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RELATIVE CLAUSE FORMATION IN MICRONESIAN LANGUAGES

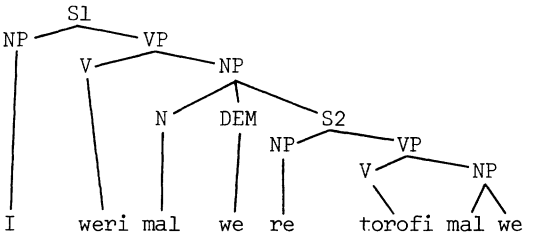
1. INTRODUCTION. This paper will concern itself with a synchronic comparison of the patterns of relative clause formation of six Micronesian languages: Woleaian (WL), Trukese (TR), Mokilese (MK), Marshallese (MR), Kusaiean (KS), and Gilbertese (GL). These languages are genetically related and distributed from west to east in the Trust Territory of the Pacific Islands.[1]

A relative clause is a sentence embedded in a noun phrase of a larger sentence in such a way that it modifies the head of that noun phrase. A head modified by a relative clause is called the antecedent of that clause. In order for a clause to be relative, its antecedent must be coreferential with an underlying noun phrase of that clause. This noun phrase is either pronominalized or deleted on the surface. For example, (1a) contains the relative clause *re torofi* 'they caught it,' whose antecedent is *mal we* 'the bird.' In the conceptual structure of the sentence, as hypothesized in (1b), the relative clause contains *mal we* as the object of the verb. The underlying *mal we* is thought to be deleted obligatorily on the surface due to its coreference with the antecedent.

(1)a. WL. I weri mal we re torofi.
I saw bird the they catch-it

'I saw the bird that they caught.'

b.



The sentences in (2) also embed a clause (in italics), but we cannot postulate any noun phrase in either embedded clause that is coreferential with any noun phrase in the main sentence. Since the coreference condition is not met, the clauses are not viewed as relative ones. They are complement clauses which are not included in the present discussion.

(2)a. WL. I giula be *re torofi mal we*.
know that they catch-it bird the

'I know that they caught the bird.'

b. GL. I aki atai bukin teraa b'a *e un*.
I not know reason what that he angry.

'I don't know why he got mad.'

Sometimes a relative clause is not dominated immediately by the node dominating its antecedent. In (3), the clause *i be liiy* 'I will kill it' is a relative one in relation to its antecedent *mal we* and a complement in relation to the clause *i tipeli* 'I want it.' Coreference, thus, applies between the object of the highest verb and that of the most deeply embedded verb in (3).

(3) WL. Ye sa weri mal we i tipeli be *i be liiy*.
he prf. see bird the I want-it that I will kill-it

'He saw the bird which I want to kill.'

When an antecedent is modified by a relative clause, its meaning is specified in certain ways.

Like adjectives and numerals, the major semantic function of a relative clause is to specify the antecedent in the sense that it restricts the referential range held inherently by the antecedent, regardless of the involvement of the speaker's presupposition. Whether an antecedent is definite or not in the sense of old or new information is not the function of a relative clause but that of certain demonstratives. Some demonstratives (e.g., WL *we*, TR *ewe*, MK *o*, MR *yew*, KS *ah* and GL *are*) definitize their antecedents in addition to specifying them. In (4), for example, the referential ranges of the antecedents (in italics) are considerably specified, but they are not definitized in spite of the presence of their relative clauses (bracketed).

(4) WL. Si be fang ngali shag *semal yaremat* [le ye gach]
we will send to-him just a person that he good
mwaremwar yeel.
lei this
'We (incl.) will award this lei to someone who is good.'

MK. Ioar *mehkij* [ma kisai kin johmwehuki].
that something that we habit. sick-with
'That is something we are usually sick of.'

Notice in the above examples that there is no demonstrative. In (5a) on the other hand, the antecedent is definitized by the presence of the demonstrative *kawe* 'those (we are talking about)'. Even if we eliminate the relative clause, the definiteness will not be affected. In (5b), the demonstrative *e* 'this' specifies the antecedent in terms of singular number and closeness to the speaker, but it does not definitize the antecedent.

(5)a. WL. *Yaremat kawe* [re sa kker] ila lai sar skuul.
person those they prf. happy (topic) Cl-my child school
'Those happy persons are my students.'

b. MK. Ngoah mwehuki *armajj-e* [ma mwehu].
I like person-this that good
'I like this person who is good.'

The discussion in this paper will cover the following topics: some characteristic processes involved in Micronesian relativization in comparison with those of English (§2), advocation of the assumption that Micronesian sentences embed not only predicational but also equational relative clauses (§3), common syntactic properties involved in Micronesian relative clause formation (§4), syntactic differences observable among the languages (§5), and a brief conclusion with some allusion to the linguistic subgrouping among the languages compared (§6).[2]

2. PROCESSES IN MICRONESIAN RELATIVIZATION. It is a common hypothesis in English relativization that there are three processes involved, i.e., (a) movement to the clause-initial position of the embedded noun phrase which is coreferential with the antecedent, (b) *relative* pronominalization of the preposed noun phrase, and (c) optional deletion of the relative pronoun in certain definable syntactic environments, such as when the pronoun is the object of the embedded verb. Thus, for example, observe the following derivational processes.

(6) I saw the bird they caught.
  ← I saw the bird which they caught.
  ← I saw the bird (the bird they caught)
  ← I saw the bird (they caught the bird)

(7) That person whose books I stole is my teacher.
  ← That person (his books I stole) is my teacher
  ← That person (I stole his books) is my teacher
  ← That person (I stole that person's books) is my teacher

(8) I know the place where he lives.
  ← I know the place (there he lives)
  ← I know the place (he lives there)
  ← I know the place (he lives at the place)

In Micronesian languages, a movement hypothesis is untenable in the first place. There is no evidence, implicit or explicit, that an embedded noun phrase is moved to the clause-initial position. Rather, there is evidence that this is not the case. For simplicity's sake, I will use Woleaian examples only, with the understanding that exactly the same

thing applies in the rest of the languages. The three English sentences (6-8) are translated as follows in Woleaian. (Underlying sentences are also given, from which the actual sentences are thought to be derived.)

(9) WL. I weri mal we re torofi.
I saw-it bird the they caught-it

← I weri mal we (re torofi mal we)

(10) WL. Yaremat la i pira yaal babiyor ila yaai sensei.
person that I steal-it Cl-his book (topic) Cl-my teacher

← Yaremat la (i pira yaal yaremat la babiyor) ila yaai sensei Cl-of

(11) WL. I giula biuleiu la ye log *iyang*.
I know-it place that he stay there

← I giula biuleiu la (ye log biuleiu la)

Woleaian has the relative marker *le* 'that' which is comparable to English relative pronouns. *Le* always comes immediately before a relative clause if both appear together. *Le* never appears, however, if the antecedent is modified by a demonstrative, hence the non-appearance of *le* in the above examples.

Now (9) does not tell us whether the embedded noun phrase *mal we* 'the bird' is deleted in its underlying position or deleted after having been preposed in clause-initial position. (10), however, shows an alternation between the construct suffix *-l* 'of' that occurs in the underlying structure and the third person possessive suffix *-l* 'his' that is manifested on the surface. The suffix *-l* 'his' is derived with the deletion of the embedded noun phrase *yaremat la* 'that person' from the construction *yaal yaremat la* 'the general object of that person.' In Micronesian languages, it is a general rule that pronominalization of the construct suffix + noun phrase results in a third person possessive suffix, as observed below.

(12) WL. metal John 'John's eyes' → metal 'his eyes'
silel sar we 'mother of the child' → silal 'his mother'
yaal yaremat la → yaal 'his general object'

In (10) pronominalization occurs because the antecedent and the embedded attribute noun phrase are coreferential.[3] Notice that the pronominalization takes place not in clause initial position but in the place where the underlying *yaal yaremat la* is located, and the pronominalized *yaal* is not moved. In (11) also, the locative pronominalization from *biuleiu la* '(at) that place' to *iyang* 'there' is effected where *biuleiu la* occurs in the underlying sentence, and *iyang* remains there without moving to the front. The evidence provided by (10) and (11) against any movement hypothesis leads us to treat (9) in a parallel manner. That is, the deletion of the embedded phrase *mal we* takes place where it is in the underlying sentence. As noticed in (7) and (8), the non-appearance of such pronominalized phrases as *his books* and *there* and the clause-initial appearance of such relative-pronominalized phrases as *whose books* and *where* certainly justify the movement hypothesis for English. This, however, is not the case with Micronesian languages.

Secondly, there is no evidence in favor of a hypothesis of relative pronominalization in Micronesian languages. English *who*, *whose*, *whom*, *which*, and *where* reflect the syntactico-semantic features of the coreferential embedded noun phrase. Obviously, this fact partly motivates the hypothesis of relative pronominalization in English. On the other hand, there is no indication that Woleaian *le* and the relative markers of the other Micronesian languages in question contain any of the syntactico-semantic features of the embedded noun phrase which is coreferential with the antecedent. Besides, as we have observed, certain embedded noun phrases are pronominalized (not as relative pronouns) and remain on the surface (e.g., *iyang*). So far as such noun phrases are persistent on the surface, there is no input upon which relative pronominalization is to be operative. It seems to me, therefore, that the main function of a relative marker is that of a conjunction and not that of a pronominal at least in present Micronesian languages. It merely conjoins an antecedent and its relative clause. If no ambiguity arises, it is frequently not introduced, as will be seen later. This may correspond to the third process in English, i.e., optional deletion of the relative pronoun.

Thus, the processes relevant to Micronesian relativization are (a) Equi-NP pronominalization/deletion and (b) relative marker insertion/deletion. It would be interesting to discuss whether Equi-NP pronominalization and Equi-NP deletion are to be ordered or not, and whether a relative marker is to be introduced in the underlying structure or through transformation, but such problems will not be touched in the present paper. Incidentally, Schwartz (1971:150-51) points out, based on an observation of a limited number of languages, that VSO and SVO languages have the tendency to move WH-forms to clause-initial position. However, Micronesian languages, which fall somewhere between VSO and SVO (but closer to VSO if I am not mistaken), neither have pronominals of the WH sort nor allow any movement of embedded elements, as observed thus far.

3. ARE THERE EQUATIONAL RELATIVE CLAUSES? Two types of major sentences are recognized in Micronesian languages: predicational and equational. A predicational sentence involves a verbal predicate, whereas an equational sentence involves a nominal predicate. Accordingly, the former may have in its verb phrase such elements as tense/aspect morphemes and a predicational marker (or subject marker: s.m.), which the latter lacks. Observe the following examples and notice the structural differences as well as semantic peculiarities of the two types of sentences.

(13) *predicational* WL. *Sar kawe re sa lag iiya*?
child those they prf. go where
(s.m.)
"Where have those children gone?

equational WL. *Laumw sar kawe*?
child-your child those
'Are those children yours?'

Thus, an equational sentence is in general a sequence of two noun phrases, one identifying or predicating the other. The normal order here is that the subject follows the predicate unless the subject is a personal pronoun or focused.

There is no doubt that all the Micronesian languages compared have relative clauses of the predi-

cational type, as we have observed in the examples given thus far. Now the problem is whether the bracketed part of each sentence below may be considered a relative clause with the italicized phrase as its antecedent or simply a noun appositive to the italicized phrase.

(14) WL. Ye gangin *mai kawe* [gelai].
he eat-it breadfruit those food-my

'He ate those breadfruit of mine.'

TR. Aa ̀ani *eney kkewe* [maay].
he-prf. eat-it food-my those b.f.

'He ate those breadfruit of mine.'

MK. Ih kang-la *koanoai* [moai]-*ok*.
he eat-up food-my b.f.-those

'He ate those breadfruit of mine.'

MR. Ye-har kagiy *may kew* [kijé̀h].
he-prf. eat-pl.obj. b.f. those food-my

'He ate those breadfruit of mine.'

KS. *Oak* [okuh-k] *ah* ac som nuh Kuam.
canoe canoe-my the will go to Guam

'Those canoes of mine are going to Guam.'

GL. *Waa ake* [nima waa akekei] a tabe n nako Kuaam.
canoe those 5 canoe those they are particle going Guam

'Those five canoes will go to Guam.'

To mention the conclusion first, I propose that the bracketed parts in the above examples be treated as equational type of relative clauses with the italicized parts as their antecedents. This proposal is based on the following observations, all of which indicate parallelism between the pattern of predicational clause formation and that of the assumed equational relative formation. For a similar proposal for Ulithian, see Sohn and Bender (1973:§4.5.3 & §4.9.4).

First, in all the languages compared, predicational and assumed equational relative clauses take the same position with regard to the antecedent and the demonstrative modifying the antecedent, as illustrated below.

(15) WL. *predication* Ye sa weri *shoabut we* [ye sa tang].
he part see-her girl the she past
cry

'He saw the girl who cried.'

equation Ye sa weri *shoabut we* [laiul].
child-his

'He saw the daughter of his.'

KS. *predication* *Mwet* se [ma eltahl uniyah] *ah* pa
man a who they killed the (focus)

Sohn.
John

'The man who they killed is John.'

equation *Oak* [luhmkoe] *ah* ac som nuh Kuam.
canoe 5 the will go to Guam

'The five canoes are going to Guam.'

Second, in languages like WL and MR, the relative marker may appear before assumed equational clauses in the same way as with predicational relative clauses. In (16), the relative marker is obligatory in the WL sentence, but optional in the MR case.

(16) WL. *Yaremat ka* [lai] *le* [selimel] ila sar skuul.
person these child-RM 3-animates (topic)
my

'These three children of mine are students.'

MR. Ye-har kagiy *may kew* (mey) [kijėh].
RM

'He ate those breadfruit of mine.'

Kusaiean is an exception in that the relative marker *ma* which may appear before a predicational relative clause is not allowed before an assumed equational clause. Thus, we notice the different degrees of allowance of a relative marker before an equational clause. Probably, the Kusaiean case may be viewed as obligatory deletion (or non-occurrence) of the relative marker in the equational context.

Third, in the languages (e.g., WL and GL) where the set of demonstratives appearing before a (predicational) relative clause are distinct formally from the set of demonstratives appearing elsewhere, only

the former set are allowed before an equational clause, as illustrated in (17).

(17) WL. *predication* *kook mwu* [ye gach] 'that coke which is good'

equation *kook mwu* [iuliumemw] 'that coke which is yours'

Cf. kook mwuul 'that coke (near you)'
*kook mwu
*kook mwuul ye gach
*kook mwuul iuliumemw

GL. *predication* *waa ake* [raoiroi] 'those canoes which are good'

equation *waa ake* [nimawaa] 'those canoes which are five'

Cf. waa akei 'these canoes here'
*waa ake
*waa akei raoiroi
*waa akei nimawaa

Fourth, in Mokilese, the relative marker may incorporate in itself the antecedent before both predicational and equational clauses, as illustrated below. // marks the subject-predicate boundary.

(18) MK. *predication* Ngoah // *ma* [wahdo mwingehu].
I one-who bring-hither food-that

'I am the one who brought that food.'

equation Rien John jeripeinno // *ma* [pahien
sibling-of-girl-that spouse-of

doaksoahn wai wadwadmen].
doctor-of foreign famous-a

'John's elder sister is the (one who is the) wife of a famous American doctor.'

Fifth, in a multiple relative construction in Woleaian where more than one relative clause modifies one and the same antecedent, the relative marker *le* appears before clauses of both predicational and equational types. In (19), the second relative clause is of the equational type, and the third of

the predicational type. Notice that both these clauses are preceded by the relative marker *le*.

(19) WL. Ye toar *mele* [i guila] [*le* terel]
it not-exist ANT-the-thing I know-it cause-its

[*le* ye sa wegiteg tipel shoabut we].
it prf. subside feeling-of girl the

'I don't know the way how he could persuade the girl.'

Sixth, in a language where a demonstrative is required in principle if a noun phrase is the antecedent of a (predicational) relative clause, the same constraint seems to apply to the antecedent of an equational type of clause.

(20) KS. *predication* El use *won se* [ma kahskahs oahna
he bring bird a which talk like

mwet uh] *ah*.
man the the

'He brought a bird which talks like a man.'

equation *Kosro ngalnguhl soko* [nuhtik] *ah*
dog one Cl-my the

arlac kuh.
very strong

'This dog of mine is very strong.'

GL. *predication* Bon anne *te b'ai ae* [ti aoaoraki
it's that the thing this we sick

iai].
of

'That is something we are usually sick of.'

equation Taiaoka rooko nakou *te um'a ae*
Please come to the house this

[um'au].
house-my

'Please come to this house of mine.'

Seventh, in Micronesian languages there are constructions which may be viewed as purely appositive,

as illustrated in (21). Such constructions must be handled differently from the assumed equational type of relative clauses. An attempt to handle them within a single frame of apposition would complicate the grammar to a considerable extent in view of the peculiarities in the semantic and syntactic differences between the two sets.

(21) WL. gelai mai 'my breadfruit'

TR. eney maay 'my breadfruit'

MK. koanoai moai 'my breadfruit'

MR. kijẻh may 'my breadfruit'

KS. mos nak 'my breadfruit'
oak luhmkoe 'five canoes'

GL. kanau mai 'my breadfruit'
nimawaa waa 'five canoes'

Eighth, since we have two major types of simple sentences in all the Micronesian languages as stated in the beginning of this section, it is theoretically reasonable to recognize the same two types of relative clauses, since in theory the underlying structure of a relative clause itself is that of a complete simple sentence.

Finally, if we assume the existence of equational relative clauses, we can simply apply the two processes we have postulated in §2, i.e., Equi-NP deletion and relative marker insertion/deletion, to equational relativization. Then, the sentences in (14) are considered to have been derived from the following underlying structures.

(22) WL. ← Ye gangin mai kawe [gelai mai kawe]

TR. ← Aa åni eney kkawe [maay eney kkewe]

MK. ← Ih kang-la koanoai [moai koanoai-ok]-ok

MR. ← Ye-har kagiy may kew [kijẻh may kew]

KS. ← Oak [luhmkoe oak ah] ah ac som nuh Kuam

GL. ← Waa ake [nimawaa akekei waa akei] a tabe n nako Kuaam

Notice that the deleted embedded noun phrases all take the subject position, i.e., the second position in an equational sentence in the underlying struc-

ture. This is the common (probably the only) pattern of equational relativization.[4]

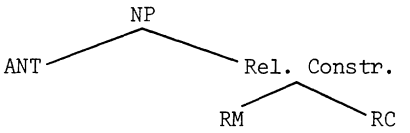
4. SYNTACTIC ASPECTS IN COMMON. Since the languages compared belong, genetically, to the so-called nuclear group of Micronesian languages, they have many typological features in common with regard to relative clause formation. Some general syntactic aspects shared by the languages have been alluded to in the preceding sections. Some more specific common aspects will be discussed briefly in what follows.

First of all, all the languages have relative clauses of the [NS] NP type, i.e., a relative clause always follows the antecedent. This may be a predominant pattern of the languages of the prepositional type, as implied in "Universal 24" in Greenberg (1966:90-91).

Another characteristic is that all the languages in question place the relative marker, if it appears at all, immediately before the relative clause. Again, this may be universal to relative clauses of the [NS] type, as pointed out in Schwartz (1971:139-44). The following sentence illustrates this fact.

(23) MK. Ngoah kangla *mwingehu* [*ma koah kihdoahng ngoahi*
ANT RM RC
I ate food that you gave-to me
aio].
yesterday
'I ate the food you gave me yesterday.'

Thus, the basic structure of a relative clause in Micronesian languages is: ANT + RM + RC. It seems that RM is more closely related to RC than to ANT in that appearance of RM is conditioned by the presence of RC. Besides, as we have seen in (19), the relative marker may be detachable from the antecedent but not from the relative clause. Therefore, the relevant tree would be of the form:



In Woleaian, the relative marker *le* never shows up if there is a demonstrative, which brings up the question as to whether *le* is in complementary distribution with a demonstrative or whether it follows or precedes a demonstrative in underlying structure and is deleted on the surface. It can be said that the position of *le*, even though it is not realized, is still after the demonstrative in view of the evidence from the other Micronesian languages. Ulithian, which is the language most closely related to Woleaian, maintains the relative marker *lá* after a demonstrative as shown below.

(24) Ulithian. Ye mommay yengaang le [*lá* John ye feoruy].
it good work this that he did-it

'This work which John did is good.'

A third characteristic in common is that relative markers seem to be tending to lose their grounds for existence. As already mentioned, their function tends to be limited to that of conjunction only. And that in many cases, their presence is syntactically redundant--to say nothing of their meaning, if any. Therefore, they frequently do not appear, obligatorily or optionally. They are invariant, not being syntactically or semantically oriented toward the function of either the antecedent or the embedded noun phrase which is coreferential with the antecedent. The fact that a relative marker is semantically (nearly) empty may be illustrated in (25) where the presence or absence of *mey* does not bring in any meaning difference (Bender 1969:165-67).

(25) MR. Ye-har lew jet libbiqey [(mey) jéyjah].
he-past see some shell which rare

'He found some shells which are rare.'

A fourth characteristic in common is that, while relative markers are losing syntactic significance, demonstratives with their highly developed system are gaining an important role in relative clause formation. A demonstrative provides the antecedent

with definiteness and specification of number and deixis, in addition to other features. Since the relative marker does not appear frequently, particularly when there is a demonstrative, a demonstrative occurring with a relative clause takes on the function of relating the clause to the antecedent. In Woleaian and Gilbertese, a preclause demonstrative has a shape different from one with other functions. In these languages, therefore, the function of a demonstrative as a relative marker is even stronger. In languages like Kusaiean, when a noun phrase has a relative clause in it, one of the demonstratives must be used (Lee 1975), as illustrated in (20). Observe the following examples where demonstratives function as if they were relative markers.

(26) WL. *Yaremat we* [re liiy] ila John.
ANT DEM they kill-him
that

'The man whom they killed was John.'

TR. *Ewe mwȧȧn* [re nniiy] iiy John.
DEM ANT they kill-him he
that person

MK. *Woall-o* [arai kojukdi] ioar John.
ANT DEM they killed (topic)
person that

MR. *L'e-yew* [re-har m̀an-ey] ye-j Jawan.
ANT DEM they-past kill-him he-prog.
person that

KS. *Mwet se* [eltahl uniyah] *ah* pa Sohn.
ANT they killed DEM (topic)
person a the

GL. *Te mm̀aane are* [a tia ni kamatea] bon Tiaon.
ANT DEM they already kill-him was
the man that

A fifth characteristic is that the same pattern of coreference prevails in all the languages compared. That is, the embedded noun phrase which is coreferential with the antecedent may be the subject, direct or indirect object of the verb, object of the preposition, attribute of a noun phrase, or an adjunct (oblique case) in the relative clause. Moreover, basically the same Equi-NP deletion pattern is shared by these languages. That is, the embedded noun phrase in the relative clause is

suppressed when coreferential with the antecedent. These facts are illustrated below.

When the subject of an equational relative clause is coreferential with the antecedent, it is deleted without any reflex of it remaining within the clause. The only member of the clause left out on the surface, therefore, is the predicate noun phrase, as discussed in §3.

When the subject of a predicational relative clause is coreferential with the antecedent, it is generally deleted. For exceptional cases with MK and KS, see §5. In certain languages, the subject (or predication) marker is also deleted, as we will observe in §5. The sentence in (27) illustrates the subject deletion common to all the languages compared.

(27) GL. *Aomata akeke* [a kukurei akekei] boni kaiin au
person those they happy there are group my
reirei.
school.
'Those happy persons over there are my students.'
← Aomata akeke [*aomata akekei* a kukurei akekei] boni au reirei.

When the direct or indirect object of the verb in a predicational relative clause is coreferential with the antecedent, it is deleted, with the object suffix of the verb, if any, intact. In all these languages, if a relative clause contains both the direct and indirect objects of the verb, the object suffix of the verb always agrees with the indirect object, regardless of the coreferentiality with the antecedent. The sentence in (28) contains only one object, while those in (29a) and (29b) each have two objects, direct and indirect. (29a) illustrates an antecedent being coreferential with the direct object and (29b) an antecedent being coreferential with the indirect object. Notice in (29b) that the object suffix *-y* in *ganneey* 'give him' agrees with the underlying indirect object in the embedded clause, i.e., *yaremat la*.

(28) WL. Yaremat we [re liiy] ila John.
kill-him

'The man whom they killed is John.'

← Yaremat we [re liiy *yaremat we*] ila John

(29)a. WL. Ye log *seliuw buk* [*le* i be gennag].
it stay 3 book that I will give-you

'I have three books to give to you.'

← Ye log seliuw buk [le i be gennag *seliuw buk*]

b. WL. *Yaremat la* [i be ganney buk we laiu] ila
that give-him tomorrow

merayerai
friend-my

'That person whom I shall give the books to tomorrow is my friend.'

← Yaremat la [i be ganney *yaremat la* buk we laiu] ila merayerai

When the object of a verb-like preposition in a relative clause is coreferential with the antecedent, it is deleted, with the object suffix of the preposition intact. The sentences in (30) illustrate this.

(30) TR. *Ewe mettȯȯch* [John aa mmwus-ää̇seni] ooch apen.
that thing prf. vomit with-it some apple

'That which John vomited is a piece of apple.'

← Ewe mettȯȯch [John aa mmwus-ää̇seni *ewe mettooch*] ooch apen

MR. *Men yew* [ye-kkay ham nahginmėj yakey] ṅey.
thing that it usual our(excl) sickness about-it that

'That is something we are usually sick of.'

← Men yew [ye-kkay ham nahginmäj yakey men yew] nėy

Notice in the above MR sentence that *men yew* is the object of the verb-like preposition *yakey*, which is not related to the embedded main verb *kkay* 'be usual' but to the still more deeply embedded *nahginmėj* 'be sick.' The construction *ham nahginmėj*

yakey (men yew) 'our being sick with it (that thing)' is a nominalized clause which functions as the embedded subject. As mentioned in Section 1, coreference is operative between an antecedent and a noun phrase quite deeply embedded. This is a general phenomenon common to the Micronesian languages compared.

When the attribute (or possessor) of a noun phrase is coreferential with the antecedent, it is deleted, with the concurrent change of the construct suffix 'of' to a third person possessive suffix, as discussed in §2. Here are some more examples.

(31) TR. *Enaan mwáán [meyi* minefé néwún ppwuk] neyiy
that guy that new Cl-his book Cl-my

chóón sukun.
person-of school

'That guy whose book is new is my student.'

← Enaan mwáán [meyi minefé néwún *enaan mwáán*
of
ppwuk] neyiy chóón sukun

MK. Noai jeripeinn-o painki *woall-o* [*ma* jamah-*u*
Cl-my daughter-the marry man-the that father-his

koapwoahpwoa].
rich

'My daughter married that man whose father is rich.'

← Noai jeripeinn-o painki woall-o [ma jeme-*n*
woall-o koapwoahpwoa] of

KS. *Tuhlihk muhtwahn se* [*ma* Tuhlwen el kihnisyac
girl a that he pinched leg-her

niyahl] *ah* tuhngyak.
the began-crying

'The girl whose leg Tuhlwen pinched began to cry.'

← Tuhlihk muhtwahn se [ma Tuhlwen el
kihnisyac niye*n tuhlihk mutwahn sac*] ah
tuhngyak

The above pronominalization in a relative clause, i.e., construct suffix 'of' + noun phrase (or

attribute) → third person possessive suffix, takes place whenever the coreference condition is met irrespective of the function of the head noun of the attribute (i.e., the noun to which the construct suffix is suffixed). In (31), the TR and MK sentences illustrate the case where the head of the attribute (*nèwů-* and *jamah-*) is the subject of each relative clause, while the KS sentence gives an example where the head (*niyah-*) is the object of the verb in the relative clause. In the sentence in (32), the head of the attribute is the adjunct (or oblique case) of the relative clause.

(32) TR. Ina ena *mettóóch* [si sowu semmwen ree*n*].
that that something we habit.sick at-its
'That is something we are usually sick of.'
← Ina ena mettóóch [si sowu semmwen ree*n* *mettóóch*] of

When the whole adjunct (or oblique case) is coreferential with the antecedent, there appears a discrepancy among the languages concerned. This will be discussed in §5. Except for this and some MK and KS (§5) cases, what we have discussed so far with regard to coreference may be formularized as follows, which is considered to apply to all the languages concerned.

Equi-NP pronominalization/deletion (Obligatory Rule)

$$\underbrace{[NP_i\ [...}_{1}\ \underbrace{\left[\begin{array}{l}\text{construct suffix} + \quad NP_i \\ \qquad\qquad\quad [\alpha\ \text{pl. hum.}] \\ NP_i\end{array}\right]}_{2}\ \underbrace{...]_S\ ...]_{NP}}_{3}$$

$$\rightarrow\ 1 + \left[\begin{array}{c}\text{3rd per. } \alpha \text{ pl. poss. suffix} \\ \emptyset\end{array}\right] + 3$$

The syntactic feature [α pl. hum.] is required, because if an attribute is plural and human the third person possessive suffix takes the plural form, and otherwise it takes the singular form, as observed below.

(33) WL. metal yaremat we 'the person's eyes'
→ meta*l* 'his eyes'
metal yaremat kawe 'those people's eyes'
→ metaa*r* 'their eyes'

A sixth characteristic in common is that these languages apply the same processes of Equi-NP pronominalization/deletion to both relativization and topicalization or focus. Observe the parallelism between the two sentences in (34).

(34) *relativization* WL. mwal we [ye ffeo yaal buk]
'the man whose book is new'
← mwal we [ye ffeo yaal mwal we buk]

topic./focus WL. Mwal we ila/mele ye ffeo yaal buk.
top. foc.
'As for the man, his book is new./ It is the man that his book is new.'
← Mwal we ila/mele [ye ffeo yaal mwal we buk]

Finally, the process of adjectivization is similar among the languages compared. A relative clause whose coreferential (or controlled) noun phrase is deleted as the subject and whose main verb is of the descriptive (or adjective) type and is the only member of the clause may optionally be reduced to an adjective construction. The processes involved are (a) deletion of the relative marker, (b) deletion of the predication (or subject) marker or personal pronoun, and (c) movement of the demonstrative modifying the antecedent to the position immediately after the embedded verb. (35) illustrates these processes.

(35) MK. Ngoah mewhuki armajj-e [ma ih mwehu].
I like person-this who he good
'I like this person who is good.'
→ Ngoah mwehuki armaj mwehu-e.
this
'I like this good person.'

The above characteristics are certainly not exhaustive. There may be many more yet to be discovered.

5. SYNTACTIC DIVERGENCE. Along with a number of syntactic aspects in common among the languages

compared, we also notice many syntactic differences among them with regard to relative clause formation. In the following we will limit ourselves to a discussion of relative markers, demonstratives, subject markers (or pronouns), pronominalization, and equational relative clauses.

Obviously, the four languages, WL, MK, MR and KS, each have an invariant word as a relative marker as follows.[5]

(36) WL. le   MR. mey
     MK. ma   KS. ma

Notice the appearance of these relative markers in the sentences in (37).

(37) WL. I tipeli semal yaremat [le ye gach].
    want-it 1 person that he good

    'I like a person who is good.'

MK. Ngoah mwehuki emen armajjok [*ma* mwehu].
    I good-with 1 person-those that good

MR. Yi-keṅahan harmėj r̈et yeṅ [mey ye-ṁṁan].
    I-like person kind that that he-good

KS. Nga luhngse mwet se [*ma* wo] uh.
    I like man a that good the

All these markers have a common function, i.e., that of conjunction, and their semantic content is negligible. Gilbertese, on the other hand, does not have any word which may be called a relative marker, as observed below.

(38) GL. I tatangiriia aomata akana [a raraoi].
    like-them person those they good

    'I like those persons who are good.'

In Trukese, *meyi* and *minne* are the words which might be considered the relative markers, although no agreement seems to have been reached among scholars on the status of these words. Dyen (1965:13-28) for example, calls *meyi* a particle functioning as a noun and *minne* a relative. Goodenough and Sugita (personal communication) call *meyi* a stative marker and view *minne* as a possible relative marker. *Meyi*

seems to function like a relative marker comparable to those in (36) in the sentences below.

(39)a. TR. Ese wor pecheriyen John *meyi sine kkapasen*
it-not exist relative-of John one-who know

Ingenes.
speech-of English

'John doesn't have any relative who can speak English.'

b. TR. Nupwen ekkewe semiriit raa nó pénché, iir *meyi*
when those children they go toilet they ones-

sowu tèntú péwúúr?
who habit. clean hand-their

'When the children go to the toilet, do they usually clean their hands?'

c. TR. Wú saani emén aramas *meyi (aramas) èèch.*
I like 1 person one-who good

'I like a person who is good.'

In spite of the above relative-like function, *meyi* has some unique features which are not shared by the relative markers in (36). First of all, *meyi* may not be followed by a predication (or subject) marker or a tense aspect particle. Secondly, a demonstrative may modify *meyi* to make it specific and/or definite, as in (40).

(40) TR. Sipwe niffang eey mwaramwar ngeni iyé *ewé meyi*
we-will give this lei to who that one-

èèch.
who good

'We will award this lei to someone who is good.'

Third, *meyi* itself always functions as the subject of the following verb. No other noun is allowed as the subject. For example, *meyi sine kkapasen Ingenes* 'one who knows English' is grammatical but **meyi ewe yaremat sine* 'one whom the person knows' is ungrammatical. Fourth, *meyi* seems to have its own semantic content which is different from conjunctive meaning, i.e., 'one (who),' 'ones (who),' 'one (which)', etc. Since this is the case, it may freely appear as an initial element or the head of a noun phrase.

(41)a. TR. *Meyi wor reey* wṳ́nṳ́ngə́t ppwuk wṳ́pwe ngoanuk.
exist at-my 3 book I-will give-you

'I have three books to give to you.'

b. TR. Ngaang *meyi semmwen.*

'I am sick (or a sick one).'

In (41), *meyi*, together with *wor reey* or *semmwen*, forms the predicate constituent of the equational sentences. From these observations, it seems that *meyi* is a defective noun (or pronoun) which functions as the subject antecedent of a nominalized clause. It is defective in that it does not appear without a following clause. The nominalization of the clause is allowed only when the subject is co-referential with *meyi* and there is no tense-aspect morpheme. In the sentences in (39), it seems to me that the noun phrase preceding *meyi* and *meyi* itself are in apposition rather than in an antecedent-relative marker relation. Thus, *meyi* is not a relative marker.

As for *minne*, Sugita (personal communication) shows its possible function as a relative marker in the sentences below.

(42) TR. *Ewe ə̀ə̀t* [(minne) inan we aa mə̀ə́-nó] iiy emə̀n
the boy that mother-she-prf die he 1
his that

nə̀wun pwiiy we.
son-of brother the
-my

'The boy whose mother is dead is a son of a brother of mine.'

TR. Ina *ewe iimw* [(minne) ó̀sun we aa ə̀ssinó reen ewe
that the house that roof-its the it- blown by the
prf.

tayifuun].

'That is the house whose roof was blown off by the typhoon.'

As in the case of the relative markers of the other languages, *minne* may optionally be deleted without any change in meaning, and its major function, at least in the above sentences, is to connect the

relative clause with the antecedent without itself having any noticeable semantic content.

Another divergence with regard to relative markers is found in their syntactic uses. The relative markers do not always occur in relative constructions. The pattern of their appearance is different from language to language. In general, MK, MR and KS allow the relative marker to appear in much broader contexts than WL and TR. MK and KS share a similar pattern in the use of the relative marker. Let us observe this more closely in terms of a few relevant syntactic environments.

A relative marker is allowed before an equational clause in MR and WL, but not in the other languages. See Section 3 for the examples. In all the languages but TR and GL, a relative marker may appear before a predicational clause whose coreferential noun phrase may have any function--subject, direct or indirect object of the verb, prepositional object, attribute, or adjunct. In TR, however, the relative marker *minne* may appear only with a clause where the coreferential noun phrase is the attribute of a noun phrase, as we have seen in (42) and (43). Remember that GL does not have a relative marker.

A relative marker may appear with a demonstrative that modifies the antecedent in TR, MK, MR and KS, but not in WL. Observe the sentences in (43).

(43) WL. Sar mwal *la* [(**le*) ye bel mwongo] ila semal
child male DEM he will eat (topic) 1

rebiuleiu kaiy.
person-place here

'The boy who is going to eat is one of my neighbors.'

TR. *Ewe* a̱a̱t [(*minne*) itan Taro] e mwocen cuuruk.
DEM boy his name he want see-you.

'The boy whose name is Taro wants to see you.'

MK. Jerimweinn*o* [*ma* pirin ken mwinge] (ih) emen in
boy-that (DEM) that will then eat he 1 of

noai piriennok.
my friend-those

MR. L'adik *yew* [(*mey*) ye-j yiten m̍egay] ye-j m̍ettan
boy DEM he-prog. go eat he part-of

harme̍j ran̍ey yitir̎i-h.
people those near-me

KS. Tuhlihk se [*ma* ac mongo] *uh* sie sin mwet tuhlan
child a will eat DEM one of people neigh-

luhk ah.
bor my the

GL. Te ataei ni mm'aane *ane* [(*) nangi tabe n
the child of boy that (DEM) will -ing of

am'arake] boni kaain rarikiu.
eat is live near-my

In MR and TR, a relative marker is optionally deletable in all cases (see (43) for example). In MK and KS, it is a general rule that the relative marker must appear before a predicational clause if the coreferential noun phrase is the subject. (43) illustrates this. In all the other cases, MK and KS allow it to be deleted optionally. In WL, the relative marker *le* must be introduced, in general, when the antecedent is not modified by a demonstrative, and it is not deletable.

Differences also appear in the use of antecedent-modifying demonstratives. As briefly mentioned elsewhere, WL and GL both have two sets of demonstratives, one set occurring only before a relative clause and the other elsewhere. The former set has both spatial and mental reference of deixis, while the latter has only spatial reference with emphasis of location. For example, WL *ye* 'this' appears only before a relative clause as in *sar ye ye gach* 'this good child,' while *yeel* 'this here' elsewhere as in *sar yeel* 'this child here.' In the same way, GL *ae* 'this' appears only before a relative clause, while *aio* or *aei* 'this here' elsewhere. So far as my data indicate, the rest of the languages do not show the same kind of alternation. In Trukese, there are two sets of demonstratives which are formally distinct but without difference in meaning. For example, *ewe* vs. *we* 'that,' and *ekkewe* vs. *kkewe* 'those'. The demonstratives with initial *e-* occur only before the noun they modify, whereas those without it only after. In Trukese, if a demonstrative modifies an attributive construction, it necessarily follows it,

otherwise it always precedes the modified noun. Thus, the two Trukese sets depend not on the presence or absence of a relative clause but on the morphological structure of the word they modify, as in *ewe mwaan* 'that man (we are talking about),' *waan we* 'that canoe of his,' and *waan ewe mwaan we* 'that canoe of that man.'

Still another divergence is found in the position of a demonstrative in relation to the relative clause and its antecedent. Three different sets of relative order between the demonstrative and the rest are observable: (a) demonstrative between antecedent and relative clause, (b) demonstrative before both, and (c) demonstrative after both, as in:

(a) ANT + DEM + RC
(b) DEM + ANT + RC
(c) ANT + RC + DEM

As we discussed in §4, the relative order between an antecedent and the relative clause is fixed throughout the Micronesian languages, i.e., ANT + RC. It is DEM which has the freedom of occurrence in different positions. The (a) order is predominant in that a majority of geographically separate languages follow it. WL, MR and GL belong to the (a) order in both predicational and equational relative constructions, as observed below.

(44) predication WL. Ye gachiur *shoa ka re gachiuw.*
like-them people these they like-him
ANT DEM RC

'He likes people who like him.'

MR. Ye keḣahan *harṁėj r̈et yeḣ ye-yiyaqey*
like people kind the he-love
ANT DEM RC

yėy.
him

GL. E tangiriia *aomata ane e tangiria.*
like-them people those they like-him
ANT DEM RC

equation WL. Faal pesheemw nge go be buu tog mwo
under feet-your but you will come

reel *imw ye imwei.*
just to house this Cl-my
ANT DEM RC

MR. Jẹ̀wij yim yiteq gan *ṁi-yin yiṁẹ̀h.*
kind & come to house-this Cl-my
ANT DEM RC

GL. Taiaoka ma rooko nakou te *um'a ae*
please but come to the house this
ANT DEM

um'au.
Cl-my
RC

MK belongs to the (a) order in predicational relative constructions, as illustrated in (45).

(45) MK. Ih kin mwehuki *armaj-koa ma kin mwehuki ih.*
he habit. good-with person the who him
ANT DEM RC

TR belongs to the (a) order only in equational relative clause construction of the type in which the antecedent is an attributive construction. If the antecedent is other than an attributive construction, it belongs to the (b) order, as we will see shortly.

(46) TR. *Ẉṅṁomw na kkok* e-se pat.
drink-your that coke it-not cold
ANT DEM RC

'That coke of yours is not cold.'

The only member that belongs to the (b) order is TR. Except for the type of equational construction illustrated in (46), this order is the only possible way in both predicational and equational constructions in TR, as shown below.

(47) TR. *predication* Aa saani *ekkewe aramas re pwan*
he-prf. like-him those person they
DEM ANT

saani.
also like-him
RC

'He likes people who like him.'

equation A'yitingeni *ekkena nimmèn iik*
pass-him those 5 fish

wùnùkkumw.
beside-your

'Pass him those five fish (which are) near you.'

KS is the language typical of the (c) order, while MK floats between the (a) and (c) orders. In both types of relative constructions, (c) is the only allowable order for KS, as in (48).

(48) KS. *predication* El luhngse *mwet ma luhngse-l uh.*
he like-him person who like-him the
ANT RC DEM

'He likes the person who like him.'

equation El rahrah elan liye tuhlihk
he anxious he-to see child

muhtwahn se nuhtuhl ah.
female a Cl-his the
ANT RC DEM

'He is anxious to see the daughter of his.'

As mentioned above, MK predicational relative constructions are basically of the (a) order. However, it is possible for a demonstrative (except *-wa* 'that (we know)') to follow a predicational relative clause resulting in the (c) order, although it is less common (Harrison 1975).

(49) MK. Ioar *woall-e ma ngoah kapang.*
behold man-this that I saw
ANT DEM RC

→ Ioar *woal ma ngoah kapangg-e.*
behold
ANT RC DEM

'It was this man that I saw.'

A further peculiarity with MK is that with the movement of a demonstrative to the end it is common to delete the relative marker *ma* and the subject pronoun of the relative clause if the subject is coreferential with the antecedent. This process looks like an extension of adjectivization discussed in §4, although it is not adjectivization itself in that transitive relative constructions are also subject to this process as in (50).

(50) MK. Ngoah kijradki jeripeinn-*ok ma* (*ih*) kin nimen
I hate-with girl-that that she habit. like

lallal.
talk

'I hate the girl who likes to talk.'

→ Ngoah kijradki jeripein kin nimen lallall-*ok.*

It seems to me that this dual possibility is due to the geographico-linguistic closeness to both the (a) order language (MR) and the (c) order language (KS).

Also differing from the other languages, MK may have two demonstratives, one following the antecedent and the other following the relative clause (*ibid.*), i.e., ANT + DEM + RC + DEM. It seems to me that one of the demonstratives is redundant both syntactically and semantically and therefore it is assumed that one of them will eventually disappear once and for all, rather than remain optionally as it stands now, in view of the fundamental nature of language that tends to eliminate complete redundancy. Observe the double demonstratives in (51).

(51) MK. Ioar *woall-e ma ngoah kapangg-e.*
ANT DEM RC DEM

In MK equational type constructions, the natural order is (c), as illustrated below.

(52) MK. Ih adpwal in kapang *nah jeripeinn-o.*
child-his girl-that
ANT RC DEM

'He is anxious to see the daughter of his.'

The (a) order, *nah-o jeripein*, is totally ungrammatical.

What we have said thus far regarding the position of a demonstrative may be summarized as follows.

order type	predication	equation
(a) type	WL, MR, GL, MK	WL, MR, GL, TR*
(b) type	TR	TR
(c) type	KS, MK**	KS, MK

*Only when ANT is an attributive constr.
**As an optional derivation from the (a) type.

Another divergence among the languages compared may be observable in the deletability of the predication (or subject) marker or the subject pronoun (in MK) in a relative clause in which the subject is coreferential with the antecedent. In WL, TR and MR, deletion of the subject marker is not allowed, as observed below.

(53) WL. Sar ka *re* tangiteng ila re be ttiril mas.
child those they cry (topic) they will fast-of die

'Those children who cry all the time die early.'

TR. Ekkewe semiriit *re* sowu kkechiuw re mȧ mwittir.
those children they habit. cry they die early

MR. Hajriy ł̈et yeḣ *ye*-jjagjag yė-mėj ṁekaj.
child kind that he cry he die early

In MK, KS and GL, deletion of the subject marker (or pronoun) is allowed with different degrees of optionality. In MK, the subject pronoun is obligatorily deleted unless it is coreferential with the *human* antecedent in which case its deletion is optional.

(54) MK. Pahioaio wiahda ew pukohk ma (**ih*) riskihdi
wife-my-that made a basket-those that close-with

skrihnin pahrang.
screen-of wire

'My wife made a basket which is closed with a net.'

MK. Jeriok ma (*arai*) kin joang anjoau ohroj nen
child-those that they habit. cry time all will

pispis ahr mehdi.
quick their die

'Those children who cry all the time die early.'

In KS, the subject marker is obligatorily deleted if the relative marker *ma* is present, while it is optionally deleted if *ma* is absent.

(55) KS. Tuhlihk se{ (*el*) / *ma* (**el*) } nuhmlah piru ah arlac
child a that he drink-up beer the very

sruhilac.
drunken

'The child who drank up the beer became very drunken.'

In GL, the subject marker is optionally deleted without restriction.

(56) GL. Anganna iikana (*a*) kaani ma ngkoe.
give-him fish they near with you

'Pass him those fish near you.'

If the subject of a relative clause is not coreferential with the antecedent, the subject marker must be present in all the languages under discussion.

Divergence among the languages appears in pronominalization too. MK is a language which does not have the paradigm of predication markers. In this language, if the subject of a relative clause is coreferential with the antecedent, that subject, instead of being deleted, is replaced by the corresponding personal pronoun, i.e., the pronoun with the same person and number features. This pronoun functions like a predication marker in other

languages and may optionally be deleted as discussed above. KS has a similar pattern (Lee, personal communication). One exception in KS is that if the subject is a singular human proper noun the personal pronoun *el* 'he' appears after the noun functioning as a predication marker. If this construction is placed as a relative clause and the subject is coreferential with the antecedent, then the proper noun is not pronominalized but simply deleted as with the other languages except MK. In the rest of the languages, all of which have predication markers, no pronominalization is made in the subject position of a relative clause. The subject is simply deleted as indicated in §4. Observe the following MK example, in which *arai* 'they' is a personal pronoun derived through pronominalization.

(57) MK. Ngoah kijradki *jeripeinnok* [ma (arai) kin nimen
I hate-with girl-those who they habit. like

lallal].
talk

'I hate those girls who are talkative.'

← Ngoah kijradki jeripeinnok [ma *jeripeinnok* kin nimen lallal]

Another difference between MK and the rest of the languages is observable in locative pronominalization. In all the languages but MK, if a locative adjunct (or oblique case) in a relative clause is coreferential with the antecedent, it is replaced by an anaphoric locative pronoun instead of complete deletion. In MK, the adjunct is completely deleted. The locative pronouns used in the above languages (except for MK) have the meaning 'there, about it, at it...' and are very similar to each other in form, which implies that they are related historically to each other. They are as follows.

(58) WL. iyang KS. we

TR. iye GL. iai

MR. yiyėy

In the following example sentences, the anaphoric locative pronouns are underlined. Observe that these pronouns appear exactly where the corresponding locative nouns would have occurred in underlying

structures, that is, at the end of the relative clauses, as illustrated in the WL sentence.

(59) WL. Ifa ssengal yaamw giula *biuleiu we* [re mil *iyang*]?
which way-of your know place the they live there

'How do you know the place where they live?'

← Ifa ssengal yaamw giula biuleiu we [re mil *biuleiu we*]?

TR. Ifa wussun oomw sineey *ewe neeni* [re nnomw *iye*]?
way-of your know-it the place they live there

MR. Yė-wiy waywėyėn haṁ jel'ay kajjiyen *yijew*
it-where way-of your know-it location-of there

[re-j jėqėy *yiyėy*]?
they-prog live there

KS. Kom etuh fuhkah acn se [ma eltahl muhta *we*] ah?
you know how place a that they stay there the

GL. Ko kangara n tia ata te tabo are [a maeka *iai*]?
you now past know the place that they live there

In contrast with the above, the following MK sentence illustrates the lack of locative anaphora.

(60) MK. Imdoahr oamw kidal wijahu [ma arai mine]?
how your know place-that that they stay

If the adjunct in a relative clause that is co-referential with the antecedent is other than a locative expression, it is deleted rather than being pronominalized in all the languages but WL. In WL, it is either pronominalized or deleted, with slight emphasis on the adjunct if pronominalized.

A typical case is where the adjunct is a time expression, as shown below.

(61) WL. I tewai maliuwegili lag yat we [i buu long lan
will-not forget away time the come in in

kalech (*iyang*)].
college at-it

'I will not forget the time when I entered the college.'

TR. Wu̇sapw mėnnu̇u̇kȯȯnȯ ewe eewin fansowun [wu̇wa
I-will-not forget the first time I-prf.

toonong nnon ewe kaanech].
enter in the college

MK. Ngoah jehpirin moalkoahla anjoawo [ma ngoah
I will-not forget time-that that

sapda oai doadoakin koahlej].
was-begun my work-of college

MR. Yi-ban mel'aql'aq yiyen yew [yi-har dėyl'ag̈
I not-able forget time that I-past enter in

yilew kahl'ej]

KS. Nga tiyah kuh in muhlkuhnlah pacl se [ma nga som
I not able to forget time a that enter

nuh colege] ah.
to the

GL. Nna aki m'aninga te tai are [ngke i a tia ni
I-will not forget the time that when I past

mena n te college].
already place of the

Finally, divergence is also noticeable in the equational type of relative clauses. I will discuss only one typical case. In an equational relative clause where the antecedent or the coreferential subject and the predicate of the clause are in classifier-classified relation, there are different restrictions among the languages as to which between the classifier and the classified should be the antecedent or the coreferential subject of the clause. It has been assumed that there are equational relative clauses in Micronesian languages and that an antecedent precedes the associated relative clause. Observe the relative constructions below and notice the unacceptability of a classifier or a classified noun as the antecedent (the first noun in each phrase) according to different languages.

(62) WL. mai kawe [gelai]
breadfruit those Cl-my

'those breadfruit of mine'

*gelai kawe [mai] *or* *gelai [mai] kawe

TR. eney kkewe [maay]
Cl-my

*maay kkewe [eney] *or* *kkewe maay [eney]

MK. koanoai [moai]-ok
Cl-my

*moai [koanoai]-ok *or* *moai-ok [koanoai]

MR. may kew [kijẹ̀h]
Cl-my

*kijeh kew [may] *or* *kijeh [may] kew

KS. mos [nak] ah
Cl-my

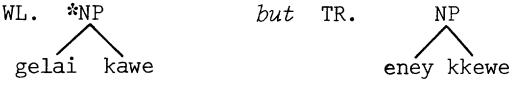
*nak [mos] ah *or* *nak ah [mos]

GL. mai ake [kanau]
Cl-my

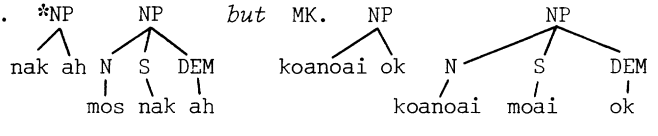
*kanau ake [mai] *or* kanau [mai] ake

There are two patterns in the above, one allowing only the classified noun as an antecedent and the other allowing only the classifier noun as an antecedent. To the former belong WL, MR, KS and GL, while to the latter belong TR and MK. No language allows both as an antecedent. It seems to me that these restrictions are related to the constraint that in WL, MR, KS and GL an attributive construction (i.e., N-poss. suffix or N-construct suffix + attribute noun phrase) may not be directly modified by a demonstrative, while in TR and MK it may. In other words, in the former set of languages, an attributive construction and a demonstrative cannot be the sister constituents dominated by the same node, while in the latter they can be. Observe (63).

(63) WL. *NP *but* TR. NP



KS. *NP NP *but* MK. NP NP



Because of the constraint illustrated in (63), WL **gelai kawe mai*, for example, should be ungrammatical

because its underlying structure would be the ill-formed sequence *_gelai kawe_ [_mai gelai kawe_] in which _gelai kawe_ is an unallowable sequence in WL. The same is true with MR, KS and GL. TR _eney kkewe maay_ is grammatical since its underlying sequence _eney kkewe_ [_maay eney kkewe_] is well formed. The same applies to MK. Incidentally, this may be another justification for the existence of equational relative clauses in Micronesian languages.

6. CONCLUSION. The above discussion is far from being complete, but I think I have touched on a number of substantial points. We have observed a number of essential syntactic behaviors commonly shared by all the languages compared. Such behaviors, together with many other unique linguistic features, may characterize the languages as belonging to a subgroup of the Eastern Oceanic family. Alongside this commonality, we have also noticed quite a few differences among the languages of a language-specific nature and which may be relevant to the subgrouping of the languages. These differences can be summarized as follows.

		WL	TR	MK	MR	KS	GL
1.	relative marker	+	+	+	+	+	-
2.	broad use of relative marker	-	-	+	+	+	-
3.	rel. marker before equational clause	+	-	-	+	-	-
4.	rel. marker before all types of pred. clause	+	-	+	+	+	-
5.	rel. marker/demonstrative cooccurrence	-	+	+	+	+	0
6.	optional deletion of rel. marker	-	+	+	+	+	0
7.	two sets of demonstrative	+	-	-	-	-	+
8.	ANT + DEM + RC in pred. rel. construction	+	-	+	+	-	+

		WL	TR	MK	MR	KS	GL
9.	ANT + DEM + RC in equat. rel. construction	+	+	-	+	-	+
10.	DEM + ANT + RC in pred/ equat. construction	-	+	-	-	-	-
11.	ANT + RC + DEM in pred/ equat. construction	-	-	+	-	+	-
12.	extended adjectivization & double demonstratives	-	-	+	-	-	-
13.	deletion of subject marker	-	-	+	-	+	+
14.	subject pronominalization	-	-	+	-	+	-
15.	locative pronominalization	+	+	-	+	+	+
16.	classifier as antecedent in equat. construction	-	+	+	-	-	-

On the basis of the above information, the numbers of both positively and negatively shared features are specified as follows.

	TR	MK	MR	KS	GL
WL	8	4	12	6	10
	TR	5	10	8	8
		MK	8	12	4
			MR	10	8
				KS	6

Or the higher number of shared features can be arrayed as follows:

		KS	10	MK
	8	10	8	
TR	10	MR		
8	8	12		
GL	10	WL		

The above results are somewhat contrary to our common subgrouping of the languages based on lexical cognates. For example, contrary to the common understanding that WL is the closest linguistically to TR, the above chart shows that WL is closer to MR and GL than to TR. On the other hand, as expected, KS and MK are the closest to each other. Since linguistic subgrouping should be based on the overall aspects of phonology, morphology, lexicon, syntax and semantics, I will not attempt to draw any generalization from the above findings of a limited nature.

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NOTES

[1]The selection of the languages depended on considerations of geographical distribution, linguistic divergence, and availability of informants. For example, Ulithian and Ponapean have not been included for comparison, because Ulithian follows more or less the same pattern of relative clause formation as that of Woleaian, and Ponapean that of Mokilese. I gratefully acknowledge Prof. B. W. Bender and my colleagues S. P. Harrison, K. D. Lee, H. Sugita, T. Tawerilmang and Terebata Groves for their kind provision of the language data and their valuable comments on this paper.

[2]The following conventions and abbreviations are used in the present paper: relative clause (RC) and relative marker (RM) usually bracketed together; antecedent (ANT) and demonstratives (DEM) usually underlined; prf. = 'perfective' morpheme; habit. = 'habituative' morpheme; Cl = classifier; prog. = 'progressive' tense/aspect morpheme; ← means 'derived from' and → 'derived to'. Most of the spellings of the data sentences that were given to me are retained as they were in the present paper. One change I made is insertion of morpheme boundaries in certain cases.

[3]A common Micronesian phrase type is that of attributive construction. An attributive construction consists of a head noun followed either by a possessive suffix or by the construct suffix + a noun phrase. The head noun belongs to a special subclass of nouns including classifiers, inalienable nouns and

locative nouns. The construct suffix has the meaning roughly equivalent to 'of' in English. The noun phrase that follows the construct suffix is related to the head noun either as a possessor, an agent, a goal, or a reference and is here called an 'attribute' noun phrase. For example, in WL *waal mwal we* 'that man's canoe', *waa* is the head noun, -l the construct suffix and *mwal we* 'the man' the attribute noun phrase.

[4]So far, I have advocated the assumption that there are equational relative clauses in Micronesian languages from the point of view of comparative evidence. Certain languages appear less convincing than the others in the light of the above nine pieces of evidence, because some of the evidence is simply lacking in such individual languages. Even so, we must admit the existence of strong parallelism common to all with regard to the equational type. For a comparative description of the languages concerned, therefore, it will be much simpler and more consistent than otherwise to view all of them as having equational relative clauses. I do not claim, however, that a description of an individual language, where little motivation could be found on internal grounds, should be based on the same assumption.

[5]Notice the similar shapes between MK, MR and KS. With the TR relative marker *minne* as the third witness, there could be a possibility of relating WL *le* to the others. TR *minne* frequently appears in a position where in WL sentences WL *mele* (a focus marker with the 'definite' meaning 'that') occurs. It seems that TR *minne* and WL *mele* may be related etymologically. WL *mele*, which may have been derived etymologically from 'thing' + e 'this,' may be regarded as a derivational source of WL *le*, i.e., *le* resulting from a reanalysis of *mele*. One piece of evidence for such a hypothesis is (19) in which both syntactic and semantic relation between *mele* and *le* may be observed. If we are to assume by any reason that MK and KS *ma* and MR *mey* may be related to the first CV of TR *minne* (Dyen (1965) gives *menne* along with *minne* as relatives), the WL *le* may be related to the second half (*-nne*) in view of the above syllogism. This is, however, highly speculative, and needs further study.

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