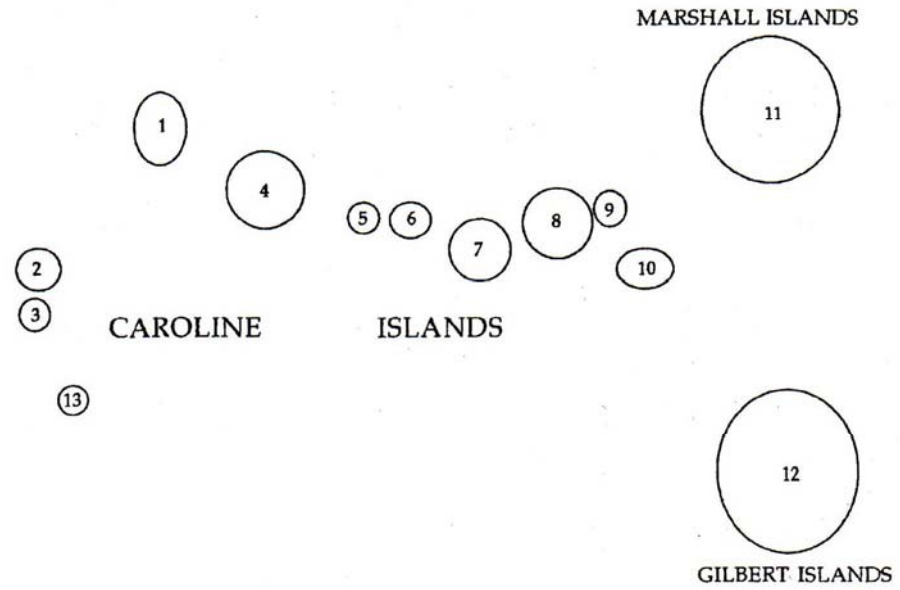


MAP 1. NUCLEAR MICRONESIAN LANGUAGES



N.B.: 1 = Ulithian, 2 = Sonsorolese, 3 = Pulo Annian, 4 = Woleaian, 5 = Puluwat, 6 = Trukese, 7 = Mortlockese, 8 = Ponapean, 9 = Mokilese, 10 = Kusaiean, 11 = Marshallese, 12 = Gilbertese, 13 = Mapian (extinct)



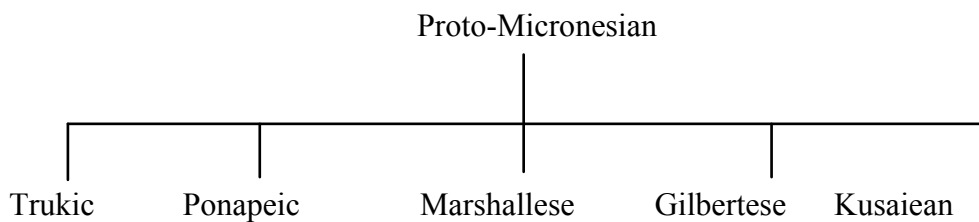
**PRONOMINAL PARADIGMATIVITY AND INTERNAL SUBGROUPING OF NUCLEAR  
MICRONESIAN LANGUAGES**

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**1. Introduction**

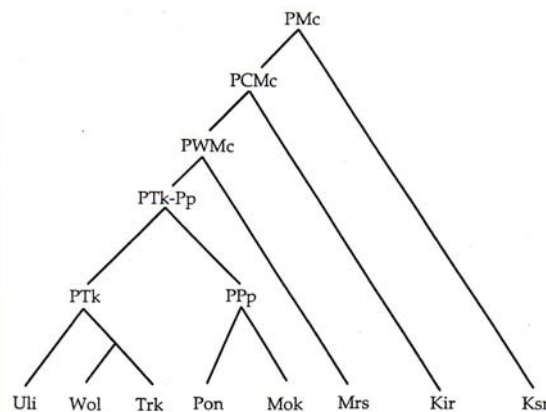
There are at least two tree models available in the literature which depict the internal genetic relationships of the Nuclear Micronesian languages.<sup>2</sup> First, what Rehg (1995:311) calls the flat tree model of the Nuclear Micronesian languages, foreshadowed in Bender (1971), is presented in Figure 1.

**FIGURE 1. A FLAT TREE MODEL OF THE NUCLEAR LANGUAGES OF MICRONESIA**



The flat tree model, in which five subgroups are recognised, is also adopted by Bender and Wang (1985:80), and Rehg and Bender (1990:2), pending further evidence for higher-level subgroups. Jackson (1983; 1986), on the other hand, proposes a stratified tree model, as is given in Figure 2. The dotted lines in the alternative model indicate where ‘the historical relationships are not reasonably clear’ (Jackson 1983:433).<sup>3</sup> The received view in Micronesian linguistics seems to be that the flat tree model may not be correct, especially in view of the evidence that Jackson (1983; 1986) adduces against it (e.g. Rehg 1995:311).<sup>4</sup> The

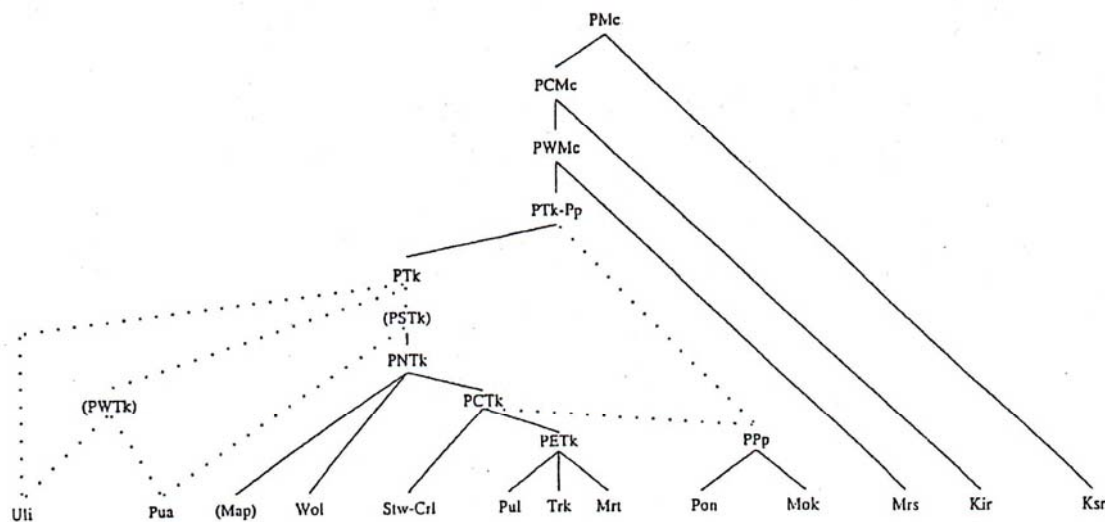
<sup>1</sup> The author was Honorary Visiting Fellow at La Trobe University during the second semester of 1997. He wishes to thank Barry Blake for his helpful comments on an earlier version of this paper.  
<sup>2</sup> The abbreviations used, but not explained in the paper are: PEO = Proto-Eastern Oceanic, POc = Proto-Oceanic, Sns = Sonsorolese.  
<sup>3</sup> Jackson (1986:214) proposes a stratified tree model — as reproduced below, although Nauruan, which he tentatively puts together with the Nuclear Micronesian languages as Proto-Greater Micronesian, has been left out — which seems to be less circumspect than the one in Figure 2 with respect to the position of Ulithian (and probably Pulo Annian), and Ponapeic (or his Pp).



<sup>4</sup> Rehg (1995:311) also points out that if the flat tree model is wrong, the explanation based on geography of the patterns of Nuclear Micronesian languages (e.g. Irwin 1992) is mistaken.

stratified tree model in Figure 2, on the other hand, has not yet been accepted completely by linguists who have studied the languages of Micronesia, as Rehg and Bender (1990:24), for instance, are cautious enough to point out that ‘[w]hether the other languages are coordinate with [Trukic and Ponapeic], or whether higher-level subgroups [as represented in Figure 2] exist within Micronesia is less certain [than whether Trukic and Ponapeic are well-defined subgroups within Micronesian]’ (also see Rehg 1995:317 for a similar point of view).

FIGURE 2. HISTORICAL RELATIONSHIPS WITHIN THE MICRONESIAN SUBGROUP OF OCEANIC



From Jackson 1983:433. Abbreviations: PMc, Proto-Micronesian; PCMc, Proto-Central Micronesian; PWMc, Proto-Western Micronesian; PTK-Pp, Proto-Trukic-Ponapeic; PTK, Proto-Trukic; PSTk, Proto-Sonsorol-Trukic; PWtk, Proto-Western Trukic; PNTk, Proto-Nuclear Trukic; PCTk, Proto-Central Trukic; PETk, Proto-Eastern Trukic; Ppp, Proto-Ponapeic; Uli, Uliian; Pua, Pulo Anna; Map, Mapian; Wol, Woleaian; Stw-Car, Satawalese-Carolinian; Pul, Puluwatese; Trk, Trukese; Mrt, Mordockese; Pon, Ponapean; Mok, Mokilese; Mrs, Marshallese; Kir, Gilbertese; Ksr, Kusaiean.

In common with others who previously commented on the family-tree theory (e.g. Bloomfield 1933:311-318; Southworth 1964; Grace 1986:1), Rehg (1995:313) also identifies the ‘use of branching trees to depict linguistic relationships’ as the major drawback of such tree models as those in Figures 1 and 2. The branchings represented in Jackson’s tree model can only be understood to have chronological significance in relative terms (Rehg 1995:314), because it is totally implausible to accept ‘the uniform parent languages and their sudden and clear-cut splittings as historical realities’ (Bloomfield 1933:311). Apart from the question as to whether PMc was a completely uniform parent language, ‘if we interpret [Jackson’s tree] as a literal model of migration patterns, then we must conclude that Micronesia was settled by a series of discrete moves through the islands, and that at each point where we identify a subgroup, there was a pause of sufficient duration to allow a unique set of innovations to develop by which we identify the subgroup’ (Rehg 1995:314) — this is what Bloomfield (1933:318) refers to as ‘sudden sharp cleavages’, whereby a parent language splits suddenly and sharply into two or more daughter languages. Rehg (1995:314) thinks that this is an unlikely scenario of the settlement of the entire region of Micronesia. As evidence for this, he makes reference to Jackson’s (1983) work on the Trukic/Ponapeic subgroup(s). Being well-defined subgroups within Micronesia by virtue of sharing a substantial number of unique innovations, Trukic and Ponapeic prove to be quite problematic in that there are several major innovations which are not due to drift or independent development, but are uniquely shared by Ponapeic and the Central Trukic languages, e.g. spirantisation and loss of PMc \*t (this is why Ppp is connected

to both PTK-Pp and PCTk by broken lines in Figure 2; see Jackson 1983:421-428 for detailed discussion).

These fundamental problems associated with the family-tree model notwithstanding, Rehg (1995:317-318) is of the opinion that ‘[t]here are ... circumstances under which family trees can be employed without distorting historical facts ... [w]hen speech communities divide from each other at a single point in time, and when they remain relatively or totally isolated, or when, if contact occurs, its effects can be discerned’ (see Rehg and Bender 1990 for such contact-induced effects in Mokilese). Rehg (1995:317-318) believes that most, if not all, higher levels of linguistic relationships within Micronesia may be of this type. He also points to the insightful works of Robert Blust, Andrew Pawley, and Malcolm Ross, who all make use of trees when and where appropriate. But, as Rehg (1995:318) himself asks, the question may then be: ‘How in our research do we determine when trees are appropriate?’ Part of the answer is, Rehg (1995:318) suggests, that the distribution of all innovations must first meticulously be tracked ‘without regard to preconceived notions of language and subgrouping boundaries’, and can then perhaps be compared with available (or competing) tree models.

Rehg’s suggestion is taken to be a call for papers to identify innovations or properties which can be utilised for an understanding of the internal relationships of the Nuclear Micronesian languages. In this paper, therefore, I will document one such property, namely the pronominal paradigmaticity of the focus and possessive pronoun systems.

The rest of this paper is organised as follows. In section 2, on the basis of Nichols (1996) I will discuss the role of grammatical evidence, especially ‘multidimensional paradigmaticity’, in the establishing of genetic relatedness. In section 3, I will review the use of the personal pronoun system in Micronesian comparative linguistics. I will also explain on the basis of Harrison (1978) why the personal pronoun system — the subject, and object systems in particular — may so far have been of little value in Nuclear Micronesian comparative linguistics. In section 4, I will carry out an ‘intersystemic’ comparison of the focus, and possessive pronoun systems, and identify a couple of innovations that may have a bearing on the validity of Jackson’s (1983) tree model. The paper closes with a brief conclusion in section 5.

## 2. Paradigmaticity as probative evidence.

Nichols (1996) argues convincingly that demonstration of genetic relationships among languages through systematic correspondences in vocabulary is not the operating procedure for the application of the comparative method. In fact, such demonstration can only be carried out by adducing ‘evidence [that] is primarily grammatical and includes morphological material with complex paradigmatic and syntagmatic organization’ (Nichols 1996:41). For example, the following segment of adjectival morphology of Latin, and Greek, as reproduced in Table 1, is regarded as such evidence in that it has what Nichols (1996:46) calls ‘multidimensional paradigmaticity’.

**TABLE 1. PARTIAL ADJECTIVAL MORPHOLOGY OF LATIN AND GREEK**

	Masculine	Feminine	Neuter
<b>Latin:</b>			
ve	-us	-a	-um
Accusative	-um	-am	-u m
<b>Greek:</b>			

Nominative	-os	(*)-ā	-on
Accusative	-on	(*)-ān	-on

The table involves two dimensions of paradigmaticity: case (nominative and accusative), and gender (masculine, feminine, and neuter). Number, if also included in Table 1, would be a third dimension. In both Latin, and Greek, the masculine, and neuter adjectival endings are identical to \*o-stem noun endings, with the feminine adjectival endings being identical to \*a-stem noun endings.

This is taken to be a fourth dimension of paradigmaticity (Nichols 1996:46). There are, in addition to the abstract paradigmaticity, phonologically specific or concrete fillers (or forms), and grammatically specific (or designated) functions for the slots in the whole paradigm in Table 1. This entire system with multiple paradigmaticity, and a degree of phonological and functional specificity can thus be seized upon to constitute a piece of probative evidence for the genetic relatedness of Latin, and Greek.<sup>5</sup>

By using conventional statistical techniques, Nichols (1996:48-56) also demonstrates painstakingly that this kind of probative evidence qualifies as what she calls ‘individual-identifying’ evidence, as opposed to ‘type-identifying’ evidence. She operationalises this distinction by means of the setting of the statistical threshold for individual-identifying, which is obtained by combining a probability of occurrence of one in a few thousand — assuming that there are a few thousand languages in the world — and a standard level of statistical significance, i.e. 0.05 or 0.01. This gives rise to the acceptable probability of 0.000 01 to 0.000 005 — one in a hundred thousand or less — for individual-identifying. Probability of individual-identifying evidence such as multiple paradigmaticity, as exemplified in Table 1, among the world’s languages is so low statistically that all languages having it must have inherited it or derived from a single source (Nichols 1996:50). Any level of probability below this threshold may not be taken to be individual-identifying, and consequently should not be used as probative evidence for linguistic relationships. Such features as verb-final word order, ergativity, nonconfigurationality, etc. fall into the category of type-identifying evidence, which cannot be interpreted to be probative of genetic relatedness (Nichols 1996:48).

At first glance, ‘personal pronouns offer a good example of a systematically structured and phonologically filled lexical field’ (Nichols 1996:54), because they may involve persons (first, second, third, etc.), numbers (singular, dual, plural, etc.), grammatical functions (focus, subject, object, possessive, etc.) and even genders (animate, inanimate, human, nonhuman, etc.). But Nichols (1996:54) hastens to sound a warning that they do ‘not yield individual-identifying probabilities of occurrence’, because ‘the forms of first and second persons, and of singular and plural numbers, are not independent; that is, in a personal pronoun system the relation of paradigmaticity to coding phonological form is nonarbitrary.’ In other words, personal pronouns are very likely to exhibit ‘their paradigmatic relationships and their deictic

<sup>5</sup> For instance, Meillet (1958:91, 97) is quoted by Nichols (1996:47) as saying (Nichols’ own translation of both quotations):

*‘Grammatical correspondences are proof, and rigorous proof, provided one makes use of the material detail of the forms and that it is established that particular grammatical forms used in the languages under consideration go back to a common source.’*

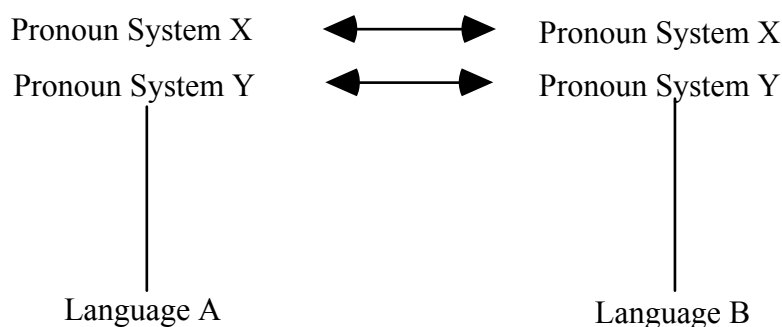
*‘While one can initially establish vocabulary resemblances between two or several languages as an indication of where to do further research, this cannot furnish a definitive demonstration; vocabulary can only orient the research, and proof comes from elsewhere.’*

semantics' by means of consonant symbolism or 'phonosymbolism'. So, 'the presence of a nasal in at least one of the personal pronoun forms is to be expected and the presence of a labial in one of the forms makes it quite likely that the other person or number form (or both) will contain a dental' (Nichols 1996:54; and [in press]). For this reason, personal pronouns may not be permitted as probative evidence of genetic relatedness (also see Meillet 1958:89-90). According to Nichols (1996), then, personal pronouns may prove to be of little practical use in detecting genetic relationships.

I would like to point out, however, that personal pronoun systems can still contribute to the establishing of internal relationships where the phonosymbolism to which Nichols refers can be kept at bay, as it were. Suppose a given group of languages are taken on the basis of other individual-identifying evidence (e.g. nominal, adjectival, verbal morphology, etc.) to form a genetic group, but their internal subgrouping details are yet to be worked out conclusively or are not well understood. Under these circumstances, since it is established at least that these languages all come from a single source there is no need to be wary of the phonosymbolism which may exist in their personal pronoun systems. The languages in question are expected to have more or less inherited the pronoun system of their parent language. And if form/function relationships in the personal pronoun system of any of these languages, (i.e. abstract paradigmaticity, phonologically specific fillers, and grammatically specific functions), cannot be traced back to the parent language, these can then be analysed as innovations for purposes of internal subgrouping.<sup>6</sup> In other words, the phonosymbolism residual in personal pronoun systems can be ignored or 'controlled' in the context of an already established genetic group, and the paradigmaticity of personal pronoun systems can safely be employed for purposes of internal subgrouping, very much as the adjectival morphology of Latin, and Greek in Table 1 has been for the genetic relatedness of these languages. This is, in fact, why linguists (e.g. Blake 1989, 1990; Ross 1996) have successfully utilised personal pronouns to carry out comparative work without ever being concerned or worried about phonosymbolism inherent in personal pronoun systems.

With phonosymbolism being 'controlled' in this way, one can proceed to establish systematic form/function correspondences that may be embodied in the equivalent personal pronoun systems across the languages in question (this can be called an intrasystemic comparison); e.g., the pronoun system X in Language A will be compared with the corresponding pronoun system X in Language B in terms of both form and function, and so on, as schematised in Figure 3 (where double-headed arrows represent the 'loci' of comparison).

**FIGURE 3. INTRASYSTEMIC COMPARISON**

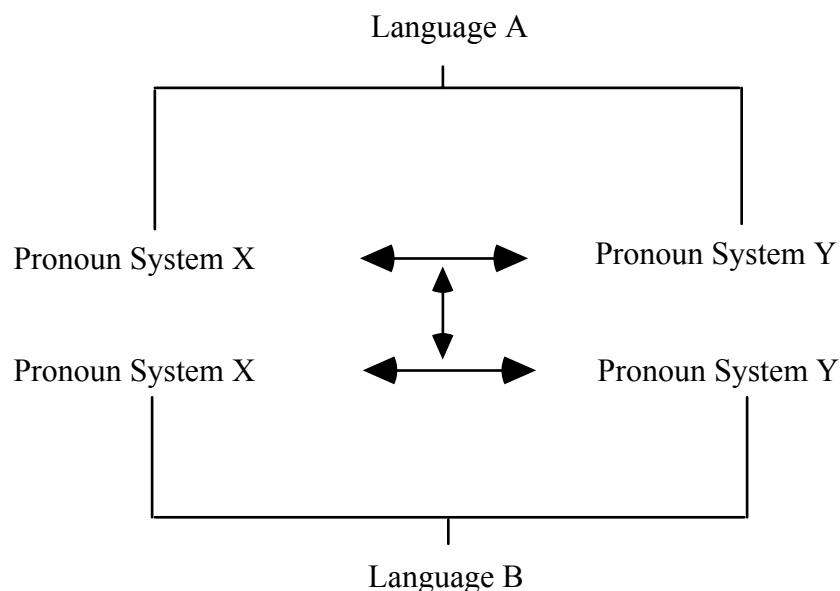


Systematic form/function correspondences cannot only be sought in the equivalent personal pronoun systems across different languages as in an intrasystemic comparison, but also across

<sup>6</sup> Needless to say, if there are forms in the personal pronoun system of any of these languages which cannot be traced back to the parent language, these forms can also be analysed as innovations for purposes of internal subgrouping.

the different personal pronoun systems in a single language. In what may be called an intersystemic comparison, the different personal pronoun systems in the same language will be compared; e.g., the focus pronoun system of Language A will be compared with the subject pronoun system of the same language in terms of both form and function, and so on, as schematised in Figure 4 (where double-headed arrows represent ‘loci’ of comparison).

**FIGURE 4. INTERSYSTEMIC COMPARISON**



This type of comparison will first be carried out for each and every one of the languages in a genetic group, e.g. A, B, C, D, and E, and then also across the languages (this is why there is also a double-headed arrow connecting the intersystemic comparison of Language A and that of Language B in Figure 4). For instance, suppose the third person singular subject and object pronouns in A, B, and C have a sequence of a consonant and a vowel in common, whereas the third person singular subject and object pronouns in D and E share a completely different sequence of a consonant and a vowel. This information may then be interpreted to be suggestive of A, B, and C being genetically closer to one another as opposed to D and E, or D and E being genetically closer to each other as opposed to A, B, and C, within the given genetic group. To put it differently, the distribution of systematic form/function correspondences in the different paradigms of the languages in question can also be taken to be potential evidence for their internal linguistic relationships.

Evidence accumulated over the past decades suggests that the Nuclear Micronesian languages are regarded as a genetic subgroup within the Oceanic group (Bender 1971, 1984; Bender and Wang 1985; Jackson 1983, 1986; Pawley and Ross 1995), although, as pointed out in section 1, the exact higher-level subgrouping of these languages has not yet been arrived at.<sup>7</sup> It will, therefore, be interesting to ascertain whether or not the personal pronoun system can be (re)scrutinised with a view to gaining an understanding of, or, more modestly, throwing some light on, the internal relationships of the languages, which possess as many as four different personal pronoun systems: focus (also known as absolute or independent), subject, object, and possessive.<sup>8</sup> This is not to say, of course, that the personal pronoun system has never been

<sup>7</sup> The evidence does not need to be belaboured here nor will it be evaluated in terms of, e.g., Nichols’s individual-identifying threshold; interested readers are referred to the references cited above.

<sup>8</sup> For the sake of convenience and comparability, I ignore here the issue as to whether the subject, and object pronouns in the Nuclear Micronesian languages are referential pronouns or ‘functionally ambiguous agreement markers’ (Bresnan and Mchombo 1987). For discussion, see Song (1994:523-547).

utilised in Micronesian comparative linguistics. Quite the contrary. Jackson (1983:357-363, 1986:205-207) studies the personal pronoun systems of a sizeable number of Nuclear Micronesian languages with this very goal in mind.

### **3. The pronoun system and internal subgrouping of Nuclear Micronesian languages**

The PMc personal pronoun system reconstructed by Jackson (1983:358-359; 1986:205-207) is reproduced in Table 2, along with the supporting data from a number of Nuclear Micronesian languages.<sup>9</sup>

Jackson (1983:357-363) draws only one inference from the data in Table 2 for purposes of internal subgrouping: the Gilbertese third person plural subject pronoun *a* reflects PEO \**da* (Pawley 1972:67), but Proto-Trukic, Ponapean, and Marshallese reflects \**re*. He then takes the form \**re* to be a PWMc innovation (Jackson 1983:362, 435; see Figure 2).

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<sup>9</sup> As can be seen in Table 2, Jackson sets up doublets for the first person plural inclusive focus, and object pronouns (\**ki(t,c)a*), the first person plural exclusive focus, and object pronouns (\**kamami*, and \**kami*), and the second person plural focus pronoun (\**kamii*, and \**kamwu*). He first points out that in the case of the first person plural inclusive pronoun \**ki(t,c)a*, the difference in the grade of the medial consonant is also reflected in other Oceanic languages (e.g. Fijian), thereby implying that the alternation between these two medial consonants may be a POc feature. He (1986:205) argues, then, that the postulation of the doublets for the second person plural focus pronoun, and the first person plural exclusive focus, and object pronouns is only confined to the focus pronoun system, because in PMc focus and object pronouns were not distinct in the plural, and because the PMc plural focus pronouns in fact functioned as object pronouns (Harrison 1978:1082). Jackson (1986:205) also draws attention to the fact that one member of each of the doublets is identical to the corresponding reconstructed subject pronoun. He interprets this to be suggestive of there having been a confusion in pre-PMc between focus and subject pronouns with the effect that subject pronouns were conscripted into service as focus pronouns by the time of PMc. In pre-PMc, then, \**kami*, and \**kamwu* were subject pronouns, whereas the other members of the doublets, \**kamami*, and \**kamii*, were focus pronouns (Jackson 1986:205).

**TABLE 2. MICRONESIAN PERSONAL PRONOUN SYSTEMS IN JACKSON (1986)**

	*PMc	Ksr	Kir	Mrs	Pon	Mok	*PTk
FOCUS							
1SG	*Nau	nga	ngngai	ñā	ngehi	ngoahi	*NaNu
2SG	*koe	kom	ngkoe	kwe	kowe	koawoa	*koe-ña
3SG	*ia	el	ngaia	e	ih	ih	*ia
1PL.INC	*ki(t,c)a	kuht	ngaira	kōj	kit-	kihs	*kica
1PL.EXC	*kamami	kitacl	-	kōmmem	kiht	-	*kaamami
	*kami	-	-	kōm	-	kam-	*kami
2PL	*kamii	-	ngkamii	komi	-	-	*kamii
	*kamwu	komtacl	-	kom3	kumw-	kamw-	-
3PL	*ira	eltahl	ngaiia	er	ir-, ihr	ihr	*ira
SUBJECT							
1SG	*ú	@	i	i-	i	@	*ú
2SG	*ko	@	ko	ko-	ke	@	*ko
3SG	*e	@	e	e-	e	@	*e
1PL.INC	*t(i,e)	@	ti	je	@	@	*Ti
1PL.EXC	*kami	@	-	@	se	@	*kami
2PL	*kamwu	@	kam'	@	@	@	*kamwu
3PL	*ra	@	a	re-	@, re	@	*re
OBJECT							
1SG	*-ai	-yuh	-ai	-eo@	-ie	@	*-ai
2SG	*-ko	@	-ko	-eok	-uhk	@	*-ko
3SG	*-a	@	-a	-e	-Ø	@	*-a
1PL.INC	*ki(t,c)a	@	-(i)ra	@	@	@	*-kica
1PL.EXC	*kamami	@	-	@	@	@	*-kamami
	*kami	@	-	@	@	@	*-kami
2PL	*kamii	@	@	@	@	@	*-kamii
3PL.HUM	*ira	@	-ia	@	@	@	*-ira
3PL.INA	*-ni	-	-	-	-	-	*-nini
3PL.BNP	*-xi	-	-i	-	-	-	*-i
POSSESSIVE							
1SG	*-xu	-k	-u	-/h/	-i	-i	*-i
2SG	*-mwu	-m	-m'	-m3	-mw	-mw	*-mwu
3SG	*-ña	-Ø, -l	-na	-n	-Ø	-Ø, -n	*-ña
1PL.INC	*-ca	-sr	-ra	-d	-t-	-s-	*-ca
1PL.EXC	*-mi	-ktacl	-	-m	-t	-m	*-mi
	*-mami	-	-	-	-	-	*-mami
2PL	*-mii	-mtacl	-mii	-mi	-mw-	-mw-	*-mii
3PL	*-(i)ra	-ltacl	-ia	-er	-Vr-	-Vr-	*-ira

Note: @ = The focus pronoun used for this function,  
 BNP = Before NPs, EXC = Exclusive, HUM = Human,  
 INA = Inanimate, INC = Inclusive, PL = Plural, SG = Singular

The Nuclear Micronesian languages have as many as four pronoun systems, thereby exhibiting a high degree of multiple paradigmaticity. Even if the distinction between inclusive and exclusive in the first person plural is ignored, the four pronoun systems (focus, subject, object, and possessive) will each have at least two dimensions of paradigmaticity: person (first, second, and third), and number (singular, and plural).<sup>10</sup> Apparently, the personal pronoun systems have been of little use in Nuclear Micronesian comparative linguistics. Why could this be so?

This question may perhaps be answered by Harrison's (1978) diachronic scenario about the Micronesian personal pronoun system. He postulates that in pre-PMc the focus pronouns all functioned as object pronouns, and that the object pronouns gradually became attracted to or fused with the verb to varying degrees (so-called verb-object attraction; also see Song 1994). So, 'the reconstructed PMc pronoun system reflects an early stage of verb-object attraction, having begun in the singular without affecting the plural forms and moving from third person to first person' (Harrison 1978:1095).<sup>11</sup>

Harrison (1978:1098) believes that the verb-object attraction process was in full swing in PMc, having been completed 'at the peripheries of geographic Micronesia', i.e. Gilbertese, and Trukic.<sup>12</sup> 'Closer to the geographic core', i.e. Kusaiean, Ponapean, Marshallese, and Mokilese, however, there seem to have been 'moves in the opposite direction' or replacement of object pronouns by focus pronouns, 'along with moves in the direction of closer morpho-syntactic binding of verb and object pronoun'. Harrison (1978:1099) suggests that what militated against the verb-object attraction process in the core of Micronesia was the spread of final vowel deletion, which gave rise to 'canonical shapes not amenable to the suffixation [or fusion] of object pronouns' to the verb. In the core of Micronesia, final vowel deletion caught up with verb-object attraction, thereby blocking further development of verb-object attraction and perhaps also setting in motion the replacement of object pronouns by focus pronouns. However in the peripheries of Micronesia (i.e. Trukic, and Gilbertese) final vowel deletion appeared only after the process of verb-object attraction had run its full course.<sup>13</sup>

What is enlightening about Harrison's scenario is that the process of final vowel deletion 'pursued' that of verb-object attraction, both beginning in the geographic core of Micronesia,

<sup>10</sup> The personal pronoun system of the Panoptic languages has an additional number, i.e. dual.

<sup>11</sup> Harrison's (1978:1081) reconstructed PMc focus and object pronouns, as reproduced below, are more or less similar to those reconstructed by Jackson (in Table 2) (but see Evans 1995:136-152, especially for lack of the first person plural and second person plural in Poc).

	FOCUS	OBJECT
1SG	*ngai	*ai
2SG	*koe	*ko
3SG	*ai	*a
1PL.INC	*ki(t',t)a	*ki(t',t)a
1PL.EXC	*ka(ma)mi	*ka(ma)mi
2PL	*kamiu	*kamiu
3PL	*ira	*ira

<sup>12</sup> In this paper, I assume that the Trukic languages are taken to have undergone no replacement of object pronouns by focus pronouns, as indicated in Table 2. This is not entirely correct, because it seems, e.g., that in Pulo Annian the plural object pronouns have been replaced by the corresponding plural focus pronouns, whereas in Woleaian the first and second person plural object pronouns have been replaced by the corresponding focus pronouns. But it is clear from a comparison of the Trukic languages that lack of formal identity between the focus and object pronoun systems is the norm.

<sup>13</sup> Harrison (1978:1099) thinks that some pressure to re-establish the earlier system is responsible for 'the drift back towards an absolute object pronoun system', although he is not sure as to what the source of this pressure is.

the eastern Carolines, and subsequently spreading outward toward the geographic peripheries of Micronesia, and that the interaction of these two processes is claimed to have a direct bearing on the extent of the replacement of object pronouns by focus pronouns. If this is a correct depiction of what happened in Micronesian linguistic history, then it may not come as a total surprise that the personal pronoun systems have not provided much insight into the genetic relationships of the Nuclear Micronesian languages, because the replacement of object pronouns by focus pronouns may, if anything, be regarded as more of an areal characteristic than a genetic one.

What about the paradigmaticity of the subject pronoun system? Does it have anything to say about the internal relationships of the Nuclear Micronesian languages? The answer seems to be no. As with object pronouns, ‘the replacement of earlier subject pronouns by focus pronouns has occurred to various extents in all M[c] languages except for [Gilbertese] and the Trukic languages’ (Jackson 1986:205); in Kusaian, and Mokilese; e.g., the focus pronoun system is used in full for subject function (cf. note 9). In fact, such a replacement is not unheard of in the context of Oceanic languages, as Ross (1988:366) points out that ‘it is probable that this replacement process has occurred many times in the history of Central and Eastern Malayo-Polynesian languages, including those of Oceania.’ But more importantly, it seems to be confined geographically to what Harrison (1978:1098) refers to as the core area of Micronesia (i.e. the replacement being complete in Mokilese, almost complete in Kusaian, and partial in Marshallese, and Ponapean). In Gilbertese and the Trukic languages (or the geographic peripheries of Micronesia), on the other hand, there is no replacement of subject pronouns by focus pronouns in evidence. This can easily be double-checked by scanning the subject and object systems across the languages in Table 2 above. Recall that the extent to which object pronouns have been replaced by focus pronouns within Nuclear Micronesian is also areally determined. There is a symmetry of varying degrees between the distribution of the symbol ‘@’ (which represents the focus pronoun being used for subject or object function) in the subject pronoun system, and that in the object pronoun system. Mokilese exhibits a complete symmetry between the two systems, Kusaian an almost complete symmetry, and both Ponapean and Marshallese a partial symmetry. In other words, the make-up, and distribution of subject pronouns in the Nuclear Micronesian languages may also not be as genetic as areal, thereby suggesting strongly that it may be injudicious to utilise the paradigmaticity of the subject pronoun system to investigate the internal relationships of the Nuclear Micronesian languages.

Since the paradigmaticity of the subject, and object pronoun systems, when looked at intrasystemically, does not yield any valuable information for possible subgroupings, one may opt for an intersystemic comparison of the focus, subject, and object pronoun systems (e.g. focus vs. subject, subject vs. object, etc.; cf. section 2). However, this also proves to be of little use, because the replacement of subject, and object pronouns by focus pronouns in Kusaian, Mokilese, and, to a less extent, Marshallese, and Ponapean is, as has been shown, more of an areal phenomenon than a genetic one.

#### **4. The focus and possessive pronoun systems**

The foregoing discussion then leaves the focus, and possessive pronoun systems to be assessed for their usefulness in the understanding of the linguistic relationships within Nuclear Micronesian. These systems also seem to provide little information for possible subgroupings, when studied intrasystemically (cf. Table 2). From the possessive pronoun system one may learn;

- (i) that in the Ponapeic languages the same form *-mw(-)* is used for both the second person singular and plural; and

- (ii) that in Gilbertese all members of the focus pronoun system occur with the prefix *ng-*, which seems to be confined to the first person singular in most of the other Nuclear Micronesian languages.

Perhaps the first piece of information may be used in support of Ponapean and Mokilese forming the Ponapeic subgroup, which has been well established in Micronesian comparative linguistics. The second point hardly bears mention as it concerns only one language. Jackson (1983:357-363, 1986:205-207) also discusses little about these systems in his subgrouping attempt. At first glance, therefore, the focus, and possessive pronoun systems are as inefficacious as the other two systems.

But there are three observations about the focus, and possessive pronoun systems that may defy this less than positive evaluation. First, all possessive pronouns are suffixes, over half of them consisting of only a single consonant. This suggests strongly that the possessive pronoun system of Nuclear Micronesian is of some antiquity. It probably was inherited from POc; the PMc possessive pronoun system in Table 2 indeed bears a very strong resemblance to Ross's (1988:112) POc possessive pronoun system in Table 3 (cf. Pawley 1972:61-75; Lichtenberk 1985:113). It may thus be fair to say at least that the possessive pronoun system is much older than the subject or object system, which is known to have been replenished, to varying extents, with focus pronouns in PMc. Second, there is no suggestion to the best of my knowledge that the possessive pronoun system has ever been replaced by the focus or any other system (see Lichtenberk 1986:62-68; Ross 1988:208; and Evans 1995: *passim* for the opposite direction of replacement in other Oceanic languages). Finally, Jackson's PMc focus pronoun system in Table 2 bears a transparent similarity to Ross's (1988:367) reconstructed POc focus pronoun system in Table 3, thereby also implying continuity between the focus pronoun system in POc, and those in contemporary Nuclear Micronesian languages.

**TABLE 3. POc FOCUS AND POSSESSIVE PRONOUN SYSTEMS IN ROSS (1988)**

	FOCUS	POSSESSIVE
1SG	*iau, *au	*-gu
2SG	*iko[e], *ko[e]	*-mu
3SG	*ia, (?) *a	*-ña
1PL.INC	*kita	*-da
1PL.EXC	*kami, *kai, (?) kamami	*-ma[m]i
2PL	*kamu, *kau, *kamiu	*-m[i]u
3PL	*(k)ira	*-di[a]

The foregoing observations call for an intersystemic comparison of the focus, and possessive pronoun systems. To this end, I present the new Tables 4a and 4b of the focus, and possessive pronoun systems in the languages — Kusaiean, Gilbertese, Marshallese, Ponapean, Mokilese, Trukese, Puluwat, Sonsorolese, Woleaian, Pulo Annian, and Ulithian — at the risk of repeating some of the information contained in Table 2.

At least five points emerge from the intersystemic comparison. First, in Gilbertese, and the Trukic, and Ponapeic languages, the paradigmatic members of the focus pronoun system have something in common with the corresponding paradigmatic members of the possessive pronoun system. For example in Mokilese the plural focus pronouns contain the plural possessive pronouns on a one-to-one basis (i.e. focus 1PL.INC *kihs* ~ possessive 1PL.INC *-s-*; focus 1PL.EXC *kam-* ~ possessive 1PL.EXC *-m-*; focus 2PL *kamw-* ~ possessive 3PL *-mw-*; focus 3PL *ihr* ~ possessive 3L *-r-*).



**TABLE 4. FOCUS AND POSSESSIVE SYSTEMS IN NUCLEAR MICRONESIAN**

	Ksr	Kir	Mrs	Pon	Mok	Trk	Pul	Sns	Wol	Pua	Uli
FOCUS											
1SG	nga	ngngai	ña	ngehi	ngoahi	gaag	nga(ang)	Na:N	gaang	ngangi	gaag
2SG	kom	ngkoe	kwe	kowe	koawoa	jeen	yeen	xere	geel	kena	xeel
3SG	el	ngaia	e	ih	ih	jiij	yiiy	i:ē	iiy	ia	yiiy
1PL.INC	kuht	ngaira	kōj	kit-	kihs	kiic	kiir	kis	giish	kisa	xiic, xa
1PL.EXC	kitacl	-	kōmmem	kiht	kam-	jääm	yææmem	xamem	gaamam	kamami	xaamami
			kōm								
2PL	komtacl	ngkamii	komi	kumw-	kamw-	jäämi	yææmi	xami	gaami	kaamii	xaamiyi
			kom3								
3PL	eltahl	ngaiia	er	ir-, ihr	ihr	jiir	yiir!	ile	iir	ila	yiir
POSSESSIVE											
1SG	-k	-u	-/h/	-i	-i	-i, -j	-y(i)	-i	-i	-i	-yi
2SG	-m	-m'	-m3	-mw	-mw	-(V)b	-mw	-m	-mw	-mwu	-mu
3SG	-Ø, -l	-na	-n	-Ø	-Ø, -n	-n	-n, -y	-ra	-l	-na	-la
1PL.INC	-sr	-ra	-d	-t-	-s-	-c	-r	-s	-sh	-sa	-ca
1PL.EXC	-ktacl	-	-m	-t	-m	-m	-mem	-memi	-mam	-mami	-mami
							-mám				
2PL	-mtacl	-mii	-mi	-mw-	-mw-	-mi	-mi	-mi	-mi	-mii	-miyi
3PL	-ltacl	-ia	-er	-Vr-	-Vr-	-r	-r!	-l	-r, -l	-ila	-yire



Second, in Kusaiean, and Marshallese as well, there is a formal similarity between the two pronoun systems in the plural, except for the first person plural inclusive. Third, what distinguishes Kusaiean from Marshallese is that in the former the second or third person singular possessive pronoun is identical to the final consonant of the second or third person singular focus pronoun, respectively, whereas this is not true of Marshallese. Fourth, Gilbertese differs from the other Nuclear Micronesian languages in that it lacks the inclusive-exclusive distinction in the first person plural throughout the personal pronoun system.<sup>14</sup> Finally, the first person singular possessive pronoun in the Ponapeic languages, *-i*, may be related formally to the corresponding first person singular focus pronoun.

But I am more inclined to think that it is a reflex of the PMc first person singular possessive pronoun *\*-xu*, as is the case with Trukic; it has derived from the vowel of PMc *\*-xu*, rather than being identical formally to the final vowel of the first person singular focus pronoun (*ngehi* and *ngoahi* in Ponapean and Mokilese, respectively). Table 5 summarises the preceding discussion.

The information in Table 5 suggests that there is a general tendency toward  $\langle [F] \text{ SG } \supseteq [P] \text{ SG} \rangle$  &  $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$  in Nuclear Micronesian. This tendency indeed ties in well with Jackson's (1983, 1986) reconstructed PMc focus, and possessive pronoun systems, which also have a formal similarity to each other in the plural, but not in the singular (see Table 2). In fact, the features of  $\langle [F] \text{ SG } \supseteq [P] \text{ SG} \rangle$  &  $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$  may well be traced further back to POC (see Table 3).

**TABLE 5. INTERSYSTEMIC COMPARISON OF FOCUS AND POSSESSIVE PRONOUN SYSTEMS**

KUSAIEAN:	$\langle [F] \text{ SG } \supseteq [P] \text{ SG} \rangle$ , except $[F] \text{ 1SG} \neq [P] \text{ 1SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$ , except $[F] \text{ 1PL.INC} \neq [P] \text{ 1PL.INC} \rangle$
MARSHALLESE:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$ , except $[F] \text{ 1PL.INC} \neq [P] \text{ 1PL.INC} \rangle$
GILBERTESE:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$ , but no distinction between INC and EXC in 1PL
PONAPEIC:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$
TRUKIC:	
Trukese:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$
Puluwat:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$
Sonsorolese:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$
Woleaian:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$
Pulo Annian:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$
Ulithian:	$\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$ & $\langle [F] \text{ PL } \supseteq [P] \text{ PL} \rangle$

Note: 'X  $\supseteq$  Y' means that Y is contained within X to varying degrees ranging from partial formal similarity to complete formal identity;

'X  $\neq$  Y' means 'X is dissimilar formally to Y';

'[F]' focus pronoun system; '[P]' possessive pronoun system;

SG = singular; PL = plural

This suggests that the feature of  $\langle [F] \text{ 1PL.INC} \neq [P] \text{ 1PL.INC} \rangle$  in Kusaiean, and Marshallese, and that of  $\langle [F] \text{ SG} \supseteq [P] \text{ SG} \rangle$ , except  $[F] \text{ 1SG} \neq [P] \text{ 1SG} \rangle$  in Kusaiean in Table 5 are post-

<sup>14</sup> Harrison (1978:1100-1101) points out that the inclusive, not exclusive, forms have been retained in the Gilbertese first person plural. This also seems to be the position of Jackson (1983, 1986).

PMc innovations. This interpretation, however, is not at all compatible with what is embodied in Jackson's tree model: Gilbertese is interposed between Kusaiean and Marshallese. Moreover, in Jackson's tree Marshallese is grouped together with Trukic and Ponapeic under PWMc; but, in Table 5, Gilbertese — with no deviation from  $\langle [F] \text{ SG} \neq [P] \text{ SG} \rangle$  &  $\langle [F] \text{ PL} \supseteq [P] \text{ PL} \rangle$  — is much closer to Trukic and Ponapeic than is Marshallese.

## **5. Conclusion.**

In this paper I have followed up two important points recently made in the literature on (Micronesian) comparative linguistics. The first is Rehg's (1995) observation that adequacy of tree models for an understanding of linguistic relationships can perhaps be determined on the basis of careful tracking of the distribution of all innovations. The second is Nichols' (1996) demonstration of the role of paradigmaticity as probative evidence for genetic relatedness. In spite of Nichols' scepticism of personal pronouns being such evidence, I have suggested that phonosymbolism of personal pronouns can be 'checked' insofar as comparative work is carried out on a given group of languages which are already known — on the basis of other evidence — to have emerged from a common source (although their internal relationships may be far from established). With these two points in mind, I have carried out an intersystemic examination of the focus, and possessive personal pronoun systems of the Nuclear Micronesian languages. The results are somewhat at odds with Jackson's (1983) stratified tree model, especially with respect to Kusaiean and Marshallese, which have one innovation in common.

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