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Mancala in Kédang: a structural test

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MANCALA IN KÉDANG: A STRUCTURAL TEST

The culture historian Huizinga regarded play as a primary category of life, one whose presence is linked to no stage of culture and to no particular world view. The self-sufficient reality of play is immediately recognizable to anyone, even if in a given language there may be no general term to express the concept. Whereas arguments may be advanced to deny the reality of abstractions such as Justice, Beauty, Truth, Mind, God and so on, no such denial of play is possible. Even though a general expression for play is not always present in all languages, and is of only recent appearance in the modern European ones, play, according to Huizinga, may still be regarded as one of the most fundamental of mental features (1938: 3, 29). At the same time, play is not to be limited to its merely physiological or psychological aspects. It is above all cultural; indeed, Huizinga attempts to demonstrate that all culture originates in play.

In his history of board games, Murray (1952: 236) remarks that Huizinga tries to find the distinctive features which are typical of play and set it apart from other forms of doing. "But," he asserts, "play refuses to be isolated in this way. None of the features which [he regards] as peculiar to play is so; all are to be found also in work or what Huizinga calls 'ordinary life'. The difference between play and work... is essentially and only one of *purpose*." Indeed, if play has the fundamental nature Huizinga attributes to it, it is to be expected that its distinction from "ordinary life" would be problematic; but Murray's objection does not really dispose of our impression that "all peoples play, and they play with remarkable similarity" (Huizinga, p. 29). There is indeed a case to be made that the characterization *Homo ludens* deserves a place alongside of *Homo faber* in describing the radical traits of that species the eighteenth century called *Homo sapiens*. Play, as Huizinga presents it, is at least a candidate to be included in any catalogue of what Needham (1973) has recently termed "the radical constituents or factors of human experience". At the same

time, play does not distinguish men from animals (Huizinga, p. 3). There is no reason on the face of it, though, why such radical constituents should always coincide with the boundaries of the species; and I should like to attempt on some other occasion to show, for example, that certain elements of perception, related to eye symbolism, may not even be restricted to the class of mammalia.¹

Whether or not it is true, as Huizinga claims, that ethnology and related sciences place too little weight on the idea of play, ethnographers have from time to time described the play and games of various peoples; and there has always been a recurrent, if minor, tradition of attention to games in ethnology, at least since Tylor's early papers attempting to demonstrate the Asiatic origin of the American game of patolli (1878, 1879-80). Furthermore, the connection between ceremony and games of various kinds is an important matter which has been given serious attention by cultural historians and ethnologists. If social anthropology has, until recently, largely left these questions alone, it is probably due to the large dose of pragmatism and distaste for historical speculation it absorbed in the heyday of Malinowski and Radcliffe-Brown.

It is to be expected though that structuralists will rediscover the important connections between some games and myth, ceremony, social classification and so on, which other versions of anthropology have always observed. In this article I want to describe the common game *mancala* as I found it played in the eastern Indonesian culture of Kédang. As will be shown below, we have moderately good evidence of the origin and spread of this game and enough comparative information to allow us to regard local versions as sets of simple variations on common themes. A reasonable case can be made, in fact, that little or nothing of the game as played in Kédang is unique or even uncommon. On the other hand, the game allows itself to be quite satisfactorily, and even pleasingly, described by reference only to prominent themes of Kédang culture. Indeed, a mere description of the game and how it is

¹ In a recent article Gombrich (1974) indicates that Huizinga takes an explicitly anti-nominalist or "realist" position in relation to play and that this position is unexpected in view of his earlier work. He also refers to Wittgenstein's comments on games in the *Philosophische Untersuchungen* (nos. 66 ff.) as a significant counter to Huizinga's argument. There is much that could be said in response, but it would be out of place to do so here. What is relevant is that "play" has in fact not yet been subjected to the intensive critical attention which would decide the question and Wittgenstein's remarks do not conclude the issue. Of more general interest is whether a scholar of nominalist tendencies can ever consistently argue for the existence of "primary categories", "radical factors" or (in Goethe's phrase) "*Urphänomene*".

played could easily initiate a structural investigation into Kédang life. The happy circumstance of a moderately clear record of cultural diffusion allows us to pose, again, the question of whether a total structural analysis of the sort recommended by Marcel Mauss (1954) is actually possible, or whether it requires such an arbitrary restriction of context that it can at best only produce an illusion.

I

Mancala is a general term adapted from the Arabic *manqala* or *minqala* (from the verb *naqala*, "to move") and applied to a set of games involving the distribution of a series of stones or seeds among a number of holes arranged in two, three or four rows. The best comparative studies are those of Murray (1952) and Béart (1955).² Boards of the two row type are known from Egypt in the period from c. 1580-1150 B.C. It next appears in Ceylon in the first centuries A.D. and in Arabia before Muhammad (Murray, p. 159). It is currently played in the Philippines, Indonesia, Malaysia, southern China and mainland South-East Asia, south India and Ceylon, the Maldiv Islands, Madagascar, the west coast of Arabia, most of Africa, and was introduced by the slave-trade into the Caribbean, regions on the east coast of South America and in the southern part of the United States (Béart, p. 480; Murray, p. 158). Culin (1896) describes the game as played by the Syrian colony in New York in the last century and also a commercial version then available. The game is currently manufactured and sold by several firms in Europe and the United States.

Richard Andrée (1889) included mancala in his catalogue of ethnographic parallels and thus initiated its comparative study. There is a consensus in the subsequent literature that the game has spread from west to east in Asia and from the northeast to the west and south in Africa. Coupled with its presence in ancient Egypt, this pattern gives the impression of a Near Eastern origin and of its subsequent spreading along tropical trade routes. In some places it seems to have been introduced by Islamic traders, but there are indications — including variations in the pattern of play and many quite various indigenous names for the game — for a quite extensive, pre-Islamic distribution.

The Kédang game to be described below is of the two row type,

² See also, Bell (1969). I would like to thank my wife for her considerable bibliographical assistance and Professor James Littlejohn and Dr. James J. Fox for their comments on this paper.

which is by far the most common; those using three or four rows are of little relevance here. The number of holes in each row varies, but as Murray remarks (p. 161), different peoples "usually show a preference for a particular number, generally six, seven, or eight in each row". The number of stones or seeds placed in a hole at the beginning of the game also varies, but four or seven are often the numbers employed. Direction of movement around the board is almost always prescribed. Sometimes the direction is up to the choice of the player, but in most mancala games it is counter-clockwise (Murray, p. 163). In Malaysia, play is always clockwise, but in Indonesia it is usually counter-clockwise. The holes may simply be dug in the dirt, but special boards are also made for this purpose, and in Africa and parts of Asia, these may be quite elaborate. In Africa, special holes for storing seeds are placed at either end but these are never included in the play. According to Murray, the outstanding feature of mancala games in southern China and South-East Asia is the inclusion of each player's store among the holes in which he distributes his stones (p. 173).

Mancala is often restricted to or is especially characteristic of a particular sex, social class or age group without any single association being general. Whereas in Africa it is often the play of men (Béart, pp. 476-7), in south India, Ceylon, Malaysia, Indonesia and the Philippines, it is predominantly a woman's game (Murray, p. 159).

Finally, although the game is frequently merely an object for recreation, occasionally it has ceremonial or other importance. Marcel Griaule (1948) devotes an excellent article to showing how certain carved objects, among them one symbolic of a mancala board, are used to represent cosmological ideas among the Dogon, Bozo and Bambara. Griaule and Dieterlen include among their graphic signs from the Sudan a figure which is at once a mancala game, a symbol of the twelve months of the year and of the organization of the world (1951: 21). Mancala is usually not associated with any season, but in Ceylon it is played at the time of the New Year. It is also often prohibited after sunset (Murray, p. 159). Herskovits found that the game was especially associated with the period of watching a corpse before burial among the Bush Negroes of Surinam (1929: 126; 1932: 34).³ In the Ivory Coast, at the death of a chief, if there are two rivals for succession,

³ Professor A. J. F. Köbben has commented in response to this passage that mancala is actually played in Surinam during the whole mourning period, especially in the three months after death.

they play the game during a night, and the next morning the winner is proclaimed chief (Béart, p. 477). Adriani reports that it is played while watching the dead among the Bare'e-speaking Toradja of Celebes (1928: 242), and Matthes says it is customary to play the game at the time of mourning in Makasar (1859).

II

The above review selects from the literature primarily only those comparative features which will later be of specific importance when considering the game in Kédang.

This latter culture is found on the island of Lembata (Lomblen) in the Solor Archipelago, in the near vicinity of the islands of Flores, Alor and Timor in eastern Indonesia. According to the census of 1970, there are 25,000 inhabitants of this region, distributed mostly among villages on the slopes of the Udjoléwun mountain and speaking the Kédang language (*Tutuq-Nanang Wéla*). The primary subsistence pattern is based on swidden agriculture, with maize as the principal staple. The social organization is characterized by patrilineal clans and asymmetric prescriptive marriage alliance. This is a rather isolated culture, in the sense that it is small and localized in this single region. The remainder of the island is inhabited by speakers of one or another dialect of Lamaholot; and even though there are many similarities of social organization and culture between the Kédang and the Lamaholot, the two languages are quite distinct.

Until recently there was hardly any published information about Kédang. In 1969-71, I conducted research among them. An extensive structural analysis of their collective representations has recently been published (Barnes 1974).⁴ In that work (p. 23), I said, "They are very easily distinguished as a society on its own, whether by the criteria of language, history, geography, or distribution of population." Since Leach's forceful demonstration of the difficulty of isolating a society in the Kachin Hills of Burma (1954), we are accustomed to expect much less discrete boundaries between cultures than those of Kédang. At the same time, the rather isolated circumstances of Kédang culture do not imply lack of contact with the outside. Currently there are sizable

⁴ Research in Kédang was conducted under the auspices of the Lembaga Ilmu Pengetahuan Indonesia and supported by a Graduate Fellowship of the National Science Foundation.

colonies of outsiders of several different kinds: Lamaholot, Badjo Laut and Chinese merchants; these have mostly come into Kédang in this century after the Dutch established political suzerainty and ended warfare. However, it is not possible to regard Kédang as isolated from foreign cultural influences at any stage of its past. It lies on trade routes linking east and west Indonesia, and one of its villages (Kalikur) was an important enough port of call to be mentioned in the log of the first European ship to circumnavigate the globe. Although there is virtually no written evidence about Kédang's history, internal inspection of the culture suggests influx of foreign influence in all strata, from the recent to the most ancient.

In the work just mentioned, I took the opportunity provided by the presence of prescriptive alliance to attempt to demonstrate a thorough system of concordances in all areas of Kédang collective representations. It constitutes one kind of test of whether a total structural analysis is at all possible. If there are some kinds of cultural systems which show an internal coherence of the sort I think Kédang has, then Mauss's idea has received an essential confirmation. Nevertheless, it may be held that even in a society like Kédang an internal investigation must remain artificial to the extent that it does not address parallels in other regions and does not consider the possibility that some major features may simply be adventitious elements introduced by borrowing. I do not admit that my study of Kédang ignores parallels and borrowings, but the focus is undoubtedly internal. So another kind of test of structural analysis is still outstanding. How does it hold up to comparative material?

It seems to me that these issues would be staged in a clear way by some institution whose features could be entirely accounted for *either* by reference alone to comparable institutions in other areas *or* only by reference to material in the society within which it is found. Mancala, as played in Kédang, is very close to being such an institution. It is a more than reasonable inference that it originated in the Near East and spread along the trade routes to Indonesia and other parts of Asia. Versions which are almost identical with the game in Kédang have been described in the Celebes (Matthes); and it would be a quite acceptable, although not a necessary, inference that it was directly introduced into Kédang by Makasarese or Buginese traders. At the same time, the first introduction must have been ancient, because it belongs to the general cultural material of the Flores area and is designated by indigenous names unrelated to those it is given in the languages of Celebes (Jacobsen; Vatter, p. 210).

III

These comparative questions will be taken up later, after the following description. I was taught to play the game by Molan Bala, a man in his fifties and a leading elder of his clan, Laong Hodiq, who was one of my most constant companions and closest friends. This happened early in my second year, at a time when the larger connections in the culture, which had until then remained hidden to me, began to make their appearance; and indeed the discovery of *motiq*, as the game is called, was an early impulse toward the coalescing of my understanding of Kédang culture. For several weeks then the village was slightly amused watching Molan and myself, as well as whoever else joined in, squatting in the dust and deeply engaged in a game that was a little less than suited to our customary dignity.

The general name for the game is *motiq*. I do not know if this word has any other meaning. The general phrase for play of any kind, *huang*, is not connected directly with the game. To play this game is *pan motiq*, and *pan* means "to travel" or "move", a phrase not far removed in meaning from the Arabic *manqala*. *Motiq* is played in two versions, each with a name of its own. The first and more common version is *ka ia* or "eat fish". Here there are two parallel lines of seven holes each, and the game starts with four stones (or seeds) in each hole. These holes are either dug in the ground, or (as one occasionally, but very rarely, sees) the game may be played on a board in which holes are cut. There are two players, and each player owns the holes in the row closest to him. Each row represents a human body and each hole is associated with a part of the body, as in figure 1.

Fig. 1. Arrangement of holes in *ka ia*.

The object of play is to capture stones. They are moved from hole to hole circularly through the rows, always in a counter-clockwise direction according to the native injunction to travel to the right, *wana pan*. It is never allowed to reverse this direction. A player may begin with any hole on his own side, but never with a hole in the opponent's row. He picks up the stones in one hole and distributes them, one each, in the next four. He then takes the five stones in the last of these holes and distributes them one by one in the next five, and so on. Eventually, it begins to be possible to end with one's last stone in a group of three. When this occurs, the player takes all four and sets them aside as his winnings before continuing play.

It works out mathematically that the first to move always ends his play in the hole from which he started. He picks up four stones and puts them one each in the next consecutive holes. He then picks the five in the last hole and lays them down. Again he picks up five and lays them down. Four plus five plus five equal fourteen, and the last stone lands in the hole from which he began. Since this hole is empty before this last stone is placed there, he cannot pick up the stones in it; his hand is empty and he is *maté*, "dead". It is then the opponent's turn.

This first play leaves two empty holes. Already at this point an experienced player may exercise strategy in his play. If the opponent picks up the stones just behind one of these empty holes, he will eventually (after several rounds) gain four stones on two occasions, and his play will then end. However, he will leave one hole for the first player containing nine stones, and if these are picked up, the first player will, after a much longer series, himself capture the stones in two holes. These are mathematical certainties, which all experienced players know about. The whole exchange can be prevented if on the very first play of the game, the first player takes the stones from the "head" hole because the relevant empty hole will land on his side. It will, in fact, be the "shin" hole. The hole right behind it, (his "foot") will also be on his side, so his opponent will not be allowed to start there.

When a player's last stone lands in a group of three and he captures all four, the player is said to *ka ia*, "eat fish". He gets, figuratively, a meal of fish. Consequently, when a group of three appears during the play they attract attention as *ia*, "fish", which potentially may be "eaten" before they are covered up by the play; i.e., before the player with more than the requisite number of stones in his hand fills it up by adding a stone in passing beyond it. Although in this case it has four, it is not won by the player because he must play beyond it, and it

becomes closed like other holes with any number of stones other than three: it is for the time being no longer a potential fish.

The player who is fortunate enough to land with a final stone in a hole with a group of three, and thus "eats fish", then, after setting aside his winnings, takes the stones in the next consecutive hole and plays on until he too lands with a final stone in an empty hole and is dead. The turn changes, and the game proceeds by alternating turns in this way.

Eventually the stones will begin to be scarce and the point will be reached where the players are in danger of moving their few stones on to the opponent's side without having any left on their own. This marks the beginning of the end game. The strategy at this point becomes to move the stones which by chance are on one's side as slowly as possible, hoping to force the opponent to move all of his stones on to one's own side before moving any more on to his. One hopes simultaneously to avoid the same fate. This stage is usually of short duration and one or the other soon fails. All stones remaining on the board are the winnings of the player who can hold out longest.

This round of the game is then over. The players count the stones they have won to see who has the most. Unless they are both even (i.e., twenty-eight to a side), there is always an advantage which is a multiple of four. Four stones represent a hole. The player on the disadvantage loses, for the next round, the number of holes corresponding to the quotient of the number of stones he is behind divided by four. In short, one loses and gains holes, not stones.

At each new play, the opening player is the one who was second in the previous set. The play begins again with (except in the event of a tie) one player with fewer, one with more, holes. The holes gained or lost are removed from the foot end. The last consecutive hole gained becomes the new head for the more fortunate player. All fourteen holes are always in play, with one player gaining more, another losing, holes. The two figures then shrink and expand according to the fortunes of the play; i.e., they become shorter or taller. It gives one a tactical advantage in the play to have more holes; for one can only begin with a hole in one's own territory and in the play one chooses to start from that hole which promises to be most productive. Although it is possible to recover ground, the more one falls behind the more difficult it becomes to maintain one's position. If after several rounds, one player is able to consume the opponent's territory to the point of capturing his head, the game is finished.

As can be seen the game can be absorbingly interesting, and an experienced player will learn to recognize certainties in the probable course of the play according to the way the stones lie, in the same way that an experienced cribbage player no longer needs to count the cards in his hand but knows what it is worth and what can be done with it at a glance.

There is another version of *motiq* called *éu léu* or *kéu léu*, "to enter the village". This differs from the former, first, in that an extra (store) hole is added to each end. This hole is the *léu*, village. The other holes

Fig. 2. Arrangement of holes in *éu léu*.

retain the names they have in the version just described. In *éu léu*, each player has, then, *eight* holes: the seven which make up the human figure plus a village, the one on his right, that is, above his figure.

Play begins with *seven* (not, this time, *four*) stones in each hole, excepting the two end holes. The opening player starts with the stones in any one of the seven holes in his figure. Commonly one begins with *tubar*, the hole which represents the head.⁵ The player places one stone consecutively in each of the fourteen holes and in his own store, which falls in sequence, as can be seen from figure 2, after his own *tubar* ("head"), and before the opponent's *léi*, ("foot"). Thus each player plays in fifteen holes, skipping the opponent's store. The play follows as in *ka ia*: one stone in each hole until the last stone, which, if it lands in a hole with stones in it, is picked up with the stones of that hole; and the play continues in this manner until a final stone falls in an empty hole, and the player "dies".

⁵ In Egypt, it is required to begin each move from the "head" hole (Murray, p. 167).

The turn changes and the play continues. However, the strategy is not to end with the last stone in a hole of three, making four which are then removed as in *ka ia*; but to get stones into one's store, for them to *séu léu*, "enter the village". One does not here "eat fish", *ka ia*. So the two games are distinguished in name by their aims.

One enters the village in two ways. Each time in the play a player passes his store, or village, a stone is added. These are never removed; so they are a permanent assession — they have "entered the village".

If in any of the holes on one's own side, there happens to be just the right number for the last to fall in the store, one picks them up in starting one's turn and lays them down until the last enters the village. Then one may take the stones from another hole (but only from one's own territory) and continue the play until one "dies". If, however, in dying a player happens to end in an empty hole on his own side, he takes all the stones in the opposite hole of the opponent's side, plus the final stone and all *séu léu*, are put in his own store. This feat is, indeed, also called *paq mo léu*, "burn your village". Although each hole is designated a part of the body, each hole is also, in a broader sense, a village, *léu*, though, as will be subsequently explained, of a different kind from the store. If the last stone lands in an empty hole on the opponent's side, one does not gain stones. In either case, one dies and the turn changes.

Play continues until the stones on one side are exhausted — the remaining stones going into the other player's store. The players then count the stones in their stores, which in this case are not necessarily a multiple of seven because the stones enter the village singly or in groups of diverse numbers. Each player then puts the stones in groups of seven back into the holes on his own side. If one of them has more than forty-nine (i.e., seven for each of the seven holes), the remainder are left in his store. The player with fewer than forty-nine stones puts seven into as many holes as he can. A remainder less than seven may not be used. Thus if one has, for example, thirty-eight, thirty-five are distributed in five holes and three are put back in the store. The two remaining holes are burnt villages and are covered up. They are not given to the other player as in *ka ia*, nor are they used in the next play. If, for example, one player has lost two holes, had "two villages burnt", both players in the next set play on only thirteen holes.

It will be possible for the player who has lost holes to regain them in the following sets; but if he were ever to end a set with less than seven stones in his store, he would be unable to fill out a hole and thus

could not start another set. The game would be over. This result would be easily possible, for example, if he were to start with only one hole. If at any time in the play, before he had played around seven times (thus putting seven stones in his store), his single hole were to turn out to be empty for his turn to play (thus giving him no place to start) the game would be over.

IV

It would seem there are two sorts of village in the *éu léu*, for the two end holes are villages, *léu*, and the fourteen other holes are referred to as *léu*, villages, which are burnt in a certain passage of the game. The end holes, however, are not mundane villages.

Although *motiq* in both versions is usually played only for recreation, it is especially suited for play during the night of vigilance when guarding a corpse before burial. Today, the young people who stay up for this purpose usually play other, newer games to aid them in keeping awake, but elder men often mentioned the game especially in this connection.

In fact the name *éu léu* is particularly appropriate in this case; for it is also the name of a stage in the funerary ceremony and of a piece of clothing given by the wife-giving affines (*epu-bapa*) and used during this stage. The purpose of the funeral is to effect a separation of the soul from the corpse and simultaneously the transition of the deceased soul to the land of the dead. The latter is in fact a village for the dead located on the small island of Rusa south of Kédang. The ceremonial of burial and subsequent funerary feast are regarded as being at the same time a ceremony and feast of initiation into the village of the dead. Thus the stores at either end of the game are the destination of dead souls and the expression *maté*, "to die", at the end of each turn is appropriate.

If we stop for a moment, we may observe that the layout of the game consists of several strata of images. The two rows compose opposite territories, each containing seven ordinary villages, plus one village for dead souls. By ordinary progression in play, souls are constantly being transferred singly to their appropriate village of the dead. In Kédang, as elsewhere in Asia, there is a distinction between good deaths and bad deaths, the latter resulting from various kinds of disaster such as injury in warfare. It is only good deaths which lead to orderly progress into the land of the dead and eventually to rebirth in the world below this one. The souls of victims of bad deaths remain trapped in this

world where they stay at the horizon. Then at the beginning of the waxing moon they may come back on the wind to cause misfortune.

Thus each stone one places in the store when passing through it is like the soul of persons who ordinarily leave this world as the result of good deaths. These ideally are occasional and always single in occurrence. If two or more persons die in a village on the same day, this is regarded as a very unpropitious and frightening event.

In a different way, the game is a war between the inhabitants of the two territories; and one occasionally burns an opponent village, taking all the captured souls to one's own store. The taking of heads (elsewhere offerings demanded by God and in Kédang formerly trophies one attempted to acquire in war and bring back to be buried in the center of the village) is another element of this culture which finds expression here. Finally, in both *ka ia* and *éu léu*, the holes in one row correspond to the parts of a body; just as the original hamlet of a Kédang village is symbolically divided into sections corresponding to parts of a body. In both versions, final victory in the game comes when a player reduces his opponent's holes progressively to the point where he captures the final, head, hole.

There is more to be said about *éu léu*, but first it must be explained that *ka ia* is also suited for use in a funeral. In this version when the last stone in the hand lands on a fish, consisting of three stones, all four are captured and one "eats fish". This may seem a simple culinary reward, but in context of a funeral it has more importance than might be expected. The most comprehensive name for Divinity in Kédang is *Ula-Lojo* or "Moon-Sun". However, the moon and the sun can represent opposite aspects of divinity. In this respect the sun is superior, benevolent, constant and effective in creation. The moon on the other hand is marked by its changing; like a witch, it is never fully what it appears. In fact, the moon is witchlike in that it feeds upon corpses. Corpses, however, under certain circumstances turn into fish in the sea; and if at any time there is ever a dearth of human bodies, the moon will feed on fish. So when one plays *ka ia*, one in effect is like the moon feeding on bodies.

Both versions of *motiq* incorporate even more fundamental principles of Kédang culture than this however. The "head" hole lies to the right of the player in conformity to a general association between the head and the right side in Kédang. Direction of play is counter-clockwise, according to the prescription *wana pan*, "travel to the right". The structure of both games exhibits a constant contrast between odd and

even numbers. This latter opposition is one of the most pervasive in Kédang culture and central to their conception of being. Briefly, in Kédang, odd numbers are said to be the numbers of life and even numbers are the numbers of death. In fact, closer inspection shows that even numbers are associated with transitions of any sort, of which birth and death are prominent examples. Odd numbers are associated with the structural properties of things or with segments between points of transition. Understandably, between the transitions birth and death, both represented by the number four, life is associated with odd numbers; the next succeeding transition, death, gives even numbers a circumstantially unpropitious aspect. In any building, the spars in each side of the roof must be of uneven number. This sets them apart from the even numbered corners and house posts, which are quite explicitly associated with various kinds of spiritual transition. In addition, horizontally lying parts of a building must lie so that the tip ends point to the right, or counter-clockwise, around the building. In a lengthy analysis (Barnes 1974) I have attempted to show that the rule of circulation to the right, coupled with the distinction between odd and even numbers, accounts for a series of concordances in Kédang representations ranging from social organization, through properties of buildings, the calendar, stages of life, and the make-up of the universe.⁶

Although all odd numbers are symbolically equivalent to each other, and the same thing is true of even numbers, seven is most representative of odd numbers, and four is most representative of even. In addition, odd numbers are considered to be incomplete, even numbers to be complete; so that the addition of one to an uneven numbered series completes it and results in a transition.

If we look again at *ka ia*, we see that the board is made of two rows of seven holes each. In this case, the sum, fourteen, is irrelevant; the board is made up of odd numbered parts. However, four stones are placed in each hole to begin the game. In this case, the stones seem to represent motion or completed circularity. A fish is a set of three stones; when this is completed by the addition of a fourth, it is captured and may be eaten. In *éu léu*, however, the stones are not cosmic

⁶ A precursor to the structural investigation of games may be found in Duyvendak's interpretation of the *entai ai* and *entai dadak* games of the Kai Islands (1926: 129-33). I welcome this opportunity to signal that this paper merely continues a rich tradition of structural investigations in Indonesia by Dutch scholars. It can, I think, be fairly observed, in any case, that Duyvendak's historical argument really belongs to a different period of scholarship.

counters of motion, but, as the imagery makes clear, human beings with souls. People, in so far as they are embodied, belong to that side of things which are represented in Kédang thought by symbols of structure or composition, uneven numbers, especially seven. In *éu léu*, one's own territory is still made of seven parts, but an eighth is added to this, which is in perfect conformity with the transition to the village of the dead which each stone eventually undergoes. Eight is symbolically equivalent to four, and when a stone moves beyond the seven villages which constitute its territory in this world, it lands in the eighth, which completes the series and effects the soul's transition into its next stage of being.

V

So far both versions of *motiq* have been related to indigenous aspects of Kédang culture. It would not be surprising for a game, even one which has been recently borrowed, to be reinterpreted during play in terms of local principles. Indeed, games — which are rule-bound systems of limited range — are so like models that they are especially suited to this sort of manipulation. And, as play is often an imaginative fantasy on ordinary life, we should expect their co-optation by collective traditions.

The main principles of *motiq*, however, need not be attributed to local parallels. Mancala, after all, is associated with guarding a corpse or mourning in Surinam, Africa, and Celebes. Since there are few other transition ceremonies with which it has been connected, this fact presents some kind of evidence that the association with death is part of its ancient burden of meaning. Furthermore, Murray tells us that in most games of the mancala II type, by which he means the more frequent version using only two rows of holes, the number of stones placed in each hole at the beginning of play is four (1952: 163). In Arabia, the front hole on each player's row is called *rās*, "head" (p. 165). All Arabic countries, except Egypt, use a 2×7 board; and this arrangement is also found in south India, Ceylon, Thailand, Malaysia, Java, Flores, Celebes, and the Philippines, as well as in some places in Africa. Movement is always irreversible and usually prescribed (though in some places, it may alternate) and the most frequent direction is counter-clockwise (p. 163).

If the principal interest of all this were merely the question of the origin and spread of the mancala game, we would have a nice little question in ethnology, one which would allow of some reasonably certain

solutions, but nothing more. However, what is really in question are the principles of structure which the game displays, especially, in the case of Kédang, the use of numbers and the prescribed direction of movement. In other words, we really are not presented with two equally satisfactory and mutually exclusive alternatives for accounting for *motiq*. Actually the comparative context must be as broad as that of the internal study.

If we compare the use of similar principles in the construction of the house, we may see why this is so. Ernst Vatter recorded a version of mancala from the village Karang Ora in the Lamaholot region of Lembata (1932: 210-11). This is of the 2×7 type, with four stones in each hole at the beginning of play. The game is called *kēmote* in Lamaholot, thus a form related to Kédang *motiq*. However, here play is supposed to be clockwise. When I was in the field, I had the opportunity to collect considerable information from various parts of Lamaholot, whose culture is in its essentials very close to that of Kédang. One of the matters I paid especial attention to was the construction of buildings; and in this matter there is a good deal of variation in Lamaholot. For example, a government official from the district of Lerek (which is close to Karang Ora), told me that there is no prescription as to how the horizontal parts of a house are placed; they may be quite disorderly from the Kédang point of view. However, in a fence it is essential that the poles all go the same direction, though the direction is not itself specified. In the village Lewuka, in the south-central part of the same island, the men I spoke with recognized no prescription about the horizontal pieces in a building; but the large, wafer-shaped rat guards on the house posts of granaries have a short "stem" on one side, and these must point in the same direction, as in figure 3.

My stay was too brief to allow me to uncover the full meaning of this tradition; for example I could not find out for sure whether the direction of motion in figure 3 is to be interpreted as counter-clockwise or clockwise; but, if, as seems implied, the "stems" are like trunks, the motion appears to be clockwise. Finally, in the village Wailolong in East Flores, the same rule as in Kédang obtains, with only a slight weakening of application. In Kédang, the rule of counter-clockwise motion is observed in all buildings and in all platforms (*balai* in Bahasa Indonesia);⁷ but, in Wailolong, platforms of only ordinary use (not, for example, those used in clan temples) are constructed without any regard to prescription.

Fig. 3. Orientation of rat guards in a granary, Lewuka, Lembata.

A parallel matter concerns marriage prescription. The Kédang system of asymmetric marriage alliance is represented as establishing irreversible cycles uniting clans. All evidence so far collected indicates the same system prevails among the Lamaholot, although there is much variation in its implementation; and related groups on Alor and Pantar have a symmetric prescriptive system. In Wailolong, Flores the prescription is stated in the phrase *mure wana*, "take from the right", making the most direct parallel with the rule for constructing buildings.

Similar comparison could be made concerning the make-up of the traditional calendar, relationship systems, structure of the universe, and so on. What is important is this. A 2×6 mancala board, as is found so often in Africa and Asia, is a regular transformation of a 2×7 board, and *vice versa*; and the same is true of clockwise and counter-clockwise motion, direct and indirect exchange, symmetric and asymmetric marriage prescriptions, the symbolic uses of even and uneven numbers. As for the latter, all or most Indonesian cultures make symbolic use of this distinction in numbers; but meanings associated with them are not constant. On the island of Roti, for example, odd numbers are regarded as being complete,⁷ just the reverse of their meanings in Kédang, whereas on Sumba even numbers are again complete, odd numbers incomplete (Onvlee 1949).

What then can we make of this variety? If there are few necessary associations, how can we undertake to treat any cultural tradition

⁷ Throughout Indonesia a simple bamboo platform is the most common object of furniture, both within and outside the house, and will serve as a chair, table or storage area.

⁸ Dr. James J. Fox kindly supplied this information in a personal communication.

holistically, even if in exceptional cases there seems to be a considerable *de facto* isolation from neighboring groups?

If we return, for the moment, to the mancala game, we may perhaps agree that it has been in use in the Solor Archipelago for many centuries, most likely since long before the introduction of Islam. There is no way at the moment to prove this, but there is a variety of circumstantial evidence which lends plausibility to the impression. Mancala may have an origin quite alien to most of the material of Kédang culture, but it appears to have been assimilated to some of this material before it even reached Kédang.

If we choose themes such as the symbolic use of numbers, prescribed direction of motion, marriage alliance and so on, we may view each as presenting a limited set of possible variations. Most of these variations can be documented by ethnographic research as occurring in eastern Indonesia. In a given area the actual expression of these various themes may be found to be to some degree concordant. This concordance is to be attributed in part to an intellectual or cultural tendency toward order. But this tendency does not thereby explain how the themes come to be associated in the ways they are found. A further task remains to show correlations or possible limits placed by sociological factors.

To contrast a study of the internal structure of Kédang culture with a study of external variation is really to draw too precise a line. The object of a total structural analysis is only to reveal if and to what extent any of these various currents come together in a coherent way in a particular region. Sometimes this coherence is only partial, sometimes it is nearly total.

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