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# THE STATUS OF SUBJECT AND OBJECT PRONOMINAL ELEMENTS IN LUKUNOSH MORTLOCKESE 

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#### Abstract

Subject and object pronominal elements go by a variety of names in the literature of Oceanic languages. Few authors, however, clarify the morphophonological and morphosyntactic status of such elements. This paper investigates the status of subject markers and object markers in the Lukunosh dialect of Mortlockese, a minority language spoken in the Federated States of Micronesia. Through the application of morphophonological and morphosyntactic tests established in the literature, I conclude that: (1) subject markers are proclitics that have ambiguous interpretation as either anaphoric agreement (arguments) or grammatical agreement, and (2) object markers are suffixes that show a split: (a) the third-person singular object marker behaves like a general transitivity marker when there is an overt object, and (b) both the third-person singular object marker and the other non-third-person singular object markers behave like anaphoric agreement when there is no overt object.


1. Introduction. ${ }^{1}$ The purpose of this paper is to determine the morphophonological and morphosyntactic status of the subject and object pronominal elements in Mortlockese. A typical characteristic of Oceanic languages is that subject and object NPs are cross-referenced with pronominal elements that usually provide person and number information, and which are in a close relationship with the verb, either as affixes or clitics. In (1) from Toqabaqita, ${ }^{2}$ the pre-verbal pronominal element $e$ '3SG.NFUT' is coreferential with the subject wela 'child', while the post-verbal pronominal element -na ' 3. obs' is coreferential with the object baqu 'banana':
(1) Toqabaqita (Lichtenberk 2005:118 = (19))

Wela e qiliano-na tawaa baqu.
child 3SG.NFUT pile.soil.around-3.OBJ be.bad banana
'The child piled the soil around the banana (tree) badly.'
Languages such as Toqabaqita exhibit conservative reflexes of Proto-Oceanic subject and object pronominal elements (Lynch et al. 2002), both in phonological shape and morphosyntactic position. The actual terms used to describe these elements in different languages vary from author to author, but the descriptive cover terms "subject marker" and "object marker" are common. For example, Lichtenberk 2005, Evans 2008, and Hattori 2012 (following Good and Welley 1989) all refer to the subject pronominal element in Toqabaqita, Marovo, and Pingelapese (respectively) as "subject markers." ${ }^{3}$ Using such a vague term permits the author to avoid making any theoretical commitments to either the

[^0]morphophonological status (clitic vs. affix) or the morphosyntactic status (argument vs. agreement) of the element in question (Auger 1994, 2004).

Regardless of whatever descriptive term is used to label such pronominal elements, two fundamental questions arise. The first is a matter of determining if the element a clitic or an affix, whereby a clitic is an element that is "word-like in [syntax], but phonologically must lean for support" on a host (Matthews 1991:218), and an affix is an obligatorily bound morph that attaches to a stem and is both syntacticallyand phonologically-dependent. ${ }^{4}$ The second is a matter of determining if the element is an argument or an instance of agreement, whereby an argument is a syntactic constituent that is required by another predicate (e.g., the direct object argument of a transitive verb), and agreement is "[morphological] marking that records a nominal's inherent features (usually person, number, gender and/or case) on ... a verb" (O'Grady 2009:116). ${ }^{5}$ Auger $(1994,2004)$ clarifies that these two questions are independent of each other: essentially, "the question of whether [an element] is an affix or a syntactically independent element belongs to the realm of morphophonology," whereas "the question of whether [an element] is an agreement marker or an argument is of a morphosyntactic nature" (2004:4). Such questions are not always directly addressed in the literature for Oceanic languages, especially in descriptive grammars. Investigating these issues can have typological (cf. Yamada 2006) and historical (cf. Evans 2008) ramifications. In this paper, I claim that Mortlockese subject markers are proclitics that are currently analyzable as anaphoric agreement (i.e., argument), but may possibility be reanalyzed eventually as grammatical agreement. The object markers, on the other hand, show a split: the third-person singular suffix behaves as a general transitivity marker when there is an overt object, whereas it behaves like anaphoric agreement when there is no overt object, as do the non-third-person singular suffixes.

Section 2 provides background information on Mortlockese and relevant structure of the verbal complex. In section 3, I briefly review the previous analyses of subject markers and object markers in the literature on related Chuukic languages. I investigate the morphophonological status of subject markers and object markers using tests to distinguish independent and bound elements based on Zwicky 1985 in section 4, and then tests to distinguish clitichood from affixhood following Zwicky and Pullum 1983 in section 5. I turn to the issue of determining the morphosyntactic status of the pronominal elements in section 6 following Bresnan and Mchombo 1987. The reanalysis of the third-person singular object suffix is explained in section 7. I discuss paths for future investigation and offer closing remarks in section 8 .
2. Mortlockese language background. In this section, I present demographic information of the speech community and an introductory discussion on the pronominal and verbal systems of the language.
2.1 DEMOGRAPHIC INFORMATION AND DATA SOURCE. ${ }^{6}$ Mortlockese is a member of the Chuukic group of Nuclear Micronesian languages (Bender et al. 2003, Lewis 2009). It is primarily spoken in the Mortlock Islands, a chain of atolls to the southwest of Chuuk Lagoon in Chuuk State, one of the four states of the Federated States of Micronesia (FSM).

[^1]Figure 1. Map of the Mortlock Islands ${ }^{7}$


There are approximately 7,000 speakers of Mortlockese ( 2000 Chuuk Census), plus an additional $2,000-3,000$ in diasporic communities in the FSM, Guam, Hawai‘i, and the mainland US. Mortlockese is best viewed as a chain of at least 11 different dialects corresponding to the inhabited islets in the Mortlock Islands group, rather than a single homogenous language. My data come from fieldwork on Pakin Atoll in Pohnpei State (2006-the present) in the form of fieldnotes and audio recordings. The Lukunosh dialectone of the southernmost Mortlockese dialects-is primarily represented in my examples, since the consultants whose speech I use in this paper are L1 speakers of the Lukunosh dialect of Mortlockese (with Pohnpeian as their L2). I draw upon the speech of my primary consultants with whom I have engaged in focused discussion/elicitation of morphosyntax: two female speakers (one late 40s, the other early 50 s ) and three male speakers (one mid 30 s , the other two mid 50 s ). Their agreement of the forms I present in this paper is robust (although I have not yet engaged in qualitative measurements of this). Accordingly, my claims here are for the diasporic Pakin communalect of the Lukunosh dialect of Mortlockese (although a few specific examples are tokens from speakers of the Ettal and Satawan dialects; these examples are noted accordingly).
2.2 CLAUSAL CONSTITUENT ORDER. The basic clausal constituent order of Mortlockese is provided in figure 2.

Figure 2. Mortlockese clausal constituent order
$\left(\mathbf{N P}_{\text {SUBJ }}\right) \cdot \mathbf{S M} \cdot \mathbf{T A M} \cdot \operatorname{ADVERB} \cdot \mathrm{V} \cdot \mathrm{OM} \bullet\left(\mathbf{N P}_{\mathrm{OBJ}}\right)$

[^2]For consistency, I refer to the subject pronominal elements as "subject markers" (hereafter, SM) and the object pronominal elements as "object markers" (hereafter, OM). ${ }^{8}$ Also, I use hyphens to distinguish morpheme boundaries for both SM and OM. In sections 4, 5, and 6, however, I provide my arguments for the morphosyntactic and morphophonological statuses of SM and OM (and change glossing conventions accordingly).

Non-pronominal subject NPs occur sentence-initially. Independent pronouns (also referred to as "focus pronouns") may also occur in this clause-initial position. SM in Mortlockese precede Tense-Aspect-Mood (TAM) markers, followed by adverbs, then by the main verb. For canonical transitive sentences, OM directly follow the verb. If the object is non-pronominal, it occurs sentence finally, following OM. To illustrate, consider (2), which contains all of these elements:

| (2) Ngaang i-sán | mwo | shuu-nge-i | mwáán=we. |
| :--- | :--- | :--- | :--- |
| 1SG.EMPH | 1SG.SBJ-NEG.POT yet meet-TH-3SG.OBJ | man=DIST.SG |  |
| 'As for me, I have not yet met that man.' |  |  |  |

Table 1 provides the paradigms for the independent pronouns, SM, and OM.
TABLE 1. Mortlockese pronominal elements

|  | INDEPENDENT | SM | OM |
| :--- | :---: | :---: | :---: |
| 1SG | ngaang | i | $\mathrm{ei} / \mathrm{ái}$ |
| 2SG | een | $\mathrm{u} / \mathrm{o}^{9}$ | k |
| 3SG | ii | e | $\mathrm{i}[\mathrm{j}] / \mathrm{u}[\mathrm{w}] / \mathrm{u} /(\mathrm{a}) \emptyset^{10}$ |
|  |  |  |  |
| 1PL.INCL | kiish | si | kish |
| 1PL.ALLINCL ${ }^{11}$ | aukiish | ausi | - |
| 1PL.EXCL | áámam/kamam | ai | kamam |
| 2PL | áámi | au | kami |
| 3PL | iir | re | r |

Independent pronouns are used in response to WH -questions as in (3), and for emphasis/contrast as previously illustrated in (2), as well as here in (4): ${ }^{13}$
(3)

| a.Ié e-pé filla? <br>  who 3SG.SBJ-FUT | go.away |  |
| :--- | :--- | :--- |
|  | 'Who will go?' |  |

[^3]
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b. Een.

2SG
'You (will go).'

| "Iei | i-pé | le | kapas | pwe | ngaang | i-mi |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| now | 1SG.SBJ-FUT | IMM | speak | because 1SG.EMPH | 1SG.SBJ-STATV able |  |
| 'Now I am going to speak up because I am able to (do this).' |  |  |  |  |  |  |
| plan that he (the Frog) believes he has devised, not others.) |  |  |  |  |  |  |

Note the co-occurrence of the independent pronoun ngaang (1SG) and the SM $i$ (1SG.SBJ) in the subordinate clause in (4). Common and proper noun subjects usually occur in sentence-initial position. The coreferential pre-verbal SM appears to be obligatory, as shown in (5): ${ }^{14}$
(5) [Rayleen/áte=we] *(e-)ké ún-úme-i [shaan=ie].
R./child=DIST.SG 3SG.SBJ-PST drink-TH-3SG.OBJ water=PROX.SG
'Rayleen/That child drank this water.'
Clauses that do not contain a sentence-initial subject noun phrase are grammatical, so long as the SM is present; thus, sentences such as eké únúmei shaan ie 'he/she/it drank this water' are licit given that the third-person singular SM anaphorically links to a previously mentioned referent.

Regarding object material, (6) illustrates that independent pronouns in post-verbal object position cannot co-occur with OM; this is in contrast to patterns like (2) and (4), in which the independent pronoun and SM can co-occur to express subject material:

| I-aa | wor-o-k | (*een). |
| :--- | :--- | :--- |
| 1SG.SBJ-REAL | see-TH-2SG.OBJ | 2SG |
| 'I see you.' |  |  |

For verbs whose direct object is not an affected patient-which include some native verbs that have invariable forms such as mwashan 'want' and afishiak 'like', as well as borrowed verbs such as kóól 'call (< English call)'-only the independent pronoun (without OM) can occur in the post-verbal object position, as illustrated in (7):

| a. | I-pé kól | een. |
| :--- | :--- | :--- | :--- |
| 1S.SBJ-FUT call | 2SG |  |
|  | 'I will call you.' |  |

b. *I-pé kóól-o-k. ${ }^{15}$

1s.SBJ-FUT call-TH-2SG.OBJ
intended: ‘I will call you.’
(7b) is unacceptable because the verb kóól 'call' cannot take OM; this transitive construction requires an uninflected form of the verb followed by the independent pronoun, shown in (7a).

The third-person singular and plural OM show idiosyncratic behavior relevant to this overview. As illustrated in (2) and (5), the third-person singular OM can co-occur with the post-verbal object NP, but only if that object is specific/definite. ${ }^{16}$ Similar to Chuukese (Sugita 1973), Mortlockese permits "semitransitive" constructions in which a syntactically transitive clause with a non-specific/indefinite lexical noun phrase object (lacking a demonstrative marker) does not exhibit OM. Compare ( $8 \mathrm{a}-\mathrm{c}$ ):

[^4]| a. | I-pé | óshóósh | (shak) |
| :--- | :--- | :--- | :--- |
| 1SG.SBJ-FUT | eat.raw | just | banana |

'I will eat bananas.'

| b. | I-pé | ósh-ee-i |
| :--- | :--- | :--- |
|  | 1SG.SBJ-FUT | eat.raw-TH-3SG.OBJ |$\quad$| [uush=ie]. |
| :--- |
| banana=PROX.SG |

The verb 'to eat raw' takes different forms depending if it is intransitive (óshóósh in (8a)) or transitive (óshee- in (8b)). The semitransitive example illustrated in (8a) cannot be considered to be an instance of noun incorporation, since other elements can intervene between the verb and the object, such as the adverbial shak 'just' (cf. Sugita 1973:400 for similar observations in Chuukese). ${ }^{17}$ In a canonical transitive clause in which the patient is fully affected and individuated (Hopper and Thompson 1980), the OM are overt and obligatory, as in (8b). Verbs that exhibit OM generally do not co-occur with bare lexical noun phrase objects that lack a demonstrative marker, as in (8c). ${ }^{18}$

Furthermore, if the lexical noun phrase object is plural-for example, common nouns co-occurring with a plural marker kewe as in (9a) or coordinated proper nouns as in (9b)-the OM remains in thirdperson singular form, not third-person plural.
a. Ngaang i-sán mwo shuu-\{nge-i/*ngee-r\} [mwáán=kewe]. 1SG.EMPH 1SG.SBJ-NEG.POT yet meet-TH-3SG.OBJ/TH-3PL.OBJ man=DIST.PL 'As for me, I have not yet met those men.'
b. Ngaang i-sán mwo shuu-\{nge-i/*ngee-r\} [Rayleen mé Romcy].

1SG.EMPH 1SG.SBJ-NEG.POT yet meet-TH-3SG.OBJ/TH-3PL.OBJ R. and R.
'As for me, I have not yet met Rayleen and Romcy.'
This discord between the number of the overt object NP and the OM applies to all the allomorphs of the third-person singular OM, and suggests that this particular OM is being reanalyzed as a "default" transitive marker (discussed at length in section 7). ${ }^{19}$ The same pattern is found in other Oceanic languages, such as Toqabaqita (Lichtenberk 2005:116-17). When there is no overt lexical noun phrase object in the clause and the referent is anaphoric, then the OM are used (cf. (24) in section 7).
3. Previous analyses. All of the closest relatives of Mortlockese-the languages of the Chuukic continuum (Jackson 1983)-exhibit SM, which appear to have very similar forms and functions: pronominal elements indexing person and number features, occurring pre-verbally or before any TAM and adverbial elements. At first glance, one might assume that these SM are essentially the "same thing" across the Chuukic language family. For example, Bender et al. (2003:28) claim that Proto-Central Micronesian subject markers were once proclitics, but are now reflected in daughter languages (such as the Chuukic languages) as prefixes. Different authors, however, take different approaches to the analysis of these SM. For Chuukese, Goodenough and Sugita (1980:xlvii) describe "subjective pronouns" as elements that may or may not have "aspect markers suffixed directly to them," although they are "better

[^5]understood as [elements that are] prefixed to the verb or an intervening adverbial. ${ }^{220}$ For Woleaian, Sohn (1975) describes SM as a "subjective," which is a member of the class of "particles [which are] words which never take any affix or form a compound" (58). The basic function of these "subjectives" is to "represent the person and number of the subject noun or pronoun in a predicative sentence" (93-94). Although a few descriptive publications about Chuukic languages address the theoretical mechanisms for the realization of SM (such as a transformational approach by Sugita (1969) for Nómwonweité), most descriptive grammars of Chuukic languages only go so far as to describe the morphophonological status of the SM without directly addressing the morphosyntactic status. ${ }^{21}$

The morphophonological status of OM is more uniform across the various descriptions of Chuukic languages: object suffixes that are bound to the main verb, indexing the person and number of coreferential object NPs (cf. Goodenough and Sugita 1980 for Chuukese, Sugita 1969 for Nómwonweité, inter alia). Not only is there a consensus in the descriptive literature to analyze these object pronominal elements as bound morphemes that directly suffix to the main verb, but also I observe an overwhelming tendency by L1 speakers to consistently write OM as suffixes on the verb. The issue, however, regarding the morphosyntactic status of the suffixes is not directly addressed in these descriptive works. This present study fills important gaps in the literature, not only for grammatical descriptions of Mortlockese (a language that is largely underdescribed as compared to its sister languages), but also for the potential contributions that Chuukic languages can make to the theoretical discourse on clitics and pronominal elements.
4. Morphophonological status. Identifying an element as either a clitic or an affix continues to be "an especially pressing piece of business for linguists" (Zwicky 1985:283). The definition of an affix is relatively straightforward across various linguistic frameworks: "obligatorily bound morphs which do not realise (sic) lexemes and which are attached to roots to produce word-forms [and to bases that already contain affixes]" (Bauer 2003:13). If bound morphemes such as affixes exist on one end of a spectrum, and independent words exist on the other end, then clitics are "forms which [seem] to be intermediary between an affix and a word" (132). Indeed, the expression of semantic features such as person, number, and gender exists on such a continuum, as illustrated in figure 2:

Figure 2. Continuum of semantic feature expression

## INDEPENDENT PRONOUN CLITIC CLITIC DOUBLING AFFIX

This continuum is consistent with patterns of grammaticalization, especially processes of independent words becoming clitics, and then becoming affixes. Clitics are often described as taking a "medial" position between independent words and affixes because they are "word-like in [syntax], but phonologically must lean for support" on a host (Matthews 1991:218). Clitics are usually distinguished as two types: (1) simple clitics, which are weakened or reduced forms of words with independent existence, such as English ' $v e$ as a reduced form of have (Bauer 2003:132); and (2) special clitics, which are clitics "whose position within some phrasal unit [are] determined by principles other than those of nonclitic syntax," such as French object clitics (Anderson 1992:201-2). The French object clitics, in particular, occur in complementary distribution to non-clitic objects, but other speech systems such as Spanish, Italian, and some dialects of Irish allow clitic doubling of certain syntactic pronouns (e.g., Spanish clitic doubling of accusative object pronouns) (Bresnan 2001:147). This is a relevant observation in regard to Oceanic languages, since one can potentially posit a clitic-doubling analysis for the co-occurrence of

[^6]independent/independent pronouns with SM (e.g., the co-occurrence of ngaang (1SG.EMPH) and $i$ (1SG.SBJ) in (4) and (6)). ${ }^{22}$ Agreement/pronominal affixes, then, represent the stage at which the elements expressing semantic features have lost all syntactic argumenthood.

Before addressing the intersection of morphophonological form with morphosyntactic function, I first address the question of whether the SM and OM in Mortlockese are affixes or clitics (or independent pronouns). The most straightforward method to employ is the application of tests used in the literature to the data at hand. Tests, however, "point to characteristic SYMPTOMS of a linguistic state of affairs, not to invariant concomitants of it" (Zwicky 1985:285, original emphasis). The criteria we choose to use to distinguish one thing from another (e.g., clitics from affixes) only really "define the prototypical cases," and so we will always expect to see "actual cases [that] deviate from the prototype to a greater or lesser extent" (Bauer 2003:132). With these caveats in mind, I use the tests outlined in Zwicky 1985 to determine the morphophonological status of SM and OM in Mortlockese.
4.1 Free vs. Bound. Zwicky (1985:286-88) provides a variety of phonological, morphological, and syntactic tests that distinguish free forms from bound (or not completely free) forms like clitics and affixes. In this discussion, I select only those tests that are relevant to the Mortlockese pronominal elements.
4.1.1 INTERNAL SANDHI. Internal sandhi rules should apply within phonological words, which include [clitic + word] combinations, whereas external sandhi rules apply between phonological words rather than in them (286). While there do not appear to be any generalizable external sandhi patterns in Mortlockese, there are patterns of vowel harmony in affixed words, as observed for the suffixation of possessive pronouns to inalienable nouns. ${ }^{23}$ There is no evidence, however, of vowel harmony when SM combine with TAM markers. ${ }^{24}$ For example, the second-person singular SM $u$ and the negative potential TAM marker sán [sæn] do not interact with each other: the former does not cause backing or rounding of the latter, nor does the latter cause fronting or unrounding of the former.

Regarding OM, a verbal base such as $a$-shshaa- (CAUS-blood) 'to cause to bleed' exhibits changes in the final vowel of the base under suffixation with only the second-person singular OM: a-shshóó-k (CAUS-blood-2SG.OBJ) 'to cause you to bleed'. We can rule out the possibility that the velar plosive $/ \mathrm{k} /$ causes rounding of the preceding vowels, since there are other $k$-initial suffixes for which there is no rounding of the preceding vowels: for example, $a$-shshaa-kish (CAUS-blood-1PL.INCL.OBJ) 'to cause us (incl.) to bleed' and $a$-shsha-kami (CAUS-blood-2PL.OBJ) 'to cause you all to bleed'. The rounding effect of the second-person singular OM extends to base vowels of various height, including high vowels (e.g., kúú- 'to bite' and $k u u-k$ 'to bite you'). This effect of the second-person singular OM appears to be an idiosyncratic rule rather than a predictable phonological process. Nevertheless, this is an illustration of internal sandhi in the context of an OM combining with its host.
4.1.2 ACCENTUAL TEST. Zwicky (1985:287) notes that the "accentual test is probably the most popular rule-of-thumb for distinguishing clitics from independent words, but it is most unreliable," primarily since cross-linguistic observations show that some languages allow clitics to be accented, and many monosyllabic words are never accented (e.g., prepositions, determiners, discourse markers, etc.). Nevertheless, I generally observe that full words are accentually independent, while clitics are dependent. In Mortlockese, neither SM nor OM can be accented for emphasis or contrast, and phrasal accent never occurs on such elements; this test suggests that neither are free morphemes.

[^7]4.1.3 Boundness. Given the expectation that "... bound elements will be affixes" (287), I observe that Mortlockese SM never occur in complete isolation and are always dependent on a host, such as a TAM marker, an adverb, or a verb. SM can never occur in place of the full NP, including independent pronouns. For example, only independent pronouns can be used in equational sentences, as shown in (10a); SM are not licit, shown in (10b):
(10)
a. Ngaang e-man sounpatak.

1SG one-NUM.CLASS.ANIM teacher
'I am a teacher.'
b. *I e-man sounpatak.

1SG.SBJ one-NUM.CLASS.ANIM teacher
intended: 'I am a teacher.'
Recall, also, (3b) in which the reply to the WH-question is the independent pronoun een ' 2 SG '; a reply with only a SM such as $u$ or $o$ ' 2 SG.SBJ' is ungrammatical. SM, then, cannot be used independently of a host. The same holds for OM; consider (11) and (12) below:
(11)
a. Shóópwut=we e-ké asor-e-i ié ? woman=DIST.SG 3SG.SBJ-PST call-TH-3SG.OBJ who
'Whom did the woman call?'
b. Een/*k.

2SG
'You.'
$\begin{array}{lllll}\text { a. } & \begin{array}{l}\text { Sounpatak=we } \\ \text { teacher=DIST.SG }\end{array} & \varnothing \text {-aa } & \text { wér-e-i } & \text { ngaang mé } \\ & \text { een. }{ }^{25}\end{array}$
'The teacher saw me and you.'
b. *Sounpatak=we $\varnothing$-aa wér-e-ái mé k. teacher=DIST.SG 3SG.SBJ-REAL saw-TH-1SG.OBJ and 2SG.OBJ intended: 'The teacher saw me and you.'
The response to the WH-question in (11a) permits only the independent pronoun, and the use of the OM to correspond to the WH-extracted phrase is ungrammatical. (12) shows that coordination can apply to independent pronouns (12a), but not to OM (12b). OM, then, can never occur in isolation as free morphemes.
4.1.4 DISTRIBUTION. Affixes generally "have a single principle governing their distribution," while "words rarely have distributions that can be described by a single principle" (Zwicky 1985:288). As observed in section 4.1.3, in Mortlockese, SM only occur as pre-verbal elements, and OM only as postverbal elements, suggesting that both are affixes rather than words.
4.1.5 COMPLEXITY. Independent words usually permit morphological complexity, whereas bound elements do not. Neither SM nor OM are morphologically complex.
4.1.6 Deletion. In the process of "deletion under identity", there is an anaphoric link between the target for deletion and another constituent in the discourse; we expect entire words to be able to delete under identity, but parts of the word (i.e., clitics or affixes) should not be able to delete (Zwicky 1985:288). For example, as shown in (13), ${ }^{26}$ it is ungrammatical/infelicitous only to delete the SM under identity:

[^8]\[

$$
\begin{align*}
& \text { U-pé filla kéné, iwe, *?(u)-pé kútt-aa- } \varnothing \quad \text { miin=we. }  \tag{13}\\
& \text { 2SG.SBJ-FUT go.away there so (2SG.SBJ)-FUT search-TH-3SG.OBJ thing=DIST.SG } \\
& \text { 'You will go there, and then, (you will) look for that thing.' }
\end{align*}
$$
\]

However, the entire [SM + TAM] group (the second instance of $u$-pé 'you will') can delete, which is preferred. OM, too, cannot delete under identity. An English phrase containing coordinated verbs such as catch and tie them (cf. catch them and tie them) can be expressed only in the following way in Mortlockese:

| supw-uree-*(r) | pwal | féé-tee-*(r) |
| :--- | :--- | :--- |
| catch-TH-3PL.OBJ | also | tie-TH-3PL.OBJ |
| 'catch them and tie them' |  |  |

The third-person plural OM are obligatory on both coordinated verbs. The entire verb that has been suffixed with the OM can, however, delete under identity, as shown in (15):
a. U-mwi toonganei féé-tee-r? 2.SG.SBJ-STATV able.to.do.it tie-TH-3PL.OBJ
'Are you able to tie them?'
b. Ngéú, i-mi toonganei.
yes 1SG.SBJ-STAT able.to.do.it
'Yes, I'm able (to do it).'
These observations for the third-person plural OM also apply to the other persons and numbers. The generalization, then, is that both SM and OM cannot be deleted under identity, suggesting that they are not independent words.
4.1.7 Summary. Table 2 summarizes the findings of the application of these selected tests from Zwicky 1985. (For convenience, I phrase the questions with respect to expectations for independent words.)

TABLE 2. Findings from free vs. bound tests

|  | SM | OM |
| :--- | :--- | :--- |
| Does it resist being affected by or causing internal sandhi? | Yes | (ambiguous, <br> re: 2SG) |
| Can it be accented? | No | No |
| Is it free? | No | No |
| Does it have an unrestricted distribution? | No | No |
| Is it morphologically complex? | No | No |
| Can it delete under identity? | (ambiguous, <br> re: (13)) | No |
| Is this likely to be an independent word? | No | No |

My preliminary conclusions are that both SM and OM are bound morphemes, not independent words. I now turn to the question about the clitic vs. affix status of these pronominal elements.
5. Clitic vs. Affix. Zwicky and Pullum (1983) provide a set of six criteria that distinguish clitics from affixes: (1) degree of selection; (2) arbitrary gaps in combination; (3) morphological idiosyncrasies; (4) semantic idiosyncrasies; (5) syntactic processes; and (6) combination restriction. I examine each criterion in turn with respect to both SM and OM.
5.1 Constraint on the host selection. While affixes can attach only to certain bases (e.g., verbs and nouns), clitics do not show any restriction on the type of host to which they can attach. For example, the English possessive clitic 's may attach to a noun (e.g., John's sister), a verb (e.g., the man I know's sister), or even a preposition (e.g., the man I was talking about's sister). In Mortlockese, SM can directly
precede TAM markers, adverbs, and verbs in a VP. Previously discussed examples such as (2) and (3) illustrate that SM can precede TAM markers. Mortlockese also allows TAM-less clauses, particularly with intransitive verbs like no 'stay' and mwashan 'want', as in (16):
(16) I-mwashan filla.

1SG.SBJ-want go.away
'I want to go (away there).'
Adverbs such as pwal 'also' can intervene between SM and verbs-for example, i pwal mwashan filla 'I also want to go (away there)'.

OM, on the other hand, can suffix only to verbal elements. OM are always suffixed to main verbs, prepositional verbs (e.g., sange-i (from-3SG.OBJ) 'from it'), V2 elements in serial verb constructions (e.g., kútt-aa-Ø fail-ii-r (search-TH-3SG.OBJ around-TH-3PL.OBJ) 'search around for them'), the instrumental suffix -iakane-, and directional elements (most likely clitics). The latter can sometimes intervene between a verb and an OM (e.g., anga-tow-e-i (take-downward-TH-3SG.OBJ) 'take it from below'), or follow OM suffixes (e.g., anga-i-tou (take-3SG.OBJ-downward) 'take it down'). Even if other postverbal elements occur, such as the adverbial/discourse marker mwo 'just, please', the OM must precede it; for example, angatowei mwo 'please take it from below' or angaitou mwo 'please take it down'. This high degree of selection for OM contrasts with the relatively low degree of selection for SM.
5.2 Arbitrary gaps in combination. Clitic groups are less likely to show arbitrary gaps in a set of possible combinations, less so than affixed words (504). SM have no restriction as to the TAM, adverb, or verb to which they can attach, as discussed in section 5.1. OM, on the other hand, may not attach to all dyadic verbs, as shown in section 2.2 (cf. mwashan 'want' and kóól 'call'). At the current stage of this research, it is not immediately clear if there is a systematic constraint that disallows the suffixation of OM on a certain verb class in Mortlockese (such as verbs of desire like afishiak 'like' or verbs that do not take affected patients like kóól 'call'). I can only claim conclusively that there are no arbitrary gaps in combination for SM and their host.
5.3 MORPHOLOGICAL IDIOSYNCRASIES. Clitic groups are less likely to exhibit morphophonological idiosyncrasies than affixed words (504). Of all the [SM + TAM] combinations permissible in Mortlockese, the paradigm for the realis TAM marker $a a$ shows an irregular pattern. ${ }^{27}$ Consider Table 3, which presents the combination of [SM + future] in contrast with [SM + realis]:

Table 3. Future and Realis paradigms

|  | FUTURE | REALIS |
| :--- | :--- | :--- |
| 1SG | i-pé | iaa [ja:] (> i-aa) |
| 2SG | u-pé, o-pé | waa (> u-aa, but no *o-aa) |
| 3SG | e-pé | aa (>Ø-aa) |
| 1PL.INCL | si-pé | saa (> si-aa) |
| 1PL.ALL-INCL | ausi-pé | ausaa (> ausi-aa) |
| 1PL.EXCL | ai-pé | aia (> ai-aa) |
| 2PL | au-pé | awa (> au-aa) |
| 3PL | re-pé | raa (> re-aa) |

The pattern presented for the future TAM marker is consistent for all other TAM markers (such as negative future sapw, immediate future pé le, hortative/past ké, and so forth), with the noted exception of the realis TAM marker. Forms in which the final vowel of a CV-type SM remain overt (e.g., *si-aa (1PL.INCL.SBJ-REAL)) are not attested in Mortlockese, although they are in Chuukese and Woleaian. There

[^9]appears to be a morphophonological rule in Mortlockese that reduces the SM from a monosyllable to a non-syllable that "fuses" with the realis TAM marker, which also happens to be the only vowel-initial TAM marker in the language. Whether this monosyllabic-prefix-reduction process is productive in Mortlockese remains to be seen. ${ }^{28}$ Also note that in the realis, the third-person singular SM is always realized as $\varnothing$, never as $e$, and the second-person singular SM as $u$, never as $o$.

This particular idiosyncrasy of SM, however, does not compare to the various morphophonological idiosyncrasies of OM. As discussed in section 4.1.1, the second-person singular OM causes rounding of preceding base vowels of the verb host, an idiosyncratic example of internal sandhi. The first-person singular OM has two allomorphs ( $e i$ and ái) that are in free variation; the choice appears to be idiosyncratic to individual speakers. Regarding the third-person singular OM, even though there are four distinct allomorphs ( $i, u, u$, , and $(a) \emptyset)$ that have largely predictable distributions depending on the quality of the preceding vowel in the verb base, when some C-final verbs are causativized with the prefix $a$-, there appears to be free variation as to which allomorph is used for the third-person singular; for example, maúr 'to sleep' $\rightarrow$ a-maúr-a-Ø (CAUS-sleep-TH-3SG.OBJ), a-maúr-e-i (CAUS-sleep-TH-3SG.OBJ), $a$-maúr-ú (CAUS-sleep-3SG.OBJ), all of which mean 'to put him/her/it to sleep'. OM, thus, exhibit more distinct morphological idiosyncracies than SM.
5.4 SEmANTIC IDIOSYNCRASIES. Clitic groups are less likely to exhibit semantic idiosyncrasies than affixed words. Regarding SM, this criterion appears to be irrelevant or at least difficult to apply without directed investigation (i.e., felicity judgments across many native speakers). It is hard to imagine what types of idiosyncratic meanings could be derived from a combination of [SM + TAM], [SM + adverb], or $[\mathrm{SM}+\mathrm{V}]$. In contrast, some $[\mathrm{V}+\mathrm{OM}]$ combinations lead to unexpected meanings; for example, llésh 'to leak, be leaky', lésh-eete- (leak-TH-) 'to leak on something (base transitive form)', $\varnothing$-aa lésh-eete-i (3SG.SBJ-REAL leak-TH-3SG.OBJ) 'it leaked on him/her/it (said of a roof)', $\varnothing$-aa lésh-eeto-k (3SG.SBJ-REAL leak-TH-2SG.OBJ) 'it urinated on you'.
5.5 SYNTACTIC PROCESSES. Clitic groups are not affected by syntactic rules, but such rules can affect affixed words. Coordination provides a good test to asses this generalization for SM and OM. If the element can be separated from its host, then it is likely to be a clitic rather than an affix. (13) shows that while the entire [SM + TAM] group can be deleted under identity when two VPs are coordinated, SM alone (leaving the TAM) are not deleted under identity; this supports an affix-group analysis. However, in TAM-less constructions such as e amwot o ( ${ }^{*}$ e) pwpwo máái (3SG.SBJ cook and pound breadfruit) 'he/she cooks and pounds breadfruit', the SM is deleted. This supports the analysis that the SM is more like a clitic and less like an affix under coordination tests. In section 4.1.6, I provide evidence that coordinated verbs with OM suffixes do not delete the OM under identity (for all persons and numbers); Mortlockese requires constructions that are translatable as 'catch- X and tie- X ' rather than 'catch and tie X '. This supports the analysis that OM are more affix-like under coordination tests.
5.6 COMBINATION RESTRICTION. As a rule of thumb, clitics can attach to other clitics, and affixes to other affixes, but affixes do not attach to clitics (504). This criterion is difficult to apply at this stage in my analysis of Mortlockese, at least regarding SM, because I have not yet investigated the distribution of other pre-verbal clitics (such as discourse markers) and their interaction with SM. In the case of causativization with $a$-, SM always occur outside this prefix (which attaches only to verbs), which suggests clitichood for SM. Regarding OM, given the discussion in section 5.1 about directionals, the extent to which OM can be considered affixes or clitics based on linear order with directionals is unclear, since both $[\mathrm{V}+\mathrm{OM}+$ directional] and $[\mathrm{V}+$ directional +OM$]$ are attested. This may be lexically determined, since a verb such as nii-la (hit-away) 'to kill' exhibits patterns such as niu-k-la (hit-2SG.OBJaway) 'to kill you' but not *nii-la-k or *nii-ló-k (hit-away-2SG.OBJ) (i.e., assuming the idiosyncratic

[^10]rounding associated with the second-person singular OM takes place). The application of this criterion is at best inconclusive at this point for SM and OM.
5.7 SUMMARY. Table 4 summarizes the findings of the application of these six tests based on criteria presented in Zwicky and Pullum 1983. (For convenience, I phrase the questions with respect to expectations for clitics.)

Table 4. Findings from clitic vs. affix tests

|  | SM | OM |
| :--- | :--- | :--- |
| Does it show a low degree of host selection? | Yes | No |
| Is there a lesser likelihood for arbitrary combinatory gaps? | Yes | (unclear) |
| Is there a lesser likelihood to show morphophonological idiosyncracies? | Yes | No |
| Is there a lesser likelihood to show semantic idiosyncracies? | Yes | No |
| Is it not likely to be affected by syntactic rules? | (ambiguous) | No |
| Can it combine with clitics? | (unclear) | (unclear) |
| Is this likely to be a clitic? | Yes <br> (clitic) | No <br> (affix) |

Recall the conclusion in section 4 that both SM and OM appear to be bound elements, OM more so than SM. This is borne out in the results from the application of the Zwicky and Pullum 1983 tests: while I conclude that OM are affixes (and thus, verbal suffixes), SM are best described as subject proclitics rather than subject prefixes. ${ }^{29}$
6. MORPHOSYNTACTIC STATUS. I now turn to the issue of determining whether SM and OM in Mortlockese are instances of anaphoric agreement (i.e., "argument") or grammatical agreement (i.e., "agreement"). Following the approach taken by Bresnan and Mchombo (1987) in their analysis of Chichewa, I propose that the distinction between the argument and agreement status of an element (regardless of its morphophonological status as a clitic or an affix) can be discerned through at least three questions: (1) Can the pronominal element be omitted?; (2) Is the pronominal element coreferential with a focus NP such as WH-phrase; and (3) Does the occurrence of the pronominal element rely on a local NP? I address each of these questions in turn in the following sections.
6.1 Omission. If the pronominal element can be omitted in a clause, this is less likely to be an instance of grammatical agreement, since this type of agreement is never optional. However, this does support the argument analysis in which the pronominal element anaphorically agrees with a referent in the previous discourse. Consider the following extract in (17) taken from narrative discourse: ${ }^{30}$
(17)
a. Pwá kewe $\mathrm{r}=\mathrm{aa}$, bat DIST.PL 3PL.SBJ=REAL
'The bats said,'
b. "Iwe, pwe ii ai=ké úró ngano-k
so because DM.SOFT 1PL.EXCL=PST say towards-2SG.OBJ
'"So, because indeed we told you'
c. pwe u=sapw apa mwo ee-u kapas. comp 2SG.SBJ=NEG.FUT say even one-NUM.CLASS.GNR word 'that you shouldn't say even one word.'

[^11]d. Iwe, iei $u=a a \quad$ lus sange-i kamatúpw.
so now 2 SG.SBJ=REAL lose from-3SG.OBJ feast
'So, now you lose out from going to the feast.'

| e. | Sé <br> Led | no | kamatúpw óó-n | téé-n. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEG go.with-3SG.OBJ | anymore | feast | on-CONST | island-CONST |
|  | 'You are not going to the feast on the island anymore.' |  |  |  |

f. Iwe, lus!"
so lose
'So, you lose out!""
g. Kairú sé ite-i no kamatúpw óó-n teé=we, frog NEG go.with-3SG.OBJ anymore feast on-CONST island=DIST.SG 'The Frog didn't go to the feast on the island anymore,'
In (17e), there is a complete lack of subject material in the clause, whereas in $(17 \mathrm{~g})$, there is an overt NP (proper name); the second-person singular SM is expected in the former, and the third-person singular SM in the latter. ${ }^{31} \mathrm{OM}$, on the other hand, are never omitted from (canonical) transitive clauses, for all persons and numbers. ${ }^{32}$ Consider the presence of $-i$ in sangei, coreferenced with kamatúpw 'feast' in (17d); the attempt to posit forms without OM like *sang- or *sange- is impossible.
6.2 WH-PHRASES. Anaphoric agreement is linked to the topic (i.e., given information), and so it is incompatible with an argument that is in focus (i.e., new information), while grammatical agreement is not subject to such a constraint. WH-phrases are one type of focused argument, one that can never be simultaneously interpreted as the topic (Bresnan and Mchombo 1987:759-60). If an overt pronominal element can co-occur with a coreferential WH-phrase, then this is evidence for grammatical agreement, since treating the co-occurrence as anaphoric agreement would result in a function clash (760), that is, the WH-phrase is both the focus and topic of the same clause (759). WH-phrases, of course, can only cooccur with coreferential third-person elements. As illustrated in (18), the third-person singular SM cooccurs with coreferential WH-phrases; it is ungrammatical to omit the SM:
Ié $\quad *(\mathbf{e}=)$ pé fitto?
who 3SG.SBJ=FUT come.here
'Who will come here?'
The same observations hold for OM. The third-person singular OM cannot be omitted with a coreferential WH-phrase, as shown in (19).

| Meet=we | u=ké | wér-e*(-i)? |
| :--- | :--- | :--- |
| what=DIST.SG | 2SG.SBJ=PST | see-TH-3SG.OBJ |
| 'What did you see?' |  |  |

In Yamada's (2006:488) application of this test to Galeya, she finds that the presence of both the thirdperson singular as well as plural OM co-occuring with coreferential WH-phrases indicates that these OM are instances of grammatical agreement (not anaphoric agreement), illustrated in (20a-b):
(20) (Yamada 2006:488)
a. Mana u-gimwane(-Pa)?
which.one 2SG-buy(-3SG)
'Which one did you buy (it)?'

[^12]
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b. Mana u-gimwane-di? which.one 2SG-buy-3PL
'Which one did you buy-them?'
However, a contrast arises with the Mortlockese equivalents for these sentences, illustrated in (21a-b):
(21)
a. Efa u=ké méé-ne-i?
which.one $2 \mathrm{SG}=\mathrm{PST}$ buy-TH-3SG.OBJ
'Which one did you buy?'
b. Ekkafa u=ké méé-\{*nee-r/ne-i\}?
which.ones $2 \mathrm{SG}=$ =PST buy-TH-3PL.OBJ/TH-3SG.OBJ
'Which ones did you buy?'
Just as discussed for (9) in section 2.2, the discord between overt plural objects and the third-person plural OM on the verb in (20b) suggests that this is not true grammatical agreement for number. Instead, we see the third-person singular OM functioning more like a general transitivity marker, a pattern observed in other Oceanic languages such as Toqabaqita (Lichtenberk 2005). (Further discussion on the transitivity marker analysis is provided in section 6.4.)
6.3 Locality. Grammatical agreement must be local (i.e., within a clause), while anaphoric agreement can be non-local (i.e., across clauses). If non-local agreement is allowed, this opens the possibility of either an anaphoric agreement analysis or a grammatical agreement + pro-drop analysis. If the latter, then the NP with which the pronominal element is coreferential is in the same clause, but it has been prodropped (i.e., is not pronounced). There are at least two mechanisms for pro-drop: either (1) agreementbased pro-drop in which the necessary semantic information (e.g., person, case, and number) of the argument are recoverable from the pronominal element (i.e., grammatical agreement), or (2) discoursebased pro-drop in which the argument is dropped without the need for co-occurring pronominal elements (Neeleman and Sendrői 2007). As previously illustrated, Mortlockese SM can co-occur with independent pronouns (cf. (4)) and overt NP material (cf. (5)). However, SM can also occur independently in clauses in which the NP with which it is coreferential is non-local, as in (22):
a. Shóó=we má lúpwpwai miir ee? group=DIST.SG indeed crab and.3PL huh 'That group of the crabs and the others, you remember?'
b. $\mathbf{R}=\mathrm{aa}$ téé-wou mé,

3PL.SBJ=REAL crawl-outwards and 'They crawled out and (said),'
c. "Oo, mwa meet!"
oh well what
'Well, what about that!'
The third-person plural SM $r=$ (fused with the realis marker) can be interpreted either as a pronominal argument that is linked to the non-local NP shóó=we 'that group (of the crabs and the others)', or as grammatical agreement in which the subject pronoun (assumed here to be the independent pronoun iir (3PL)) is unexpressed, perhaps as a type of agreement-based pro-drop. This extends to all persons and numbers for Mortlockese SM. The investigation into whether a pro-drop analysis applies to Mortlockese is beyond the scope of this paper, since distinguishing between agreement-based pro-drop and discoursebased pro-drop requires extensive analysis of discourse data. Note, however, that the co-occurrence of the independent pronoun and SM always has contrastive/emphatic focus on the independent pronoun (cf. (2) and (4)); this is not the unmarked strategy for expressing subject material in a declarative sentence. Such is the case for Romance languages, for which agreement-based pro-drop is allowed.

Regarding OM, we must distinguish between third-person singular and other OM, since the former can co-occur with a coreferential object NP (cf. (5)), whereas the latter cannot, which clearly suggests anaphoric agreement. However, the third-person singular OM can anaphorically agree with non-local NPs mentioned in the previous discourse, as in (23):
a. "Úkkúúkú-n áá-i tipaashem=ie, entirety-CONST POSS.CLASS-1SG.POSS smart=PROX.SG
'Because of my great smartness,'
b. ngaang me i=ké apasá-á-tá sokkon=ie

1SG.EMPH FOC 1SG.SBJ=PST say-3SG.OBJ-upwards type=PROX.SG
'I was the one who said this kind of a thing'
c. pwe i=pé angai,
because 1SG.SBJ=FUT then
'because I will then,'
d. kúú-Ø leesópwu-n paaú-n pwá=kewe." bite-3SG.OBJ end-CONST hand-CONST bat=DIST.PL
'bite the end of the hand of the bats.'
e. Iwe, pwá=kewe r=aa súú-tou shak so bat=DIST.PL3PL.SBJ=REAL fly-downwards just
'And so, the bats just flew downward'
f. óó-n aa-n tor-ofe-i shak, kúú-Ø.
on-CONST POSS.CLASS-CONST grab-TH-3SG.OBJ just bite-3SG.OBJ
'for the Frog's grabbing of it, then biting of it.'
In (23f), the verbs torofei 'grab him/her/it' and kúu - $\emptyset$ 'bite him/her/it' anaphorically agree with the object leesópwun paaín pwá kewe 'the end of the hands of the bats', which is non-local (23d). It would be ungrammatical to omit the OM, which is best illustrated with the first verb: neither *torofe- nor the intransitive form ttor 'to grab' is permissible here. In either case-grammatical agreement or anaphoric agreement - the third-person singular OM cannot be omitted. The application of this locality test, then, leads to ambiguous results for the third-person singular OM (i.e., permitting both grammatical and anaphoric agreement), an ambiguity discussed further in section 7. ${ }^{33}$
6.4 Directions for future change. The ambiguous results from the application of these tests outlined in Bresnan and Mchombo 1987 suggest that there are potential changes under way in Mortlockese with regard to SM and OM. For SM, there is some evidence to suggest that these proclitics can be analyzed as arguments (i.e., anaphoric agreement) through application of the omission and locality tests, although the third person singular SM must co-occur with co-referential WH-phrases, suggesting grammatical agreement. However, one can posit a potential move towards a reanalysis of SM as grammatical agreement in this language. ${ }^{34}$ Because SM can co-occur with independent pronouns in all persons and numbers (not only for third-person singular), this can be seen as a type of highly-generalized clitic doubling, but only in contrastive/emphatic contexts. If, however, this clitic doubling is one day extended to unmarked declarative constructions, then Mortlockese could enter a process of reanalyzing these doubled clitic arguments as grammatical agreement. Independent pronouns that are now analyzed as

[^13]adjuncts that co-occur with coreferential SM arguments (figure 3) may then soon be reanalyzed as the new subject arguments that co-occur with SM agreement morphemes (figure 4). ${ }^{35}$

Figure 3. Argument schema
$[\text { Subject NP/Independent Pronoun }]_{\text {adjunct }}[S M]_{\text {argument }}=$ TAM/Adverb/Verb

Figure 4. Agreement schema
[Subject NP/Independent Pronoun/ $\downarrow]_{\text {argument }}[S M]_{\text {agreement }}=$ TAM/Adverb/Verb

In contrast, OM appear to have at least two distinct patterns. On the one hand, the non-third-person singular OM are readily analyzable as anaphoric agreement (when there is no overt direct object), especially since these OM cannot co-occur with coreferential independent object pronouns (otherwise a sign of grammatical agreement). On the other, the third-person singular OM appears to have two functions: anaphoric agreement (when there is no overt nominal direct object) and a general transitivity marker (when co-occuring with overt nominal direct objects).
7. THE THIRD-PERSON SINGULAR OM AS A TRANSITIVITY MARKER. A common grammaticalization pattern found in the world's languages is the reanalysis of a high-frequency third-person singular element as a zero-form. For example, in the context of Proto-Indo-European reconstruction, Watkins' Law proposes that an inflected verb stem that originally contains a third-person singular subject is reanalyzed as a zero exponent, thus providing the basis for the construction of a new paradigm based on that reanalyzed stem (Watkins 1962). In the case of Mortlockese, the third-person singular OM is being reanalyzed as a transitivity marker, and the actual third-person singular exponent as zero-marked. This particular OM, then, exhibits plurifunctionality: (1) when there is an overt direct object-regardless of whether the object is singular or plural (or coordinated) - the OM functions like a general transitivity marker, and less likely as true grammatical agreement; and (2) when there is no overt direct object, the OM functions more like anaphoric agreement. Crucially, in the second pattern, the singular-plural contrast in the OM is retained. Recall (8), in which it is ungrammatical for the third-person plural OM to co-occur with overt plural or coordinated objects, and the third-person singular OM is required. However, if those objects were to have been mentioned earlier in the discourse (or are understood from context), then the use of the third-person plural OM is licit, but not the third-person singular OM, shown in (24):

| Ngaang | i=sán | mwo | shuu-\{ngee-r/*nge-i $\}$ |
| :--- | :--- | :--- | :--- |
| 1SG.EMPH | 1SG.SBJ=NEG.POT | yet | meet-TH-3PL.OBJ/TH-3SG.OBJ |

This further supports the hypothesis that OM other than third-person singular are actually arguments (i.e., anaphoric agreement) rather than true (grammatical) agreement. ${ }^{36}$ Similar patterns are attested crosslinguistically; in Kinyarwanda, for example, OM only surfaces when an object is not overtly expressed (i.e., anaphoric agreement) (Baker 1988).

Currently, the generalized use of the third-person singular OM as transitive marker is limited to when the direct object is third-person and an NP that has old-information status. The transitivity marker analysis predicts at least two scenarios (happening over time): (1) this marker may be allowed to co-occur with independent pronouns other than third-person singular, and (2) this marker can co-occur with non-

[^14]specific/non-definite overt objects. Regarding the first scenario, there is evidence from the speech of the current young generation in which there is apparent free alternation between the suffix form and the independent form of pronominal objects, as illustrated in (25a-b):
(25)
a. i=aa kútt-óó-k

1SG.SBJ=REAL search-TH-2SG.OBJ
'I search for you'
b. $\mathrm{i}=\mathrm{aa}$ kútt-aa- $\emptyset$ een

1SG.SBJ=REAL search-TH-3SG.OBJ 2SG
'I search for you'
Much investigation needs to be done to ascertain the frequency and acceptability of these patterns, since (25b) in particular is not generally attested in the speech of older adults. ${ }^{37}$ However, other examples are robustly attested in the speech of both young and old generations, such as the free alternation within the pair in (26a-b):

| a. | $\mathrm{r}=\mathrm{aa}$ | wér-e-kish |
| :--- | :--- | :--- |
|  | 3pl.SBJ=REAL | see-TH-1PL.INCL.OBJ |
|  | 'they see us (inclusive)' |  |

$\begin{array}{ll}\text { b. } & \begin{array}{l}\mathrm{r}=\mathrm{aa}\end{array} \quad \text { wér-e-i } \quad \text { kiish } \\ \text { 3PL.SBJ=REAL } & \text { see-TH-3SG.OBJ } \\ \text { 'they see us (inclusive)' }\end{array}$
There is no phonological environment or discourse/pragmatic context to condition the variation; both are equally grammatical and felicitous. Not all persons and numbers allow variation such as that in (26a-b), suggesting that the reanalysis of the third-person singular OM as a transitivity marker is still in progress. Note that the combinations of third-person singular OM and third-person singular independent pronoun $i i$ are ungrammatical (e.g., * wérei ii).

Regarding the second scenario, one might suspect that the transitivity marker is better analyzed in the context of the information status of the overt object. Indeed, the majority of instances of overt thirdperson singular OM on the verb co-occuring with overt objects are cases in which the objects are marked with demonstrative enclitics, such as mwáán=we 'that man' in (2) and shaan=ie 'this water' in (5); these are high-frequency patterns in naturalistic discourse and written texts, as well as in elicited examples. However, it is also possible to allow overt third-person singular OM to co-occur with unmarked (non-specific/non-definite) objects, such as in (27), taken from a written narrative:

$$
\begin{array}{llllll}
\text { iwe Taak } \quad \emptyset=\text { aa } & \text { úró pwe } & \text { Likkaarek e=pé } & \text { wisan-e-i }  \tag{27}\\
\text { so T. } & \text { 3SG.SBJ=REAL say thatal. } & \text { L. } & \text { 3SG.SBJ=FUT } & \text { role-TH-3SG.OBJ speech } \\
\text { 'So Taak said that Likkaarek will take the role of giving a speech.' }
\end{array}
$$

This is the first mention of the object afalafal 'speech' at this point in the discourse, and it is arguably generic (i.e., speech in general, not a specific discourse-old speech). This object co-occurs with the thirdperson singular OM on the verb wisanei 'to take the role of something'. Much needs to be investigated regarding the discourse contexts that permit these kinds of alternations, but for the moment, we can at least observe that the third-person singular OM can co-occur with non-specific/non-definite objects, which is consistent with the transitivity marker analysis. The relatively low frequency of these constructions (as compared to canonical [ $\mathrm{OM}+\mathrm{N}+$ demonstrative] constructions) might suggest that this is a strategy that is either entering into the language, or is fading away. ${ }^{38}$

[^15]8. FUture investigations and closing remarks. My discussions in sections 4 and 5 show that Mortlockese SM are best analyzed as proclitics, whereas OM are suffixes. In section 6, I conclude that SM are most likely arguments, but I also raise the possibility that they may potentially become more agreement-like while still retaining some characteristics of argumenthood (i.e., going through a stage of ambiguous interpretation, as in Chichewa SM). OM, on the other hand, exhibit a split in patterns between the third-person singular and others, with the former likely undergoing reanalysis as a transitivity marker, discussed in section 7. Apart from the directions for future research I raise in sections 6.4 and 7, there are a number of important residual questions. Regarding grammaticalization, Romance languages, for example, are excellent testing grounds for observing shifts in process. Culbertson and Legendre (2010) show that in colloquial spoken French, clitic pronouns are obligatory with subject pronouns, optional with definite NP subjects, and ungrammatical with indefinite NP subjects. My preliminary investigations in Mortlockese show that SM are obligatory (null SM notwithstanding) for all three cases, including indefinite NP subjects. Picard, a regional language of France, shows the same pattern as Mortlockese; furthermore, in Picard, the subject clitics have completely been reanalyzed as subject-agreement markers (Auger 1994, 2004). Mortlockese may very well be in the process of moving away from a stage similar to colloquial spoken French and in the direction of Picard.

Regarding the issue of null SM (cf. (17e) and (17g)), preliminary discourse analysis shows that they have very low frequency in discourse narratives compared to verbal clauses with overt SM. Despite the marginal status of this null SM construction, we must wonder why such a construction is even allowed, and what motivates it. Given that interlocutors have multiple syntactic options for shaping the flow of information, we might look to discourse and pragmatic explanations for this strategy (cf. Du Bois 1985). Indeed, the low frequency of null SM might suggest that this strategy is fading away in Mortlockese, a strategy that may have been permissible for elements analyzed as arguments, but is no longer tenable for elements now being analyzed as agreement (i.e., the desire to avoid null grammatical agreement, hence the low frequency and marginal status).$^{39}$ Then again, the low frequency of null SM could also mean that this strategy is slowly being adopted by speakers over time, a scenario for which a discourse pro-drop analysis could provide some explanation. These speculations need to be borne out with extensive analyses of discourse corpora.

This paper is very much a work-in-progress that attempts to fill a rather large hole in the morphophonological and morphosyntactic research of Micronesian languages. Chuukic languages, Micronesian languages in general, and Oceanic languages as a whole consistently exhibit SM and OM, yet few authors have taken the opportunity to determine the morphophonological and morphosyntactic status of these pronominal elements. This paper shows that the observations of SM and OM in Mortlockese (and other languages) can contribute to wider theoretical discussion about the status of clitics and the various paths taken on the road to grammaticalization.

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[^0]:    ${ }^{1}$ I would like to thank Yuko Otsuka, Kamil Deen, Victoria Anderson, William O'Grady, Ryoko Hattori, Jojo Peter, Karnim Judah, and the participants of the Fall 2011 Semester of LING 750X Austronesian Syntax for the valuable comments on this project. I also thank the residents of Pakin Atoll for their unfailing assistance, and especially Liperto Linge for his dedication as my language teacher: kilissou shaapwúr áámi mwonson reen óómi alillis, sangei loomw toorei iei. All errors in this work are mine alone.
    ${ }^{2}$ Glossing and abbreviation conventions follow those in the Leipzig Glossing Rules, except for the following: ABAN, abandoned; ALLINCL, all-inclusive; CLASS, classifier; CONST, construct-genitive suffix; DM.CONT.ACT, discourse marker that expresses a continual action; DM.SOFT, discourse maker that softens expressions; EMPH, emphatic; EXIS, existential; GNR, general; HEV, high evidentiality; IMM, immediate; LOCATION, locational; MED, medial; NFUT, non-future; NUM, numeral; POT, potential; REAL, realis; REDUP, reduplicated element; STATV, stative; TH, theme. Even though I do not yet provide my arguments for the morphophonological status of the SM and OM (which I address in section 5), for the moment I will consistently use hyphens between SM and TAM markers and between verbs and OM.
    ${ }^{3}$ Hattori 2012 provides an alternative analysis for what Good and Welley 1989 describe as "subject markers," considering them to be auxiliary verbs that encode evidentiality.

[^1]:    ${ }^{4}$ This is discussed further in section 4.
    ${ }^{5}$ This is discussed further in section 6.
    ${ }^{6}$ The IPA values for the orthographic symbols used are as follows: <á> $=[\mathfrak{Z}]$, <é> $=[६],\langle u ́\rangle=[\mathfrak{u}],\langle o ́\rangle=$ $[0],\langle\mathrm{mw}\rangle=\left[\mathrm{m}^{\mathrm{wy}}\right],\langle\mathrm{ng}\rangle=[\mathrm{n}],\langle\mathrm{pw}\rangle=\left[\mathrm{p}^{\mathrm{wy}}\right]$, <ch> = [tf], <sh> = [f], <CC> = [C:], 〈VV> = [V:]. Other symbols, such as <s> and <o>, have their expected IPA values.

[^2]:    ${ }^{7}$ Map courtesy of Danko Taboroši, Island Research and Education Initiative.

[^3]:    ${ }^{8}$ I use these abbreviations with plural denotation. Later in this paper, for my discussions about the thirdperson singular OM, I treat the abbreviation as singular (referring to the construction as a whole, rather than to the various morphological realizations of that OM).
    ${ }^{9}$ Of the two second-person singular forms, $u$ is by far the most common one across speakers, with $o$ restricted to a few fixed phrases like o-sé mwashan (2SG.SBJ-NEG want) 'please (literally, 'don't you want')'. Even then, alternation with $u$ is idiosyncratic (e.g., $u$-sé mwashan).
    ${ }^{10}$ The zero morph is often preceded by lengthening of the preceding vowel in the verb, when V-final. If the verb is C-final, then $a$ is added to the end as a "theme" or "extension" (Spencer 1991:11), to which the OM attach.
    ${ }^{11}$ When the first-person all-inclusive pronoun exists in a paradigm, it denotes all members of a group, including those who are not in earshot of the speaker or are not in the immediate vicinity, whereas the firstperson inclusive denotes only those who are in earshot/in the immediate vicinity.
    ${ }^{12}$ Speakers have idiosyncratic preferences as to which form they tend to use on a regular basis, although both are available for any given speaker.
    ${ }^{13}$ The independent pronouns will be described as (EMPH) only when emphasis/contrast is evident in the context.

[^4]:    ${ }^{14}$ Note, however, the discussion of apparent null SM in section 6.1.
    ${ }^{15}$ The most frequent transitivizing affix that is used for non-native vocabulary is -nei, but this, too, is unattested (e.g.,, *kóól-nei 'call someone' or *kóól-nok 'call you').
    ${ }^{16}$ At this point in my research, it is unclear if specificity or definiteness (or even affectedness) is the relevant parameter to describe the interaction of demonstratives with overt OM. I use the slash-joined terms like 'specific/definite' as a placeholder, one that still refers to information status.

[^5]:    ${ }^{17}$ I thank Karnim Judah for confirming the felicity of (8a); Ms. Judah is an L1 speaker of the Satawan dialect.
    ${ }^{18}$ But note the exception discussed in (27). Patterns like (8c) seem to be allowed for other NPs modified for possession and number but lacking demonstrative markers.
    ${ }^{19}$ This pattern of object agreement discord is grammatical among many registers and styles of various dialects of Mortlockese.

[^6]:    ${ }^{20}$ Similarly, Sohn and Bender (1973:135) consider SM to be "bound subjects" in Ulithian.
    ${ }^{21}$ There is a dearth of research on the syntax of Chuukic languages, and the publications to which I have access do not directly address the question of the morphosyntactic status of SM. In most descriptive grammars or grammatical sketches, these issues are peripheral, if addressed at all (cf. Roddy 2007 and Oda 1977, which refer to subject pronominal elements as "subject pronouns" in Satawalese and Pulo-Annian, respectively).

[^7]:    ${ }^{22}$ Yamada (2006:482-83) suggests this for Galeya.
    ${ }^{23}$ Most citation forms of lexical nouns are consonant-final, such as iit 'name', but underlying (lexemic) forms retain final vowels that are historically attested, thus, ita- 'name' (note that this form is never given in citation, nor does it occurs in isolation). Affixation with possessive suffixes provide evidence of internal sandhi in the form of vowel harmony, e.g., ite-i (name-1SG.POSS) 'my name', ito-mw (name-2SG.POSS) 'your name', itash (name-1 PL.INCL.POSS) 'our name'.
    ${ }^{24}$ Determining the morphophonological status of TAM markers in Mortlockese is another issue beyond the scope of this paper. For convenience, I use the term "TAM marker" as a terminological placeholder.

[^8]:    ${ }^{25}$ I thank Ms. Judah for providing this example.
    ${ }^{26}$ I thank Jojo Peter for his assistance with this example. Mr. Peter is an L1 speaker of the Ettal dialect.

[^9]:    ${ }^{27}$ I use the umbrella term "realis" as a terminological placeholder, since this particular TAM marker in Mortlockese has complex denotation and deserves closer study. It covers a variety of TAM dimensions including simple present, assumed-change-of-state, past, subjunctive, and hortative.

[^10]:    ${ }^{28}$ Consider, for example, the productive nominalizing prefix $l i$-, which does not lose its vowel when affixed to V-initial lexical items, for example, li-araw (NMLZ-blue) 'the blue one', not *laraw.

[^11]:    ${ }^{29}$ For consistency, I continue to use the abbreviations "SM" and "OM" for the remainder of this paper, with the understanding that "SM" refers to subject proclitics, and "OM" to object suffixes. The abbreviations retain plural denotation.
    ${ }^{30}$ From this point onwards, all SM will be glossed with a clitic boundary, and OM with an affix boundary.

[^12]:    ${ }^{31}$ More investigation is needed to determine if null SM is restricted to certain TAM markers; note that both instances of null SM in (17) occur in the context of a negative TAM marker.
    ${ }^{32}$ Recall, however, the discussion of semitransitive constructions in (8) in section 2.2.

[^13]:    ${ }^{33}$ Such ambiguity is not surprising, since Bresnan and Mchombo conclude that Chichewa SM are "ambiguously used for grammatical and anaphoric agreement" (1987:745).
    ${ }^{34}$ The scenario of reanalysis suggested here is strictly hypothetical and needs to be supported by empirical evidence. I must leave this issue for future investigation.

[^14]:    ${ }^{35}$ My preliminary analyses of discourse narratives in Nómwonweité (another Chuukic language closely related to Mortlockese) suggest that the language is already in this stage of reanalysis.
    ${ }^{36}$ Many thanks to William O'Grady for assisting me in clarifying these observations, as an outgrowth of an unrelated pilot project on the acquisition of Mortlockese SM and OM.

[^15]:    ${ }^{37}$ There appears to be dialectal variation in the licitness of these patterns, since (25b) is not permissible in Ettal Mortlockese (Jojo Peter, pers. comm., 2012).
    ${ }^{38}$ Older Mortlockese texts need to be consulted to assess this, but that is beyond the scope of this paper.

[^16]:    ${ }^{39}$ Another path to examine is the influence of certain register effects that are observed in English (cf. Thrasher 1977 for subject drop in adult English casual speech, as well as Haegeman and Ihsane 2001 for subject drop in diary-style writing, a register that in turn has its own dialectal variation).

