

THE 'BIG BANG' OF DRAVIDIAN KINSHIP

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Introduction

This article is about the essential nature of transformations in Dravidian kinship systems as may be observed through a comparison of a few contemporary ethnographic examples. It is a sequel to an earlier article entitled 'The Hill Madia of central India: early human kinship?' (Vaz 2010),¹ in which I have described the structure of the Madia kinship system as based on a rule of patrilateral cross-cousin (FZD) marriage. I concluded that article by saying that a complex bonding of relations, rather than a simple structure, seems to be the essential feature of the Proto-Dravidian kinship terminology and that it is only from the point of view of such an original state that Allen's (1986) 'Big Bang' model for the evolution of human kinship would make sense. The aim of the present article is first, to discuss certain aspects of the transformations of Dravidian kinship, and secondly, to reconsider Allen's 'Big Bang' model. I begin with a review of some theoretical perspectives on Proto-Dravidian as well as on proto-human kinship and a brief reference to the role of marriage rules in human kinship systems. This is followed by the main content of this article, which is a comparative analysis of three Dravidian kinship systems (actually, two Dravidian and one Dravidianized) and an Indo-Aryan system, on the basis of which I have proposed a revised 'Big Bang' model.

Why the 'Big Bang' analogy for Dravidian kinship?

Trautmann has used the analogy of a tree trunk and its branches for proto-Dravidian kinship, while stating that the 'trunk' does not exist anymore (Trautmann 1981: 229). In his view,

¹ That article presents the Madia kin terminology, which I do not reproduce here. However, there is an error in an observation I made there that I wish to correct here. I said that 'although all of the Madia kin types have address terms, not all of them have reference terms. The relatives in G +2 are the only grand-kin who have reference terms' (Vaz 2010: 10). In retrospect, I would rather say that, while most kin types in levels G 0, G +1/-1, and +2 have reference and address terms that are distinct, most terms in the levels G +3/-3, and G -2 do not make this distinction. The ethnonym 'Madia' appears as 'Maria' in earlier works on this tribe.

contemporary Dravidian kinship systems, as variants and co-descendants from that common trunk, are all equally daughters of a historical source, and none of them can be seen as Proto-Dravidian. Therefore, according to him, it is not correct to speak of any one contemporary system as being derived from any other. However, my own study of the few key types of Dravidian kin terminologies suggests otherwise. In this I have found Allen's metaphor of the 'Big Bang' to be more appropriate, but am using Allen's model in a sense in which he himself apparently did not intend. When Allen (1986: 107) proposed the 'Big Bang' analogy for the evolutionary process of human kinship systems, he did so in conjunction with a tetradic model he had created for 'the simplest possible social organization' (with just four sociologically recognized kin terms and hence 'tetradic') as the starting point for human kinship systems. However, as I mentioned earlier, the 'Big Bang' analogy fits better with a complex and compact beginning than it does with the 'simplest'. After all, the 'Big Bang' theory is all about a super-dense, super-compact and super-symmetrical beginning of the universe wherein the four fundamental forces of nature existed as a homogeneous entity.

If finding an appropriate metaphor is one problem, finding appropriate terms to describe the process of transformations in kinship systems is another. If I am to use the 'Big Bang' model as an analogy to describe the process of transformations of kinship, then I probably should not use the term 'evolution'. Because of its association with biology, evolution is generally taken to be a process whereby complex structures are derived from simpler ones. The term has been generally used in kinship studies to mean simply an increasing divergence from an original condition. In Dravidian kinship systems I see this divergent movement as proceeding from complex to simple structures and not vice versa, and therefore the term 'diffusion' seems more appropriate than 'evolution'. Hence, diffusion is what I mean, even when I sometimes use the term 'evolution', following my predecessors. And diffusion is possible only if the original kin terminological system, which we assume to be the historical source, is a compact, dense and symmetrical structure (which is more or less what I have found the Madia kinship system to be).²

² Readers will be better able to follow the arguments in this article if they first read my earlier article in the previous issue of *JASO* (Vaz 2010).

I describe later in this article the diffusion process, which, I suggest, has given rise to different types of kinship systems, but before I do so, I wish to address two more key issues here.

Links between the debates about Proto-Dravidian and proto-human kinship

The debates about Proto-Dravidian and proto-human kinship appear so connected that I find it difficult to discuss the former without bringing in the latter. The Madia kinship system possesses certain key features such as alternate generation merger, cross-generational self-reciprocity and cross-cousin marriage prescription, which have been proposed by different theorists as features of great antiquity. It is for this reason that I included the phrase 'early human kinship?' in the title of my previous article even though the main aim of that article was only to describe the complexity of the Madia kinship structure. Similarly even now, though my main aim is to describe the 'Big Bang' process for Dravidian kinship, I will discuss here theories about proto-human kinship as well. I do so not just because it has been hypothesized by several anthropologists that a Dravidian-like system was the most original but mainly because the many types of Dravidian kin terminology found today seem to have derived from a Madia-like kinship system. This point is elaborated on and becomes clear later in the article.

Trautmann's enormous undertaking to reconstruct the proto-Dravidian kinship system remains unparalleled to this day, but it had ended in a dilemma as he could not decide whether it was the central or the south Dravidian that was more original (Trautmann 1981:236). A few years later Parkin (1988a: 1) responded to this situation suggesting that, since alternate generation merging is an archaic feature, and since it has mostly disappeared in south India, it is the north and central Dravidian that 'most closely represent Proto-Dravidian' kinship. This was followed by Tyler's (1990) reconstruction of the 'Proto-Dravidian address system' using the Raj Gond, Koya, Pengo and Dhurwa kinship systems, all of which are central Dravidian.

When Allen began hypothesizing about a tetradic model as representing proto-human kinship, he too cited alternate generation merger as the number one feature for his model.

Writing two decades later, Dziebel (2007) introduced the concept of superreciprocity³ and said: 'I suggest that we should look carefully at Superreciprocal Relative Age systems, since their logical cogency, worldwide distribution, and evolutionary productivity...makes them a good candidate for great antiquity. Their low frequency around the world also suggests an archaic status' (Dziebel 2007: 248). Dziebel's description of the 'superreciprocal relative age terminology' seems to fit the Madia data in almost every way.

With all these different theoretical perspectives and debates, the stage now seems set for viewing the Madia as representing the most original of Dravidian kinship structures, and perhaps also typifying the most ancient of human kinship systems.

Approach through marriage rules

Trautmann's work is highly relevant to the discussion here because it contains excellent observations about the Madia terminology with reference to two special features, the distinctions of grandkin for crossness and the merging of alternate generations.⁴ In his own words: 'I believe that the two patterns may be related to one another, for they find their unity in a third pattern, the Maria Gond rule of marriage'. However, the Madia marriage rule seems to have eluded him. He assumed it was a bilateral alliance rule, although Grigson's data (1938) clearly pointed to the Madia's patrilateral form of alliance, which was later reported as such by Moore (1963). Trautmann still wondered about 'what precise form that ancestral rule took' among the Madia Gond, but he continued to work with the assumption that both unilateral alliance rules derived from the bilateral rule. What I wish to point out here is that he concluded his substantial survey of the Dravidian kinship systems by providing direction for further research: 'the future of the inquiry into the nature, and necessarily also the history, of the Dravidian kinship system lies in Central India' (1981: 236). This direction, pointing to Gond kinship, combined with his

³ Dziebel has presented five subtypes of alternate generation merging (2007: 205), and he describes superreciprocity as alternate generation merger in its strongest form (ibid.: 245). These features are found in the Madia terminology in which not only does the even-numbered generations merge but also the odd-numbered ones. (However, this feature applies to the terms for parallel and cross relatives only, not to affinal relatives).

⁴ Trautmann reports other sources to show these two features in a few other central Dravidian kin terminologies, such as Kurukh, Kondh and Gammu Koya (Trautmann 1981: 141, 144, 189).

argument correlating 'the Madia Gond marriage rule' with alternate generation merger and crossness for grandkin (all of which, he has said, are the common features of the Hill Madia and the Kariera⁵), provide support for some of the arguments presented in this article.

Now I wish to turn my readers' attention to arguments concerning marriage rules made within the debates about proto-human kinship. Allen's tetradic model of early human kinship (Allen 1986, 1989) is based on the assumption of bilateral cross-cousin marriage as the most original form. But Dzielbel has challenged this assumption on the basis of his research involving 'a database of some 2500 kinship vocabularies' (Dzielbel 2007: xx) that represent African, Australian, Austronesian, Papuan, Eurasian, North and Middle American Indian, and South American languages. He has claimed that superreciprocal relative age terminologies represent the most ancient and that these are never found in societies with bilateral cross-cousin marriage (ibid.: 249).

Such seems the scenario that faces us today as we consider the Madia data. My previous article (Vaz 2010) argues for FZD alliance being the rationale for all the equations and discriminations found in the Madia kinship terminology. The present article argues for the antecedence of the FZD rule over the other two cross-cousin marriage rules and, for that matter, over all other types of marriage prescription. The proposal that patrilateral cross-cousin marriage (where the FZD is not also the MBD) was the starting point for human kinship is nothing new. Lévi-Strauss, who recognized alternate generation merger as one of the 'immediate functions' of FZD marriage (Levi-Strauss 1969:219), had also seen the plausibility of the transitions from patrilateral to bilateral to matrilateral systems (ibid.: 218). Though such ideas were later disputed by Needham (e.g. 1962: 108-19) and his followers like Korn (1973), who sought alternative explanations for the same data that he had analysed, Lévi-Strauss' conclusions about the 'evolution' of the marriage rules, which he had made in the light of Australian data, seem to fit the case of the Dravidian kinship systems, as we shall see in the following sections of this article.

The significance of marriage rule for kinship systems should already be clear. 'Who should marry whom?' was the question at the dawn of human society. If a society's marriage rule is the

⁵ For Trautmann on Kareira, see 1981: 237, 435.

basic assumption on which its kin terminology and social organization are built, then it is important that we understand the correlations between changes in marriage rules and those in terminologies when we discuss the 'evolution' of kinship terminologies. Besides, since there exist only a few basic types of marriage prescription, approaching the study of transformations in kinship through the marriage rules should prove less complicated. This is what I shall do now, instead of individually examining various key aspects of kinship terminologies for their antiquity, as seems to have been the general practice.

Transformations in Dravidian kinship

The following is an attempt to discover the pattern of changes in Dravidian kinship by tracking those that occur in the terms for three key relations from three different generations (i.e. grandfather, maternal uncle and cross-cousin) in three different types of kin terminology⁶ (i.e. two Dravidian and one Dravidianized) that are each based on a different rule of marriage alliance (i.e. patrilateral, bilateral and matrilateral). Besides, I have also considered a non-Dravidian kin terminology (i.e. Hindi, a system which is based on the prohibition of blood relatives in marriage), for by doing so I find support not only for the argument about the historical primacy of prescriptive alliance over proscriptive alliance, but also for the 'Big Bang' like process of transformations of kinship systems.

On the track of the cross cousins

In tracing the changes in terms for cross cousin, it is helpful to follow the term for the male cross cousin rather than the term for his female counterpart. The general norm among south Dravidian peoples is for a man to marry a woman younger than himself. Since it is a common practice to address any younger relative by his/her first name, it is acceptable for H to address his W by her

⁶ I follow the kinship notations recommended by (Parkin 1997:9). The abbreviations I have used here are F, M, B, Z, S, D, H, W, P, G, and E for father, mother, brother, sister, son, daughter, husband, wife, parent, sibling, and spouse respectively. To these are added 'e' to mean elder and 'y' to mean younger. The 'e' and 'y' are placed before the symbol to which they relate. When in final position, however, these refer to the whole specification. The 'ms' and 'ws' stand for 'man-speaking' and 'woman-speaking' respectively.

name.⁷ For this reason, the kin type H⁸ usually has an address term, whereas the W does not. (It is generally taboo anywhere in India for a wife to use her husband's first name.) Moreover, since it is only the older female cross cousins who have address terms and since these kin types are not marriageable anyway, these terms only serve to show the categories that a man must avoid in marriage. This means that there are usually no terms specifying a female cross cousin as spouse-designate.

On the other hand, the terms for the older male cross cousins indicate the categories that are prescribed for marriage, making easy their identification. This is also made easy because south Dravidian terminologies are not known to distinguish between the cross and affinal relatives. Thus the Tamil term for older male cross cousin *athān*,⁹ which is also the term for H, leaves no doubt as to who the cross cousin spouse-designate is. Besides, this term is found both in bilateral and matrilineal alliance terminologies, which also helps in comparisons. For all the above reasons, it helps to examine the term for the male cross cousin rather than that for his female counterpart in our exercise to identify the marriage prescription in South Dravidian. However, the changes in the terms for the female cousins too are crucial for understanding the process I describe as diffusion, and so we will consider these as well.

For the following exercise, I use three examples from Trautmann (Trautmann 1981:312-313), one of which is based on bilateral alliance (Tamil non-Brahman), another on matrilineal alliance (Tamil Brahman), the third being a proscriptive system, i.e. one not permitting cousin marriage (Hindi) (ibid.: 93).¹⁰

⁷ The W has only terms of reference such as *manaivi*, *penjathi*, *pendati*, all meaning literally 'wife'.

⁸ Where there is no address term for H, euphemistic phrases like 'Are you there?' or 'What am I saying?' are called out by the W to get the attention of her H. Though terms such as *athān*, *machān* and *māma* for H are well-known in Tamilnadu and are commonly used by women to refer to or address their husbands, a generation or two ago the indirect way of addressing the H seems to have been the norm. Most women in my mother's generation never used these kin terms for their H.

⁹ Trautmann's *attān* (Trautmann 1981:312).

¹⁰ Trautmann's source for the Hindi kinship terminology is Vatuk (Vatuk 1969).

TABLE 1. CHANGES IN CROSS-COUSINS TERMS: DIFFUSION PROCESS¹¹

Type of Alliance	Cross-cousin terms	
	Male	Female
FZD Alliance (Madia)	<i>sangi</i> (MBS = FZS ≠ H)	<i>sango</i> (MBD = FZD ≠ W)
Bilateral Alliance (Tamil non-Brahman)	<i>athān</i> (MBSe = FZSe = H) <i>attai/māmā-makan</i> = FZSy/MBSy ¹²	<i>attāci</i> (MBDe = FZDe ≠ W) <i>attai/māmā-makaḷ</i> (FZDy/MBDy)
MBD Alliance (Tamil Brahman) ¹³	<i>athān</i> (FZSe = H) <i>ammānji</i> (MBSe ≠ H) ¹⁴ <i>attai-makan</i> (FZSy)	<i>attāngāḷ</i> (FZDe ≠ W) ¹⁵ <i>ammāngāḷ</i> (MBDe ≠ W) <i>attai/māmā-makaḷ</i> (FZDy/MBDy) ¹⁶
Non- prescriptive (or proscriptive) system (Hindi: Indo-Aryan)	<i>bhāi</i> = B, FBS, MBS, MZS, FZS	<i>bahen</i> = Z, FBD, MBD, FZD, MZD

¹¹ Since I myself am a Tamil hailing from the very town of Thanjavur (Trautmann's Tanjore) from where Trautmann's data come, I have taken the liberty of adding relevant data that are lacking in his text and also to make a few minor corrections where necessary.

¹² Trautmann reported the term *maccunan* for MBS and FZS, but this refers primarily to WyB, though the term *macān* (a colloquial use of *maccunan*) is sometimes jokingly used by male speakers for their MBSy and FZSy. The terms of reference for FZSy and MBSy are *attai-makan* and *mama-makan* respectively, and these are simply descriptive terms meaning 'father's sister's son' and 'mother's brother's son'. However, as mentioned earlier, personal names are used for younger relatives (except for the affinal categories EGy). Trautmann has also given the term *maccuni* for FZD or MBD, but this applies only to WyZ ms.

¹³ Here Trautmann has made use of Gough's list (Gough 1956, appendix)

¹⁴ Some Brahman communities use the term *marumān* for MBS.

¹⁵ Trautmann reports *attāci* as another term for *attāngāḷ*, but this is not correct.

¹⁶ This is the kin type that is the potential wife. However, it is incorrect to report MBDy = W (as does Trautmann) because the term for MBDy is not applied to W. There are no terms for female cross cousin spouse-designate, because she must be a younger relative who is addressed and referred by name.

The Thanjavur non-Brahman kinship system, which is one of bilateral alliance,¹⁷ has the equation $MBSe = FZSe = H = athān$. Here the cross cousins MBD and FZD are not terminologically distinct, but are both distinguished for relative age in order to mark the older ones who are not marriageable. Thus:

$$MBDe = FZDe = attāci \neq W; \text{ and}$$

$$MBDy = FZDy = māmā/attai-maka]$$

This terminology is different from that of the Brahman community (Indo-Aryans who have assimilated into the Dravidian kinship system) from the same town of Thanjavur. This Brahman community is known here for its system of matrilateral cross-cousin alliance, where the following terminological equation is found in the terms for the elder male cross cousins:

$$MBSe ammānji \neq FZSe athān = H athān$$

Note that this terminology has an additional distinction for the elder female cross cousins, which is not found in the bilateral system:

$$FZDe attāngā] \neq MBDe ammāngā]$$

The above distinction simply corresponds to that found in the terms for elder male cross cousins. Besides, we see that the terms for the younger female cross cousins are not distinguished. Thus we have:

$$MBDy = FZDy (māmā/attai-maka])$$

There are two things here that I would like to draw my readers' attention to. One concerns the changes that occur in the term for the female patrilateral cross-cousin (FZD) as she seems to move away from her original position in the FZD-MBS alliance system. In the Madia kinship system, both female cross cousins are known by a single term (*sango*), and there is no distinction of age or type (like $MBD \neq FZD$ or $FZDe \neq FZDy$). But we understand the central importance of the kin type FZD to this system when we view the Madia kinship structure in its entirety and

¹⁷ This is the community I belong to. Besides the bilateral cross-cousin marriage rule this community is also known for eZD-MyB (avuncular) marriage and for this reason the terminological equation $MB = H = māmā$ is well known here. Because of the practice of avuncular marriage, the term *pu//a*, which is an address term for SW (and often used in a generic sense for female relatives in G-1), is also used for W. Thus we see that this community's kinship, while no doubt being a classic example of a system based on bilateral marriage alliance, co-exists with the avuncular variant.

consider how the FZD rule may be the motivation for all equations and discriminations found in this terminology (which is the main argument presented in Vaz 2010.)¹⁸ In the Tamil non-Brahman (bilateral) alliance, we find that FZD and MBD are both distinguished for age and that FZDy is only as much a potential spouse as is MBDy. But in the matrilateral alliance system, the FZDy is no longer a potential spouse. Lastly, in the proscriptive system we find that FZD is not even distinguished from the parallel cousins FBD, MZD. Thus we see that the kin type FZD moves steadily away from her original central position until she becomes entirely peripheral. Metaphorically speaking, the FZD is the unifying force in the original system who, acting like a gravitational force, holds the kinship system together by being the rationale for the vertical and horizontal mergers of the terminology. The 'Big Bang' diffusion process begins with the distinction of the FZD from her counterpart, the MBD. Such a distinction leads to the FZD's central and neutral position in the terminological system being compromised and this change effects a sort of destabilization of the compact system, thus setting in motion a progressive diffusion of kin categories. As the original (i.e. FZD) rule gives way to other types of cross-cousin alliance, the terms for the female cross-cousins begin to show distinction for age and/or

¹⁸ Some may not accept the FZD rule as the basis for Madia system, citing the lack of the terminological 'prescription' to show a distinction in the terms for cross cousins (like MBS \neq FZS or MBD \neq FZD) and to denote the spouse-designate. As far as I am able to understand Madia kinship, it is actually crucial for such a compact system to have the cross-cousins undistinguished. A distinction here would make impossible the high degree of vertical (i.e. alternate generation) merger of terms and the self-reciprocity that we observe in the Madia terminology. Moreover, it is no coincidence that none of the other Gond sub-tribes that say they practice FZD marriage (e.g. the Gaitha, Bison-horn Madia, Nilkanth) show terminological distinction of cross cousins, and that all of these systems exhibit transgenerational crossness (i.e. crossness in all generation levels), which would be necessary for cross-generational self-reciprocity, besides also exhibiting varying degrees of alternate generation merger. Another point I wish to make here is that in Dravidian kinship systems the absence of a distinction in the cross-cousin terminology for either age or laterality or designation for marriage seems as important an indication of the marriage rule as is its presence. Therefore we must seek a careful explanation of the absence of terminological 'prescription' in these central Dravidian systems, especially since the Dravidian systems in India are well-known as classic examples of 'prescriptive systems'. If a prescriptive system does not show 'prescription' in its cousin terminology, then it may be so for a significant reason. In systems where such a distinction is present we find it easy to identify the marriage rule, but even where the distinction is not found, we will still be able to identify the marriage rule by taking into account the entire terminological system, as well as key cultural practices, as I have done for the Madia kinship (Vaz 2010). Therefore I suggest that we do not reject the FZD system as unviable solely on the basis of the cross-cousin terminology. Perhaps we should now return to the old practice of applying the idea of 'prescription' to the marriage rule rather than to the kin terminology because it is the rule that *generates* the terminology in the first place, and it cannot be vice versa. It is true that the terminology, in turn, can and does serve as a 'guide' to spouse selection (Good 1981), but this does not disprove the above mentioned fact about where lies the generative power and in which direction the causal arrow points.

for laterality - something that is neither found in the FZD kinship system nor would be compatible with it.

The other point I would like my readers' to note here concerns the nature or pattern of change that cross-cousin terms seem to undergo. In the proto-Dravidian system the terms for cross cousin are just two (*sango* and *sangi*). In the bilateral system there are four (*attan* and *attai/māmā-makan* for males, *attāci* and *attai/māmā-makan* for females). And in the matrilineal system there are six (*athān*, *ammānji* and *attai- makan* for males and *attāngā*], *ammāngā*] *attai/ māmā-maka*] for females). This pattern indicates the diffusion - the many kin types that were originally contained in a single category (thus concentrated and compact) became increasingly differentiated and scattered. This diffusion process can be illustrated even more clearly in the examples taken from G +1 and G+2 levels, which I present in the next two sections.

The term for MB: the vertical and horizontal diffusions

The changes in the cross-cousin terms can give us only a partial view of the transformations that are taking place in the system as a whole. This is the reason why we must also consider the changes that occur simultaneously in the other generational levels. The changes that happen in the G+1 level can be seen by following the term for the mother's brother. There are many reasons why the term for MB is the best choice from the G+1 level. For one thing, the term *māma* is the same for the MB in the central and south Dravidian languages, and that makes the comparisons easier than it would have been with other terms. Secondly, and even more importantly, *māma* in the original terminology shows alternate generation merger very clearly, and so the loss of this feature becomes strikingly evident in the changes that this term undergoes in other systems. Moreover, the term for MB is a helpful example as it is a less complicated category (terminologically speaking) since it is not distinguished for relative age, as are the terms for FB and MZ. For these reasons, the term for MB seems the best choice for our present exercise. In Table 2 below, I present the changes in the kin term *māma* (MB) in order to illustrate the unfolding of the vertical and horizontal dimensions of an originally compact system.

TABLE 2. CHANGES IN TERMS FOR MB: THE HORIZONTAL AND VERTICAL UNFOLDING¹⁹

Alliance rule	The kin types in the category of <i>māma</i>
FZD – Madia (Central Dravidian)	<i>māma</i> = MB, FZH, EF, EFB, ZHF, BWF, FMF, MFF, EFFF, EMMF, ZS ms, SSS ws, DDS ws, DSS ms, SDS ms) ²⁰
Bilateral – Tamil Non-Brahman (South Dravidian)	<i>māmā</i> = MB, FZH ²¹ <i>māmanār</i> = EF ²²
MBD – Tamil Brahman (Indo-Aryan assimilated to Dravidian)	<i>māmā</i> = MB <i>attimpēr</i> = FZH <i>māmanār</i> = EF
Non-prescriptive – Hindi (Indo-Aryan)	<i>māmā</i> = MB <i>phūphā</i> = FZH <i>sasur</i> = EF <i>māvsā</i> = BWF, ZHF

We see from Table 2 that the term *māma* originally referred to a host of kin types. Following the changes in the marriage rules, and as more and more discriminations were made, this term consistently kept losing its referents. If at the beginning the kinship system was universal and all-

¹⁹ It is possible to present this data showing the cross and affine distinction in the Madia terminology, but doing so will not have any bearing on the arguments made here, and therefore I have avoided that unnecessary detail.

²⁰ Grigson (1938) reported *bachā* for FZH, thus distinguishing the latter from MB, *māma*. But the term *bachā* is not used for FZH in the Bhamragad and Etapalli regions, where it is used as an address term for WBS.

²¹ The MB is referred to as *thāi-māman*, specifying that *thai* 'mother' is the linking relative, and thus distinguishing MB from the other kin types listed here. The address term, however, is the same for all: *māmā*.

²² The term *māmanār* is used only in reference to EF while the address term for the same is *māmā*.

pervasive, and thus encompassing the entire society, it steadily lost such pervasiveness to the process of diffusion. What is striking here is the sudden loss of cross-generational self-reciprocity as shown in the equations $FMF/MFF = MB = ZS = DSS$ ms. The loss of this feature represents the vertical unfolding. The horizontal unfolding is seen in the loss of equations such as $MB = EFB = EFFF = EMMF$. The numerous kin types that were originally included in the single category *māma* were dispersed and many of these eventually came to be viewed as non-relative because the distance from ego is considered too great (e.g. EFFF or EMMF). Such relations may be considered as lost in diffusion.

We find a single term at the beginning (i.e. in the FZD system) covering many different kin types and from different generational levels, but we find two terms in the bilateral system, three in the matrilineal and four in the proscriptive system, which I think illustrates well what I have called the diffusion process. More terms become necessary as the compact system opens up and as the few key kin types become differentiated. Simultaneously, more and more relatives move outside the boundaries of kinship. The loss of distant relatives from the sphere of social categories and the increasing distinction of the immediate relatives who remain in the system are what I describe as the vertical and horizontal unfolding. This causes the systems to become more and more scattered until the classification itself is in a sense lost in systems like the Euro-American (or what are called descriptive terminologies), where the kin type MB becomes totally indistinct from the FB or FZH (e.g. the single English term 'uncle' applies to MB, FB, EMB, and EFB).

The term for FF: loss of symmetry

The loss of symmetry or homogeneity is another key change. Unlike the two features, alternation (vertical) and complementary (horizontal) merger, which disappear rather slowly and steadily, the loss of symmetry seems to occur quickly and almost totally. (If alternation is found in bilateral alliance systems, it is probably so because this feature disappears only gradually.) But the symmetrical character seems to disappear without leaving any trace, as is seen in Table 3. The polar categories (the terms in G+2) are the indicators of the symmetry in the original system (see Fig. 4 in Vaz 2010), and therefore I choose to examine these to understand this particular

change. The table shows terms for male relatives, and it is possible to do the same using terms for their female counterparts.

TABLE 3. CHANGES IN THE TERM FOR FF: LOSS OF SYMMETRY

Type of alliance	Terms for grandfather	
	Parallel	Cross
FZD alliance (Madia)	<i>thādho</i> = FF, MBWF, MMB, EMF, MFZH, SS ms	<i>ako</i> = MF, FZHF, FMB, EFF, FFZH, DS ms
Bilateral alliance (Tamil non-Brahman)	<i>tātā</i> ²³ = FF, MF, MBWF, FZHF	
MBD alliance (Tamil Brahman)	<i>tātā</i> = FF, MF, MFZH <i>attimpēr</i> = FZHF, FFZH (same as FZH) ²⁴ <i>ammangi</i> = MBWF (same as MBS _e) ²⁵	
Non-prescriptive terminology (Hindi)	<i>dādā</i> ²⁶ = FF <i>nānā</i> = MF <i>dādsarā</i> = EFF <i>nānasarā</i> = FMF	

²³ Trautmann is incorrect in saying that *appucci* is FF (or FFB, MMB, MFZH) because it is in fact the term for FM (cf. Trautmann 1981: 312). A single term *tātā* applies to both FF and MF. Only the grandmothers are distinguished into two categories: *appāyi* or *appucci* for FM, and *ammāyi* or *ammucci* for MM.

²⁴ I have placed the terms *attimpēr* for FZHF/FFZH and *ammānji* for MBWF in the parallel category because I am not sure if these kin types are viewed as cross relatives by the speakers themselves.

²⁵ This information is not found in Trautmann's diagram but was provided to me by informants who are from a Brahman community living in Thanjavur.

²⁶ Vatuk's (1969) data use term *bābā* for FF in Hindi, but this is actually *dādā*.

The symmetry (or the balanced proportion of parallel and cross kin) that is seen in the Madia kinship system is due to the fact that crossness is maintained across generations. This dimension extends to all levels and never allows merger of the two kinds of grand relative. The equation which keeps the Madia kinship a balanced dual structure is this:

$$FF = EMF = MBWF = dhādhā \neq MF = EFF = FZHF = ako$$

What is evident from Table 3 is that this balanced character or homogeneity is actually the very first feature to be lost in the diffusion process. While the terms for grandfathers in Tamil do not show the crossness dimension, the terms for grandmothers do (*appāyi* or *appucci* for FM, and *ammāyi* or *ammucci* for MM). But symmetry is not something we can discuss in terms of degree or gradation; it is either present or absent. Therefore, even when the crossness dimension is found in the terms for grandmother in the Tamil terminology, I would still say that the symmetry is absent.

What seems unique about the Madia or Central Dravidian kinship is that this symmetry is found even at the G+3 level²⁷ It is impressive that, out of the few dozen kinship terminologies²⁸ that Dzielbe had found suitable for discussion in his book on proto-human kinship, the Central Dravidian (Raj Gond) is the only one that shows crossness in the G+3 level. As shown in my earlier article (Vaz 2010), the following equations in the G+3 level are found in the Madia terminology:

$$FFF = MMF = EMFF = EFMF \textit{ pēpi} \neq \textit{ māma} = FMF = MFF = EFFF = EMMF$$

$$FFM = MMM = EMFM = EFMM \textit{ pēri} \neq \textit{ ātho} = FMM = MFM = EFFM = EMMM$$

It does not seem that such symmetry can be achieved without the transgenerational crossness and the skewing of generations which seem to work together to create a superreciprocal terminology, and it is my understanding that only FZD alliance is able to do this. Once the FZD rule ceases to be the basic assumption, the symmetric structure crumbles.

²⁷ This is observed in a few other central Dravidian kin terminologies (Tyler 1990).

²⁸ These few dozen are chosen from his larger database of about 2500 kin vocabularies.

Changes in Madia kinship

Of all the kinship systems considered here, the Madia system is the one where kinship seems the most pervasive, and such pervasiveness is generally assumed to be a feature of ancient kinship systems. However, the Madia kinship is no more immune to historical changes than are the other systems. There are a few important differences between Grigson's list (1938) and my own. In his time the Madia of Bastar (now Chhattisgarh) seem to have distinguished between FZH *bacha* and MB *māma*. But both these relatives are now known by the same term (*māma*), and the term *bacha* now remains only as a reciprocal term: *bacha* or *bacha* = WBS²⁹ (this is so at least in the Bhamragad and Etapalli regions where I conducted my research). Another archaic term is *poye* for FZ, which has been replaced by *ātho*. If I consider *poye* to be more original, it is because this term still exists among the Bison-horn Madia and the Gaitha to denote FZ; among the Hill Madia it exists only as a reciprocal term for BDws (which is similar to the case of *bacha*). The Marathi term *aji* is beginning to replace the Madia term *bāpi* among school-going children. The terms for cross cousins, *maryox* and *mandarī*, are now being replaced by the terms *sangi* and *sango*, as not many people are aware of the former any longer. Moreover, I am seeing these days that the practice of patrilineal cross-cousin marriage itself is being challenged by some of the Madia youth. What accelerates such changes in marriage practice as well as in terminology, more than anything else, is perhaps the coming of formal education to the Madia society in the recent past (actually just in this generation) which provides some exposure to other ways of life. Isolation seems to be the primary factor that has contributed to the preservation of the Madia practice of FZD alliance and the archaic kin terminology.

The question that begs to be asked is this: 'In what ways could the original Madia kin terminology have been different from its present form?' When Tyler reconstructed Proto-Dravidian on the basis of alternation, he said it could only apply to address usage (1990: 161). In my previous article I discussed the vocative nature of the Madia terminology and mentioned the significance of the address terminology in understanding the kinship structure. Could it be that

²⁹ It was my oversight not to have reported this term for WBS in my earlier article (Vaz 2010). I am so accustomed to hearing and using the Hindi term *bacha* 'child' that I had ignored this Madia term, thinking it must be a borrowed term from Hindi, but I now realize that it is actually an indigenous Madia term.

the Madia kinship terminology was originally purely an address system and the reference terminology followed later?

Madia as Proto-Dravidian

What is the point of the above analysis? Precisely this: if by 'evolution' is meant the increasing divergence from a previous condition, then it makes sense that we should be able to trace it back in the opposite direction to an original condition from which it all must have started to change. If Hill Madia kinship is representative of Proto-Dravidian, then it must be demonstrable that the other types are derived from it. If Madia kinship represents the most compact structure, then it must be evident that the other terminologies have structures that are increasingly diffused as they move away from the most complex starting point. And if the FZD alliance rule is indeed the rationale for the structure of the Madia kinship, then it must be evident that the adoption of other types of marriage rules causes, or at least is correlated with, the variations found in the other kinship structures. If my reasoning here is sound, then it would mean that Allen's 'Big Bang' model is more helpful in understanding the 'evolution' of Dravidian kinship than Trautmann's model of the tree trunk and branches. However, Allen's 'Big Bang' model itself would need some revision in the light of the arguments made so far in this article.

A revised 'Big Bang' model

Allen founded his tetradic model for the simplest possible social organization on 'three important types of equation' which are alternate generation merging, prescriptive equations and classificatory equations (Allen 1986:99). The prescriptive equation that he proposed was based on bilateral cross-cousin marriage, but he found it difficult to link the bilateral alliance rule with alternate generation merging. With the bilateral rule he could explain the 'horizontal' relations but not the 'vertical' merger of relations; and the tetradic structure he envisioned needed both dimensions covered (2011: 99). There is no way the bilateral rule could explain tetradic structures. This seems to have led Allen to reverse the direction of the causal arrow and to propose that the tetradic structures itself could be *generative* of the alliance rule (ibid.: 104). On

the contrary, and as we have seen through the analysis of the Madia kinship system, the patrilineal alliance rule covers both the horizontal and vertical dimensions of relations and by doing so it generates the tetradic super-structure (as in G +2 and G +3). Both my earlier article and the present one argue that it is the alliance rule that generates the structures, and not vice versa. On the basis on these observations, I suggest that Allen's 'Big Bang' sequence for kinship needs some revision.

Allen has proposed a unidirectional (generally speaking) and irreversible evolutionary path for transformations of kinship, which he presented as a sequence of disruptions in terminological equations as shown below:

1. Loss of alternate generation equations (which merged relations in alternate generations)
2. Loss of prescriptive equations (which merged cross and affinal kin, indicating bilateral alliance rule)
3. Loss of classificatory equations (which merged same-sex siblings).

However, the analysis presented in this article suggests that the loss of the FZD alliance rule, combined with that of the cross-generational self-reciprocal equations (which imply transgenerational crossness), must precede the loss of alternation.³⁰ This would mean that Allen's disruptive sequence depicts the transformation process at its second or third stage. Moreover, my analysis also suggests that, instead of viewing the transformations of kinship systems as a sequence of loss of equations and discriminations (which are numerous and make the study complicated), we could view it as the unfolding of relations horizontally and vertically, and as a movement away from an original condition of concentration and compactness to becoming increasingly diffused and scattered.

³⁰ When alternation is found in a kinship system based on bilateral alliance rule it is usually so only with regard to a few kin terms, and these can be explained as vestiges from a former stage. With regard to matrilineal alliance though, it would be interesting to investigate if alternation is effected in section societies because the MBD exchange must work in circles here. A study of the Australian aboriginal societies which have a high degree of alternation found in the MBD systems would shed more light on this issue.

It is significant for our discussion here to note that a meagre retention of alternation is found in the Kurukh kinship (a north Dravidian system) and that it is so even in 'the absence of preferential cross-cousin marriage' and in spite of 'a preference for marriage with nonrelatives' (Trautmann: 1981: 143-4). Whereas the Tamil-Brahman kin terminology is a case of an Indo-Aryan community having been assimilated to a Dravidian kinship system in south India, the Kurukh is clearly a case of a Dravidian society in northern India where it has assimilated to the dominant practice there, i.e. of the Indo-Aryan proscriptive marriage rule.

If anything at all, the analysis of the Dravidian data presented here should clearly bear out the fundamental importance of marriage rule for kinship and social organization since we see that changes in the rule effects changes in the kin terminological systems. Therefore, assuming that marriage rule is the logic of human kinship, I have proposed below a revised 'Big Bang' model, one that is based on the few basic types of marriage rules and one that provides a sort of historical perspective showing the general direction of transformations in kinship. Following the analogy of the 'Big Bang' of the universe, I have illustrated this process using concentric circles. Here I have added two more kinship systems to the ones discussed in this article, namely the parallel-cousin marriage that is well known in Arab societies, and descriptive systems of which the Euro-American kinship terminology is usually taken as an example.

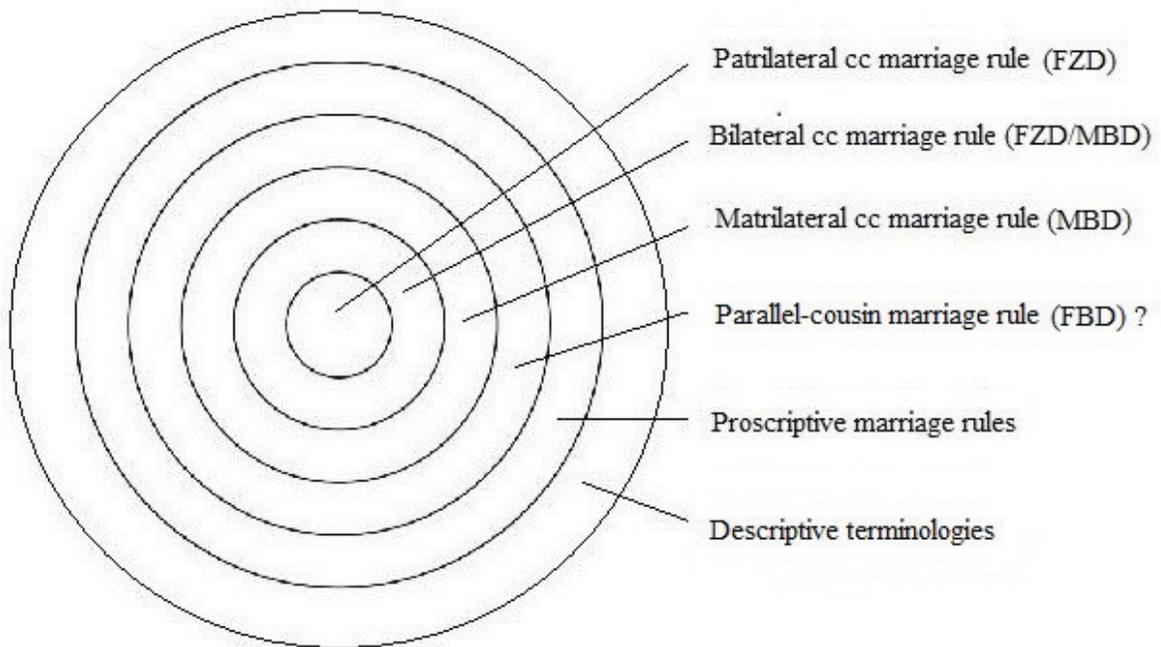


Figure 1. The 'Big Bang' for kinship systems

Let us consider briefly a few of the variations (that abound for sure) within the few basic types of alliances mentioned in this illustration. Oblique marriages are one example. The ZD-MB (avuncular) marriage is a variant of the bilateral type. The eZD marriage among the Thanjavur

non-Brahman Tamils does create certain peculiarities in this bilateral terminology, but the overall kinship structure and the social organization would not be transformed by this practice. For example, in this terminology we come across equations like $WM = eZ = akkā$, $DH = yB = thambi$, $MB = H = māmā$, and $HM = ammāci$ (same as MM), $FZH = tātā$ (same as FF), equations that are found in the particular cases where eZD marriage takes place. However, this marriage is fairly common here, and its influence on the bilateral terminology must be noted. A few examples follow. The equation $WM = eZ = akkā$ is also found in marriages that are not between eZD and MyB, specifically where ego's WM happens to be merely a few years older than he is. Similarly, girls who are married to men who are considerably older than them (a not so uncommon practice) address their husbands as $māmā$ (MB) and their HF as $tātā$ (MF). The equation which is most commonly found in the bilateral terminology but which I think exists because of the influence of eZD-MyB marriage is this one: $DH = yB = thambi$. All such occurrences mean that certain relatives can be either pushed up or down to the adjacent generational level without jeopardizing the kinship system, for in spite of such peculiarities the Thanjavur non-Brahman Tamil terminology remains a bilateral system. Because the eZD terminology is absolutely compatible with that of the bilateral, the ZD marriage can be seen as a variant of the bilateral rule. Conversely, the terminology that goes with eZD marriage is not compatible at all with the FZD alliance system.³¹ This takes us to the next point, which is significant to note.

As mentioned above, the eZD-MyB marriage causes the blurring of adjacent generational levels with regard to certain relatives (e.g. $H = MB = HF/WF = māmā$), and this is entirely compatible with the bilateral system. This is something that the Madia (FZD) terminology could never allow because a clear demarcation of generational levels is fundamental to the Madia kinship system. When my Madia informants heard about the equations cited above from the Tamil terminology, they were horrified that some men would actually marry their eZDs. If eZD-MB marriage is totally compatible with the bilateral system but not at all so with the kinship

³¹ Trautmann (1981: 206) seems to draw a parallel between eZD marriage and FZD marriage, which must be rejected in light of the discussion here.

system based on the FZD marriage, how then can we say that the FZD alliance is simply a variant within the bilateral form of alliance?³² (see also footnote 18).

Let us now turn to variants that exist within the FZD system. First, marriages with FFBDD or MMBDD would be variants of the FZD system, as these cousins belong to the same category as the kin type FZD. I imagine that alliances where the FFBDD and MMBDD are prescribed would effect certain changes in the structure of the terminology, causing it to be different, but perhaps not fundamentally so, from the system based on the FZD marriage rule. The Dieri system (Radcliffe-Brown 1914) is given as an example of such second-cousin marriage, and it is significant that Lévi-Strauss (1969: 204-7) considered it to be a case of transition from asymmetric to symmetric exchange – an idea that fits well with the 'Big Bang' model I have proposed because this marriage can be seen as a stage between the FZD and the bilateral.³³ (It would be illuminating to study second and third cousin marriages in MBD systems and consider how these may fit in this model.)

Another type of variant within the FZD system is an oblique marriage. Among the Madia, while marriage with a man or woman from an adjacent generation is unthinkable, the MF-DD marriages (i.e. relatives from alternate generation) are considered acceptable (as noted by Grigson and quoted by Trautmann and others). Madia MF-DD marriage seems a natural companion of the FZD-MBS alliance because the former falls so perfectly within the latter, requiring no change at all in the FZD terminology (e.g. HF = MFF is already *māma* anyway). The reason why MF-DD marriage is so totally compatible with FZD marriage is because this marriage does not violate the basic structure of alternate generation equivalence as would eZD marriage. This explains the disgust the Madia express for Tamil eZD marriage. A Madia man who is found guilty of marrying his ZD or having had sexual contact with her (who is in the same category as MyZ in the Madia kinship system) is made to pay a heavy fine and is put

³² Besides this, there are at least two other reasons why the FZD marriage is distinguishable from the bilateral type of alliance, and so cannot be covered within the umbrella of direct (bilateral) exchange (Parkin 1997: 101-4). First, cross-generational self-reciprocity, which seems to be an effect of the FZD rule, is not associated with the bilateral type of alliance. Secondly, the delayed reciprocity as a 'principle' forms the basis of the FZD exchange and results in a unique kinship structure; and therefore it cannot be equated with the arbitrary delay that may often be the case in the direct exchange due to demographic reasons.

³³ Since data from the study of Australian aboriginals abound in systems with second- or third-cousin marriages, a comparative study of these would throw more light on this topic.

through a ritual of purification before he could be restored back into the social and ritual life of the community.

Let us move on to the next type. All I know about the parallel-cousin marriage rule is that it is always the FBD and never the MZD who is the prescribed bride. I have yet to familiarize myself with the kinship terminology that goes with this alliance rule, and therefore the placement of this system in this illustration may not be accurate. However, it is by following the idea that proscriptive systems proceeded from the prescriptive systems that I have placed the FBD alliance above the proscriptive marriage rules.

Then come the proscriptive marriage rules which are well known in India. Most ethnic groups in the country would not allow marriage between a man and a woman having the same family name. In addition, the prohibition on taking a bride from the same village because the groom and bride drank water from the same well and therefore are like siblings is also known. I have heard of places in the northern states where there are rules prohibiting a man from taking a bride residing within a certain range, say a thirty or forty kilometre radius, of his ancestral residence (presumably because the couple would have shared the same natural resources, particularly the underground water). In the south Indian state of Kerala, it is a common practice for the name of a person's ancestral village to be part of his/her personal name, and a man and a woman carrying the same village name cannot marry. The Hindi kin terminology used in my analysis in this article is based on a rule that prohibits all blood relatives from marriage. Thus, water, blood and territory are some of the things marriage proscription in India is based on, and there certainly are many other kinds of proscriptions.

The last in my illustration, the descriptive system, of which Euro-American kinship can be used as an example, is the furthest from the FZD type, and this is where the kinship structure and social organization seems the least complex. It is simple not just in the sense that there are only a dozen core terms or kin categories (if affixes like 'in-law', 'grand-', 'step-' and 'ex-' are not considered). It is simple also because the number of kin types included in this kinship system is smaller. For example, FZHF or EMBWM is excluded from the range of kin as he or she is seen as too distant to be a relative.

Overall, the sequence of the transformations in kinship systems as illustrated above would be, as Allen has said, irreversible and generally unidirectional. I have found the 'Big Bang'

model extremely helpful in conceptualizing and understanding the transformations in Dravidian kinship, where I did not find it problematic to include the three non-Dravidian and non-prescriptive kinship systems, as these seem to fall very much in line with the movement from prescriptive to proscriptive to descriptive systems. Such transformations in kinship would perhaps coincide with transformations of societies as they move or moved from being very small-scale, localized and collectivistic to becoming increasingly dispersed and individualized ones.

Conclusion

The main conclusion I make in this article is that Madia kinship represents the most archaic of Dravidian kinship systems and that the FZD rule is the most ancient of cross-cousin marriage rules. However, here I would also like to refer once again to a point I discussed early in this article, namely the link between the debates about proto-Dravidian and proto-human kinship systems. As recently as 2001, Per Hage (Hage 2001:487) summed up the history of the analyses of the transformations of kinship systems by citing an impressive list of authors and analysts:

Grand theories of the evolution of human kinship systems usually take as their starting-point a Dravidian-like system based on cross-cousin marriage as in the transition from elementary to complex (Lévi-Strauss 1969), prescriptive to non-prescriptive (Needham 1967), and tetradic to non-tetradic system (Allen 1986, 1989, 1998)... Historically, the available documentary and linguistic evidence reveals 'rightward' shifts away from Dravidian as in the Burmese (Spiro 1977), Chinese (Benedict 1942; Fêng 1937), Mon-Khmer (Parkin 1988b), Nasupo (Kryukov 1998), and Algonquian systems (Hockett 1964; Wheeler 1982), but not 'leftward' shifts towards Dravidian... 'no evidence of Dravidian having been formed as a result of the transformation of a system of any other type has been found so far. (Kryukov 1998)

Hage's summary indicates that there exists a general consensus about the ancestry of a 'Dravidian-like' system as the historical source of human kinship systems. The data analysis and arguments presented in this article may help to further narrow it down to a Madia-type system.

A wider question

Allen's tetradic structure as proto-human kinship is dated back to 60,000 years ago, implying the unlikelihood of modern ethnographic evidence for it. Regardless of the great interest Allen's tetradic theory holds for neo-Darwinists, the question about the dating of proto-human kinship can only be secondary to the logical and empirical questions. We have seen that the Madia kinship system is tetradic in its super-structure having four terms in $G +2/+3$ (see Figure 4 in Vaz 2010). Besides, Madia society is divided into four exogamous god-groups, each god-group having a certain number of gods ranging from four to seven (Grigson 1938; von Fürer-Haimendorf 1979). Note also that the numbering in the god-group system begins with four.

Allen's dating of his tetradic (early human) society may agree with trends in neo-Darwinism that see correlations between primate and human kinship. But Parkin, Dziebel and McConvell have all warned against the dangers in this trend even as it is threatening to override kinship studies. Parkin, for one, warns against multidisciplinary approaches in which social anthropology is given only marginal importance and the regrettable tendency to abandon traditional and technical study of kin terminologies (Parkin 2009). He has also pointed to the 'strong tendency' in neo-Darwinism 'to reduce human society, which we can interrogate directly, to those of our primate relatives, whom we cannot', saying that this tendency leads analysts 'to ignore or downplay the uniqueness of humans as a species (which is due not least to culture and to cultural difference) ...' (ibid). Dziebel, for another, points to an unfortunate belief among anthropologists that kinship systems 'are incapable of generating historical reconstructions of their own, but are restricted to either supporting or contradicting archaeological and linguistic evidence', whereas he sees kinship systems as actually 'the most secure field of reference' because of their 'unique formal properties' (2007: 140, 144).

McConvell too has urged social anthropologists to avoid 'fuelling speculations' and to work to make 'actual' hypotheses, beginning by first identifying, through rigorous methods, the proto-kinship terminologies of the language families of the world. This alone, he says, will lead to an understanding of 'possible systems and changes to systems and the chronology' and help us to 'assess the plausibility of reconstructing a single Dravidian-type kinship system as the primeval system, or alternatives, including different systems in different parts of the world'

(2009:7-8). It is my hope that the presentation of ethnographic data and analysis in this article is a step in that direction.

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