Strauss bases his claim upon the proposition that "social systems and symbolic representations [are] parts of an underlying system" (1976[1960]:81). Without wishing to contradict Lévi-Strauss at this time, I claim only to have found an alternative way to explain asymmetric dualism which, I think, deserves further attention.

24. The structuralist notion of mediation refers to a dialectically derived "synthesis" of a contradiction between a "thesis" -like diametric dualism - and an "antithesis" -like concentric dualism -, whereby the latter two's opposition becomes partially cancelled out or neutralized, and at the same time partially preserved - as in asymmetric dualism - a process Hegelian philosophy calls *Aufhebung*.

25. A curious exception to the animal-low association on Roti is given by Fox: "A prerequisite for the well-being of a house is that it be inhabited by a cat. Such a cat is called the 'cat in the upper house' (*meo nai uma lai*)" (1993:159). But perhaps the inconsistency is only superficial, since "This cat is identified with the woman of the house", the 'upper house', being her exclusive precinct. Moreover, not all animals need be classified into the same *ontological* class: see, for example, Tambiah's analysis of the Thai house in relation to animals where he analyzes the *Baan Phraan Muan* distinction between "Animals in the house - inedible" and "Animals under the house - edible with special rules" (1968:448).

CHAPTER TWO: HOUSE AND KINSHIP

This chapter marks a transition to a domain of referents not pertaining directly to the house, that is, the house considered in terms of architectural features and spatial organization, but pertaining, rather, to the metaphorical projection from the physical (material and spatial) domain of the house to the more abstract domain of social referents.

In the context of immediate kinship relations within a 'house' group (a cluster of, normally, agnatically related houses), a dualistic mode of thinking, consonant with that evidenced with regard to the architecture and space inside the house, is used with reference to social relations. Intra-house space is ordered both laterally and concentrically in a way that is iconic with the horizontal spatial orientation experienced from the point of view of a human body. The house can thus be understood according to a number of image-schemata: *center-periphery*, *in-out (container-contained)*, and *whole-parts*. These schemata are highly pertinent when it comes to understanding the value dimension of the dualistic categories used with reference to kinship, a reference which often takes as its perspectival source the house.

Spatial contrasts, such as inside/outside, close/distant, and center/periphery, provide a sensory means for understanding, by means of a metaphorical mapping, a number of social contrasts relevant to the social relations of kinship within the house cluster. The most salient categories found with regard to the relations of kinship, and referring specifically to the individual houses linked by kinship, are elder and younger brother house, and trunk and tip house. Elder and younger, and trunk and tip, the latter of which of themselves already imply a spatial contrast, are given spatial connotations when they are understood in terms of contrasts such as close/distant, source/issue, and center/periphery.

The value dimension implied by these contrasts and mappings derives, at least in part, from the asymmetric 'logic' of the image-schematic gestalt by which they are understood to be related. Thus, elder and younger derive some of their meaning as a pair from the image-schematic relation of *center* and *periphery*: that is, elder:younger::center:periphery. Inasmuch as a periphery is normally thought to depend ontologically upon a centre (see Lakoff 1987:275), the analogy implies that a younger brother depends in a similar way upon an elder brother. Similarly, trunk and tip can correspond to a spatially and temporally separate source and issue or (quasi-) cause and effect, and their relation is asymmetric to the extent that an issue (effect) depends upon, and follows from a source (cause). The spatial meaning of trunk and tip derives, as well, from our experience of spatially and, more generally, visually distinct, albeit linked, botanical parts.

With regard to the fact that botanical parts are linked, we can see a more pervasive notion of linkage implied by the spatial and social contrasts already mentioned. Elder and younger are linked as brothers, trunk and tip are botanically linked by a common life- substance, while trunk and tip houses are metaphorically linked by a life-substance (which is in actual fact the common substance of kinship).

Whereas the substance of kinship is shared by contiguous, but discontinuous individuals within the house cluster, the botanical metaphor suggests a more tangible *link*, that is, a continuous substance connecting contiguous parts of a substantial whole. The trunk and tip metaphors thus serve to *highlight* one aspect of the concept of kinship, that is, linkage, while *hiding* or downplaying another aspect, that is, the fact that individuals are visually distinct, noncontiguous entities in space (see Lakoff and Johnson 1980:10, on "highlighting and hiding"). The same metaphorical structuring is at work in notions of house construction, with building components being arranged in proper botanical order from trunk to tip (see ch.1). The house is thereby conceived as being a multiply linked structure, a complex whole. That whole can become transformed into a part when combined with another house, through kinship, with the entire trunk/tip relation itself designating a larger whole.

Each categorical contrast mentioned, whether social, spatial, botanical, or architectural, forms a simple whole, that is, a pair or dualistic whole. Although the parts of that whole are spatially distinct, they are also united by the common space of the whole. The house provides the preeminent model for a dualistically articulated *whole-parts* object, a model by which to understand social objects, such as relations between persons, or between metaphorical persons such as houses.

The house is also a tangible model for unity, because it is a container-like object. The house is a bounded entity, marking the difference between inside and outside. To the extent that the individual houses comprising a house cluster share a common space, and identify with a privileged source or core house, the entire cluster can be thought of as a metaphorical house. Being one metaphorical house implies being contained within the boundary of that house, just as objects and persons (and person-objects) are contained by the physical boundaries of an actual house. Containment designates unity inasmuch as those who are inside form a unit in contrast to those who are outside. Inside and outside can, however, permit of degrees of inclusion, since the inside can be conceived in terms of a *near-far* schema, and in terms of a *homogeneous-heterogeneous* contrast. Such elaboration entails that those who are closest to the source or core house, both spatially and substantially, approach a more homogeneous quality of 'inside' than those who are 'farther out'.

Thus, along with the pertinent social contrasts—elder/younger, and trunk/tip—and spatial contrasts—inside/outside, close/distant, centre/periphery—there are a number of corresponding image-schematic meanings—about containment, concentricity, whole, and source—by which the value dimension of the relations among those contrasts is grasped in preconceptual understanding. Dual categories are related according to the axiological meaning[1] of image-schemata, and these schemata indicate the structured nature of the categories. The categories by which social life is conceived and understood, to borrow the words of Bourdieu, "exert their structuring efficacy only in so far as they are themselves structured" (1990:95). And we know that at least part of that structuration derives from the embodied, being-in-the-world nature of cognition and categorization.

The categories that contribute to the structuring of social life derive from the structures of perception and action in terms of which a world is enacted. The material

significations of socially efficacious categories, given by way of basic-level objects such as houses and parts of houses, give those categories an objective, tangible, and taken-for-granted existence, which is crucial to their being reproduced in social practice. Thus, the subjective, imaginative, embodied environment of social categories is in part supported by an objectively articulated, built environment, and the two environments coincide insofar as they are enacted in routinized practices. The built, structured, socially significant environment of material and spatial artefacts is, in other words, the *iconic,* objective correlative of structures 'present' within preconceptual understanding.

What I have argued above about the physical-and-social environment may be summed up by a single, abstract proposition: inasmuch as the objective and subjective poles of the process of categorization serve as both medium and outcome of the other, each is recursively grounded in the other, and each is, therefore, irreducible to the other.

In what follows, I focus on the eastern Indonesian categorical pairs elder/younger, and trunk/tip, with regard to their image-schematic understanding, as well as to their objective reference in the spatial and material artefacts of the house cluster. I cannot, of course, demonstrate the recursive grounding of the categories, their image-schemata, and their objective reference, but such grounding can be plausibly inferred from the iconicity of its aspects or moments. The recursivity argument is, however, only important here insofar as it relates to how we understand categorization and embodiment. It may be helpful to recall Lakoff (1987:12) on this point: "the properties of certain categories are a consequence of the nature of human biological capacities and of the experience of functioning in a physical and social environment. [This notion ...] is contrasted with the idea that concepts exist independent of the bodily nature of any thinking beings and independent of their experience" (also see Johnson 1987:20-21).

The previous chapter focused on the cultural design of the eastern Indonesian house in terms of the partition of space and the position of architectural components. The present chapter will concentrate on the house as a social category within the domain of agnatic kinship. As a social category 'house' designates more than the physical dwelling: "although a house has a physical referent, the category 'house' may be used abstractly to distinguish, not only just households, but social groups of varying sizes" (Fox 1993a:1). Such groups are generally ordered according to principles of descent and lineal segmentation: "the category of 'house' defines and often locates a descent group of varying segmentary order" (Fox 1980b:11). The term 'house' must therefore be distinguished from household or domestic unit, the latter being the less inclusive designation (see Francillon 1980:248, Fox 1980c:116, Clamagirand 1980:136, Traube 1986:71, Lewis 1988:141, McKinnon 1991:98, Forth 1993:97). The term 'household' will be defined here as a group of people living

together who form a domestic unit, who occupy a physical structure with walls and a roof, a house, and who cook, sleep, and work together (see Otterbein 1972:45).

As a social category, 'house' refers to localized aggregates of related households. A 'house' therefore conforms generally to what Leach calls a local descent group: "membership in such groups is defined by descent as well as residence" (1961:56). The households comprising such a group are either of a conjugal family type or an extended family type, although it seems that the conjugal type of household is more common.

Thus, for the Timorese Atoni, "The house [-hold] (*umé*) is the residential, economic, and ritual unit at the base of Atoni society. It is inhabited mainly by an elementary family, which eats and sleeps there" (Cunningham 1973:205). Similarly for the Timorese Tetum,

> The most tightly-knit unit in the Tetum social organization consists of husband and wife, and their unmarried children, but although the Tetum have a term for the domestic group that inhabits the household, the simple family is favoured with no verbal recognition.... [And] for most economic tasks, including harvesting, planting, buying and selling in the market, and daily chores, the household is self-sufficient. (Hicks 1991:23-24)

Even for those eastern Indonesian societies where domestic groups comprise extended families, their *nucleus*, analytically considered (see Lévi-Strauss 1985:44), can still be discerned in the conjugal unit consisting of a husband and wife, and their children[2] (see Schulte Nordholt 1971:118, Barnes 1974:67, Clamagirand 1980:136, Mitchell 1981:62, Traube 1986:71, Ellen 1986:6, Lewis 1988:144).

The constitution of eastern Indonesian domestic groups derives from a set of rights and obligations relating to marriage, descent, inheritance, and post-marital residence, extensively reviewed by Barnes (1980b). I will only be concerned with marriage and descent here. Descent is commonly patrilineal in eastern Indonesia so that the 'house' is defined principally by a core of agnatic relatives (Barnes 1980a:73, Fox 1980c:113, Gordon 1980:49, Clamagirand 1980:135, Forman 1980:154, Forth 1981:265, Mitchell 1981:60, Valeri 1980:183, McKinnon 1991:84, Traube 1986:70). 'Houses', or descent groups of varying segmentary order, are the exogamous units in eastern Indonesian societies: this will be the topic of chapter three.

One of the constants in the processes of the devolution and formation of households is the preservation of the related notions of location and origin: "the house, by its nature, implies some idea of localization (or origin) that is ultimately centred on a specific physical structure" (Fox 1980b:12). The fact of residence implies a concern for the location of a house and its relation to an origin, a concern which is "essential for social identity and differentiation" (Fox 1993a:17). The aim of the following sections will be to examine how social relations among households are understood in terms of indigenous categories, 'elder-younger' and 'trunk-tip', and their underlying image-schematic structures.

ELDER/YOUNGER

Every residence is affiliated with other agnatically related residences according to a scheme reckoned in terms of a spatio-temporal order of precedence. Visually, this social relational precedence of houses finds expression in the recognition that space is centred: among the Ema of Timor, for example, "a core house is the 'heart' of an elder/younger brother ['house'] group, and core houses that share the same name are centred on a 'mother' house that is considered the original core house" (Clamagirand 1980:150, see also Lewis 1988:229, Forth 1981:24, Mitchell 1981:71, Vischer 1992:135).

The principal contrast employed among agnatically related households is 'elder/younger', whether that be given in terms of same sex siblingship or generation, while the spatial contrast with which it correlates is 'centre/periphery', if only metaphorically. The eldest house in a group of houses is situated in the center in relation to the others. The younger houses extend by degrees away from the center toward the social periphery. Each of the younger houses thus orients itself in terms of status and position by its relation to the center house. The center or ceremonial house is *the house* by which the entire group of elder/younger houses identifies itself as a social unit. 'House' is thus, in this context, a metaphor for a social unity defined in terms of the physical and other experiential properties connoted by the metaphor: containment, boundary, shelter, and protection.

In the house group, what one consistently finds is a 'centre/periphery' orientation associated both with a factor of priority in time and preeminence in space. This is not an uncommon means of orienting social relations in general, as Giddens (1984:131) points out:

> Centre/periphery distinctions tend frequently to be associated with endurance over time. Those who occupy centres 'establish' themselves as having control over resources which allow them to maintain differentiations between themselves and those in peripheral regions. The established may employ a variety of forms of social enclosure to sustain distance from others who are effectively treated as inferiors or outsiders.

The spatial differentiation of a centre and a periphery expresses a temporal precedence that distinguishes the established insiders relative to the less established outsiders. The socially established are temporally and spatially definite as a concentrated, relatively stable origin and centre, while the less established are peripherally indefinite lacking such concentration and anchorage.

The less established households in eastern Indonesia require a centre 'house' in order to orient their social existence, as position and status, in spatial and temporal terms. Otherwise, a house would not have a 'place,' as an identity and a value, in the social order. The guiding principles of this order are succinctly expressed by Traube (1986:68): on the one hand, "outcomes evoke origins, both metaphorically, by replicating on a lesser scale the earlier state of things, and metonymically, by their

culturally defined status as parts detached from a greater whole"; and on the other hand, "Antecedence is precedence" because the closer one is to an origin, the closer one is to the 'whole' that represents the source of one's existence. These principles of order derive their efficacy from the complementary perspectives on social life each implies, and establish the essential balance between social difference and solidarity: "Viewed from the perspective of outcomes, humanity is divided into hierarchically ranked houses, but viewed from the perspective of origins, the human condition is defined by unity."

The spatio-temporal centre/periphery orientation of individual households is an essential conceptual component of the *institutionalised hierarchy* that orders inter-household relations. It is an institutionalized hierarchy because, as Bloch (1976:289) points out, the inequality of relations it effects is both stable and hidden:

> Some inequality is often manifested as unadorned oppression, but ... it is then highly unstable, and only becomes stable when its origins are hidden and when it transforms itself into hierarchy: a legitimate order of inequality in an imaginary world which we call social structure. This is done by the creation of a mystified 'nature' and consisting of concepts and categories of time and persons divorced from everyday experience, and where inequality takes on the appearance of an inevitable part of an ordered system.

At the level of house groups, or the "house system," inequality in the social structure is proportioned according to a conceptual scheme positing degrees of "the past and the present in the present." In such a scheme, the recognition of antecedence as precedence relies on a notion of a continuous relation with the past whereby the past becomes a resource for distinction, a form of "symbolic capital," to use one of Bourdieu's terms (1990:68).

Apart from the naturalizing or ideological mystification working in this social scheme, the hierarchy works as an institution if only partly because its effects of differentiation are counterbalanced by the visually pervasive metaphorical space of social unity: the concentric space of house groups. Every peripheral household is ultimately focused on a central origin house. The common centre of the origin house signifies the house group's identity, that is to say, sameness, while the original centre is at the same time the reason for the production of social difference because of the implied temporal factor. Unity and difference combine as social structural principles to effect a kind of negative, organic solidarity, a differentiated whole comprised of mechanically solidary households (see Sahlins 1972:95).

TRUNK/TIP

The dualisms of 'centre/periphery' and 'elder/younger' codify social differences and signify distinctions that are legitimated according to a cosmological principle of order. 'Elder' and 'younger' are categories that define a social difference founded on the recognition of natural precedence. As gradable categories, moreover, their singular contrast can be multiplied in such a way as to produce a system of hierarchical differences.

The reification of the properties defining such distinctions, particularly as regards relative age distinctions in human life, are even more pronounced in the categories of trunk and tip. These categories denote a botanical order of precedence outside of social life, but they imply, more importantly, essential features of all manifestations of proper order, and are, therefore, integral to social order as well.

In the chapter on principles of order inside eastern Indonesian houses I introduced the metaphorical pair of trunk and tip with reference to the way in which the ends of major wooden components are distinguished and oriented in the construction of traditional dwellings. It was indicated there as well that trunk and tip are categories that can be interpreted through a concentric image-schema, the trunk as central, principal part, the tip (branches and leaves) as peripheral (see Lakoff 1987:274).

Trunk and tip may also metaphorically distinguish a prior undifferentiated whole from its derived part, depending on context of use. Whole and part thus stand to one another, in temporal terms, as source (or origin), and derivative (or issue).

As an ideological force, the metaphorical relation of trunk and tip serves to objectify social relations by virtue of the background of essential properties it has in common with such relations. These essential properties, glossed here as the asymmetrical relations of whole/part and source/issue, explain at least partly how the botanical metaphor defines a social relation of precedence.

Like the contrast elder/younger, that of trunk/tip objectifies a relation of temporal precedence. The common abstract properties of each contrast are describable, in part, as temporal terms : the categories 'elder' and 'trunk' define an antecedent, while 'younger' and 'tip' identify a consequent.

What is also implied is a contrast between a kind of cause, and its effect. The 'trunk' causes the 'tip' in the sense that the latter emerges *out of* the former by virtue of the trunk's capacity as a kind of agent.[3] Such a conception suggests that the trunk, as prior undifferentiated whole, *already contains* the tip before it emerges, which furthermore lends the conception of 'trunk' certain attributes of a dynamic agent[4]. Thus, trunk and tip, as asymmetrical categories, stand to each other as container and contained, and quasi-cause (or agent) and effect (or patient) when considered in certain aspects, just as in other aspects trunk and tip are understood by way of central/peripheral or whole/part schematic properties.

There is another way in which trunk and tip contrast as asymmetrical categories. Their relation is demonstrably constrained by an image-schematic *path* with the following definite internal structure: (1) a starting point (the trunk); (2) an end-point (the tip); and (3) a sequence of contiguous locations connecting the start

with the end (continuous botanical substance). Trunk and tip, understood in terms of a *path* schema, metaphorically impose directionality upon the path.[5] Directionality is, by definition, asymmetrical. Likewise, asymmetry is understood in terms of a directional, "linear spatialization of time": "I start at point A (the source) at time T_1, and move to point B (the [superordinate] goal [or, alternatively, the subordinate issue, like a tip]) at time T_2. In this way, there is a time line mapped onto the path" (Johnson 1987: 114). The time aspect shows how the *path* schema is compatible with the temporal attributes of trunk and tip, as outlined above. The *path*-like properties of trunk and tip, finally, also serve to highlight the essential wholeness of trunk with tip: i.e., since "a sequence of contiguous locations connecting the start with the end" equates essentially with a continuous botanical substance extending through an abstract one-dimensional space, like a mathematical line.[6]

It should now be sufficient to state that the dual metaphorical contrast trunk/tip is asymmetrical, by virtue of a number of related super- and subordinate properties which it implies. The metaphorical pair of trunk and tip therefore makes for a fairly unequivocal expression of asymmetry in the referential domain of social relations.

Among agnatically related households, trunk and tip are terms used in reference to senior and junior 'houses'[7], respectively (see Clamagirand 1980:140, Forth 1981:44, Mitchell 1981:78, Traube 1986:73, McKinnon 1991:98, Vischer 1992:136)[8]. And as ranked social units standing to one another as trunk and tip, houses thereby imply all of the abstract structural relations described above, relations of whole/part, centre/periphery, source/issue, and cause/effect.

****

This chapter has shown how certain preconceptual structures organize the understanding of categories used to order social relations among agnatically related kin. The understanding of such categories is clearly correlated with the understanding of the categories that are used with reference to spatial and architectural features found in the house. The next chapter will explore how the same preconceptual structures organize conceptions of marriage and alliance.

ENDNOTES

1. The term axiological refers to the *value* dimension implied comparatively and contrastively between two or more categories. Axiological meaning is here understood as being based upon cognitive schemata, that is, "structures of the imagination that connect concepts with percepts" (Johnson 1987:21).

2. [T]he elementary family may be regarded as "the reproductive nucleus of the domestic domain. It consists of two, and only two, successive generations .... [T]he nucleus is formed purely by the direct bonds of marriage, filiation and siblingship. The domestic group is essentially a householding and housekeeping unit organized to provide the material and cultural resources needed to maintain and bring up its members. The distinction ... is an analytical one. The actual composition of the nuclear family and the domestic group may be identical...; but the strictly reproductive functions, in the sense given to our concept of social reproduction, are distinguishable from the activities concerned with production of food and shelter and the non-material concerns for ensuring continuity with society at large. One might put it that the domestic domain is the system of social relations through which the reproductive nucleus is integrated with the environment and with the structure of the total society" (Fortes 1958 in: Goody 1971:91-92).

3. As Lakoff and Johnson point out, the emergence metaphor is only one of several possible ways in which to conceptualize causation (1980:72-75).

4. Lakoff and Johnson define the following examples as "paradigmatic" cases of direct causation by virtue of a number of "shared features": "The agent is the energy source ... and the patient is the energy goal (i.e., the change in the patient is due to an external source of energy).... [T]here is a spatiotemporal overlap between what the agent does and the change in the patient .... There is a single specific agent and a single specific patient" (1980:70-71). I would interpret the relation between agent and patient, with reference to trunk and tip, as ambiguous with regard to the question of intentionality: i.e., the agent is neither volitional nor non-volitional but something transcendent of those categories. Perhaps this ambiguity relates to a conception of life, considered as an abstract cosmological principle (v. Waterson 1993:230).

5. "Paths are not inherently directional - a path connecting point A with point B does not necessarily go in one direction" (Johnson 1987:114).

6. This interpretation would require, in a more detailed exposition, the introduction of what Lakoff and Johnson call the LINK schema: "In its simplest manifestation, the internal structure of the LINK schema consists of two entities (A and B) connected by a bonding structure. Typically, those entities are spatially contiguous within our perceptual field. Extended cases might involve many related entities (rather than merely two) and might include spatially and temporally discontinuous or noncontiguous entities (as in "action-at-a-distance" (Johnson 1987:118). Thus, in terms of the LINK schema, there is always a "third thing," which binds or relates at least

two objects as a perceptual or logical feature.

7. It should perhaps be emphasized that the category 'house' refers to a social unit of varying segmentary order. Although it is useful empirically to identify the various social levels the 'house' denotes, in this context it is the conceptual relation between such units, considered as abstract units or quanta, that is the focus. The principal object is the relations of categories, not the interaction of substantive 'things'. This may be truer to the 'emic' view as well, since, as Barnes says of the Kedangese, "the relationship which derives from marriage is more important to them than the nature of the groups involved and ... the structural nature of the line [of descent] in question depends on the context in which the relationship of alliance is called into play" (1980:82).

8. . Less common in eastern Indonesia are the *enatically* related households (v., eg., Lewis 1988:141, Francillon, 1967:332), although the principles of their differentiation and rank are expressed in essentially the same metaphors.

CHAPTER THREE: HOUSE AND MARRIAGE

The following account of houses considered as marriage groups will not distinguish alliance units from exogamous units. Although exogamous and alliance units certainly overlap, they are not coterminous in eastern Indonesian societies, since alliance relationship will often be established by a lineal segment more specific than that of exogamy. This difference is, however, not important for the present purpose, which is not precisely to define empirical groups, but rather to look at the marriage relationship in terms of the idiom of the house, and what that idiom means in terms of preconceptual structures.

Given that the category 'house' is used to designate social groups (comprised of individual households) of varying sizes, and that the category 'house' frequently designates the unit of alliance, the question arises as to the social boundary of that unit: if houses intermarry, at what level of segmentation in the social structure do houses function as marriage groups—households, local descent groups, larger lineage segments, clan? The answer proves, in some cases, to be elusive. Thus, among the Nage of Flores, Forth informs us that

> 'Houses' (*sa'o*) are often spoken of as the units of alliance, yet any given marriage will normally mobilize two much larger groupings which, furthermore, usually do not exactly coincide with clans (conceived as collections of houses recognizing common ancestors). In other words, the 'house' ... is no more than a focus around which more inclusive social unities can form. (1993:97)

Considered as a unit of exogamy or as a unit of alliance, then, the category 'house' is a metaphor for "social unities" that as empirically derived entities may vary. Similarly, according to Barnes, among the Kédang on Lembata, "the notion of alliance group cannot be given any fixed definition." "[The] various aspects of alliance work themselves out below the level of the clan, but below the clan level the system loses itself in a mass of particular arrangements" (1980a:85). Alliance and exogamous units thus appear to be "practical groups" in these societies, groups which "exist only through and for the particular functions in pursuance of which they have been effectively mobilized" (Bourdieu 1990:170).

In other societies, however, there seems to be a more clearly defined order of social segmentation wherein one may identify with some consistency the unit of exogamy. Hicks (1976:81) reports of the Tetum of Timor that, with a fair regularity, "whereas clans are exogamous only in theory, lineages are exogamous in practice," and that this practice is, in turn, based mainly upon residence: "the hamlet [,a cluster of up to a dozen or so households,] is the largest grouping that maintains its exogamy." On Roti, Fox discerns four levels of social structure ordered taxonomically from general to specific, wherein one may identify the unit of alliance: "clans (or lineages) are described as divided into 'lineage segments' ('nggi-lea'), 'birth groups' ('bobongik'), and 'houses' ('uma'). Of these, houses or 'uma' correspond to units of

alliance" (1980c:115). Likewise, among Timorese Ema, "A core house is the minimal exogamous unit of the society" (1980:141). Some core houses share a name with other core houses:

> an elder/younger relation can also exist between certain core houses if one considers itself derived from the other or if they both claim a common origin. This relationship is emphasized by a common name, which is followed by a specific term that differentiates the houses. (Clamagirand 1980:139)

These higher order associations of shared-name core houses are often, but not always, coterminous with an exogamous boundary. Marriage alliance between two shared named core houses is possible. Finally,

> At a higher level, core houses are divided into two main categories: Those derived from autochthonous core houses...and those from immigrant core houses.... It is clear, then, that a core house...can exist within the context of a larger group of elder/younger brothers attached to different core houses. (Clamagirand 1980:141)

Other examples of the category 'house' used with reference to an exogamous group or unit of alliance include the "house-complex" on Tanimbar (McKinnon 1991:98, 115), the "'lepo'" or "house compound" of the Florenese Tana 'Ai (Lewis 1988:141, 154, 197), the "'fada'" or minimal "house group" of the Timorese Mambai (Traube 1986:70, 82), and the Timorese Makassae "lineage house (*oma bese*)" (Forman 1980:154-156), while in the Kei islands in Tanebar-Evav, from the "point de vue de l'exogamie la maison, 'rahan', est le groupe pertinent" (Barraud 1979:90). Clearly, as Fox writes, "the house, in its localized manifestations, tends to define the minimal exogamous group primarily, though not exclusively, involved in the actual arrangement of marriages" (1980b:12).

'House' is used with reference to more than the unit of exogamy or the unit of alliance in contexts of marriage. 'House' can itself become a metaphor for the alliance relation itself. As Forth observes of the Rindi of eastern Sumba,

> the alliance relation is represented as a house, specifically the house of the wife-giver. Another expression of this idea is an idiom employed in contracting marriage, when it is said of the wife-giver that 'he extends the veranda for him (the wife-taker) and adds to the house for him'.... The wife-taker's house is then spoken of as 'a house added on'..., which as noted otherwise denotes a house subsidiary to a clan's ancestral house, i.e., a 'cool house.' (Forth 1981:294)

Similarly, among the Kédang

> the alliance relationship is called *nobol-teqa*. This phrase refers to a number of poetic expressions that play on the interlocking and mutually supporting parts in the structure of a building or bamboo platform. The manifold and interlocking obligations entailed by an alliance work themselves out on several levels over an appreciable period of time and they involve a number of people. (1980:78)

Other examples of metaphors for marriage in the idiom of the house can be found throughout eastern Indonesia (Barraud 1989:213-214, Lewis 1988:190, Fox 1980b:11, 1993:158, Valeri 1989:125, Cunningham 1973:226-227, 231, Traube 1986:94, Mitchell 1981:311, 324, Forth 1981:376-381, Barnes 1974:260).

The category 'house' is thus *both* a metaphor for a social unit of exogamy, *and* a metaphor for alliance. Both of these representations are consistent with one another because their underlying schema suggests that a house is a *whole* (an exogamous group) out of which a *part* (a person) may be derived or extracted. At another level of signification, the 'house' can be interpreted as a metonym, a part (a single physical entity) standing for a whole (the house cluster), of the group. The house is, then, both a *whole* and a *part*, but according to entirely distinct perspectives. On the one hand, the house is a *whole* because it is a configuration of parts, of locations and objects, and of persons. One the other hand, the house is, as a singular physical entity, merely a *part* of a *whole*. The first perspective is 'intra-housal' and the second is 'inter-housal'. Each of these perspectives is understood, preconceptually, according to the same image-schematic structure, *whole-part*. The same schema underlies the representation of the alliance relationship, which is a relationship that is a *whole* made out of the *parts* of two houses.

The alliance relationship is a created *whole*: in other words, it is a *whole* that is made out of *parts* that, prior to their configuration into the alliance-*whole*, were themselves *wholes* because they were separate houses. The implied temporal dimension is, as Traube (1986:82) points out, crucial for understanding how this configurative process works. This dimension is made explicit in the botanical idiom that distinguishes 'wife-giver' and 'wife-taker' as 'trunk' and 'tip' respectively, as a source out of which an issue is derived (see Forth 1981:286, Mitchell 1981:211, Barnes 1974:249, Vischer 1992:325, Traube 1986:86). 'Trunk' and 'source', moreover, are categories that suggest a *center-periphery* understanding in relation to 'tip' and 'issue' such that trunk:tip::center:periphery, as demonstrated in the second chapter.

In addition to the *whole-part*, and *centre-periphery* schemata constituting the understanding of the category 'house,' either as 'trunk-that-gives' or 'tip-that-takes', there is the structure of *containment*, which is based upon an *in-out* orientation. This structure utilizes the experiential understanding of the 'house' as a *container* which, by metaphorical extension, can be thought of as *containing* a social group. As indicated in the previous chapters, the house is metaphorically understood as social *container*: first, it has the basic properties of a container in that it has an interior, a boundary, and an exterior; second, a house contains various objects, things such as inalienable

wealth, and persons who live in it as a dwelling as well as those persons who are socially included within its purview as a privileged source of life and as a ceremonial centre.

And as demonstrated in the chapter on the cultural design of the house, the schematic structures, *whole-part, centre-periphery*, and *containment*, are not mutually exclusive, and it may be worthwhile reviewing the effects of their superimposition. To begin with, there can be a semantic affinity among the *containment* and *centre-periphery* schemata. As Johnson writes, "we almost always superimpose a container schema on our CENTRE-PERIPHERY orientation.... When such a container schema is superimposed we experience the centre as *inner* and define the *outer* relative to it" (1987:125). By means of a further superimposition, a temporal dimension, understood in terms of a *path* schema (source-link-goal, which is a temporalized *link* schema), can be added to the superimposition of *containment* and *centre-periphery*, so that the *centre* can be transformed into a *source* in relation to some *peripheral* goal or *issue*. This accounts for the preconceptual, structured understanding of the alliance relationship of two bounded groups in terms of 'trunk' and 'tip'. The boundedness of the *source* group thereby eventuates the metaphorical encompassment of the *issue* group, whose *centre* is, in this context, conceded to be identical to the *source*.

One may ask, then, how the *whole-part* schema figures in these representations? The answer to this question will take us into the domain of marital prestations and exchange; for it is by means of the exchange of goods that 'house' can be understood as a metaphor for the alliance relationship, a metaphor that is nonetheless based upon an understanding of the house as a *whole* comprised of extractable *parts*.

****

As is evident from the first chapter, the house can be understood according to the image-schematic categorization *whole-parts*. As such, it is thought to inhere the following basic elements: a whole, parts, and a configuration. A whole is, by definition, a configuration of parts. We understand such theoretical entities as psychological *gestalten* according to the *whole-part* schema, wherein the *whole* is theorized to be more cognitively basic than the analyzed *parts*, and this theory accounts for much of our everyday behavioural and perceptual experience. We conclude, therefore, that the truth of the *gestalt* cannot be found by its decomposition into primitive elements. The house, too, is understood as a *whole*, and it bears those features of what Lakoff describes as the "basic logic" of the *whole-part* schema:

> The schema is asymmetric: If *A* is a part of *B*, then *B* is not a part of *A*. It is irreflexive: *A* is not a part of *A*. Moreover, it cannot be the case that the WHOLE exists, while no PARTS of it exist. However, all the PARTS can exist, but still not constitute a WHOLE. If the PARTS exist in the CONFIGURATION, then and only then does the WHOLE exist. It follows that, if the PARTS are destroyed, then the WHOLE is destroyed. If the WHOLE is located at a place *P*, then the PARTS are

> located at *P*. A typical, but not necessary property: the PARTS are contiguous to one another. (Lakoff 1987:273)

The *whole-part* understanding of the house is highly pertinent in the context of a marriage relation between two houses, particularly in terms of the exchange of goods that accompanies and in part constitutes that relation.

We may begin by resolving an issue broached earlier regarding the semantic affinity between *whole-part, centre-periphery*, and *containment* schemata. Firstly, *containment* and *whole-part* schemata incorporate such properties as would tend them cognitively to become superimposed. I will illustrate this point using an example from a text of Dumont. Dumont states that there are essentially "two conceptions or definitions of a whole, one through a rigid boundary, the other through internal interdependence and consistency" (1986:254). The former conception is described as "modern and arbitrary or ... mechanical," the latter as "traditional and structural." Dumont's traditional/modern label of the distinction for conceptions of wholeness is, however, less important to the discussion than the other features of his description. The first description—"through a rigid boundary" hence mechanical—evidences a *containment* schema, while the second—"through internal interdependence" hence structural—conforms to a *whole-part* schema.

According to schema theory, then, the second conception of wholeness is more properly holistic, but this is not to suggest that *containment* cannot become confused with *wholeness*. It is plausible to suggest that experience, whether "traditional or modern", often confuses the two for, insofar as the *parts* of a configuration are experienced as contiguous, as with the house, they may be thought of as encompassed and bounded, and hence, *contained*. The eastern Indonesian house is certainly a *whole-container* in this sense, since it is both a configuration of parts and a container. *Whole-part* and *containment* may, therefore, be analytically distinct, but they are probably rarely experienced as such. As a matter of fact, it is difficult to imagine a *whole-parts* configuration that does not include the encompassing perspective of an "exotopic" position (see Holquist 1990:31), that is, an outside, observer viewpoint.

As a *whole-parts* entity, the house is configured in terms of dual categories—such as, male/female, front/back, right/left, and centre/periphery. In the context of marriage, it is the male/female dualism that is perhaps the most pervasive. The dualism of male/female, like the other dualisms, does not express a dualism between two fundamentally distinct entities, two 'containers' separated "through a rigid boundary", but rather a *holistic* dualism united "through internal dependence and consistency". The distinction can be expressed as follows: first, to take a dual*ism* view of *X* is to take the view that *X* is composed of two distinct, though related elements; second, to take a dual*ist* view of *X* and *Y* is to take the view that *X* and *Y* are fundamentally distinct (cf. Sparkes 1991:190).

The main point to be observed here is that 'male' and 'female', like 'trunk' and 'tip', or 'wife-giver' and 'wife-taker', are configured *parts* of a *whole*. Marriage alliance is basically a process that reconfigures *parts* into new *wholes*, the alliances, through the transforming action of giving and receiving. The alliance relation is thus a

broadened, reconfiguration of the 'house', a *whole*, designating a social *whole* that, although it exists on a larger scale in relation to the social topography, serves to include affines and agnates in a common social-conceptual space.

The alliance relation between houses in eastern Indonesian societies is, by and large, of the asymmetric type (see Forman 1980:156, Barnes 1980a:84, 1974:244-45, Schulte Nordholt 1971:106-7, 128, Forth 1981:331, Traube 1986:84, Fox 1980c:119, Mitchell 1981:191, Gordon 1980:54). In patrilineally 'based' societies, asymmetric alliance refers to the practice wherein, for one's own exogamous, agnatically based group, affines will be divided into 'wife-givers' and 'wife-takers'. Affines will be distinguished thus according to the basic rule whereby a group that gives wives to another group may not also take wives from that group. Hence, the giving and taking of persons in marriage is not reciprocal or symmetric but rather non-reciprocal or asymmetric.

The social mode of reproduction in eastern Indonesian societies, that is asymmetric alliance, provides the practical basis upon which to enact a set of dual categories on a broader scale in the social topography, that is, a scale that transcends the domain of agnatic kinship. The categories are experientially basic, involving oppositionally salient notions about bodies, life and procreation, gender, houses, plants, space, and time. It is their experientially basic qualities, along with their practical enactment in social life, including contexts of marriage alliance, that make them such potent metaphors for living.

As metaphors to live by, the dyadic categories do not merely concord with the social order as Needham (1962:96) suggests; rather, they are part of the structuration of that order, that is, the categories are structured by and also serve to structure that order (see Giddens 1984:31, also Bourdieu 1990:95). Considered solely as structures of signification, however, dual categories both constrain and enable certain social orientations and practices among their users because they metaphorically structure the understanding of social life (see Lakoff & Johnson 1980:10). The enactment of dual categories in the context of eastern Indonesian marriage alliances produces an understanding of social relations in terms of some basic preconceptual structures.

The dyadic relation of 'wife-giver' and 'wife-taker' is an obvious case in point. Understood as 'male' and 'female' respectively, they form a dualism, that is, a *contained whole* (see Forth 1981:284, Schulte Nordholt 1971:160, Barnes 1974:147, McKinnon 1991:111, Clamagirand 1980:140, Valeri 1980:182, Traube 1986:82). The dualism serves to create a metaphorical, bounded social space that *includes* the alliance partners and *excludes* everyone else. Each member of the pair is a unity unto itself, with regard to the fact that there are two levels of boundary in categorical dualism. The first concerns the boundary between, in this case, the parts 'male' and 'female;' and the second, the boundary separating the *whole* 'male-and-female' and 'everything else' (see Wilden 1977:186). Thus, just as we understand categories or classes as abstract containers (Johnson 1987:39-40) so, by extension, do we understand categorical pairs as containers, albeit containers bearing crucially distinctive *whole-part* properties. In other words, categorical dualism is a exemplary type of schematic

superimposition which, in this example, involves the superimposed schemata of *containment* and *whole-part*.

Image-schematic structures often imply one another because they are frequently associated in actual experience. Thus, *whole-part* implies some kind of substantive link among the parts of a configuration (see Harris 1987:135). In other words, the *whole-part* schema implies an even more experientially basic *link* schema, without which the notion of *part* could have no meaning. Dual categories are *linked parts of a whole*. As Johnson describes it, "In its simplest manifestation the internal structure of the LINK schema consists of two entities (A and B) connected by a bonding structure. Typically, those entities are spatially contiguous within our perceptual field" (1987:118). Our understanding of linkage relies on at least two objects that are bound by some "third thing" common to each. For example, it is easy to conceive of male and female as *linked* because the third thing that binds them is, among other things, 'humanness.'

The *link* schema is strongly suggested in the metaphor of the 'path', which refers, in eastern Indonesia, to the common trail connecting two houses linked in a marriage alliance. The Timorese Mambai, for example, "liken their marital destinies to the act of following a preexistent 'path' ('dan'), a trail blazed by the marriages of their ancestors" (Traube 1986:81). The image of the path in the context of alliance is common throughout eastern Indonesia (see Cunningham 1973:227, Schulte-Nordholt 1971:107, Mitchell 1981:196, Barnes 1974:240, Lewis 1988:190, Gordon 1980:54, Fox 1980c:118, Vischer 1992:254).

The link schema is, moreover, obviously fundamental in reckoning connections in the domain of kinship. Siblings are understood as linked by their connection to a common source: their parent(s). Conversely, spouses are linked by their common issue: their children. What distinguished siblings from spouses as 'male-female' links, apart from generation, is their respective temporal relations: 'brother-sister' implies the cultural message "unity-before-division" (divided unity) while 'husband-wife' implies "unity-after-division" (unified division). What these gendered links have in common, however, is the even more basic cultural message "both-same-and-different": categorical dualism in eastern Indonesian expresses, from an imagined internal perspective, a complementary *both/and* rather than a mutually exclusive *either/or* relation. It is from an external perspective, however, that *both/and* is transformed into a unit that becomes *either/or* when set against 'everything else'.

The affinal relation is commonly referred to in terms of the consanguineal link of brother and sister in eastern Indonesia. Expressing the affinal relation among two houses in terms of cross-sex siblingship is consistent with a *both/and* way of understanding (see Fox 1980b:14, Clamagirand 1980:141, Forman 1980:156, Gordon 1980:53, Valeri 1980:185, Forth 1981:286, Barraud 1979:142, Howell 1990:253, McKinnon 1991:115). According to Traube (1986:82),

> what needs emphasis is the temporal dimension implicit in the categorization. In alliance contexts, the idea of an original whole is projected onto the cross-sex sibling pair, the boy and girl, raised in the

> same house and later separated by their disparate marital destinies. Allied groups distinguished as brother and sister evoke this image of unity before division at the same time as they enact their complementary unity in division.

But something perhaps more obvious is implied here as well: the contrast between cross-sex *difference* (affinity) and same-sex *identity* (consanguinity) in an encompassing medium of siblingship. As Lewis (1988:303) observes,

> parallel kin ... are one's own people, while relations through cross-sex links are to a greater or lesser degree other people.... Cross-sex relations introduce outsiders—people of different blood—into the calculation of kin relations and social relations generally. However, those outsiders provide one's own group with the means for reproduction.... [O]thers related to one's own across a sister/brother boundary are necessary for the reproduction of one's own people as a social group.

In this scheme of reckoning one's own people and others, everyone is united in an encompassing medium of *sameness*, that is, siblingship, and divided by the *difference* of gender (see Héritier 1982). As Fox states, "If relative age distinctions (that is, elder/younger) between siblings of the same sex form the categorical basis for differentiating groups of the same kind, then relationships between siblings of the opposite sex serve to categorize their [affinal] alliances" (1980b:13).[1] It follows that what distinguishes groups of the same kind, "one's own people" as the *identical*, from "other" affinal relatives, is an accumulation of *sameness*, of siblingship and of same-sexness. To sum up, it might be useful to state, in terms of a "symbolics of sameness and difference" (Heritier 1982:158), the understanding of relations among kin and affines in the following way: 'Cross-sex' encodes *difference*; conjugality a mediated difference of *unified division*; siblingship encodes *sameness*; and cross-sex siblingship a mediated difference of *divided unity*. By way of clarification of the terms 'unified division' and 'divided unity', I distinguish conjugality and cross-sex siblingship by their implied temporal relation, that is, according to whether they are initially divided, as in the former, or intially unified, as in the latter.

The categories of 'male' and 'female' simply provide a more abstract way in which to express the alliance relationship. Although the categories of gender seem primarily to encode *difference*, in social life 'male' and 'female' are never simply divided, they are, rather, both divided and unified in conjugality and siblingship. 'Male' and 'female' are apt metaphors for 'wife-givers' and 'wife-takers' respectively, because they express an alliance (unity) between (divided) social units.

But while the categories 'male' and 'female', like other dual categories such as 'trunk' and 'tip', are understood as being complementary, they are also asymmetric. The asymmetry of dual categories derives, in part, from their social and temporal dimension. As Traube states,

> Superiority and inferiority in status are not a function of the content of synchronic relations of categorical opposition and correspondence (male:female ::outside:inside...), but rather of the diachronic relations that symbolic categories express. Thus, the superiority of wifegivers...reflects neither their symbolic attribute of maleness nor any combination of homologous categories (male=front=east...). It is rather that maleness, in the alliance context, stands for the status of wife-givers as the *original sources* of women. From this temporal perspe[illegible] wife-givers are the encompassing social category that inclu[illegible] male and female. (Traube 1989:324)

'Wife-givers' are thought of as 'sources' in relation to 'wife-takers' throughout eastern Indonesia (see Forth 1981:288, Lewis 1988:301, Mitchell 1981:211, Fox 1980c:117, Barnes 19[illegible]48). In the context of marital alliance, the major 'mode of social reproduction,' an ideology of gender expresses that 'male' encompasses 'female' according to a diachronic process of emergence whereby a *whole-part* configuration is derived from one of the two parts. Bhaskar's figural notion of *constellationality* sums up the notional process exactly: constellationality is a figure of containment of one term contrasted with an encompassed term, from which the encompassed term is understood as being diachronically emergent (Bhaskar 1994:47). This description of a relation of value must be distinguished from Dumont's notion of "hierarchical opposition." Thus, constellationality is a conception that superimposes *whole-part* and *containment* schemata, but need not incorporate an *up-down* orientation structure, as in the hierarchical conception of levels.

It is true that Dumont (1970:245) alternatively represents hierarchy as "the encompassing of the contrary, or, what amounts to the same thing, the orientation to the whole." These can be represented graphically without an *up-down* orientation. Dumont also states, however, that "hierarchy assumes the distinction of [two] levels," which is strictly true because the term 'hierarchy' is a metaphor that is meaningless unless understood in terms of an *up-down* orientation. As Dumont (1970:242) suggests, however, the distinction of levels—whereby "at the superior level there is a unity; [and] at the inferior level there is a distinction"— is not necessary to represent the dimension of value, it merely permits "the clearest formulation." My point is that such clarity is for the sake of the literate mind only, and may not adequately correspond to the indigenous reality at hand.

Returning to the issue of gender categories and marriage, 'wife-giver' and 'male' are conceived as source in relation to 'wife-taker' and 'female.' There is thus an implicit causal schema in operation here in which the encompassing term is the cause of the encompassed term. Prototypical causation involves an interaction between an *agent* and a *patient* (Lakoff & Johnson 1980:70). Categories such as 'male' and 'female', and 'trunk' and 'tip', are thus causally connected. More specifically, such categories are related in terms of "causal emergence," which is a variation on prototypical causation, wherein there is both a spatiotemporal overlap between the quasi-patient and the quasi-agent, *and* a *link*. An example of such emergence is natural

birth: "In birth, an object (the baby) comes out of a container (the mother). At the same time, the mother's substance (her flesh and blood) are in the baby (the contained object)" (Lakoff & Johnson 1980:74).

Another fairly obvious example of *emergence* is found in the categories of 'trunk' and 'tip'. 'Trunk' and 'tip' are used to refer to 'wife-givers' and 'wife-takers' respectively, in eastern Indonesia. The 'tip', an object, comes out of a container, the 'trunk', while the 'trunk's' botanical substance is continuous with that of the 'tip'. Moreover, duality and unity are combined in the categories of 'trunk' and 'tip' in the manner of a "constellation".

Emergence informs the conceptual linkage between the categories of 'male' and 'female' as well. As Traube states in the quote above, 'wife-givers' as 'male' are the "original sources of women", that is to say, the causal *container-source* in relation to their caused *contained-issue*, 'wife-takers,' who are symbolically 'female', and who rely on their 'wife-givers' for their means of reproduction.

McKinnon's analysis of Tanimbarese marital exchange illustrates how exchange transforms houses into 'male' and 'female' counterparts. One of McKinnon's main problems was to discover the conditions of possibility for the generation of an "hierarchical" relation between wife-giver and wife-taker. She first examines Dumont's concept of hierarchy as illustrated in the story of the creation of Eve from the extracted rib (part) of Adam's body (whole): "the superior pole of the hierarchical opposition is coterminous with the whole and the inferior pole is determined solely in relation to the former" (Dumont 1986:253). McKinnon discerns three essential ideas implicit in Dumont's example, but, she argues, not fully developed and articulated by him:

> first, the idea of a prior, undifferentiated unity; second, the idea...that a *process* of differentiation is a necessary requirement for the existence of a relation between two opposed entities; and third, the idea that, to the extent that one entity is extracted from another, there will be an asymmetry in the relation between the two such that the one that has been extracted is hierarchically encompassed by the one from which it has been extracted. (1991:34)

McKinnon subsequently reaches a conclusion as to the basis of the concept of hierarchy:

> There are thus two conditions for the establishment of a hierarchical relation between two opposing parts. First, a part must be extracted from a prior unity such that the remaining part is constituted as the source from which its opposite issues forth. If one cannot be conceptualized as the source of the other, there can be no hierarchy only differentiation and equality. Second, a tension must be established between the processes of extraction and containment, separation and encompassment. (McKinnon 1991:35-36)

The operation that brings about "hierarchy" in the context of Tanimbarese (and, arguably, other eastern Indonesian) marriage practices is exchange: "exchange is the motivating force behind the constitution of both the identity of the units [houses] and the hierarchical relation between units" (36).

I must maintain, however, that hierarchy is not clearly implied in the process that McKinnon identifies. McKinnon's account illustrates, rather, how, through exchange, *wholes* (houses) get transformed, through a process of extraction, into *parts* ('male' and 'female') which, in turn, belong to a newly emerged *whole* (the alliance). Exchange thereby enacts the schemata of *containment* and *whole-parts*, by which the alliance relation is understood, and not by metaphorical levels.

The social categories associated with marriage are conceptually consistent with the categories of exchange. The cross-sex sibling pair is a unity, a *whole* that originates within the house and that must be separated into *parts* so that an inherently unproductive unity can be transformed into a re-productive duality. It is by giving a wife and exchanging goods that "the prior unproductive relation *within* a house is thereby transformed into a productive cross-gender relation *between* houses" (McKinnon 1991:198, also see Clamagirand 1980:144).

A closer examination of the process of exchange will clarify how the *whole-part* schema structures the understanding of exchange. The goods that are exchanged in marriage stand for the *parts* of two separate, *contained wholes*. Symbolically 'masculine' goods are transferred from 'wife-takers' to 'wife-givers' while 'feminine' goods are transferred in the opposite direction from 'wife-givers' to 'wife-takers' throughout eastern Indonesia (see Forth 1981:369, Fox 1980c:117-118, Hicks 1991:38, Mitchell 1981:319, Fox 1993b:164, Barraud 1989:210, McKinnon 1991:190, Traube 1986:99, Clamagirand 1980:143-45). As Needham writes with regard to such systems of prestation,

> In matrilateral [asymmetric] alliance the masculine goods circulate in the opposite direction to that of the women, and feminine goods in the same direction as the women.... Thus the system is not characterized by the one cycle of the initial model, consisting of a unidirectional circulation of women, important though this is, but by a reciprocal opposition of two cycles, masculine and feminine.... Generalizing, we may say that a prestation must be appropriate to the character and status of the receiver, and that a group is associated with those goods which are given to it. Masculine goods are therefore proper to wife-givers, and feminine goods to wife-takers: wife-givers are associated in this way with the (superior) masculine cycle, and wife-takers with the (inferior) feminine cycle. (Needham 1962:94-95)

Among the Timorese Mambai, Needham's account is given support according to Traube's interpretation:

> The exchange of gift items conforms to the gender categories that express alliance relationships. Symbolically "male" goods circulate against "female" goods, and groups are identified with what they receive. Wife-takers provide the male gifts (water buffalo, goats, horses, metal disks), and they are reciprocated with female gifts (pigs, cloths, coral necklaces, cooked rice). (Traube 1986:88)

Other interpretations would also appear to conform to Needham's account (see Clamagirand 1980, Hicks 1991:38), and what they have in common is that they tend to emphasize how each class of goods stands in relation to the receiver: but what about the giver?

McKinnon's analysis illustrates a unique perspective because it adopts the viewpoint of the giver relative to the class of goods it gives. The opposed unilateral transfer of 'male' goods in one direction, and 'female' goods in the other, is a double act, the *double entendre* of which is signified in terms of opposite transformations. On Tanimbar, by giving away the sister along with goods connoting 'female' qualities, the wife-giving house symbolically "exteriorizes" its 'female' aspect. Conversely, by providing a counter-prestation of "male valuables," the wife-taking house "exteriorizes" its 'male' aspect. In effect, the wife-giving house emphasizes its 'male' facet in contrast to the wife-taking house which highlights its female aspect (see McKinnon 1991:165).

McKinnon's account clearly illustrates how each house transforms itself into a *part* that is the complement of the other. In effect, where at first there are only separate *wholes*, the two houses prior to their marriage arrangement, by a transformative "exteriorization" through exchange each becomes a *part* of a larger, reconfigured *whole*: the two houses linked by marriage.

In Tanimbar, 'wife-givers' give away the 'female' aspect of a house. This act "elicits and constitutes" a 'male' identity as "the source of life." 'Wife-takers,' however, give away the 'male' aspect of their house and in so doing establish a 'female' identity as "issue-from-source." Therefore, the feminine quality of 'wife-takers' and the masculine quality of 'wife-givers' derives not from the aspect that they retain, but from the aspect that they give away. The elicitation and constitution of identities or subjects in exchange, therefore, depends upon the values associated with the objects that are alienated.

The ratification of the *part-whole* configuration of two 'houses' related in marriage obtains with regard to the exchange of objects of value as prestations. The "exteriorization" of 'half'-*parts* of a dualistic whole, the 'house-whole', is accomplished through the transfer of marital prestations. Symbolically 'male' goods travel *away from* or *out of* 'female' 'wife-takers' to 'male' 'wife-givers', while symbolically 'female' goods move *from* 'wife-givers' *to* 'wife-takers'.

The above analysis could be taken further with regard to the content of marital exchange. In Rindi, on the island of Sumba, 'wife-takers' provide a "bridewealth" consisting of "horses, metal pendants...and chains of plaited metal wire" while 'wife-givers' respond with "counter-prestations" comprising "textiles," "beads," "ivory

armbands, and the woman's knife" (Forth 1981:359). It is also noted that the prestations given by 'wife-takers' and 'wife-givers' are distinguished as "masculine and feminine goods." But this distinction corresponds to a broad articulation since each general category is "further divided into masculine and feminine components" (360). As Forth indicates,

> The combination of masculine and feminine qualities is enjoined by rules that govern the composition of the individual increments of which a total marriage prestation is composed. In the first place, a pendant should always be given with a chain. This is the minimal prestation, which [is] given in exchange for a length of material ('tera') [a textile].... It is also the most basic expression of the masculine/feminine distinction; thus while a pendant and a chain can be given without a horse, the reverse is not possible. (1981:361)

All prestations and counter-prestations involve "the prescribed combination of masculine and feminine values" (361-62). Exchanges entail the calculation of standard values that complement each other. Bridewealth and the "counter-prestation" "should be in proportion, otherwise the marriage will not prosper" (362). The principle of masculine/feminine complementarity, moreover,

> permit[s] a systematic expansion (or reduction) of quantities with regard to individual prestations. Briefly, this involves treating a basic male/female pair (e.g., a pendant and a chain) as a unit (in this case feminine) when combined with another unit (e.g., a horse) of the opposite gender. The process may then be continued until the limit of two stallions, two mares, and four pendants is reached. (362)

Fox (1989) has commented at length on Forth's analysis and notes the "recursion of male-female categories." He suggests that "what is significant is the *recursion* of these categories—the way in which they may be applied successively in various contexts and at many levels of signification.... By this principle of recursive complementarity, nothing is exclusively of one category; anything that is categorized according to one component of a complementary pair can *potentially* contain elements of its complement" (Fox 1989:45-46). Thus, as Forth indicates, the process of recursive complementarity permits "a systematic expansion (or reduction) of quantities with regard to individual prestations" (1981:362).

The process of recursive complementarity illustrates another manner in which *parts* are configured into *wholes*. Recursive complementarity indicates that some *wholes* are more 'holistic' than other *wholes*. This is suggested by the idea of a scale of quantity, with each unit in the scale being a *whole*. The scale increases as the complexity of each successive *whole* increases, because each unit will include the previous units. In Rindi, the holistic scale is reflected in the dyadic character of each unit of bridewealth: "The composition of marriage prestations ... reflects the value

attached to even numbers.... In this context, the quality of evenness (or completeness) is clearly founded on a duality deriving from the prescribed combination of masculine and feminine values" (Forth 1981:362-362).

A *whole* is, by definition, greater than the sum of its *parts*. It follows, therefore, that it is the relations among those parts, in addition to the number of parts, that determines the complexity of the whole. The features of relation among parts of a whole seem to be invariant in eastern Indonesia—features such as dualism, categorical asymmetry, and recursive complementarity. Given these basic features, it follows that the greater the sum of the *parts* the greater will be the *whole*, because more *parts* implies more relations. This is evidenced by the exchange of marital prestations in Rindi: although 'male' and 'female' designate *parts* extracted from 'wife-takers' and 'wife-givers,' respectively, each of those *parts* ("units") is, in itself, a dyadic *whole*, and each of those *wholes* may include a suborinate *whole*, and/or may be included within a superordinate *whole*. A gross redundacy in the number of dyads involved is used to transform quantity into a *holistic* network of parts and relations. In other words, although marriage payments evidence a quantitative aspect, emphasis is placed upon the *qualitative* effect, that is, the holistic effect associated with, but not determined by, sheer quantity.[2] This quality of holism is reminiscient of that associated with the house indigenously conceived as an interwoven complexity, a kind of *textile* (Cunningham 1973:222, 235, Fox 1993b:143), or 'text,' a word of which the original meaning is 'to weave.' (see Ong 1982:13).

The holistic measure of the prestations will be determined by the holistic measure of the alliance, that is, its generational depth: as Forth states of the Rindi, "the number of increments required ... depends upon the rank and wealth of the two parties and the tenure of their alliance" (1981:362). This means, basically, that established alliances are 'less expensive' per marriage than newly instituted ones, which require more elaborate payments of bridewealth. The holistic measure of the marital prestations is thus inversely proportional to the holistic measure of the alliance. It is *as if* the one measure is designed to compensate for the other, with the encompassing value being *holism*. Holism thus refers to a qualitative meaning that is essential to conceptions of social affinity. Other examples of *whole* and *parts* understanding, and holistic accounting in alliance and exchange may be found throughout eastern Indonesia (see Forman 1980:161-62, Mitchell 1981:319, Vischer 1992:318, Fox 1993b:164, Cunningham 1973:229).

****

The above interpretation indicates the contribution that certain image-schematic structures can make with regard to the understanding of alliance and exchange among houses in eastern Indonesia. There are many other aspects to alliance and exchange that have not been examined in the light of such preconceptual structures. What I take to be the sociologically most important categories, however, have been examined. I have shown how a dimension of eastern Indonesian social life, alliance and exchange, is understandable according to cognitively basic structural categories, categories that

are, moreover, shown to be present in other domains of society, in particular the domestic domain of house and house cluster. The present work could be extended to the field of political relations, which are linked to marriage and alliance, and the same structures would, I believe, emerge, thus indicating a widespread consistency, reflecting a cognitive economy, in the understanding of eastern Indonesian cultural categories.

ENDNOTES

1. The brother-sister categories are used with reference to affinally allied 'houses' in a wide number of eastern Indonesian terminologies: Sumbanese (v. Onvlee in: Fox 1980:14), Timorese Ema (Clamagirand 1980:141), Timorese Makassae (Forman 1980:156), Rotinese (Fox 1980:14), Florenese Mangarrai (Gordon 1980:53), Seramese Huaulu (Valeri 1980:185), Eastern Sumbanese (Forth 1981:286), Timorese Mambai (Traube 1986:85), Florenese Ata Tana 'Ai (Lewis 1988:216), Tanebar Evav (Barraud 1979:142, 1989:200-1), Florenese So'a (Smedal in: Howell 1990:253), Florenese Lio (Howell 1990:252), Fordata Tanimbarese (McKinnon 1991:115), and others.

2. Johnson (1987:122) describes our understanding of scales in terms of quantity and quality: "The SCALE schema is basic to both the quantitative and qualitative aspects of our experience.... [W]e can view our world as a massive expanse of quantitative amount and qualitative degree or intensity."

CONCLUSION

At the beginning of this thesis I introduced the notions of embodiment and preconceptual structure. Embodiment refers to "basic biological capacities and ... the experience of functioning in a physical and social environment" (Lakoff 1987:12). As for preconceptual structure, there are generally two kinds: basic-level and kinesthetic image-schematic. The presence of such structures in conceptualized categorizations indicates the embodied nature of cognition.

The theory of embodied cognition can contribute to an explanation of cultural phenomena within an oral tradition, where conceptual elaborations are limited by the "means of communication" and storage of knowledge relative to a culture with a written tradition (see Goody 1977:10, 146-162). Cultural knowledge, which basically consists of shared categories of social and physical experience, is likely to be motivated by directly meaningful, preconceptual structures within an oral tradition, rather than constituted by a conceptually elaborated network of meanings: conceptualizations displaying, for example, complex sequences and relations of logically principled propositions, rules, and formulae utilizing arbitrary symbols, which are difficult to remember and apply in everyday experience, and are simply impractical in most contexts (see Lakoff 1987:280). The available means of communication, storage, and recall of knowledge within an oral tradition entails the fact that such a tradition will be mostly comprised of directly meaningful knowledge, knowledge that is easier to learn, remember, and use: in other words, preconceptually motivated knowledge rather than arbitrary knowledge. Exceptions to this will arise, of course, depending upon whether the relevant psychological capacities are "underutilized in a culture or are specially developed to a level of expertise" (Lakoff 1987:38): well known examples of the latter would include Nuer knowledge of cattle, or Inuit categories for snow (see Lakoff 1987:308 on "the [illegible]2-words-for-snow phenomenon") in comparison to the knowledge of such things possessed by, for instance, an 'average' urban Canadian.

I examined examples from the ethnography of eastern Indonesia with the intention of finding evidence of preconceptual structures underlying those categories that appeared to be the most salient because of their wide distribution both within and across societies. I concluded that the house is an especially privileged site for the production and reproduction of cultural knowledge in eastern Indonesia. Ethnographers of the region have already noted that "the pre-eminence of the house stems ... from a combination of sociality and physicality" (Ellen 1986:28). As Cunningham (1973:235) writes, moreover, "the house is one of the best modes available to a preliterate society to encapsulate ideas, given the absence of literature and the sporadic occurrence and varying degree of participation in ritual." The predictable signifying capacity of the house directly relates to the extent that it affords cognitively basic, routinized kinds of interaction with objects and persons. The built environment of the house is made up of "human-sized," basic-level categories of physical objects and relations, that is, basic in terms of overall perceived shape, ease of mental imaging, recognition, and identification. This follows from the fact that, as Lakoff states, "most basic human

artifacts are constructed so that our bodies can interact optimally with them. Chairs, tables, houses, books, lamps, coats, cars, etc are constructed with our basic-level interactional abilities and purposes in mind" (1987:270). In eastern Indonesia, the basic-level environment of the house is comprised of spatial partitions and architectural objects, such as doors, rooms, hearths, posts, poles, not to mention the entire building itself.

The house also affords other cognitively basic kinds of experience, experience involving sensorimotor interactions and orientations—in-out, front-back, right-left, up-down, whole-part, center-periphery, near-far. These spatial categories follow from the basically horizontal character of experience. As Ellen remarks, "we construct space in terms of concentric rings" and divide space into binary oppositions "modelled [in part] on the human body, in the anatomical symmetries which allows us to divide the body into halves." Such embodied experience is projected onto fixed metaphorical bodies, the eastern Indonesian house being an exemplary instance of such projection. Such metaphorical bodies are further given the attributes of human agency, explaining why, in eastern Indonesia, houses are thought of as corporate, quasi-persons which, from the perspective of the ethnographer, appear as "the principal structural units that are concerned with matters relating to land, property, and marriage" (Fox 1980:11).

Extending beyond the distinctive space of individual dwellings, houses are also significant features in the wider eastern Indonesian social topography of kinship and marriage. Although a house is defined principally as a familar place, that is, a *here* associated with typical patterns of co-presence and cooperation, such a locale bears meaning as well in relation to the *elsewhere* of other houses, particularly those to which one is linked in kinship and marriage. It is the idiom of the house which is used to express the relations between spatially distinct groups. This idiom is thus inscribed in the social space beyond the domestic sphere, and it is an idiom that is directly meaningful, in part, inasmuch as it is understood according to preconceptual, spatio-temporally patterned gestalts of the understanding, that is, embodied image-schematic structures.

The broader eastern Indonesian social space has as its geographical markers, basic-level objects, houses, and the cartography of this space is given in part by the basic-level architectural-spatial map, which is a general orientational, schematic map, understood on the basis of cognitive schemata. That is to say, the house provides a physical domain by which to project from "human-sized" features of experience to the abstract, conceptual space of social relations. Insofar as conceptions about social relations and the practices which support them are understood *iconically* with other domains of knowledge—botanical, architectural, bodily—each will confirm the other's reality. But there still remains the fact that there is a level of understanding that is cognitively basic, and the pre-eminence of the house in eastern Indonesia can be explained inasmuch as it affords a cognitively basic medium by which to learn, remember, communicate, and use culturally basic knowledge, that is, cultural knowledge that is grounded in the cognitive infrastructure.

The preconceptual understanding of eastern Indonesian houses and society indicates a thoroughly embodied kind of cultural knowledge consistent with the

argument that, in an oral tradition, preconceptually motivated knowledge will be more likely than arbitrary knowledge to attain a cultural level of distribution, given the basic human psychological tendency for cognitive economy: "Human beings try to construct classes that are as general as possible and seek to link those classes together by means of associations that are also as widespread as may be. There is, in other words, a drive for generality and inclusiveness (Law & Lodge 1984:33, also see Bourdieu 1990:86, Benjafield 1992:70). I have shown how a number of cultural categories (or classes) in eastern Indonesia evince such cognitive economy, to the extent that they are cognitively basic as well as associated in terms of image-schematic structures.

This thesis is given only partial support, however, since I do not provide evidence for negative instances, that is, for categories that appear not to have the retention criteria associated with embodiment and that are correlatively describable as not widely distributed. These negative instances are implied only counterfactually. Their presence could, however, be tested, for instance, in studies of sociocultural change where knowledge bearing a correlation of "physicality and sociality", that is, embodied knowledge, can be shown to lose some of its motivation and, consequently, its popularity. This loss would be occasioned by a change in material or social circumstances, whereby the shared conceptual categories of past social and physical experience no longer seem to correlate with the referential reality of present experience. It remains reasonable and plausible to argue, however, that the most established, socially instituted, and hence widely distributed cultural categories within an oral tradition are likely to strongly correlate with, and hence likely to have been directly motivated by, preconceptual structures of experience.

BIBLIOGRAPHY

EASTERN INDONESIA

Barnes, R. H. 1974 *Kédang: A Study of the Collective Thought of an Eastern Indonesian People*. Oxford: Clarendon Press.

--- . 1980a Concordance, Structure, Variation: Considerations of Alliance in Kédang. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed. Cambridge: Harvard UP.

--- . 1980b Marriage, Exchange and the Meaning of Corporations in Eastern Indonesia. in *The Meaning of Marriage Payments*. London: Academic Press.

Barraud, C. 1979 *Tanebar-Evav: Une societé de maisons tourneé vers le langue*. Cambridge: Cambridge UP.

--- . 1989 Wife-givers as Ancestors and Ultimate Values in the Kei Islands *Bijdragen*: 193-225.

Clamagirand, B. 1980 The Social Organization of the Ema of Timor. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed. Cambridge: Harvard UP.

Cunningham, C. E. 1973 Order in the Atoni House. in *Right and Left: Essays on Dual Symbolic Classification*, R. Needham, ed. & tran. Chicago: U of Chicago P.

Ellen, R. 1986 Microcosm Macrocosm and the Nuaulu House: Concerning the Reductionist Fallacy as Applied to Metaphorical Level. *Anthropologica* XXVIII(142):1-30.

Erring[illegible] S. 1987 Incestuous Twins and the House Societies of Insular Southeast [illegible]sia. *Cultural Anthropology* Nov.:403-444.

Forman, S. 1980 Descent, Alliance, and Exchange Ideology among the Makassae of East Timor. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed. Cambridge: Harvard UP.

Forth, G. 1981 *Rindi: An Ethnographic Study of a Traditional Domain in Eastern Sumba*. The Hague: Martinus Nijhoff.

--- 1991a Male/Female Symbolism in Nage, Eastern Indonesia. Unpublished Department Seminar.

--- . 1991b *Space and Place in Eastern Indonesia*. U of Kent at Canterbury, Centre of Southeast Asian Studies: Occasional Paper No. 16.

--- . 1993 Nage Kin Terms: A New Form of Eastern Indonesian Social Classification. *Bijdragen* 149:94-123.

Fox, J. 1971 Sister's Child as Plant Metaphors in an Idiom of consanguinity. in *Rethinking Kinship and Marriage*. R. Needham, ed. London: Tavistock Publications.

--- . 1973 On Bad Death and the Left Hand: A Study of Rotinese Symbolic

Inversions. in *Right and Left: Essays on Dual Symbolic Classification*, R. Needham, ed. & tran. Chicago: U of Chicago P.

--- .ed. 1980a *The Flow of Life: Essays on Eastern Indonesia*. Cambridge: Harvard UP.

--- . 1980b Obligation and Alliance: State Structure and Moiety Organization in Thie, Roti. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed. Cambridge: Harvard UP.

--- 1980c Introduction. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed.

--- 1980d Models and Metaphors: Comparative research in Eastern Indonesia. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed.

--- . 1989 Category and Complement: Binary Ideologies and the Organization of Dualism in Eastern Indonesia. in *The Attraction of Opposites: Thought and Society in the Dualistic Mode*. D. Maybury-Lewis & Uri Almagor, eds. Ann Arbor: U of Michigan P.

--- . 1993a Comparative Perspectives on Austronesian Houses: An Introductory Essay. in *Inside Austronesian Houses: Perspectives on Domestic Design for Living*, J. Fox, ed Canberra: ANU.

--- . 1993b Memories of Ridge-Poles and Cross-Beams: The Categorical Foundations of a Rotinese Cultural Design. in *Inside Austronesian Houses: Perspectives on D[illegible]ic Design for Living*, J. Fox, ed. Canberra: ANU.

Francillon, G. 1980 In[illegible]pon Wehali: A Modern History of an Ancient Empire. in *The F[illegible] of Life*, J. Fox, ed. Cambridge: Harvard UP.

Gordon, J. L. 1980 The Marriage Nexus among the Manggarai of West Flores. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed. Cambridge: Harvard UP.

Hicks, D. 1975 La compensation matrimoniale chez les Tetum. *L'Homme* XV, 3-4:55-66.

--- . 1985 Conjonction feminine et disjonction masculine chez les Tetum (Timor, Indonesie orientale). *L'Homme* XXV (2):22-36.

--- . 1991 *Kinship and Religion in Eastern Indonesia*. Gothenburg: Gothenburg UP.

Howell, S. 1990 Husband/Wife or Brother/Sister as the Key Relationship in Lio Kinship and Sociosymbolic Relations. *Ethnos* 1990:3-4.

Kana, N. L. 1980 The Order and Significance of the Savunese House. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed. Cambridge: Harvard UP.

Kruyt, A. C. 1973 Right and Left in Central Celebes. in *Right and Left: Essays on Dual Symbolic Classification*, R. Needham, ed. & tran. Chicago: U of Chicago P.

Lewis, E. D. 1988 *People of the Source*. Dordrecht, Holland: Foris Publications.

Macdonald, C. 1987 *De la hutte au palais: societies < <à maison> > en Asie du Sud-Est insulaire*. Paris: Editions du centre national de la rechereche scientifique.

Maybury-Lewis, D. & U. Almagor, eds. 1992 [1989] *The Attraction of Opposites: Thought and Society in the Dualistic Mode*. Ann Arbor U of Michigan P.

McKinnon, S. 1991 *From a Shattered Sun: Hierarchy, Gender, and Alliance in the Tanimbar Islands. Wisconsin: U of Wisconsin P.*

Mitchell, I. G. 1981 *Hierarchy and Balance: A Study of Wanokaka Social Organization*. Ph.D. thesis, Monash University, Melbourne.

Needham, R. 1966a Terminology and Alliance: I-Garo, Manggarai. *Sociologus* 16: 141-157.

--- . 1966b Age, Category, and Descent. *Bijdragen* 122:1-35.

--- . 1968 Endeh: Terminology, Alliance and Analysis. *Bijdragen* 124:304-335.

--- . 1970 Endeh II: Test and Confirmation. *Bijdragen* 126:246-258.

Schulte Nordholt, H. G. 1971 *The Political System of the Atoni of Timor*. The Hague: Martinus Nijhoff.

Traube, E. 1980 Affines and the Dead: Mambai Rituals of Alliance. *Bijdragen* 136:90-115.

--- . 1986 *Cosmology and Social Life: Ritual Exchange among the Mambai of East Timor*. Chicago: U of Chicago P.

--- . 1989 Obligations to the Source: Complementarity and Hierarchy in Eastern Indonesian Society. in *The Attraction of Opposites: Thought and Society in the Dualistic Mode*. D. Maybury-Lewis & Uri Almagor, eds. Ann Arbor: U of Michigan P.

Valeri, V. 1975-76 Alliances et echanges martrimoniaux à Seram Central (Moluques). *L'Homme* 15, nos. 3-4:83-107; 15, no. 1:125-49.

--- . 1980 Notes on the Meaning of Marriage Prestations among the Huaulu of Seram. in *The Flow of Life: Essays on Eastern Indonesia*, J. Fox, ed. Cambridge: Harvard UP.

--- . 1989 Reciprocal Centers: The Siwa-Lima System in Central Moluccas. in *The Attraction of Opposites: Thought and Society in the Dualistic Mode*. D. Maybury-Lewis & Uri Almagor, eds. Ann Arbor: U of Michigan P.

Van der Kroef, J. M. 1954. Dualism and Symbolic Antithesis in Indonesian Society. *American Anthropologist* 56:847-862.

Van Wouden. 1968 *Types of Social Structure in Eastern Indonesia*. The Hague: Martinus Nijhoff.

Vischer, M. P. 1992 *Children of the Black Patola Stone: Origin Structures in A Domain on Palu'é Island (Eastern Indonesia)*. PhD thesis, Australian National University, Canberra.

Waterson, R. 1990 *The Living House: An Anthropology of Architecture in South-East Asia*. Singapore: Oxford UP.
--- . 1993 Houses and the Built Environment in Island South-East Asia: Tracing Some Shared Themes in the Use of Space. in *Inside Austronesian Houses: Perspectives on Domestic Design for Living*, J. Fox, ed. Canberra: ANU.

GENERAL

Allen, N. J. 1985 Hierarchical Opposition and Some Other Types of Relation. in *Contexts and Levels: Anthropological Essays on Hierarchy*. Barnes, R. H., D. de Coppet, & R. J. Parkin. eds. Oxford: JASO.

Barkow, J. 1989 *Darwin Sex and Status: Biological Approaches to Mind and Culture*. Toronto: U of Toronto P.
Barkow, J. et al., eds. 1992 *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. Oxford: Oxford UP.
Barnes, R. H., D. de Coppet, & R. J. Parkin. 1985 *Contexts and Levels: Anthropological Essays on Hierarchy*. Oxford: JASO.
Benjafield, J. G. 1990 *Cognition*. Englewood Cliffs, New Jersey: Prentice Hall.
Best, J. B. *Cognitive Psychology*. second edition. St. Paul: West Publishing Co.
Bhaskar, R. 1979 On the Possibility of Social Scientific Knowledge and the Limits of Naturalism, in: *Issues in Marxist Philosophy, Volume Three: Epistemology, Science, Ideology*. New Jersey: Humanities P.
--- . 1986 *Scientific Realism and Human Emancipation*. London: Verso.
--- . 1993 Realism, in: *The Blackwell Dictionary of Twentieth-Century Social Thought* eds. W. Outhwaite & T. Bottomore, Oxford: Blackwell.
--- . 1994 *Plato Etc.: The Problems of Philosophy and Their Resolution* London: Verso.
Bloch, Maurice. 1976 The Past and the Present in the Present. *Man* (N.S.) 12:278-292.
Bonner, J. T. 1989 *The Evolution of Culture in Animals*. Princeton: Princeton UP.
Boon, J. 1982 *Other Tribes, Other Scribes: Symbolic Anthropology in the Comparative Study of Cultures, Histories, Religions, and Texts*. Cambridge: Cambridge UP.
Bourdieu, P. 1990 *The Logic of Practice*. Stanford: Stanford UP.

Churchland, P. 1989 *A Neurocomputational Perspective: The Nature of Mind and the Structure of Science*. Cambridge Mass.: MIT press.
Clark, A. 1991. *Microcognition: Philosophy, Cognitive Science, and Parallel Distributed Processing*. Cambridge Mass.:MIT press.
Cohen, A. P. 1985 *The Symbolic Construction of Community*. New York: Tavistock Publications.
Collier, A. 1994 *Critical Realism: An Introduction to Roy Bhaskar's Philosophy* London: Verso.

Comaroff, J. L., ed. 1980 *The Meaning of Marriage Payments*. London: Academic Press.

Culler, J. 1979 Jacques Derrida. in *Structuralism and Since: From Lévi-Strauss to Derrida*. J. Sturrock, ed. Oxford: Oxford UP.

Deely, J. 1982 *Introducing Semiotic: Its History and Doctrine*. Indiana: Indiana UP.

--- . 1990 *Basics of Semiotic*. Indiana: Indiana UP.

Deely, J. et al., eds. 1986 *Frontiers in Semiotics*. Indiana: Indiana UP.

Drever, J. 1978 *The Penguin Dictionary of Psychology*. Harmondsworth, Middlesex: Penguin Books Ltd.

Dreyfus, H. 1979 *What Computers Still Can't Do: A Critique of Artificial Reason*. Cambridge Mass.: MIT press.

Dumont, L. 1979 *Homo Hierarchicus: The Caste System and Its Implications*. Chicago: U of Chicago P.

--- . 1992 [1986] *Essays on Individualism: Modern Ideology in Anthropological Perspective*. Chicago: U of Chicago P.

Eco, U. 1976 *A Theory of Semiotics*. Bloomington: Indiana UP.

--- . 1980 Function and Sign: The Semiotics of Architecture. in *Signs, Symbols, and Architecture*. G. Broadbent et al., Toronto: John Wiley & Sons Ltd.

--- . 1986 On Semiotics in *Frontiers in Semiotics*. J. Deely et al., eds. Bloomington: Indiana UP.

Fernandez, J. ed. 1991 *Beyond Metaphor: The Theory of Tropes in Anthropology* Stanford: Stanford UP.

Fiske, J. 1988 *Introduction to Communication Studies*. London: Routledge.

Flanagan, O. 1984 *The Science of the Mind*. Massachusetts: MIT press.

Fortes, M. 1969 *Kinship and the Social Order*. Chicago: Aldine.

--- . 1971 [1958] The Developmental Cycle in Domestic Groups in *Kinship* J. Goody ed. Harmondsworth: Penguin.

Giddens, A. 1984 *The Constitution of Society*. Berkeley: U of California P.

Gould, S. 1977 *Ever Since Darwin: Reflections in Natural History*. New York: Norton.

Greenwood, J. 1991 *Relations and Representations: an introduction to the philosophy of social psychological science*. London: Routledge.

Greimas, A. 1990 *The Social Sciences: A Semiotic View*. Minnesota: U of Minnesota P.

Harré, R. 1972 *The Philosophies of Science*. Oxford: Oxford UP.

1980 *Social Being*. Totawa, N.J.: Littlefield, Adams & Co.

Hearnshaw, L. S. 1989 *The Shaping of Modern Psychology: An Historical Introduction*. London: Routledge.

Héritier, F. The Symbolics of Incest and Its Prohibition. in *Between Belief and Transgression: Structuralist Essays in Religion, History, and Myth*. M.Izard and P. Smith eds., Chicago: U of Chicago P.

Hertz, Robert. 1973 [1909] The Pre-eminence of the Right Hand: A Study in Religious Polarity. in *Right and Left: Essays on Dual Symbolic Classification*, R. Needham, ed. Chicago: U of Chicago P.

Holquist, M. 1990 *Dialogism: Bakhtin and his World*. London: Routledge.

Jackendoff, R. 1983 *Semantics and Cognition*. Massachusetts: MIT Press.

Jenkins, R. 1992 *Pierre Bourdieu*. London: Routledge.

Johnson, Mark. 1987 *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: U of Chicago P.

Keesing, R. 1976 *Cultural Anthropology: A Contemporary Perspective*. New York: Holt, Rinehart & Winston.

Lakoff, G. 1987 *Women, Fire, and Dangerous Things: What Categories Reveal About the Mind*. Chicago: U of Chicago P.

Lakoff, G. & M. Johnson. 1980 *Metaphors We Live By*. Chicago: U of Chicago P.

Law, J. & P. Lodge 1984 *Science for Social Scientists* London: MacMillan P.

Leach, E. 1961 *Rethinking Anthropology*. London: Athlone.

--- . 1982 *Social Anthropology*. Oxford: Oxford UP.

Lévi-Strauss, C. 1963a *Structural Anthropology*. New York: Basic Books.

--- . 1963b *Totemism*. Boston: Beacon Press.

--- . 1969 *The Elementary Structures of Kinship*. Boston: Beacon Press.

--- . 1984 *Anthropology and Myth*. Oxford: Blackwell.

--- . 1985 *The View From Afar*. New York: Basic Books.

Lewontin, R. 1983 The organism as the subject and the object of evolution. *Scientia* 118:63-82.

Lewontin, R. *et.al.* 1988 [1984] *Not In Our Genes: Biology, Ideology, and Human Nature*. Markham Ontario: Penguin.

Lyons, J. 1977 *Semantics*. 2 vols. Cambridge: Cambridge UP.

Manicas, P. 1987 *A History and Philosophy of the Social Sciences*. Oxford: Blackwell.

Marcus, G. & M. Fischer *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences* Chicago: U of Chicago P.

Maybury-Lewis, D. 1960 The Analysis of Dual Organizations: A Methodolgical Critique. *Bijdragen* 116:2-44.

McShane, J. 1991 *Cognitive Development: An Information Processing Approach*. Oxford: Basil Blackwell.

Merleau-Ponty, M. 1962 *The Phenomenology of Perception* London: Routledge.

Mertz, E. 1985 *Semiotic Mediation: Sociocultural and Psychological Perspectives*. Orlando: Academic Press, Inc.

Needham, R. 1962 *Structure and Sentiment: A Test Case in Social Anthropology*. Chicago: U of Chicago P.
Neisser, U. 1976 *Cognition and Reality: Principles and Implications of Cognitive Psychology*. San Francisco: W. H. Freeman & Co.

Ong, W. 1982 *Orality and Literacy: The Technologizing of the Word*. London: Routledge.
O'Sullivan, T. et al. 1994 *Key Concepts in Communication and Cultural Studies*. second edition. London: Routledge.
Otterbein, K. F. 1972 *Comparative Cultural Analysis: An Introduction to Anthropology*. New York: Holt, Rinehart & Winston, Inc.

Pandian, J. 1991 *Culture, Religion, and the Sacred Self: a critical introduction to the anthropological study of religion*. London: Prentice Hall.
Pavel, T. 1989 *The Feud of Language: A History of Structuralist Thought*. Oxford: Basil Blackwell.
Perinbanayagam, R. S. 1985 *Signifying Acts: Structure and Meaning in Everyday Life*. Carbondale: Southern Illinois UP.
Pesmen, D. 1991 Expectations of Coherence in Culture Implied by the Prohibition of Mixed Metaphor in *Beyond Metaphor: The Theory of Tropes in Anthropology*. J. W. Fernandez, ed. Stanford: Stanford UP.
Preziosi, D. 1986 The Multimodality of Communicative Events in: J. Deely *et.al.*, 1986 *Frontiers in Semiotics*.

Ritzer, G. 1992 *Contemporary Social Theory: Third Edition*. New York: McGraw-Hill.

Sahlins, M. 1972 *Stone Age Economics*. Chicago: Aldine.
--- . 1976 *Culture and Practical Reason*. Chicago: U of Chicago P.
Schneider, D. 1985 Some Muddles in the Models: Or, How the System Really Works. in *The Relevance of Models for Social Anthropology*. New York: Frederick A. Praeger.
Sebeok, T. 1994 *Signs: An Introduction to Semiotics*. Toronto: U of Toronto P.
Singer, M. 1980 Signs of the Self: An Exploration in Semiotic Anthropology. *American Anthropologist* 82:
Sparkes, A. 1991 *Talking Philosophy: A Wordbook*. London: Routledge.
Sperber, D. 1982 Is Symbolic Thought Prerational? in *Between Belief and Transgression: Structuralist Essays in Religion, History, and Myth*. M. Izard & P. Smith, eds., Chicago: U of Chicago P.
--- . 1985 Anthropology and Psychology: Towards and Epidemiology of Representations. *Man:* v. 20:73-89.
--- . 1989 [1975] *Rethinking Symbolism*. Cambridge: Cambridge UP.

Tambiah, S. 1968 Animals are Good to Think and Good to Prohibit. *Ethnology*, 8:423-459.
Thompson, K. 1982 *Emile Durkheim*. New York: Tavistock Publications.
--- . 1986 *Beliefs and Ideology*. New York: Tavistock Publications.
Tooby, J & L. Cosmides 1992 The Psychological Foundations of Culture. in: J. Barkow *et al.* 1992.

Varela, F. *et al.* 1991 *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge Mass.: MIT press.

Weiner, A. B. 1985 Inalienable Wealth. *American Ethnologist* 12.2:
Wilden, A. 1972 *System and Structure: Essays in Communication and Exchange* London: Tavistock.