IMPLICIT ARGUMENTS AND UNACCUSATIVE SYNTAX: EVIDENCE FROM PALAUAN*

Justin Nuger
University of Maryland
!@ju-st.in

This paper expands on the idea that Palauan verbalizer morphemes are a class of functional heads of the category *v* (Nuger 2009, 2010) whose function is to transform a verb root into a full-fledged verb, where the root is either of category V or is category-neutral. The focus shifts here to data involving intransitive verbs (and adjectives) in Palauan. The primary question I address is one of selection vs. projection: if a verb is a syntactic object constructed compositionally from a V or $\sqrt{\text{ROOT}}$ and a verbalizer *v* via the operation Merge, one might expect to find many more verbs in a language than are actually attested. How can we restrict the possible combinations of *v* heads and their VP or $\sqrt{}$P complements such that only the attested verbs of a language are derived? I address this question first by presenting syntactic diagnostics for subclasses of passive and unaccusative verbs—as well as stative adjectives—all formed from a $\sqrt{\text{ROOT}}$ and the prefix *me-*. Next, I devise a system that encodes the lexical semantic differences between these subclasses using (morpho)syntactic features on the subparts of the verbs (*i.e.*, $\sqrt{\text{ROOT}}$ and *v*) and combines the notions of c-selection and feature unification (perhaps using the feature percolation system in Grimshaw 2005: Ch. 1). The system makes strong empirical predictions about the possible lexical semantic subclasses of verbs in Palauan and can be extended straightforwardly to verb classes in other languages.

1. Framing the investigation

Many Palauan transitive verbs have a corresponding intransitive *basic form* (Josephs 1997: 211–220).[1] In such cases, the direct object of the transitive variant, *e.g.*, a blai 'building' in (1), becomes subject of the basic variant, as shown in (2).

(1) A chad a mla **meleseb** er a blai el me er a eou.
D person TOP AUX burn.IMPF ACC D building L come P D space.below
"Somebody has burned the building down."

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[1] This is also known as the *ergative form* in Josephs 1975: 131–136, 1990: xxx–xxxi.

(2) A blai er a Ngerchemai a **me-seseb** el me er a eou.
D building P D Ngerchemai TOP ME-burn L come P D space.below
"Building in Ngerchemai Burns Down." [*Roureor Belau*, 22 May 2002]

The question that immediately arises is whether the alternation between *meleseb* and *meseseb* in (1) and (2) is a voice alternation, like the active/passive alternation in English. This question has continually puzzled Palauan researchers. In the Palauan literature, basic forms have been analyzed as: ergative (unaccusative) forms (Wilson 1972; Josephs 1975, 1990), passives (Waters 1980; Georgopoulos 1986, 1991), and a sort of hybrid between the two (Flora 1974; Lemaréchal 1991; Gibson 1993; Josephs 1997, 1999). As far as the morphology is concerned, basic forms contain the same roots as their corresponding transitive forms—*e.g.*, $\sqrt{\text{SESEB}}$ 'burn' in (1) and (2)—but different prefixes (*e.g.*, *me-* instead of *meN-*, *o-* instead of *oN-*, and so forth).[2]

I show below that the syntactic status of Palauan basic forms (*i.e.*, passive, unaccusative, etc.) is much clearer if the lexical semantics of the verb roots are taken into account. Syntactic and semantic irregularities within the morphological class of basic forms (which I also call *me-* verbs) suggest that they do not constitute a homogeneous syntactic class of verbs, but they may belong to one or more subclasses: passive verbs, unaccusative verbs, or stative adjectives. Membership of a particular *me-* verb in each of these subclasses may be diagnosed syntactically, using both cross-linguistic and Palauan-internal diagnostics to distinguish between the three types.

To account for the differing syntactic behavior among the three subclasses, I propose an analysis like those of von Stechow 1995, Kratzer 1996, and Alexiadou and Anagnostopoulou 2004, in which the behavior of each subclass is traceable to the syntactic configurations in which the verbs appear. The paper proceeds as follows. In Section 2, I examine the properties of (and diagnostics for) passive verbs in Palauan. Next, I present a new Palauan-specific unaccusativity diagnostic which I call *di ngii*-predication in Section 3 and discuss its interaction with the diagnostics for passive. In Section 4, I lay the groundwork for a (morpho)syntactic system that restricts the possible sets of verbs that can be constructed syntactically from a $\sqrt{\text{ROOT}}$ and a *v* head and examine the implications of a system of this sort.

2. Implicit Arguments in Passives

In this section I present evidence for a subclass of passive *me-* verbs, like those in (3).

(3) A tech-el a charm a kir-el mo **me-dul**.
D flesh-3SGP D animal TOP obligation-3SGP FUT ME-roast
"The meat is to be roasted." [*Chedaol Biblia*, Exodus 12:8]

How can we tell whether (3), which includes the *me-* verb *medul* 'roasted' (*cf. melul* 'roast;' Josephs 1990: 170), is a passive construction? Is the *me-* prefix a passive morpheme? From example (3) alone, the answer to this question is unclear. In (3), *a techel a charm* 'the meat' is the subject, and no agent argument is expressed overtly. But is there also a *covert* agent argument?

[2]Regardless of their morphological form, I gloss many instances of what Josephs (1997) calls "basic form" prefixes with ME (for *me-*)—this is intentionally pretheoretical.

Similar questions have been raised for English and other Indo-European passives (and indeed unaccusatives; see, *i.a.*, Roberts 1986; Roeper 1987). The generally accepted consensus for Indo-European is that: (i) passives can express an agent overtly in a PP/oblique DP (unaccusatives can't), (ii) implicit agents of passives can license agent-oriented adverbials (which are bad with unaccusatives), and (iii) implicit agents of passives can bind PRO in purpose infinitivals (which are bad with unaccusatives). In Palauan, some members of the morphological class of *me-* verbs pass these tests more clearly than others. I run through each test below and discuss its results briefly.

2.1. The elusive *by*-phrase

Palauan language researchers have reported mixed judgments for oblique PPs (which I call *er*-phrases) in sentences with *me-* verbs. For instance, Josephs (1975: 134–135) reports that some speakers find *er*-phrases "awkward," whereas DeWolf has at different times said that agents are "not usually indicated" (DeWolf 1979: 101) and even that specification of an agent argument in an *er*-phrase is "disallowed" (DeWolf 1988: 171). Gibson (1993: Ch. 5) reports no problems eliciting *er*-phrases "beyond a preference to omit them." In my own fieldwork, I have found that the relative (un)acceptability of an *er*-phrase depends largely on the verb with which it co-occurs.[3] Some examples containing *er*-phrases are given below in in (4).

(4) a. A "Belau er Kid" a mo me-chitakl **(er a rengalek er a skuul)**.
D Palau P 1PL.INCL TOP FUT ME-sing (P D children P D school)
"*Belau er Kid* (the Palauan national anthem) will be sung (by the students)."

b. Aike [el mlok-oad **er a tebelik el charm**] a dimlak
those [L PAST.PASS.CAU-die P D wild L animals] TOP NEG.PAST
kulab.
1SGS.WH[O].PAST.carry
"Those that were killed by wild animals, I didn't take them." [*Chedaol Biblia*, Genesis 31:39]

c. Ng mo ua kerrekar el mla me-dul **er a ngau** a
3PL.−HUM= FUT like trees L AUX ME-burn P D fire D
rechel-el, me a bng-al a m-o-sebek **er a eolt**.
branches-3PL.−HUMP and D flowers-3PL.−HUMP TOP ME-CAU-fly P D wind
"They will be like trees whose branches are burned by fire, whose blossoms are blown away by the wind." [*Chedaol Biblia*, Job 15:30]

d. ... a bleob el okesi-ul ngike el charm el m-il-temall **er a saider**.
... D idol L image-3SGP that L beast L ME-PAST-wound P D sword
"... an image in honor of the beast that had been wounded by the sword."
[*Chedaol Biblia*, Revelations 13:14]

[3]The acceptability of *er*-phrases in Palauan is probably not interference from English passive *by*-phrases: *er*-phrases were attested as early as the 1940s (Capell 1949), and Palau only became a U.N. Trust Territory administered by the United States in 1944.

Like English *by*-phrases, the Palauan *er*-phrase can contain agents (4a–b), causers (4c), instruments (4d), and anything else that could serve as subject of the transitive variant. If it's true that passive verbs license *er*-phrases, then the co-occurrence of *er*-phrases with *me-* verbs in (4) suggests that (at least some) *me-* verbs are passives.

2.2. Agent-oriented adverbials and purpose infinitivals

Agent-oriented adverbials (AOAs) and purpose infinitivals (PIs) provide a means to diagnose (null) implicit arguments. In many languages, AOAs and PIs are licensed by syntactic presence of an agent, and the agent may be overt or null. If the same is true of Palauan, then we would expect that passives that can have implicit agents should license AOAs and PIs as well. And yet, the results are somewhat mixed. In some cases, AOAs and PIs are perfectly acceptable, as in (5), and passives of verbs requiring agents (*e.g.*, creation verbs) always license AOAs and PIs.

(5) A Belau er Kid a **(blak a reng-rir el)** mo me-chitakl **(el**
a Palau of 1PL.INC TOP (eager the hearts-3PLP L) FUT ME-sing (L

oldeu er a reokiaksang PRO).
make.happy ACC the guests they)
"Our Palau will (eagerly) be sung (by the students) (to please the guests)."

Passives of verbs that optionally take agents (such as transitive *meleseb* 'burn') show greater variability, as indicated by the question marks [?] in (6). For *me-* verbs like *meseseb* 'be burned,' AOAs and PIs become much more acceptable if an agent is expressed overtly in an oblique *er*-phrase rather than simply implicitly.

(6) A blai a **(?blak a reng-ul el)** m⟨il⟩-seseb (er a rubak) **(?el**
the house TOP (?eager the heart-3SGP L) ME.⟨PAST⟩-burn (by the old.man) (?L

ngmai a udoud el insurance PRO).
get the money L insurance he)
"The house (was) (?eagerly) burned down (by the old man) (?to collect the insurance money)."

Finally, it is worth noting that statives formed from *me-*, like *mesaul* 'tired,' do not license AOAs or PIs. This fact appears to correlate with the impossibility of expressing an agent in an *er*-phrase, as shown in (7).

(7) Ng **(*blak a reng-ul el)** me-saul (*er a rengelek-el) **(*el mo**
3SG= (*eager the heart-3SGP L) ME-tired (*by the children-3SGP) (*L go

mechiuaiu PRO).
sleep he)
"He is (*eagerly) tired (*by his children) (*to go to bed)."

2.3. Intermediate Conclusions about Passives

We have now seen that some *me-* verbs but not others share the key properties of some Indo-European passives: (i) an external argument may be licensed in an oblique *er*-phrase, (ii) AOAs are licensed (with or without an associated *er*-phrase), and (iii) control into PIs is possible (with or without an associated *er*-phrase). Still, not all *me-* verbs pattern like passives. For these verbs: (i) an external argument in an oblique *er*-phrase may be awkward or ungrammatical, (ii) AOAs are impossible in the absence of an *er*-phrase, and (iii) control into PIs becomes impossible in the absence of an *er*-phrase. At this point, several questions arise.

The first question is, what causes this syntactic divergence in the morphologically uniform class of *me-* verbs? I suggest that the differences in syntactic behavior arise from differences in the properties of individual roots, primarily in the domains of argument structure and lexical aspect. The next question is, can we predict which verbs will behave which way? The answer to this question seems to be yes. In the next section, I present a Palauan-specific diagnostic for unaccusativity called *di ngii*-predication. *Di ngii*-predication (together with the diagnostics for passive in this section) makes it possible for us to classify *me-* verbs into three distinct subclasses. The question of what the underlying reason is for this divide in the class of *me-* verbs is addressed in Section 4. Let's first examine the *di ngii*-predication diagnostic for unaccusativity in Palauan.

3. An Unaccusativity Diagnostic

In this section, I show that a significant number of *me-* verbs that do not pattern like passives instead appear to behave more like unaccusatives. Their failure to license *er*-phrases, AOAs, and control into PIs suggests the lack of a syntactically realized external argument. Chierchia notes that (anticausative) unaccusatives can be distinguished from passives in Italian by the *da sé* 'on its own' diagnostic.[4] Similar diagnostics using *on its own*-type modifiers have been shown to diagnose unaccusativity in other languages as well, including at least English (Delancey 1984; Levin and Rappaport Hovav 1995), German (Härtl 2003, Schäfer 2008), (Modern) Greek (Alexiadou and Anagnostopoulou 2004), and Ukrainian (Lavine 2010).

If there is no external causer or agent that initiates the event, then an *on its own*-type modifier can describe the subject of the unaccusative.[5] Given its success in diagnosing unaccusatives in a number of other languages, it's worth considering whether we can apply a similar diagnostic to Palauan intransitive verbs. Below, I present the *di ngii*-predication diagnostic and argue that it patterns with *on its own*-type modifiers constructions in other languages in diagnosing the absence of implicit arguments, and, by extension, distinguishing passives from unaccusatives.

[4] I adopt the English translation 'on its own' rather than 'by itself' to avoid unintended confusion with English *by*-phrases in passives.

[5] Alexiadou and Anagnostopoulou (2004: 131) show that a Greek version of the *da sé* diagnostic may also distinguish morphologically identical passives and unaccusatives in Greek.

3.1. Palauan *di ngii*-predication

The relevant "without external help" interpretation of *on its own* is expressed in Palauan using a reflexive pronoun as the main predicate, which is modified by *di* 'just/only.' This is the construction that I call *di ngii*-predication. The reflexive co-refers with the subject DP, which contains a non-restrictive relative clause that denotes the event; as such *di ngii*-predication shares some of the properties of clefts.[6] An example of the *di ngii*-predication construction is given below in (8).

(8) Ng **di mle** **ngii**$_i$ [a butiliang [el u⟨le⟩-beu]]$_i$.
3SG= only AUX.PAST itself [D bottle [L ME.⟨PAST⟩-break]]
"The bottle broke **on its own**."

Unlike English *on its own* or *by itself*, the *di ngii*-predication construction in (8) is not ambiguous (*i.e.*, it does not mean "alone"). To get the "alone" reading, a regular cleft of an argument DP modified by *el tang* "alone" must be formed, as in (10) (*cf.* the "without external help" interpretation of the *di ngii*-predication in (9)).

(9) "WITHOUT EXTERNAL HELP" INTERPRETATION:
[Ngii el siseball]$_i$ a **di mle** **ngii**$_j$ [__$_i$ [el me-ngai a chesmer-el]]$_j$.
[it L entrance] TOP only AUX.PAST itself [[L ME-remove D door-3SGP]]
"The gate opened for them **by itself**." [*Chedaol Biblia*, Acts 12:10]

(10) "ALONE" INTERPRETATION:
Ng ngera a uchul me ng **di mle** **kau** **el tang** [el me]?
3SG= what? D reason so.that 3SG= only AUX.PAST yourself L alone [L come]
"Why did you come **all by yourself**?" [*Chedaol Biblia*, 1 Samuel 21:1]

The distinction between (9) and (10) is important, as it shows that Palauan *di ngii*-predication unambiguously expresses the relevant "without external help" interpretation of English *on its own*—the irrelevant "alone" interpretation is expressed with a different construction.

3.2. Distinguishing Unaccusatives from Passives

Now, like the diagnostics for passive, *di ngii*-predication does not apply uniformly to sentences containing *me-* verbs. For instance, when *di ngii*-predication is applied to (2), the result is acceptable, as shown in (11). If *di ngii*-predication truly diagnoses unaccusativity, then (11) suggests that *meseseb* should be classified as an unaccusative verb.

[6] I am hesitant to definitively classify the *di ngii*-predication construction as a cleft, however, for two reasons. First, Georgopoulos's (1991) extensive research on Palauan clefts does not mention the construction, and second, there is a full DP in subject position which heads the relative clause, rather than an expletive subject. I have not investigated the syntactic properties of *di ngii*-predication thoroughly enough to ascertain whether it is derived by the same process that forms clefts. This task must be left aside for the time being.

(11) Ng **di mle ngii** [a blai [el **m⟨il⟩-seseb** el me er a
3SG= only AUX.PAST itself [D building [L ME.⟨PAST⟩-burn L come P D
eou]].
space.below]]
"The building burned down **on its own**."

But this result apparently contrasts with the behavior of *meseseb* in Section 2. We saw in (6) that the presence of an (overt) agentive *er*-phrase licenses AOAs and PIs—this is shown below in (12).

(12) A blai a **(kerekikl el) m⟨il⟩-seseb** el me er a eou er a
D building TOP (carefully L) ME.⟨PAST⟩-burn L come P D space.below P D
rekelebus$_i$ **(el melai a techei PRO)**.
prisoners (L take.IMPFV D revenge they)
"The building was (carefully) burned down by the prisoners (to take revenge)."

What is interesting is that *di ngii*-predication is incompatible with external agent/causer arguments (implicit or overt). As a result, the relative clause in a *di ngii*-predication cannot contain *er*-phrases as shown in (13), AOAs as shown in (14), or PIs as shown in (15).

(13) *Di ngii*-PREDICATION BLOCKS *er*-PHRASES:
Ng **di mle ngii** [a blai er a Ngerchemai [el **m⟨il⟩-seseb** el
3SG= only AUX.PAST itself [D house P D Ngerchemai [L ME.⟨PAST⟩-burn L
me er a eou **(*er a rekelebus)**]].
come P D space.below (*P D prisoners)]]
"The building in Ngerchemai burned down **on its own (*by the prisoners)**."

(14) *Di ngii*-PREDICATION BLOCKS AGENT-ORIENTED ADVERBIALS:
Ng **di mle ngii** [a blai er a Ngerchemai [el **(*kerekikl el)**
3SG= only AUX.PAST itself [D house P D Ngerchemai [L (*carefully L)
m⟨il⟩-seseb el me er a eou]].
ME.⟨PAST⟩-burn L come P D space.below]]
"The building in Ngerchemai **(*carefully)** burned down **on its own**."

(15) *Di ngii*-PREDICATION BLOCKS CONTROL INTO PURPOSE INFINITIVALS:
Ng **di mle ngii** [a blai er a Ngerchemai [el **m⟨il⟩-seseb** el
3SG= only AUX.PAST itself [D house P D Ngerchemai [L ME.⟨PAST⟩-burn L
me er a eou **(*el melai a techei PRO)**]].
come P D space.below (*L take.IMPFV D revenge)]]
"The building in Ngerchemai burned down **on its own (*to take revenge)**."

A possible explanation for the fact that verbs like *meseseb* display such variable behavior when confronted with the diagnostics for passive and the *di ngii*-predication diagnostic could be that they are sometimes interpreted as passives (meaning something like "the building was burned

down") and other times as unaccusatives (meaning something like "the building burned down"). If *di ngii*-predication reliably identifies unaccusatives and is incompatible with external agents and causers, then a clear prediction is made, namely that *di ngii*-predication should be completely impossible with *me-* verbs that require agents, such as creation predicates like *paint* or *build*. This is indeed what we find in (16) and (17).

(16) a. A sensei a m⟨il⟩ngesbereber er a siasing.
D teacher TOP ⟨PAST⟩.paint.IMPFV ACC D picture.
"The teacher was painting a picture." TRANSITIVE

b. A siasing a **m⟨il⟩-chesbereber** (er a sensei).
D picture TOP ME.⟨PAST⟩-paint (P D teacher)
"The picture was painted (by the teacher)." IMPLICIT AGENT OPTIONAL

c. *Ng **di mle ngii** [a siasing [el **m⟨il⟩-chesbereber**]].
3SG= only AUX.PAST itself [D picture [L ME.⟨PAST⟩-paint]]
("The picture (was) painted on its own.") IMPLICIT AGENT BAD

(17) a. A dem-ak a omekedechor er a beches el bli-mam.
D father-1SGP TOP build.IMPFV ACC D new L house-1PL.EXCP.
"My father is building our new house." TRANSITIVE

b. A beches el bli-mam a **mlukedechor** (er a dem-ak).
D new L house-1PL.EXCP TOP PAST.ME.build (P D father-1SGP)
"Our new house has been built (by my father)." IMPLICIT AGENT OPTIONAL

c. *Ng **di mle ngii** [a beches el bli-mam [el **mlukedechor**]].
3SG= only AUX.PAST itself [D new L house-1PL.EXCP [L PAST.ME.build]]
("Our new house (was) built on its own.") IMPLICIT AGENT BAD

What we see in (16) and (17) is that some intransitive *me-* verbs (*e.g.*, verbs of creation) are simply incompatible with *di ngii*-predication. These verbs are interpreted unambiguously as passives—since their lexical semantics requires that there be an agent/creator, Palauan speakers interpret the agent/creator as being implicit. This result completely aligns with the idea that *di ngii*-predication diagnoses the absence of an implicit argument.

3.3. *Di ngii*-predication and Statives

We saw at the end of Section 2.2 that statives formed from *me-* pass none of the tests that diagnose implicit arguments. Perhaps unexpectedly, *me-* statives are also incompatible with *di ngii*-predication, *despite* their inability to license implicit arguments.

(18) a. *Ak di ngak [*pro* [el mle **me-saul**]].
1SG= only myself [I [L AUX.PAST ME-tired]]
("I am tired on my own.")

b. *Ng di ngii [a chim-ak [el mle **me-ringel**]].
3SG= only itself [D hand-1SGP [L AUX.PAST ME-painful]]
("My hand hurts on its own.")

c. *Te di tir [a rengalek [el mle **me-si-siich**]].
3PL= only themselves [D children [L AUX.PAST ME-RED-strong]]
("The children are healthy on their own.")

However, the addition of the verb *mo* "become" transforms stative predicates into change-of-state achievement predicates (see Nuger to appear), which are then compatible with *di ngii*-predication as in (19).

(19) a. Ak di ngak [*pro* [el **m⟨l⟩o** **me-saul**]].
1SG= only myself [I [L ⟨PAST⟩.become ME-tired]]
"I was getting tired on my own."

b. Ng di ngii [a chim-ak [el **m⟨l⟩o** **me-ringel**]].
3SG= only itself [D hand-1SGP [L ⟨PAST⟩.become ME-painful]]
"My hand started hurting on its own."

c. Te di tir [a rengalek [el **m⟨l⟩o** **me-si-siich**]].
3PL= only themselves [D children [L ⟨PAST⟩.become ME-RED-strong]]
"The children were becoming strong on their own."

Evidently, it is the aspectual properties of statives and not their thematic argument structures that cause them to fail the *di ngii*-predication test. Because we can reliably distinguish statives from passives by differences in their lexical aspectual properties and argument structures, we can now subclassify intransitive *me*- predicates into one of three syntactic classes—see Table 1, which summarizes the results.

PREDICATE TYPE	IMPLICIT/OBLIQUE ARGUMENTS	AGENT-ORIENTED MODIFIERS	*Di ngii*-PREDICATION	LEXICAL ASPECT
Passive verbs	Permitted	Licensed*	Unacceptable	Variable
Unaccusative verbs	Not permitted	Not licensed	Acceptable	Dynamic
Stative adjectives	Not permitted	Not licensed	Unacceptable	Non-Dynamic

*Acceptability improves in the presence of an oblique (rather than implicit) agent.

Table 1: Typology of Palauan intransitive *me*- predicates

4. The (Morpho)syntax of *me*-

To account for the syntactic differences within the morphological class of *me*- verbs, I propose an articulated model of the verbal complex in which unaccusative verbs (as well as passive verbs and stative adjectives) may project a functional *v*/*a* layer on top of a lexical head (either a category neutral $\sqrt{\text{ROOT}}$, a V, or an A; for possible implementations, see Marantz 1997, 2001, 2007; Arad 2003, 2005; Borer 2005a, 2005b; Embick and Noyer 2007; Embick and Marantz 2008). *Me*- verbs

start off as roots (like $\sqrt{\text{CHESBEREBER}}$ 'paint,' $\sqrt{\text{SESEB}}$ 'burn,' or $\sqrt{\text{SAUL}}$ 'tired; exhaust'). Each $\sqrt{\text{ROOT}}$ may only select a single internal argument as its complement, and the heads of the *v*/*a* projections are the loci of *me-* morphology in Palauan. Three different syntactic heads may be spelled out as *me-*: (i) $v_{[\text{PASSIVE}]}$ forms passives as in Figure 1, (ii) $v_{[\text{UNACCUSATIVE}]}$ forms unaccusatives as in Figure 2, and (iii) *a* forms statives as in Figure 3.[7]

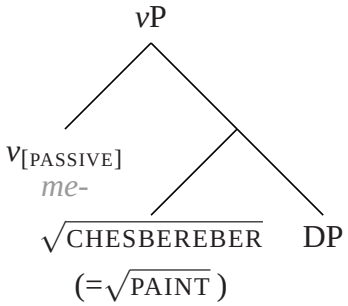

Figure 1: Passive argument structure

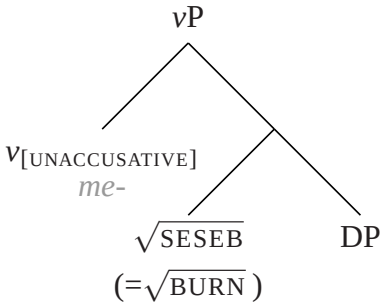

Figure 2: Unaccusative argument structure

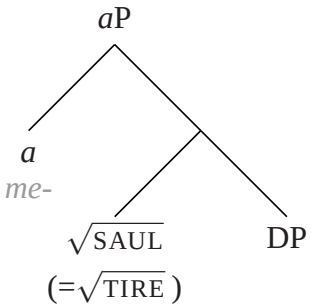

Figure 3: Stative argument structure

The three subclasses of *me-* verbs are characterized by having different flavors of an essentially unaccusative syntax. In Figures 1–3, the argument DP is uniformly introduced as a complement to $\sqrt{\text{ROOT}}$ and subsequently promoted to subject.[8] Some roots may be able to merge with more than one category-defining head. For example, if $v_{[\text{PASSIVE}]}$ and $v_{[\text{UNACCUSATIVE}]}$ select the same $\sqrt{\text{ROOT}}$, then two homophonous *me-* verbs can be created—one passive and the other unaccusative. If an oblique *er*-phrase is present, it must be licensed by $v_{[\text{PASSIVE}]}$, which also licenses

[7]It is still an open question whether statives in Palauan should be classified as verbs or adjectives. Recent research has suggested that the adjective category is universal (Baker 2003; Dixon 2004), and presumably the predicates that have been called stative verbs in the Palauan literature are the likely candidates for classification as adjectives. Despite the lack of evidence, I adopt the label *a* here, recognizing that it is essentially a notational variant of $v_{[\text{STATIVE}]}$ until evidence for a difference between the two can be uncovered.

[8]Note that on this analysis, the DP complement to the $\sqrt{\text{ROOT}}$ must be accessible for further movement. If it turns out that merger of a category-defining head creates a spell-out domain consisting of the complement of the $\sqrt{\text{ROOT}}$ along the lines of Marantz 2007 (*cf.* Arad 2003) then this DP must necessarily be introduced higher in the structure. I cannot explore the ramifications of that move here.

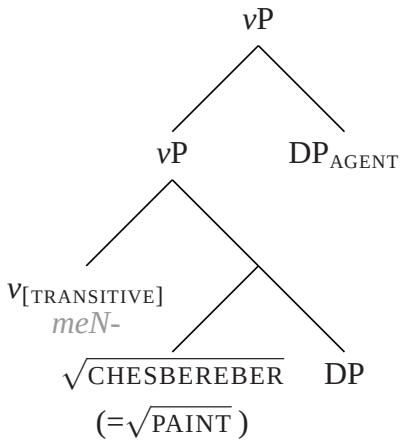

Figure 4: Transitive *mengesbereber*

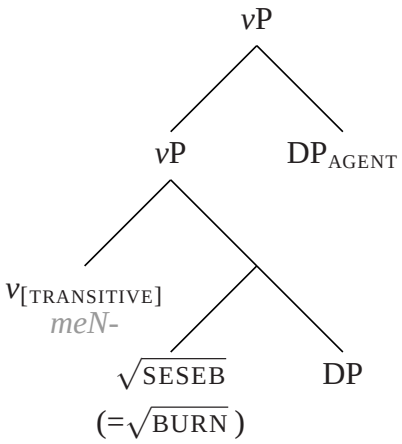

Figure 5: Transitive *meleseb*

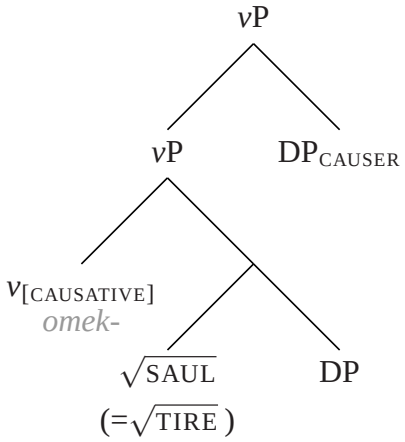

Figure 6: (Transitive) causative *omeksaul*

AOAs and control into PIs. But if the *er*-phrase PP is absent, the verb could be interpreted as an unaccusative formed from $v_{[\text{UNACCUSATIVE}]}$, which would also allow *di ngii*-predication.

On this analysis, nothing prevents intransitive *me-* verbs from covarying with transitive forms. The subject of a *me-* verb bears the same thematic role as the direct object of its transitive counterpart because they are base-generated in the same position: complement to the $\sqrt{\text{ROOT}}$ (or V/A in frameworks that do not include $\sqrt{\text{ROOT}}$). Transitives can be built from the same roots but with different verbalizer prefixes, such as *meN-* (a transitive prefix which triggers nasal substitution) or *omek-* (a causative prefix; see Josephs 1975). The transitive correlates of the *me-* verbs in Figures 1–3 are shown schematically in Figures 4–6, which indicate that it makes no difference whether a $\sqrt{\text{ROOT}}$ combines with an intransitive *me-* verbalizer or a transitive verbalizer like $v_{[\text{TRANSITIVE, ACC}]}$ (= *meN-* in Figures 4–5) or $v_{[\text{CAUSATIVE, ACC}]}$ (= *omek-* in Figure 6).

But how do we know which instances of *v* or *a* can combine with which roots to build words? I think one way of understanding the possible combinations of *v*/*a* and $\sqrt{\text{ROOT}}$/V/A depends on articulating morphosyntactic and/or lexical semantic properties of (verb) roots as fea-

tures, which must be compatible with corresponding features on the functional heads that select these roots or projections of these roots (see Ramchand 2008 for a proposal that is similar in spirit but implemented quite differently). Compatibility can be defined by feature unification, assuming a theory of feature sharing among sub-projections of an extended projection along the lines of the Extended Projection Theory outlined by Grimshaw (2005: Ch. 1). Extended Projection Theory maintains that lexical heads (N, A, and V) form "extended projections" with the functional heads that project above them. For instance, a V head forms a VP projection, but then when this VP combines with a functional head *v* (or Asp, T, Mood, etc.), the resulting *v*P (or AspP, TP, MoodP, etc.) is an extended projection of the VP. Morphosyntactic features on any of the heads in the extended projection become features on all of the heads in the extended projection.[9]

We might imagine a scenario in which we can encode information about category, aspect, argument structure, and so forth with features on roots and functional heads. Let's construct a basic example with just three features, a category feature [CATEGORY],[10] the aspectual feature [±DYNAMIC], and an argument structure feature [±INITIATOR], which specifies whether the event(uality) needs an initiator argument (*i.e.*, if it is [+INITIATOR]), allows but does not need an initiator argument (*i.e.*, if it is [__INITIATOR]), or does not permit an initiator argument (*i.e.*, if it is [−INITIATOR]). With features like [CATEGORY], [±DYNAMIC], and [±INITIATOR], we can begin to restrict the possible combinations of *v* and $\sqrt{\text{ROOT}}$ by specifying which Vocabulary Items can be inserted into which positions in an extended projection according to the Subset Principle (Halle 1997: 428). Assuming that category-neutral roots form the foundation of each extended projection, let's imagine a subset of Vocabulary Items that can be inserted into $\sqrt{\text{ROOT}}$ positions, such as those listed in Table 2, as well as some functional heads that could be inserted into the category-defining head positions, such as the three *me-* prefixes listed in Table 3.

VOCABULARY ITEM	SUBCATEGORIZATION	FEATURES		
$\sqrt{\text{CHESBEREBER}}$ "paint"	[__ DP_{THEME}]	[CATEGORY: __]	[+DYNAMIC]	[+INITIATOR]
$\sqrt{\text{SESEB}}$ "burn"	[__ DP_{THEME}]	[CATEGORY: __]	[+DYNAMIC]	[__INITIATOR]
$\sqrt{\text{SAUL}}$ "tire; exhaust"	[__ $\text{DP}_{\text{EXPERIENCER}}$]	[CATEGORY: __]	[−DYNAMIC]	[−INITIATOR]

Table 2: Some roots with associated features

VOCABULARY ITEM	SUBCATEGORIZATION	FEATURES		
passive *me-*	[__ $\sqrt{}$P]	[CATEGORY: V]	[__DYNAMIC]	[+INITIATOR]
unaccusative *me-*	[__ $\sqrt{}$P]	[CATEGORY: V]	[+DYNAMIC]	[−INITIATOR]
stative *me-*	[__ $\sqrt{}$P]	[CATEGORY: A]	[−DYNAMIC]	[−INITIATOR]

Table 3: Some category-defining functional heads with associated features

If it were not for additional feature specifications, any of the category-defininig heads in Table 3 would be able to merge with any projection of the roots in Table 2, but then we would

[9] But it seems unlikely that semantic or phonetic/phonological features should be shared in this way. How to formalize the differences in these features remains to be explained.

[10] If roots are category-neutral, they might be said to have the value [CATEGORY: __] uniformly.

not predict to find the syntactic differences in the class of *me-* predicates explored in this paper. Instead, this system of feature unification restricts the possible combinations in the narrow syntax, before Spell Out and Vocabulary Insertion. For instance, the passive *me-* morpheme may occupy only a position in the phrase structure that is of category V and has a complement with compatible features. That is, it may select $\sqrt{}$P complements that are headed by roots like $\sqrt{\text{CHESBEREBER}}$ "paint" (and probably other creation verbs) because they are [+DYNAMIC] [+INITIATOR]. But it may also select a $\sqrt{}$P complement that is headed by a root like $\sqrt{\text{SESEB}}$ "burn" even though it is [__INITIATOR], because it allows an initiator but does not require one. On the other hand, passive *me-* cannot select a $\sqrt{}$P complement that is headed by roots like $\sqrt{\text{SAUL}}$ "tired" which is stative and cannot have an initiator (*i.e.*, it is [−INITIATOR]) and thus clashes with the feature specification [+INITIATOR] of the passive *me-* morpheme. The same goes for unaccusative and stative *me-*—each can only select $\sqrt{}$Ps with compatible features. Importantly, the features are already present in the hierarchical syntactic structure: Vocabulary Insertion simply inserts compatible Vocabulary Items. Different Vocabulary Items can be inserted into different structures, depending on their feature specifications.

Furthermore, the system is flexible enough to model the productivity and behavior of new verbs in other languages. If the lexical semantics of any novel verb root can be understood from context, the present analysis predicts that the new verb should have different variants resulting from its combination with any number of compatible functional *v* heads. I noticed an example on an episode of the television series "Gossip Girl" on the CW Network, in which a new transitive verb was coined based on the title of "An Affair to Remember," the 1957 film starring Cary Grant and Deborah Kerr in which one character proposes to meet the other in six months on the top of the Empire State Building in New York City. An exchange between two characters is given in (20).

(20) TRANSITIVE VERB FORMED FROM THE MOVIE TITLE *An Affair to Remember*:

a. CHUCK BASS: I'll be waiting at the top of the Empire State Building.

b. BLAIR WALDORF: You can't *Affair-to-Remember* me!

[*Gossip Girl*, Episode 64, 10 May 2010]

Many internet sites write recaps of episodes of popular TV shows, and the recap of this particular episode on http://gawker.com/ remarked on the exchange given in (20), using a passive of the newly coined transitive verb *Affair-to-Remember*, as shown in (21).

(21) (Blair) can't be *Affair-to-Remember*-ed.

[URL: http://gawker.com/5536274/gossip-girl-scheming-is-free, retrieved 17 May 2010]

If viewers of Gossip Girl episode 64 lexicalized *Affair-to-Remember* as a verb root with the features [+DYNAMIC] and [+INITIATOR], then this verb root should be compatible with passive *v*, and the passive form in (21) is predicted. Furthermore, it is predicted that *Affair-to-Remember* should have no unaccusative form, a prediction that would have to be tested.

Empirical tests showing differences in syntactic behavior like the ones examined in this paper (*e.g.*, co-occurrence with *er*-phrase PPs, *di ngii*-predication, etc.) should ideally motivate

differences in feature specification. If an approach like the one outlined here is on the right track, then research at the syntax–lexical semantics interface, like Levin's (1993) extensive investigation of the syntax and lexical semantics of English verb classes, is crucial to our understanding of the syntactic composition of lexical and functional morphemes into words and phrases.

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