Variations on the Palauan Theme

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Abstract
This paper explores the syntax of theme arguments in Palauan. Palauan’s passive construction is examined first, arguing that a class of Palauan me- and o- verbs are passive forms of related transitive verbs whose theme arguments are promoted to subject position. Evidence for this analysis is drawn from quantifier float, syntactic causation, and wh-agreement. The Palauan passive construction will be shown to share some properties with the class of English unaccusative verbs even though the Palauan construction is much more productive. In particular, I argue that the Palauan passive does not contain an implicit agent, evidenced by its inability to contain a null PRO in purpose/rationale clauses and its incompatibility with agent-oriented adverbials like blak a rengul “intentionally.” I propose an analysis that treats the me- and o- prefixes as instances of (non-external-argument-introducing) passive $\nu^\circ$ heads (cf. Kratzer 1996; Chomsky 2000, 2001). Next, I analyze the syntax of transitive imperfective and perfective verbs, in which theme arguments are mapped to the direct object position. Accusative Case is registered morphologically in two different ways, depending on the aspect of the verb. I propose an analysis in which the accusative case marker for direct objects of imperfective verbs, er, and the object agreement affixes that appear on perfective verbs are only realized post-syntactically, at PF. Independent evidence for this analysis arises from the aforementioned passive construction.

1 The Palauan Passive Construction

1.1 Does Palauan have a passive?

Since the publication of Josephs’s (1975) Palauan Reference Grammar, the status of the passive in Palauan has been a matter of some debate (see also Wilson 1972). Palauan contains two different constructions that have alternately been referred to as passives, illustrated below. Sentences (2) and (3) exemplify the alternate “passive” forms of the corresponding active sentence in (1).¹

(1) a. Ng omangch er a rechad se el bilis.
   3SG bite CASE people that LNK dog
   “That dog is biting people.”

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¹Unless otherwise cited, all Palauan examples are taken from my own fieldnotes. Any errors should obviously (and unfortunately) be attributed to me.
b. \textit{Te melubs er se el bara a rengalek.} \\
3PL water CASE that LNK rose children \\
“The children are watering that rosebush.”

(2) a. A rechad a l-omangch er tir se el bilis. \\
people TOP 3SG.IRR-bite CASE them that LNK dog \\
“People are getting bitten by that dog. (lit. The people, that dog is biting them.)”

b. Se el bara a l-ullubs er ngii a rengalek. \\
that LNK rose TOP 3PL.IRR-water.PAST CASE it children \\
“That rosebush was being watered by the children. (lit. That rosebush, the children were watering it.”

(3) a. \textit{Te obangch a rechad.} \\
3PL bite people \\
“People are getting bitten.”

b. \textit{Ng mesubs se el bara.} \\
3SG water that LNK rose \\
“That rosebush is being watered.”

Example (1) illustrates the default VOS word order of a transitive active sentence: the direct object DPs \textit{a rechad} “people” and \textit{se el bara} “that rose(bush)” are preceded by the accusative case marker \textit{er}.\footnote{The properties of the accusative case marker \textit{er} will be examined below in §2.4.} The subject DPs \textit{se el bilis} “that dog” and \textit{a rengalek} “the children” follow the direct object and trigger subject agreement morphology: [3SG] agreement on the verb \textit{omangch} in (1a), and [3PL] agreement on the verb \textit{melubs} in (1b).

While sentences like those in (2) have been analyzed as passive correlates of sentences like (1) (Wilson 1972: 144–148; Josephs 1975: 141–143, 400–407), there has been subsequent research that has concluded that such sentences are simply instances of object topicalization.\footnote{Waters (1980) provides empirical evidence and a careful analysis. See also Georgopoulos 1986, 1991b; Lemaréchal 1991; Gibson 1993.} Without consequence for the present paper, I assume the object topicalization analysis for the construction in (2) and will refer to it simply as “object topicalization” in what follows.

In contrast, it is sentences like those in (3) that I will analyze as passives in Palauan, following Waters (1980), \textit{inter alia}. There are indeed at least three immediately evident morphosyntactic differences between (1) and (3) that lend support to the claim that (3) might contain passive analogues of (1), in which the theme arguments serve as subjects.

First, the verb in (3a) is preceded by the [3PL] subject agreement morpheme \textit{te} rather than the [3SG] \textit{ng} which appears in (1a), suggesting that the verb agrees with a \textit{rechad} “people.” For ease of reference, the Palauan subject agreement morphemes are given below in Table 1.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
 & \textbf{Singular} & \textbf{Plural} \\
 & \textbf{Inclusive} & \textbf{Exclusive} \\
\hline
\textbf{1st person} & \textit{ak} & \textit{kede} & \textit{aki} \\
\hline
\textbf{2nd person} & \textit{ke} & \textit{kom} \\
\hline
\textbf{3rd person} & \begin{tabular}{c}
[+HUM] \\
\textit{ng} \\
\end{tabular} & \begin{tabular}{c}
[–HUM] \\
\textit{ng/te} \\
\end{tabular} & \begin{tabular}{c}
[–HUM] \\
\textit{te} \\
\end{tabular} \\
\hline
\end{tabular}
\caption{Palauan Subject Agreement Morphemes}
\end{table}
That is, the suppressed agent se el bilis cannot simply be realized as a (null) pronominal, as [3sg] subject agreement would be predicted. Put differently, it seems as if that subject of (3) is not pro.\textsuperscript{4} Second, the accusative case marker er from the sentences in (1) has vanished in the sentences in (3), suggesting that a rechad “people” and se el bara are not a direct object in (3). Third, the verb forms in (3), obangch and mesubs, are morphologically distinct from their counterparts in (1), omanch and melubs. It might be tempting to analyze this morphological distinction as marking a contrast between active and passive voice. Together, these properties of (3) lend support toward treating it as a passive variant of (1) with the theme arguments a rechad “people” and se el bara “that rosebush” serving as the grammatical subjects of the sentences. In the next section, the properties of Palauan subjects will be investigated so as to determine whether the theme argument in a Palauan passive is truly functioning as a subject.

1.2 The Syntax of Subjects in Palauan

Palauan is a Western Austronesian language spoken by approximately 15,000 people in the Republic of Palau, with smaller communities of speakers in Guam, Hawaii, and various locales in (particularly the Western regions of) the United States. Typologically, Palauan is a VOS language\textsuperscript{5} with relatively strict word order. Predicates can be of any lexical category (e.g., nominal, adjectival, or verbal), there is no copula, and all major syntactic categories (except, potentially C[omp]) are head-initial. (4) illustrates the default word order.

(4) Te ulemekall a mlim er a kesus a rebuik.
3PL drive.PAST.IMPFV YOUR.cars PREP last.night boys
“The boys were driving your cars last night.”

Verb phrase adjuncts may occur between the object and the subject, resulting in VOXS order, as indicated by the placement of er a kesus “last night” in (4). Still, subjects may also occur to the left of such adjuncts, as noted by Waters (1980).

(5) Te killii a ngikel a rechad er a kesus.
3PL eat.PAST.PFV fish people PREP last.night
“The people ate the fish last night.” (Waters 1980: 8, ex. 10c)

To my knowledge, the only arguments that may ever surface to the right of such adjuncts are subjects; direct and indirect objects may not.\textsuperscript{6}

\textsuperscript{4} Palauan does have another construction that appears to make use of arbitrary [3PL] pronominals to express something like a passive.

(1) Te millubs a bara pro.
3PL water.PAST rose they?
“The rosebushes were watered. (lit. They (arb.) watered the rosebushes.)”

The [3PL] subject agreement suggests that there is a null plural pronominal in subject position, but speakers agree that the referent of this pronominal may be unknown and may just refer to a single (unknown) individual. The properties of this construction in Palauan are currently ill-understood, but cf. Jaeggli 1986 for a related construction in Spanish and McCloskey 2007 for Irish.


\textsuperscript{6} However, clausal (CP) complements to verbs appear to be able to undergo extraposition — a phenomenon that I have not investigated in enough detail to comment further on. Indirect objects that are expressed periphrastically,
Matrix clause verbs display overt morphological agreement with subjects in the form of agreement proclitics (Lemaréchal 1991), such as the [3PL] clitic te in (4) and (5). Palauan is also a pro-drop language; a subject pronoun that triggers subject agreement on the predicate must be null in its argument position, as the contrast between (6a) and (6b) shows.

(6) a. Te ulemekall a mlim er a kesus pro.  
3PL drive.PAST.IMPFV your.cars prep last.night they  
“They were driving your cars last night.”

b. *Te ulemekall a mlim er a kesus tir. 
3PL drive.PAST.IMPFV your.cars prep last.night they  
“They were driving your cars last night.”

The fact that subject agreement markers occur to the left of verbal modifiers suggests that they should indeed be analyzed as proclitics, rather than prefixes.

(7) Ak dirrek el mesuub a tekoi er a Dois pro.  
1SG also LNK study language of Germany I  
“I’m also studying German.” (Josephs 1990: 80)

Consolidating these facts, I assume the following model of Palauan phrase structure in (8), using (4) as an example.

(8)

These basic syntactic properties of subjects will be important in showing that the theme is promoted to subject position in passive sentences — the goal of the next section.

e.g. in [CP el mo er ...] “to go to” (goal) clauses, may also be extraposed.
1.3 Promotion to Subject

In transitive active sentences like those in (1), the agent is typically grammaticized as the subject, while the theme is grammaticized as the direct object. If what I have argued to be passives are truly such, then it might be expected that the theme should exhibit properties typical of subjects, rather than of direct objects. Independent evidence for the subjecthood of the theme in passives arises from three tests: quantifier float, participation in the periphrastic causative construction, and inducing *wh*-agreement.

In Palauan, the presence of a quantifier like *rokui* “all” triggers the linker between the quantifier itself and the nominal that it quantifies over, as in the following example in (9). Quantifiers themselves may either precede or follow the nouns they quantify over.

(9) a. Ng ulerrenges a *rokui* el chelitakl, [CP el ngar er a CD ___] a Lulu. 3SG hear.PAST.IMPfv every LNK song COMP be.located on CD Lulu
Lulu listened to every song that was on the CD.
b. Ng ulerrenges a chelitakl el *rokui* [CP el ngar er a CD ___] a Lulu. 3SG hear.PAST.IMPfv song LNK every COMP be.located on CD Lulu
Lulu listened to every song that was on the CD.

When a (non-topicized) subject DP is quantified by *rokui*, like a *rengalek el rokui er a skuul* “all the students” in (10), the DP may appear either to the left or to the right of adjuncts like *er a elecha el sils* “today.”

(10) a. Te ulerrenges *er a chelitakl a rengalek el rokui er a skuul* [PP er a 3PL hear.PAST.IMPfv case song children LNK all PREP school PREP
elecha el sils].
now LNK day
“All the students listened to the song today.”
b. Te ulerrenges *er a chelitakl [PP er a elecha el sils] a rengalek el rokui
3PL hear.PAST.IMPfv case song PREP now LNK day children LNK all
er a skuul.
PREP school
“All the students listened to the song today.”

As in English and many other languages, quantifiers like *rokui* have the option to float. That is, it is possible for the quantified nominal to move, stranding the quantifier in a lower position (Sportiche 1988). Example (11b) illustrates an English floated quantifier analogue of (11a).

(11) a. *All the children* have listened to the song today.
b. *The children* have *all* listened to the song today.

Unlike English, Palauan has a VOS word order, and the subject moves to the right of adjuncts like *er a elecha el sils* “today.” I analyze this as movement to a rightward-branching Spec TP, following Georgopoulos (1991b). Assuming that movement to Spec TP proceeds before subject topicaliza-

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7 cf. Guilfoyle et al. 1992 for a syntactic analysis of subjects in several other Philippine languages, also placing them in rightward-branching specifier positions.
tion, it might be expected that the floating quantifier may appear in either the subject’s base position (immediately to the right of the direct object, as in (12a)) or in its intermediate position in Spec TP (to the right of the adjunct, as in (12b)). However, only the latter is possible.\(^8\)

(12) a. \* A rengalek er a skuul a ulerrenge el rokui [\_PP er children \_PREP school \_TOP hear.PAST.\_IMPFV CASE \_SONG \_LNK all \_PREP a elecha el \_sils].

   \_NOW \_LNK \_DAY

   “The students have all listened to the song today.”

b. A rengalek er a skuul a ulerrenge er a chelitak\_ [\_PP er a elecha children \_PREP school \_TOP hear.PAST.\_IMPFV CASE \_SONG \_PREP \_NOW a \_sils] el rokui.

   \_LNK \_DAY \_LNK \_ALL

   “The students have all listened to the song today.”

On the basis of contrasts like that in (12), I conclude that syntactic Nominative Case — or, equivalently, the licensing of the DP in question as the sentential subject — is a prerequisite for quantifier float in Palauan.

Consistent with this analysis is the fact that direct object DPs do not seem to be able to strand floating quantifiers when they are topicalized, as (13) indicates. This holds true whether the DP in question is the direct object of either an imperfective verb or a perfective verb.

(13) a. \* A tuu a l-onga el rokui a Lulu.

   bananas \_TOP 3PL.IRR.-eat.\_IMPFV \_LNK \_ALL Lulu.

   \_intended: “The bananas are all being eaten by Lulu. (lit. The bananas, Lulu is eating all of them.”

b. \* A tuu a mo le-kang el rokui a Lulu.

   bananas \_TOP AUX.FUT 3PL.IRR.-eat.\_PFV \_LNK \_ALL Lulu.

   \_intended: “The bananas will be eaten (up) by Lulu. (lit. The bananas, Lulu will eat all of them.”

If only subjects (or, DPs licensed with syntactic Nominative Case) can float quantifiers, then the contrast between the ungrammatical sentences in (13) and the grammatical (12b) can be explained.

Now, the theme argument in a corresponding passive sentence may float a quantifier, pattern- ing with the subject in (12b) rather than the direct objects in (13). Example (14) thus serves as evidence from quantifier float that sentences like (3) are passives, as the theme argument functions syntactically like a subject, rather than a direct object.\(^9\)

(14) A tuu a mo mekang el rokui.

   banana \_TOP AUX.FUT eat.\_PASS \_LNK \_ALL

   “The bananas will all be eaten.”

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\(^8\)Interestingly, the human plural prefix re- surfaces on the quantified noun when the quantifier is floated, but not when it is adjacent to the quantified noun.

\(^9\)The evident question that arises upon comparison of (14) to (12) is whether floated quantifiers in passives must also occur to the right of an adjunct like er a elecha el sils “today.” Unfortunately, I have no data at this time to confirm or deny a parallel between the positions in which quantifiers can be floated by subjects of active and passive sentences.
The next piece of evidence for the promotion of the theme to subject position comes from the ability of sentences like those in (3) to participate in a complex construction expressing causation. This Palauan construction involves the verb meruul “make/cause,” which takes the causee as a direct object, followed by a lower clause introduced by the coordinator me “and/so.”\textsuperscript{10} Example (15) illustrates this periphrastic causative construction formed from an intransitive verb lmangel “cry.”

(15) a. Ng lmangel a Karen.
    3SG cry.PFV   Karen.
    “Karen is crying.”

   b. A Terry, a meruul er a Karen, pro, [me ng lmangel pro],
    Terry TOP cause.IMPfv CASE Karen and 3SG cry she
    “Terry is making Karen cry.”

The causee must be coreferent with a null pro subject in the lower clause; this pro cannot be in direct object position. The coordinator me does not typically introduce embedded clauses — the complementizer el is the prototypical subordinator. The fact that there is overt subject agreement morphology in the me-clause suggests that the verb is finite.\textsuperscript{11} It is on the basis of this agreement that I analyze the null pronominal in the me-clause as “little” pro, rather than “big” PRO.

Example (16) illustrates this contrast with a transitive predicate, oldik “banish/fire.” In the grammatical (16b), the causee controls an agent pro in the subject position of the lower clause, while in the ungrammatical (16c), the causee controls a theme pro in the direct object position of the lower clause. (16c) cannot be improved if the null pro in object position is substituted for an overt pronoun.

(16) a. Ng uldikii a Steve er a urer-el pro a bos.
    3SG banish.PAST.PFV Steve from job-3SG.POSS him boss
    “The boss fired Steve from his job.”

   b. A delengerenger-el, a Steve a milruul er a bos, pro, [me ng
    bad.behavior-3SG.POSS Steve TOP cause.PAST.IMPfv CASE boss and 3SG
    oldik er ngii er a urur-el pro pro].
    banish.IMPfv CASE him from job-3SG.POSS him he
    “Steve’s bad behavior caused the boss to fire him from his job.”

\textsuperscript{10}A detailed syntactic study of the properties of me has not yet been conducted, as far as I know. I call it a coordinator here because it also serves to coordinate sub-clausal constituents, i.e. in (i).

(i) Ak milsaa a Thomas me a stoang pro.
    1SG see.PAST.PFV Thomas and Julie at store I
    “I saw Thomas and Julie at the store.”

Some further (though very brief) discussion of DP-coordination in Palauan can be found in §3.1.

\textsuperscript{11}For instance, relative clauses with subject gaps introduced by el do not display subject agreement morphology, suggesting that the verbs those clauses are non-finite.

(ii) Ak medengelii a chad, [el milcher-ar tia el buk ___] pro.
    1SG know.PFV man COMP buy.PAST.PFV this LNK book I
    “I know the man who bought this book.”

(cf. Georgopoulos 1991b: 63, ex. 2a)
The contrast in grammaticality between (16b) and (16c) suggests that there is a restriction that allows only some DPs (and not others) to be co-referential with the causee in Palauan’s periphrastic causative construction. This restriction appears to target only DPs with syntactic Nominative Case (i.e., subject DPs) as those that may be controlled by the causee.

However, the situation changes if the verb in the lower me-clause is a passive verb. In this case, it is perfectly possible for a theme pro in the lower me-clause to be coreferent with the causee in the matrix clause, as shown in the causativized passive in example (17).

(17) A delengerengerel, a Steve a milruul er ngii, pro, me ng
  bad.behavior-3SG.POSS Steve TOP cause.PAST.IMPVF CASE him and 3SG
  oldik pro/er ngii, er a urur-er pro a bos].
  banish.IMPVF him/CASE him from job-3SG.POSS him boss

  "Steve’s bad behavior caused him for the boss to fire from his job."

If only subject DPs may be co-referent with causees in the Palauan periphrastic causative construction, as (15) and (16) suggest, then the fact that example (17) is grammatical serves as further evidence for the promotion of the theme DP to syntactic subjecthood in sentences like (3).

The third piece of evidence for the promotion of the theme to subject position in sentences like (3) arises from the subject-oriented wh-agreement morphology induced by an extracted theme DP in the passive construction. The phenomenon of wh-agreement will now be briefly discussed before its relevance for the Palauan passive is explored.

Palauan realizes a morphological distinction between what have been called realis and irrealis verbs (Georgopoulos 1985, 1991b; cf. Wilson 1972; Josephs 1975). Realis verbs occur in the vast majority of Palauan sentences, while irrealis verbs are found mostly in embedded clauses, under negation, in conditionals, etc. The details of the distribution of realis and irrealis verbs are irrelevant to the present discussion, but an important contrast arises when subjects and non-subjects are extracted via A-bar movement.

When subjects are extracted from a clause containing a realis verb, the verb displays a pattern of anti-agreement in which the realis form is maintained, but there is no subject agreement clitic that bears the matching person and number features of the subject DP. An example of the contrast is found in (18) and (19). Example (18) is an example of a transitive sentence with neither argument extracted, while (19a) is a corresponding wh-question in which the gap occupies the subject position, and (19b) is the associated subject topicalization.

(18) Ng kileldii a sub a sechel-il pro.
  3SG heat.up.PAST.PFV soup friend-3SG.POSS him
  "His friend heated up the soup."

(19) a A delengerengerel, a Steve a milruul er ngii, pro, me ng
  bad.behavior-3SG.POSS Steve TOP cause.PAST.IMPVF CASE him and 3SG
  oldik pro/er ngii, er a urur-er pro a bos].
  banish.IMPVF him/CASE him from job-3SG.POSS him boss

  approximately: "Steve’s bad behavior caused him for the boss to fire from his job."


(19) a. Ng techang, [a kileldii a sub __i] ?
   3SG who NMLZ heat.up.PAST.PFV soup
   “Who heated up the soup? (lit. The one that heated up the soup is who?)”  (cf. Georgopoulos 1991b: 70, ex. 19a)
b. [DP A sechel-il pro], a kileldii a sub __i.
   friend-3SG.POSS him TOP heat.up.PAST.PFV soup
   “His friend heated up the soup.”

   On the other hand, when non-subjects — like possessors, direct objects, adverbials, and so forth — are extracted, the verb displays irrealis subject agreement with the (non-extracted) subject. Irrealis subject agreement morphemes are prefixes rather than clitics, and the verbalizer morphemes occur between the subject agreement prefixes and the root in a reduced form, typically -u-, -o-, or Ø. The irrealis wh-agreement pattern is illustrated in (20). The direct object from (18) is questioned in (20a) and topicalized in (20b).

(20) a. Ng ngerang, [a le-kileldii __i; a sechel-il pro] ?
   3SG what NMLZ 3SG.IRR-heat.up.PAST.PFV friend-3SG.POSS him
   “What did his friend heat up? (lit. The thing that his friend heated up is what?)”
b. [DP A sub], a le-kileldii __i; a sechel-il pro.
   soup TOP 3SG.IRR-heat.up.PAST.PFV friend-3SG.POSS him
   “The soup was heated up by his friend. (lit. The soup, his friend heated up.)”

   Now, because the two wh-agreement patterns are sensitive to whether the extracted DP was in a subject or a non-subject position, we can use it as a diagnostic for subjecthood. In passive constructions, when the theme argument is questioned or otherwise extracted (i.e., topicalized, etc.), the verb appears in its realis form, like the examples in (19), rather than its irrealis form, like the examples in (20). The wh-agreement pattern in (21) suggests that the questioned/extracted DP was a syntactic subject, rather than a direct object as the ungrammatical examples in (22) would indicate.

(21) a. Ng ngerang, [a mla mekeald __i] ?
   3SG what NMLZ AUX.PERF heat.up.PASS
   “What has been heated up? (lit. The thing that has been heated up is what?)”
b. [DP A sub], a mla mekeald __i.
   soup TOP AUX.PERF heat.up.PASS
   “The soup has been heated up. (lit. The soup, it has been heated up.)”

(22) a. * Ng ngerang, [a mla le-mekeald __i] ?
   3SG what NMLZ AUX.PERF heat.up.PASS
   intended: “What has been heated up? (lit. The thing that has been heated up is what?)”
b. * [DP A sub], a mla le-mekeald __i.
   soup TOP AUX.PERF heat.up.PASS
   intended: “The soup has been heated up. (lit. The soup, it has been heated up.)”

14The details regarding why the realis/irrealis alternation correlates with subject/non-subject extraction are presently irrelevant, but see Georgopoulos 1991b for a careful and thorough investigation.
Examples (21) and (22) thus provide us with a third type of evidence that we are dealing with a passive construction, above and beyond the evidence from quantifier float in (14) and from the periphrastic causative construction in (17). In the next section, further syntactic properties of the Palauan passive are compared with its Indo-European counterparts, drawing examples from English, French, and German.

1.4 Syntactic Properties of the Palauan Passive

Three ways in which English (and other Indo-European) passives differ syntactically from unaccusatives include their ability to express the agent overtly in a prepositional phrase, their licensing an implicit agent which can bind a null PRO in a purpose/rationale clause, and their compatibility with agent-oriented adverbs like deliberately. Whether Palauan passives have the same characteristics is investigated below.

Indo-European passives optionally allow an “internalized” agent argument to be expressed overtly in a so-called “by-phrase.” English, French, and German passives all have this option at their disposal; the examples in (23a–c) show this for each of the three languages, respectively.\(^\text{15}\)

(23) a. People are getting bitten (by the dog).

b. Des gens se sont mordus (par le chien).
   some people reflex are bitten by the dog
   “People are getting bitten by the dog.”

FRENCH

b. Menschen werden (vom Hund) gebissen.
   people become from.the dog bitten
   “People are getting bitten by the dog.”

GERMAN

The sentences in (23) are almost invariably judged to be grammatical by native speakers of English, French, and German. The Palauan passive does not appear to have quite the level of freedom in expressing an agent obliquely. I have found there to be a great deal of variation with respect to whether native Palauan speakers accept agentive er-phrases in sentences like those below in (24). Compare (24) to (3), repeated below for convenience.

(3) a. Te obangch a rechad.
   3PL bite people
   “People are getting bitten.”

b. Ng mesubs se el bara.
   3SG water that LNK rose
   “That rosebush is being watered.”

(24) a. ?Te obangch a rechad [pp er a bilis].
   3PL bite.PASS people by dog
   “People are getting bitten by the dog.”

b. ?Ng mesubs se el bara [pp er a rengalek].
   3SG water.PASS that LNK rose by children
   “That rosebush is being watered by the children.”

\(^\text{15}\)The French and German data and judgments in this section were elicited from Benjamin Girard-Bond and Armin Mester, respectively. I thank them both.
These findings largely pattern with observations made in the earlier Palauan literature. Various researchers have reported mixed acceptability judgments of er-phrases in passive sentences. Josephs (1975: 134–135) says that some speakers find their inclusion “awkward.” DeWolf (1979: 101) notes that the agent is “not usually indicated,” which he follows up in DeWolf 1988: 171, making the stronger claim that specification of the agent in an er-phrase is disallowed. On the other hand, Gibson (1993: Ch. 5) reports no problems with eliciting these er-phrases, beyond a preference to omit them. Perhaps interestingly, I have found that if the subject is topicalized, speakers more readily accept sentences in which the agent is expressed obliquely in an er-phrase.

(25) a. A rechad a obangch [PP er a bilis].
   people TOP bite by dog
   “People are getting bitten by the dog.”

   b. Se el bara a mesubs [PP er a rengalek].
   that LNK rose TOP water.PASS by children
   “That rosebush is being watered by the children.”

While I know of no principled reason why agentive er-phrases should be more acceptable in passive sentences when the subject is topicalized, I might speculate that it has something to do with the availability of Palauan’s having two distinct means for increasing the discourse prominence of a theme: the passive construction under discussion here, and the object topicalization construction exemplified in (2). I suggest that the object topicalization construction in some sense “blocks” passive sentences with no topic and an overt agent in an er-phrase. To put it more precisely, passives can be distinguished from object topicalizations by virtue of the fact that the theme does not have to be topicalized (the passive morphology suffices to raise the prominence of the theme). However, it seems that — for some speakers — for an agent to be expressed in a passive, the theme appear in a position even more prominent than subject position: it must be topicalized.16

Another less theoretically satisfying but equally plausible explanation might be that there is interference from English. All of the native Palauan speaker informants that I have conducted elicitation sessions with are bilingual, using English in everyday communication with Americans. Furthermore, English is a second official language of Palau and the primary language of instruction from elementary school through college. The result is that Palauan er-phrases may be undergoing a shift in increased acceptability in exactly the same types of sentences in which they would be accepted in English, since they “sound more like” grammatical English sentences. Of course, this is all purely speculation.

16Gibson (1993) goes so far as to refer to the object topicalization construction as a “pre-passive,” treating the irrealis subject agreement prefixes as passive morphemes that are co-referent with the agent argument in the sense of the English -en morpheme in Baker et al. 1989. While the theoretical assumptions I adopt here are incompatible with Gibson’s analysis, the analysis captures an interesting connection between the syntax of the object topicalization construction and its function in contexts that would necessitate a passive in English.
In summary, the Palauan passive patterns similarly with English (and other Indo-European) passives with respect to the option of expressing an agentive by-phrase obliquely, but Palauan appears to have additional restrictions on when er-phrases are appropriate.

Next, Roeper (1987: 268) observes that English passives may also have an implicit agent which can bind a null PRO in a purpose/rationale clause, as in (26a). The same is true in French and German, as (26b) and (26c) demonstrate, respectively.

(26)  
| a. The boat was sunk [(in order) PRO to collect the insurance]. (cf. Roeper 1987: 268, ex. 3b) |
| b. Le navire a été coulé [pour PRO percevoir (l’argent de) l’assurance]. the ship has been sunk for collect.INF the.money of the.insurance “The ship was sunk to collect the insurance (money).” FRENCH |
| c. Das Schiff wurde versenkt, [um PRO das Versicherungsgeld zu bekommen]. the ship became sunk, in.order.to the.insurance.money to receive “The ship was sunk to collect the insurance money.” GERMAN |

In each sentence in (26), an implicit agent of the event binds the PRO in the purpose/rationale clause modifier. It appears as though Palauan passives do not share this property. Compare the following pairs of sentences in (27) and (28).

(27)  
| a. Ak silebii a blai pro, [el ngmai a insurance PRO]. 1SG burn.down.PAST.PFV house I COMP receive insurance “I burned down the house to collect the insurance.” |
| b. Ak milcherar a rekodoll pro, [el odiur a del-ak pro PRO]. 1SG buy.PAST.PFV string I COMP make.happy mother-1SG.POSS me “I bought some string to please my mother.” |

(28)  
| a. * Ng milseseb a blai [el ngmai a insurance PRO]. 3SG burn.down.PAST.PASS house COMP receive insurance intended: “The house was burned down to collect the insurance.” |
| b. * Ng mla obechar a rekodoll [el odiur a del-ak pro PRO]. 3SG AUX.PERF buy.PASS string COMP make.happy mother-1SG.POSS me intended: “Some string has been bought to please my mother.” |

In (27), the subjects of both active sentences, pro “I”, trigger 1SG subject agreement and bind the PRO in the purpose/rationale clauses.\(^ {17}\) In (28), which gives the passive analogues of (27), this binding is impossible. In this respect, the Palauan passive patterns with run-of-the-mill unaccusatives in English, French, and German.\(^ {18}\)

(29)  
| a. * The boat sank [(in order) PRO to collect the insurance]. (cf. Roeper 1987: 268, ex. 3a) |

\(^ {17}\)That pro in (27) is [1SG] is indicated by the [1SG] subject agreement morpheme ak.

\(^ {18}\)Note that all of the sentences in (29) are grammatical on the irrelevant (and totally implausible) reading where the ship itself is sentient and has actively sunk itself, as noted by various native speaker informants of all three languages. The same reading is available for the Palauan sentences in (28).
b. * Le navire coulait [pour PRO percevoir (l’argent de) l’assurance].
   the ship sank for collect.inf the.money of the.insurance
   “The ship sank to collect the insurance (money).”
   French

c. * Das Schiff versank, [um PRO das Versicherungsgeld zu bekommen].
   the ship sank in.order.to the.insurance.money to receive
   “The ship sank to collect the insurance money.”
   German

Another property of English, French, and German passives is their compatibility with agent-oriented adverbials like *deliberately*.

(30) a. The boat was sunk deliberately.
   Le navire s’est délibérément coulé.
   “The ship was sunk deliberately.”
   French

c. Das Schiff wurde mit Absicht versenkt.
   “The ship was sunk intentionally.”
   German

In Palauan, the correlate of English *deliberately*, i.e. the expression *blak a rengul* “intentionally (lit. his heart is intent),” can modify verbs the same way that other adverbials can, as (32) illustrates (cf. the non-modified verb in (31)). Modifiers typically precede the verb and trigger the linker between themselves and the verb.

(31) Ak kilemedii a chanakangari pro.
    1sg sew.up.past.pfv button.hole I
    “I sewed up the button hole.”

(32) a. Ak betimel el kilemedii a chanakangari pro.
    1sg slow Lnk sew.up.past.pfv button.hole I
    “I sewed up the button hole slowly.”

b. Ak di ngak el kilemedii a chanakangari pro.
    1sg only me Lnk sew.up.past.pfv button.hole I
    “I sewed up the button hole by myself.”

c. Ak [tulechoid a chim-ak pro] el kilemedii a chanakangari pro.
    1sg sloppy hand-1sg.poss Lnk sew.up.past.pfv button.hole I
    “I sewed up the button hole sloppily. (lit. I sewed up the button hole with a sloppy hand.)”

d. Ak [blak a reng-uk pro] el kilemedii a chanakangari pro.
    1sg intent heart-1sg.poss Lnk sew.up.past.pfv button.hole I
    “I sewed up the button hole intentionally. (lit. I sewed up the button hole with an intent heart.)”

The expression *blak a rengul* contains the word *reng-* “heart,” which — as a noun which refers to a body part — is an inalienably possessed noun. That is, it must be inflected for agreement with a possessor.¹⁹ When *blak a rengul* is used as a modifier, the possessor of *reng-* must be co-referent

¹⁹cf. (32d) where *reng-* is inflected for [1sg] possession as *renguk* “my heart” rather than as *rengul* “his/her heart”. The same pattern is found in (32c), where *chim-* “hand” in *tulechoid a chimal* is inflected as *chimak* “my hand.”
with the agent argument of the verb. Thus, it is incompatible with verbs that do not select agent arguments, such as psych-predicates like dmeu “happy” in (33).

(33) Ng (*blak a reng-ul pro el) mle dmeu a buik.
    3SG (*intent heart-3SG.POSS him LNK) AUX.PAST happy boy.
    “The boy was (*intentionally) happy.”

Interestingly, the inclusion of blak a rengul also renders (34), the passive analogue of (31), ungrammatical. Compare to (32a) and (35), in which the inclusion of the non-agent-oriented adverb betimel “slowly” remains possible in the passive.\(^{20}\)

(34) Ng (*blak a reng-ul pro el) mla mekemed a chanakangari.
    3SG (*intent heart-3SG.POSS 3SG.ARB LNK) AUX.PERF SEW.UP.PASS button.hole
    “The button hole has been sewn up (*intentionally).”

(35) Ng betimel el milkemed a chanakangari.
    3SG slow LNK SEW.UP.PAST.PASS button.hole
    “The button hole was sewn up slowly.”

What (34) suggests, along with the contrast in (27), is that what I have called the passive construction in Palauan does not include an implicit agent argument. Once again, these sentences share this feature with Indo-European unaccusative verbs, rather than passive verbs.\(^{21}\)

    b. * Le navire coulait délibérément.
       “The ship sank deliberately.”  
       French

c. * Das Schiff hat mit Absicht versunken.
       “The ship has with intention sunk
       “The ship sank intentionally.”
       German

However, if the agent is expressed explicitly in an agentive er-phrase, the situation changes. A null PRO can be controlled in a purpose/rationale clause and the agent-oriented adverbia  

blak a rengul becomes licit; both of these facts are illustrated in (37).

(37) A chanakangari a blak a reng-ul pro el milkemed er a Melii, [el
    button.hole TOP intent heart-3SG.POSS her LNK SEW.UP.PAST.PASS by Melii to
    mengaus er a siats PROJ].
    mend CASE shirt
    “The button hole was intentionally sewn up by Melii to mend the shirt.”

In sum, we have seen that the Palauan passive does not behave exactly like its Indo-European cousins. Like in Indo-European passives, it is possible to express an agent overtly in an oblique PP, but this option seems to depend on whether the subject of the passive verb has been topicalized,

\(^{20}\)I have unfortunately not yet elicited passive correlates of (32b–c).

\(^{21}\)And again, informants report that these sentences are grammatical on the irrelevant (and implausible) reading in which the ship is sentient and has deliberately sunk itself.
which I have speculated might be due either to a requirement that the discourse prominence of
the theme be increased or to interference from English. However, if the agent is not expressed
overtly in a PP, it seems as though Palauan passives do not license implicit agents, as shown by their
inability to license null PRO arguments in purpose/rationale clauses and their incompatibility with
agent-oriented adverbs like blak a rengul. The Palauan passive exhibits a hybrid of the properties
that characterize passive and unaccusative verbs in English, French, and German.

1.5 The Analysis

The analysis of the Palauan passive that I will lay out below is constructed in the Minimalist frame-
work developed by Chomsky (2000, 2001), drawing on the work of Kratzer (1996). Primarily,
I adopt the assumption that theme arguments are base generated as complements of verbs and
that their meaning contributes to the meaning of the verbal predicate, following the arguments of
Marantz (1984) and Kratzer (1996). However, the verb itself cannot license syntactic Accusative Case
on its DP complement; syntactic Accusative Case is licensed by an external-argument-introducing
v_0 head (or Voice_0 in Kratzer 1996, which in turn is adapted from Johnson’s (1991) μ_0). In syntactic
terms, the V_0 and its DP complement merge to form a VP, which corresponds to the core meaning
of the predicate, given in (38).

\[
\begin{align*}
\text{(38)} & \quad \text{VP} & \rightarrow \lambda e [\text{kill} \text{(the conversation)}(e)] \\
& \quad \text{V} & \text{kill} \\
& \quad \text{DP} & \text{the conversation} \\
& & \quad [\emptyset \text{THEME}] 
\end{align*}
\]

At this point in the derivation, the theme DP the conversation has not been Case-licensed. If a
transitive v_0 head merges with the VP, then the v_0 can license syntactic Accusative Case on the
theme DP via Agree, illustrated schematically in (39).

\[
\begin{align*}
\text{(39)} & \quad \text{vP} & \rightarrow \lambda e [\text{kill} \text{(the conversation)}(e) \& \text{Agent} \text{(Max)}(e)] \\
& \quad \text{DP} & \quad \text{v'} \\
& \quad & \quad \text{Max} \\
& & \quad [\emptyset \text{AGENT}] \quad [\text{ACC}] \quad [\mu \text{CASE}] \\
& & \quad \text{v} \quad \text{VP} \\
& & \quad \text{V} \quad \text{kill} \\
& & \quad \text{DP} \\
& & \quad \text{the conversation} \\
& & \quad [\emptyset \text{THEME}] \\
& & \quad [\# \text{CASE}] 
\end{align*}
\]

Now, Chomsky (2000, 2001, following Perlmutter 1978; Burzio 1986; inter alia) hypothesizes
that passive and unaccusative v_0 heads differ from their transitive and unergative counterparts in
two ways: first, they do not introduce external arguments, and second, they do not license syntactic Accusative Case. When a passive or unaccusative \( \nu^0 \) head merges with a VP, then the theme argument DP (i.e. the direct object) cannot be licensed for Accusative Case. The derivation may still converge if it can get Nominative Case licensed by a higher finite \( T^0 \) head. Movement of the theme to the specifier position of finite \( T^0 \) is induced by an \([ePP]\) feature on \( T^0 \), effectively causing the theme to serve as the subject of the clause. This is the state of affairs in (40).

Turning back to Palauan, it is easy to see why such an analysis would be appealing to account for the differences between the realization of theme arguments as direct objects in transitive predicates but as subjects of their corresponding passives. But is there any basis for proposing a distinction in Palauan between transitive/unergative \( \nu^0 \) heads on one hand and passive/unaccusative \( \nu^0 \) heads on the other?

I propose that there is, and it lies in Palauan’s verbal morphology. Surface forms of verbs in Palauan are formed from two components: a root — which may or may not have independent status as a noun — and a verbalizer prefix or infix. Transitive perfective verbs bear object agreement suffixes unless the direct object is \([3\text{PL}, -\text{HUM}]\).\(^{22}\) Transitive perfective verbs are formed with verbalizer infixes, such as \(-m-, -u-,\) and \(-o-.\) Transitive imperfective verbs are typically formed with the verbalizer prefixes \(\text{me}N-\) or \(\text{o}N-\), where \(N\) triggers nasal substitution at the left edge of the stem.\(^{23}\) Their corresponding passive forms are formed with the verbalizer prefixes \(\text{me}-\) and \(\text{o}-\); in other words, they are almost identical to the imperfective transitive forms except for the fact that nasal substitution does not occur. Examples of all three verb types is given below in Table 2, illustrating the output of the nasal substitution rule.

\(^{22}\)Following Josephs (1975), I analyze the lack of agreement with \([3\text{PL}, -\text{HUM}]\) direct objects as a paradigm gap. Put differently, although \([3\text{PL}, -\text{HUM}]\) DPs may be licensed for Case syntactically via Agree, there need not be a morphological reflex of this Agree relation in all cases.

\(^{23}\)See Wilson 1972 and Flora 1974 for discussion of nasal substitution in Palauan. See also Blust 2004 for a recent survey of Austronesian nasal substitution.
I argue now that the morphological differences between the three verb types in Table 2 can be reduced to differences between the various instantiations of \( v^\circ \) available in the inventory of Palauan functional heads. The differences are summarized in Table 3, below.\(^{24}\)

<table>
<thead>
<tr>
<th>Label</th>
<th>Phonological Form</th>
<th>Features</th>
<th>Selects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive Perfective ( v^\circ )</td>
<td>(-m)-, (-u)-, (-o)-</td>
<td>[PERFECTIVE] [ACC]</td>
<td>VP, DP</td>
</tr>
<tr>
<td>Transitive Imperfective ( v^\circ )</td>
<td>(meN)-, (oN)-</td>
<td>[IMPERFECTIVE] [ACC]</td>
<td>VP, DP</td>
</tr>
<tr>
<td>Passive ( v^\circ )</td>
<td>(me)-, (o)-</td>
<td>[PASSIVE]</td>
<td>VP</td>
</tr>
</tbody>
</table>

Table 3. A Partial Classification of Palauan \( v^\circ \) Heads

When a root combines with a particular \( v^\circ \) head (realized overtly as a verbalizer morpheme), there are consequences in the syntax. Leaving the transitive \( v^\circ \) heads aside until §2.2, I now illustrate how this analysis of the \( me-/o\)- verbalizer morphemes as passive \( v^\circ \) heads allows for the extension of Kratzer’s (1996) analysis to the Palauan passive.

Just as in English, I assume that Palauan verbs merge with the theme DPs that they select to form a VP.

\[(41)\]  
\[\text{a. } [\text{VP bangch } [\text{DP a rechad}]]\]  
\[\text{bite people}\]  
\[\approx \text{“bite people”}\]  
\[\text{b. } \rightarrow \lambda e [\text{bite(people)(e)}]\]

\[\text{\(\text{VP}\)}\]  
\[\text{\(\text{V}\)}\]  
\[\text{\(\text{bangch}\)}\]  
\[\text{\(\text{a rechad}\)}\]  
\[\text{\(\text{\(\theta\)THEME}\)}\]  
\[\text{\(\text{\(u\)CASE}\)}\]  

---

\(^{24}\)Table 3 conspicuously lacks an entry for any unergative or unaccusative \( v^\circ \) head(s) in Palauan. At this point in time, I do not have a sufficiently thorough understanding of the properties of Palauan intransitive verbs to make any substantiated claims about their syntax or morphology. I will put such an investigation aside for future research.
Now, to passivize the VP, a passive $v^\circ$ head must merge with the VP. The features corresponding to the passive $v^\circ$ in Table 3 enter the derivation at this point.

\[(42)\]

\[
\begin{align*}
\text{a. } & [vP \text{ o-} [VP \text{ bangch a rechad}]] \\
& \text{PASS bite people} \\
& \approx \text{“be bitten people”}
\end{align*}
\]

\[
\begin{align*}
b. & \quad vP \\
& \quad \rightarrow \\
& \quad \lambda e [\text{bite(people)(e)}]
\end{align*}
\]

Consistent with the theory developed by Chomsky (2000, 2001), the passive $v^\circ$ neither introduces an external argument nor licenses Accusative Case, leaving the theme DP’s [$u\text{CASE}$] feature unvalued. A finite $T^0$ must then be merged, which enters in an Agree relation with the most local DP in its $c$-command domain, where “locality” is calculated in the Relativized Minimality sense of Rizzi 1990. Via this Agree relation, nominative Case is checked on the theme argument, and the theme is promoted to subject, indicated by the subject agreement clitic that matches the person and number features of the theme.

\[(43)\]

\[
\begin{align*}
\text{a. } & [TP \text{ te } [vP \text{ o-} \text{ bangch a rechad}]] \\
& 3\text{PL PASS bite people} \\
& \text{“People are being bitten.”}
\end{align*}
\]

\[
\begin{align*}
b. & \quad TP \\
& \quad \rightarrow \\
& \quad \lambda P_{<s,t>} \exists e_s [P(e) \& \text{present(e)}] (\lambda e [\text{bite(people)(e)}])
\end{align*}
\]

The derivation in (43) converges, but at least one question remains open. We saw several pieces of evidence in §1.3 that the theme argument in the Palauan passive construction behaves like a subject, rather than a direct object. However, it is not clear what the surface position of the subject
is. If Palauan’s Spec TP is rightward-branching, then movement of a *rechad “people” in (43) to Spec TP would be string-vacuous. So, the question essentially amounts to whether the subject DP occupies its base position within the VP or whether it raises to a higher position, such as Spec TP.

Recall that in (12), it was observed that subjects could strand a floating quantifier, but only to the right of a temporal adjunct like *er a elecha el sils “today.” One need not look far to find another language with a similar restriction: McCloskey (2000) and Bošković (2004) describe the case of floating quantifiers in English passives. In English, quantifiers may float (after A-movement) in an intermediate position above the passive verb, as shown in (44a), but not in the subject’s base-generated θ-position, as shown in (44b).

(44)  a. The students were all arrested (last night). (cf. Bošković 2004: 692, ex. 24)
    b. * The students were arrested all (last night). (cf. McCloskey 2000: 77, ex. 61b; Bošković 2004: 682, ex. 3b)

The grammaticality of (44a) suggests that the subject occupies an intermediate position higher than the complement of V° but lower than the specifier of T°. It seems reasonable to guess that it may be in an outer specifier of v°, as the floated quantifier cannot surface below a low adverbial like *completely.

(45)  a. The knives were all completely sharpened.
    b. * The knives were completely all sharpened.

However, it appears that if Palauan subjects that occur to the right of (higher than) temporal adverbials like *er a kesus “last night” indeed occupy the specifier of T°, then they cannot float a quantifier in an intermediate position, as (46b) suggests. Thus, it appears that — unlike in English (45) — Palauan theme arguments may not have to stop in an intermediate Spec vP position on the way to Spec TP (if [PP er a kesus] is indeed adjoined to vP).

(46)  a. * Ng mildorem el rokui er a kesus a oles.
        3PL.—HUM sharpen.PAST.PASS LNK all PREP last.night knives
        intended: The knives were all sharpened last night.
    b. * Ng mildorem er a kesus el rokui a oles.
        3PL.—HUM sharpen.PAST.PASS PREP last.night LNK all knives
        intended: The knives were all sharpened last night.
    c. Ng mildorem er a kesus a oles el rokui.
        3PL.—HUM sharpen.PAST.PASS PREP last.night knives LNK all
        “All the knives were sharpened last night.”
    d. A oles a mildorem er a kesus el rokui.
        knives TOP sharpen.PAST.PASS PREP last.night LNK all
        “The knives were all sharpened last night.”

But cf. McCloskey’s demonstration that the same does not hold for all dialects of English. For instance, West Ulster English allows quantifier float in a postverbal position if it is stranded by wh-movement rather than A-movement.

(i)  a. Who was arrested all in Duke St.?
    b. What was said all at the meeting? (McCloskey 2000: 72, ex. 47)
The quantifier *rokui* cannot be stranded in the theme's base position under A-movement as in (46a), nor in an intermediate position above the adjunct *er a kesus* as in (46b). Thus, it appears that if the theme is to move to Spec TP, it must either bring the quantifier with it as in (46c).²⁶ If the subject is moved higher (e.g., if it is topicalized), then the quantifier can float as in (46d).²⁷

The examples in (46) suggest that the theme argument in a Palauan passive may move to Spec TP, but example (47) suggests that it may not need to.

(47) Ng *mildorem a oles el rokui er a kesus.
    3PL.—HUM sharpen.PAST.PASS knives LNK all PREP last.night
    “All the knives were sharpened last night.”

At least two analyses of the possible word orders present themselves. On the first analysis, the temporal adverbial PP *er a kesus* may adjoin only to *vP*, leaving two possible positions for the subject: complement of *V*⁰ and specifier of *T*⁰. There is no systematic explanation for why the subject may appear in either position. On the second analysis, *er a kesus* may adjoin either to *vP* or *TP*, and the subject raises to the specifier of *T*⁰. I know of no empirical evidence that favors one analysis over the other, but if the second one is correct, then it is possible to argue that both subject agreement and quantifier float are licensed when a DP occupies a particular position: the specifier of *T*⁰.

In the next section, I discuss the properties of the theme arguments of transitive verbs, showing how the syntax of passives can help to inform us about the syntax of transitive predicates.

2 Transitive Verbs in Palauan

2.1 An Aspectual Alternation

In Palauan, the relationship between the aspectual interpretation of verbs and the realization of their internal arguments is closely interconnected. In Table 2, it was shown that imperfective and perfective verbs in Palauan are morphologically distinct. Imperfective verbs are formed when the verbalizer prefixes *meN-* or *oN-* attach to roots, while the *-m-, -u-, and -o-* infixes form perfective verbs from roots. When these verbs are transitive, their direct objects are realized differently.

The direct objects of transitive imperfective verbs may either surface with the accusative case marker *er* — which is homophonous with the preposition *er* — as shown in (48a), or with no case marking whatsoever, as shown in (48b).

²⁶Another alternative is that the quantifier is adjoined to the DP acyclically, as in Bošković’s (2004) analysis. In the interest of space, I do not pursue a comparison of the two alternatives.

²⁷Unfortunately, I do not have any data to confirm or deny the interesting possibility of stranding *el rokui* in the theme’s base (θ) position via A-bar movement, which would suggest that the Palauan quantifier float pattern is more similar to that of West Ulster English than that of “Standard” English. This would be the case if, for example, a sentence like (i) turns out to be grammatical.

(i) ? A oles a mildorem el rokui er a kesus.
    knives TOP sharpen.PAST.PASS LNK all PREP last.night
    intended: The knives were all sharpened last night.

The notation ? in (i) simply indicates that I have not confirmed its (un)grammaticality — not that there is variation in judgments among speakers.
(48) a. Ng mo menga er a bobai pro.
   3SG.AGRS AUX.FUT eat.IMPFV CASE papaya he
   “He will be eating the papaya/a (particular) papaya.”

   b. Ng mo menga a bobai pro.
   3SG.AGRS AUX.FUT eat.IMPFV papaya he
   “He will be eating (some) papaya/some papayas/the papayas.”

The er vs. Ø alternation can be characterized as a differential object marking phenomenon (Bossong 1985; Aissen 2003; de Swart 2007), in which individuated DPs (either singular specific DPs or human DPs) appear preceded by the case-marker er, while non-individuated DPs do not (see Josephs 1975; Woolford 2000). The specificity/number contrast is indicated in the English translations of the sentences in (48). This specificity contrast is neutralized when the direct object is human, in which case the direct object must be overtly case-marked with er, as (49) shows.  

(49) a. Ng mo omes er a tolechoi pro.
   3SG AUX.FUT watch.IMPFV CASE baby he
   “He will watch a (particular) baby/some baby/the baby.”

   b. Ng mo omes er a retolechoi pro.
   3SG AUX.FUT watch.IMPFV CASE babies he
   “He will watch (the/some) babies.”

Direct objects of transitive perfective verbs, on the other hand, never exhibit case marking. Instead, direct object DPs trigger object agreement morphology on the verb, realized as the set of suffixes shown in Table 4.  

---

28 Number manifests itself morphologically on DPs in a number of ways: on demonstrative determiners, with different sets of numerals that are compatible with different classes of nouns (perhaps a sort of limited classifier system parallel to those of some East Asian languages), and with the plural prefix re-, as in (49b). The prefix re- may only attach to human nouns, and optionally to some common household animal nouns. It is incompatible with inanimate nouns.

Mandarin Chinese (Sino-Tibetan; genetically unrelated to Palauan) is another language in which plural nouns may display additional morphology if they are [+HUM], but not if they are [−HUM] (see Li & Thompson 1981: 40–41; data from Jesse Saba Kirchner, p.c.).

(i) a. i. tóngzhì “comrade(s)”
   ii. tóngzhì-men “comrades”

   b. i. mˇa “horse(s)”
   ii. ? mˇa-men “horses”

   c. i. shítou “stone(s)”
   ii. * shítou-men “stones”

See Smith-Stark 1974 for more on such plurality splits.

29 While this set of suffixes is compatible with the vast majority of Palauan perfective verbs, a relatively large class of irregular verbs show some variability in the form of their object agreement suffixes, typically in the 3rd person. An example is the [3SG] suffix -ang in mesang “see” in (51).
Table 4. Palauan Object Agreement Suffixes

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th></th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Inclusive</td>
<td>Exclusive</td>
<td></td>
</tr>
<tr>
<td>1st person</td>
<td>-ak</td>
<td>-id</td>
<td>-emam</td>
</tr>
<tr>
<td>2nd person</td>
<td>-au</td>
<td>-emiu</td>
<td></td>
</tr>
<tr>
<td>3rd person</td>
<td>[+HUM]</td>
<td>-ii</td>
<td>-terir</td>
</tr>
<tr>
<td></td>
<td>[-HUM]</td>
<td>-ii</td>
<td>Ø</td>
</tr>
</tbody>
</table>

The perfective correlates of (48) and (49) are illustrated below in (50) and (51), respectively.

(50)  a. Ng mo kol-ii a bobai pro.
3SG.AGRS AUX.FUT eat.PFV-3SG papaya he
“He is going to eat (up) a (particular) papaya/some papaya/the papaya.”

   b. Ng mo kmang a bobai pro.
3SG.AGRS AUX.FUT eat.PFV papayas he
“He is going to eat (up) (some/the) papayas.”

(51)  a. Ng mo mes-ang a tolechoi pro.
3SG AUX.FUT see.PFV-3SG baby he
“He will see a (particular) baby/some baby/the baby.”

   b. Ng mo mes-terir a retolechoi pro.
3SG AUX.FUT see.PFV-3PL.+HUM babies he
“He will see (the/some) babies.”

As in many other languages, it is the theme argument that is grammaticized as the direct object of a transitive verb in Palauan: any theory of Palauan syntax must explain how the theme is grammaticized as a subject in passive constructions and as a direct object in transitive constructions, with all of the associated syntactic and morphological properties of both constructions. In the next section, I propose an analysis of transitive verbs in Palauan.

2.2 Direct Objecthood in Palauan

Under the syntactic assumptions in the Minimalist framework proposed by Chomsky (2000, 2001), transitive verb stems merge with their theme arguments to form a VP as in (52), just as passive verbs do as in (41).

(52)  a. [VP kemed [DP a chanakangari]]
   sew.up button.holes
   ≈ “sew up the button holes”

   b. VP → λe [sew.up(the button holes)(e)]

   V
   kemed
   DP
   a chanakangari
   [0theme]
   [uCASE]
Now, recall that the primary distinction between transitive and passive verbs is encoded syntactically via the selection of an appropriate $v^o$ head (cf. Johnson 1991; Kratzer 1996). Passive $v^o$ does not have an [acc] feature to license accusative Case via agree, whereas transitive $v^o$ does. Thus, if transitive $v^o$ merges with VP, then the theme DP is grammaticized as a direct object and can receive Case from transitive $v^o$. Finally, transitive $v^o$ differs from passive $v^o$ in requiring that an agent DP merge with it (i.e., transitive $v^o$ has an extra selectional restriction for a constituent of category D). The $vP$ constructed in (53) represents an imperfective predicate, while (54) shows the corresponding perfective predicate.

(53) a. $[vp\ meN-\ [vp\ kemed\ a\ chanakangari]\ [dp\ a\ Keli]]$
    sew.up\ button.holes\ Keli
    $\approx$ “Kelly sew up the button holes”

    b. $vP \rightarrow \lambda e [\text{sew.up}(\text{the button holes})(e) \& \text{Agent}(\text{Kelly})(e)]$

    $vP$
     \[<<\]
     $v$
     $meN-\ [\text{IMPFV}]$
     $[\text{ACC}]$

     $vP$
     $\rightarrow$
     $DP$
     $a\ Keli$
     $[\emptyset\text{AGENT}]$
     $\text{[uCASE]}$

    $V$
    $kemed$
    $\rightarrow$
    $DP$
    $a\ \text{chanakangari}$
    $[\emptyset\text{THEME}]
    [\text{[hCASE]}$
    $[\text{3PL}]$

(54) a. $[vp\ -u-\ [vp\ kemed\ a\ chanakangari]\ [dp\ a\ Keli]]$
    sew.up\ button.holes\ Keli
    $\approx$ “Kelly sew up the button holes”

    b. $vP \rightarrow \lambda e [\text{sew.up}(\text{the button holes})(e) \& \text{Agent}(\text{Kelly})(e)]$

    $vP$
     \[<<\]
     $v$
     $-u-\ [\text{PFV}]$
     $[\text{ACC}]$

     $vP$
     $\rightarrow$
     $DP$
     $a\ Keli$
     $[\emptyset\text{AGENT}]$
     $\text{[uCASE]}$

     $V$
     $kemed$
     $\rightarrow$
     $DP$
     $a\ \text{chanakangari}$
     $[\emptyset\text{THEME}]
     [\text{[hCASE]}
     $[\text{3PL}]$

The only element that must be altered for the predicate to be perfective is the choice of $v^o$ head. As transitive perfective $v^o$ heads agree with the direct object in VP, the person and number features
from the theme DP can be shared with transitive perfective \( v^o \) head via the same Agree relation that is already required to check syntactic Case on the direct object.

While this analysis immediately appears attractive for characterizing the distinctions between imperfective and perfective predications, a potential problem arises quickly: that of the accusative case marker \( er \), which is homophonous with the preposition \( er \).\(^{30}\) The problem is that if the correct analysis of the accusative case marker is as an element of category P, then it must merge in the derivation at a point at which it is impossible to tell whether it will be licensed. The accusative case marker \( er \) appears only on direct objects of imperfective verbs, and even then, only on DPs that are either specified as \([+\text{HUM}]\) or as \([\text{sg}, +\text{spec}]\). In the Minimalist theory of syntax assumed here, this amounts to a Look Ahead problem.

One classic (and, in my opinion, uninteresting) explanation of such Look Ahead problems can be constructed if one remembers that any subset of lexical and functional heads available in the lexicon of a language can form a numeration, and that the vast majority of numerations will crash in the syntax. One might say, then, that imperfective transitive \( v^o \), \( P_{er} \), or both can be included in a given numeration, but the numeration can only result in a converging derivation if both elements are present — not just one or the other. Still, this is not a solution to the Look Ahead problem; it simply pushes the problem out of the syntax and into the lexicon.

A more satisfying solution to the present problem might be reached if one assumes uniformity in the argument structures of imperfective and perfective predicates: direct objects of both verb classes would be treated as DPs, with \( er \) inserted post-syntactically at PF in line with much recent work on the morphosyntax of case (see, e.g., McFadden 2004). The question is whether such a solution has any merit: is there any reason to treat the accusative case marker \( er \) differently from any of its other uses as a preposition?

I will argue that there is a very good reason to treat accusative \( er \) as different from prepositional \( er \): the differential object marking alternation that characterizes \( er \)'s use in transitive imperfective predicates does not manifest itself when \( er \) is used as a preposition. I will set this issue aside for a moment, however, as it will first be useful to motivate my analysis of the \( vP \) structure in (53) and (54).

### 2.3 Object Agreement and the Fate of the Syntactic Category Asp

Recall that direct objects of perfective verbs are never marked with \( er \); instead, they trigger object agreement suffixes on their selecting verbs (for all but \([3\text{pl}, -\text{HUM}]\) direct objects). Since it is all and only transitive perfective verbs that display object agreement, it is natural to wonder whether direct objects of perfective verbs are licensed for syntactic Case in a manner wholly distinct from direct objects of imperfective verbs. Recent analyses of the connection between telicity and the bounding of an event by a direct object have been pursued by Arad (1998), Ritter & Rosen (2000), Kratzer (2004), and Travis (2005), building on the work of Tenny (1987, 1994), Krifka (1992), and Travis (1992).

The core of these proposals centers around the idea that there is some intermediate projection between VP and \( vP \) that checks Case on direct objects of transitive telic predicates, with various

\(^{30}\)That the case-marker for direct objects is homophonous with the language's only preposition is probably not noteworthy. Palauan has an extremely limited set of function words that serve multiple purposes. For example, the default complementizer \( el \) is homophonous with the linker morpheme \( el \), just as \( er \) may also serve to introduce temporal modifiers like \( er \ a \ kesus \) "last night" or license a possessor like \( er \ kau \) "your."
names for this projection. The idea is that if the direct object directly figures in the calculation of the telicity of a predicate, then a functional head carrying aspectual information (let’s call it Asp⁰) stands in some relation with the direct object DP. Depending on the analysis, the direct object must raise to the specifier of this head, or else the head may check syntactic Case in an Agree relation with the direct object DP. In this section, I develop this type of alternate analysis of Palauan’s vP-internal syntax, showing why the syntax of passives provides evidence against its tenability for Palauan. The passive data instead motivates only the analysis constructed in (53) and (54).

One advantage of an Arad/Ritter/Rosen/Kratzer/Travis-inspired approach to the syntax of aspect is that the DP complements of atelic verbs cannot receive case from Asp⁰: accusative case licensing is tied directly to telicity. These DP complements to V⁰ can then be licensed in two ways. First, they may incorporate into the verb (syntactically or semantically) if they are (roughly) non-quantized (Krifka 1992, *inter alia*), being treated as a sort of property-denoting modifier rather than a true argument of the predicate. Otherwise, they must be licensed for case via some other means. Consider the pair of sentences in (55), below.

(55)  
  a. Johann will mow lawns today.
  b. Johann will mow our lawn today.

Neither of the events described in (55) have yet taken place; the sentences describe events that will occur in the future. Nonetheless, (55a) describes an atelic event that has no definitive endpoint: there is no point at which the event can naturally be described as complete. Instead, the agent, Johann, must make a conscious decision to stop mowing lawns, at which point the event is terminated. However, the event described in (55b) describes a telic event that has a natural endpoint. The event will be terminated as soon as all of the grass in our lawn has been completely mowed. In other words, only the direct object in (55b) (and not in (55a)) acts as an incremental theme.

This contrast is expressed morphologically in Palauan and indicates the difference between what have up to this point been called perfective and imperfective verbs. The Palauan analogues of (55) are given below in (56).

(56)  
  a. A Johann a mo melaml a chudel er a elecha el sils pro₁.
      Johann TOP AUX.FUT cut.IMPF grass PREP now LNK day
      “Johann will mow lawns today.”
  b. A Johann a mo ngoml-ii a chedel-ed pro er a elecha el
      Johann TOP AUX.FUT cut.PF-3SG grass-1PL.INCL.POSS us.INCL PREP now LNK
      sils pro₁.
      day
      “Johann will mow our lawn today.”

An Arad/Ritter/Rosen/Kratzer/Travis-inspired analysis of the contrast between the vP-internal syntax of (56a) and the vP-internal syntax of (56b) might look something like (57a) and (57b), respectively.

---

33See Massam 2001 for a convincing analysis of NP-incorporation in Niuean.
34Perhaps along the lines of Farkas & de Swart 2003 or Chung & Ladusaw 2003.
For the sake of comparison, let's say that the more articulated vP structures in (57) represent the “aspect-on-Asp” analysis, while the less articulated vPs in (53) and (54) represent the “aspect-on-v” analysis.

On the aspect-on-Asp analysis, the aspectual and Case-licensing features of the verb are distributed between v° and Asp° functional heads. The aspectual interpretation of the verb is introduced by Asp°: [ATELIC] in (57a) and [TELIC] in (57b). However, the direct object DP’s uninterpretable [UCASE] feature is valued by v° in (57a), but by the telic Asp° head in (57b). While the aspect-on-Asp analysis provides an intuitive means for characterizing the morphological reflexes of the aspectual difference between imperfective sentences like that in (56a) and their imperfective counterparts like that in (56b), the analysis raises several questions.

One potentially attractive side-effect of the aspect-on-Asp analysis is that it provides a syntactic reflex of the morphological difference between the two types of accusative case morphology. If
syntactic Accusative Case is licensed via Agree, then the fact that two distinct heads may license Accusative Case might provide some rationale for why direct objects of imperfective verbs are marked with the accusative case marker er, while direct objects of perfective verbs trigger object agreement morphology on the verb. However, the dissociation of AspP from VP and vP might not be necessary. Is there any empirical reason behind conceptualizing aspect as the interpretation of a syntactically realized functional head Asp\(^0\), rather than as simply a feature (or bundle of features) introduced by the verb itself (V\(^0\)) or a functional v\(^0\) head?

Some preliminary evidence that might indicate that the answer is yes comes from the morphology of imperfective verbs in Palauan. As was discussed earlier, the stems of imperfective verbs undergo nasal substitution. An example is when the root √chat “smoke” becomes mengat “smoke (impfv.),” while its corresponding passive form is mechat “be smoked.” Flora (1974: 76–80) posits a syntactic feature \([±\text{MP}]\) which is positively specified for imperfective verbs but negatively specified for passive and perfective verbs, and it is \([+\text{MP}]\) that is responsible for the nasal substitution. Josephs (1975: 136–141; see also Wilson 1972: 120–128) argues that nasal substitution is the reflex of an imperfective morpheme distinct from the “verb marker,” or rather the verbalizer prefix that I have analyzed as v\(^0\). It might be tempting to think of the phonological exponent of this morpheme as a placeless nasal (N-) that attaches to the verb stem and coalesces with the initial consonant: Asp\([\text{MPFV}]\) could then be argued to introduce this morpheme into the syntax. Potential evidence for this analysis comes from the interaction between nasal substitution and reduplication.

The way in which nasal substitution interacts with reduplication is of immediate relevance to the status of imperfective verb morphology in Palauan, indicating that it cannot be analyzed as the result of suppletive verb roots. Flora (1974: Ch. 4) identifies two patterns of reduplication in Palauan, which Finer (1986) call Ce- and CVX reduplication. Semantically, both patterns of reduplication may be used to serve different functions, such as to indicate iteration of an event, a weakened sense of a particular property, or an inclination or ability to undertake a particular action: the semantics of reduplication is presently irrelevant. In descriptive terms, Ce- reduplication copies just the initial consonant of the root and inserts an -e-, or [e], between the reduplicant consonant and its correspondent in the base. CVX reduplication, on the other hand, copies the initial CV sequence from the root, along with whatever consonant or vowel follows — if it is a vowel, then the vowel cluster will be reduced, as reduplicant prefixes are unstressed (see Finer 1986 and Zuraw 2003 for discussion).

What is relevant is that CVX reduplication can feed Ce- reduplication, but only CVX reduplication can feed nasal substitution before the subsequent prefixation of a verbalizer. Roots that have undergone Ce- do not undergo nasal substitution: instead, a homorganic nasal is prefixed. This contrast is illustrated below. In (58), the root √kes “scrape” undergoes only CVX reduplication, and the leftmost consonant of the reduplicant undergoes nasal substitution. In (59), however, the same root first undergoes CVX reduplication, followed by Ce- reduplication. In this case, nasal substitution is blocked.

\[
(58) \quad \text{meN-} + \text{CVX} + \sqrt{\text{kes}} \rightarrow \text{menges-kes}
\]

\[
(59) \quad \text{meN-} + \text{Ce} + \text{CVX} + \sqrt{\text{kes}} \rightarrow \text{meng-ke-kes-kes} \quad \text{(Flora 1974: 171, ex. 23)}
\]

The nasal substitution (or, prefixation) patterns in (58) and (59) strongly suggest is nasal substitution is triggered root-externally, i.e. by a prefix, rather than occurring in a suppletive root form.

If the nasal substitution is triggered by a prefix that contributes aspectual information, the
analysis of the imperfective morpheme N- occupying Asp⁰ [IMPFV] seems to make sense. After all, nasal substitution occurs only in imperfective verbs. The question is whether the imperfective morpheme is an autonomous prefix or part of the verbalizer morphemes meN- or oN-.

I know of no decisive evidence for one analysis over the other. The primary advantage of the aspect-on-Asp analysis is that there is an additional functional head Asp⁰ [IMPFV] available that can plausibly serve as the locus of imperfective morphology, as well as a head Asp⁰ [PFV] which can trigger the object agreement morphology associated with transitive perfective verbs. Still, the dissociation of aspctual features from v⁰ eliminates any rational syntactic basis for the distinction between imperfective and perfective verbalizer morphology. In other words, if the imperfective morpheme is simply a prefix N- and perfective object agreement morphology is simply sufixation, why are imperfective verbs formed from verbalizer prefixes that would have to be analyzed as me- and o-, while perfective verbs are formed from verbalizer infixes such as -m-, -u-, and -o-?

It seems to me that the issue regarding the selection of verbalizer morphemes is circumventable if one assumes the Extended Projection theory proposed by Grimshaw (2005: Ch. 1) in conjunction with the tenets of Distributed Morphology (Halle & Marantz 1993, 1994, inter alia). In a theory like Extended Projection, feature values may percolate through various functional projections associated with lexical heads like N⁰ and V⁰. For NP, this class of functional projections may contain elements like NumP, DP, and KP, while for VP, it may contain vP, AspP, TP, CP, and so forth. As such, it would make little difference for v⁰ whether [IMPFV] or [PFV] were introduced by Asp⁰: the feature value would be visible to v⁰ via Extended Projection, and the appropriate morphological form of the verbalizer could be inserted post-syntactically at PF.

While this analysis is relatively uncontroversial from the theoretical standpoint, there is actually both conceptual and empirical evidence against it. First, the split Case-licensing analysis, in which direct objects of perfective verbs are licensed by Asp⁰ [TELC] and direct objects of imperfective verbs are licensed by v⁰, makes an incorrect prediction. If AspP merges directly above VP (but lower than vP), then it may be headed by a telic Asp⁰. This is the head which is capable of Licensing Case on the DP complement of the verb in telic predicates. If this is the case, then the DP complement to V⁰ may be licensed for Case (say, [ACC]) before v⁰ enters the derivation. If v⁰ is passive v⁰ (see Table 3), then finite T⁰ should not be able to enter into an Agree relation with the theme DP to license [nom], as the DP’s [ucase] feature will have already been checked by telic Asp⁰.

Now, we know from Georgopoulos’s (1991a) work on Palauan modal nouns and psych-nouns that it is possible for the subject to agree with either the experiencer argument, the theme argument, or indeed neither argument. These three options are shown below in (60a–c), respectively.

(60) a.  Te  soa-rir    kemam a rebuik.
     3PL liking-3PL.POSS US.EXCL boys
     “The boys like us.”
     (Georgopoulos 1991a: 224, ex. 16b)

b. Aki soa-rir    a rebuik pro.
     1PL.EXCL liking-3PL.POSS boys WE.EXCL
     “The boys like us.”
     (Georgopoulos 1991a: 225, ex. 18c)

c. Ng soa-rir    kemam a rebuik pro.
     3SG liking-3PL.POSS US.EXCL boys IT.EXPL
     “The boys like us.”
     (Georgopoulos 1991a: 225, ex. 20a)

In the case where the nominal predicate does not agree with either overt argument, (60c), finite
T₀ presumably licenses syntactic Nominative Case on (and agrees with) a default [3sg] expletive pronoun, as in existentials and other expletive-subject constructions.

This option does not appear to be viable in passives, as (61) suggests.

(61) * Ng obangch a rechad pro.
     3sg bitePASS people itEXPL

approximately: “It is the people getting bitten.”

In other words, it is essential that finite T₀ Agree with the theme argument in passive sentences, unlike in modal or psych-noun predicates. The presence of the [3sg] subject agreement clitic in (61) suggests that there has been no Agree relation relation established between finite T₀ and a rechad; otherwise, the subject agreement clitic would be the [3pl] te. Example (61) is thus an initial piece of evidence that the theme DP in a passive cannot be licensed syntactically in its vP-internal position, whether by v₀ on the aspect-on-v analysis or by telic Asp₀ on the aspect-on-Asp analysis.

Furthermore, (60a) shows that it is possible for an argument of a modal noun or psych-noun to enter into two feature-sharing relations: first with the noun itself in the form of possessor agreement, and then with finite T₀ in the form of subject agreement. Example (62) suggests that this is not possible for DP complements of passive verbs. Passive verbs just do not exhibit object agreement, suggesting that their theme DP complements cannot be licensed by a telic Asp₀ head before entering into an Agree relation with finite T₀.

(62) * Te mla bengche-terir a rechad.
     3pl AUX PERF bitePASS3PL people

intended: “People have been bitten.”

And finally, (63) shows that object agreement between passive verbs and their theme DP complements cannot occur even if an expletive is inserted, essentially showing that if telic Asp₀ can be analyzed as part of the verbal complex in (63), it has no DP-licensing properties (i.e., an interpretable Case feature).

(63) * Ng mla bengche-terir a rechad pro.
     3sg AUX PERF bitePASS3PL people itEXPL

intended: “It has been people bitten.”

On the other hand, if aspectual information is introduced by v₀ as in the aspect-on-v analysis, rather than on Asp₀ as in the aspect-on-Asp analysis, then there is no need to stipulate that telic Asp₀ cannot combine with passive v₀: none of the sentences in (61) – (63) would even be predicted to be grammatical. Under the aspect-on-v analysis (with the inventory of v₀ in Table 3), the way in which the theme DP is Case-licensed will simply fall out from which v₀ head merges with VP. In this way, aspect features on imperfective and perfective v₀ play a direct role in the way internal arguments are syntactically Case licensed.

Thus, it seems preferable to adopt the aspect-on-v analysis proposed in (53) and (54). This conclusion should not be construed as a claim that AspP or an inventory of Asp₀ functional heads has no place in Universal Grammar. There have been very elegant analyses devised for phenomena in other languages that motivate the inclusion of AspP in an articulated vP structure (see Travis 2005:80–84 for Malagasy).
One final note is in order. A consequence of the aspect-on-\(v\) analysis is that there is no notion of an “imperfective morpheme” independent from the “verb marker” (cf. Wilson 1972; Josephs 1975). The so-called imperfective morpheme is treated as part of the imperfective verbalizer morpheme \(meN\)-, in accordance with the analyses of Capell (1949) and DeWolf (1988). From a comparative or historical standpoint, this analysis is probably more accurate when one considers the types of prefixes and infixes that form verbs in other Philippine languages. In Indonesian, \(meN\)- can form either intransitive or transitive verbs (Sneddon 1996). In Chamorro, \(man\)- can form intransitive verbs from nouns if the subject is plural, whereas \(-um\)- (cf. the perfective infix \(-m\)- in Palauan) is used if the subject is singular (Topping 1973: 84, 226). In Tagalog, both \(maN\)- and \(-um\)- can form transitive and intransitive actor focus verbs (Schachter & Otanes 1972: 290, 292–293). If the present analysis is correct, then the verbal prefix/infix system of Palauan is poised to resemble those of other languages more closely.

2.4 Differential Object Marking

Now that the analysis in §2.2 has been motivated, I will address the issue involving the status of the accusative case marker \(er\) found on direct objects of imperfective verbs. As we saw above in (48), the relative presence or absence of accusative \(er\) depends on the values of animacy, number, and specificity features on the direct object DP. What I show in this section is that the use of \(er\) as an accusative case marker is distinct from its usage as a preposition, and I argue that it should not be analyzed in the syntax as the morphological realization of a \(P^o\) head.

The differential object marking alternation described in §2.1 is a phenomenon unique to direct objects. Subjects, possessors, obliques, and adjuncts do not participate in similar alternations between being marked with \(er\) or not: they are either uniformly marked with \(er\) or uniformly not marked with \(er\). To start, I will demonstrate that humanness, number, and specificity are indeed the three features that govern the accusative case alternation. To this end, much use will be made of the set of demonstrative determiners, which have distinct forms for use with human vs. non-human DPs as well as singular vs. plural DPs in Palauan. They can thus transparently indicate the features humanness and number features of particular DPs. Furthermore, when the NPI \(ngii\ di el\ “any”\ occurs in a DP within the scope of a downward-entailing operator (such as within a question; Ladusaw 1979), the DP receives a non-specific interpretation, which we can use to probe the specificity restriction on the accusative case marker \(er\).

Now, both the human direct object \(ngke\ el chad\ “that person”\ in (64) and the singular, specific direct object \(se\ el hong\ “that book”\ in (65) must be marked with \(er\).

\[
\begin{align*}
\text{(64)} & \quad \text{A Steven, a olengeseu} \:\text{er ngke el chad} \:\text{pro}. \\
& \quad \text{Steven TOP help.IMPFV CASE that LNK person} \\
& \quad \text{“Steven is helping that person.”}
\end{align*}
\]

\[
\begin{align*}
\text{(65)} & \quad \text{A Sally, a menguiu} \:\text{er se el hong} \:\text{pro}. \\
& \quad \text{Sally TOP read.IMPFV CASE that LNK book} \\
& \quad \text{“Sally is reading that book.”}
\end{align*}
\]

\[\text{Note} \text{ the homophony between Palauan’s only preposition, \(er\), and the accusative case marker \(er\). Probably not too much should be made of this homophony: it is not uncommon crosslinguistically to utilize prepositions as accusative case markers.}\]
However, a non-human direct object is not marked with *er* if it is either plural or non-specific. For example, neither the plural direct object *aike el hong* “those books” in (66) or the non-specific indefinite *a ngii di el hong* “any book” in (67) is marked with *er*.

(66) A Sally, a menguiu *aike el hong pro*.
    Sally TOP read.IMPFV those LNK book
    “Sally is reading those books.”

(67) Ke milenguiu *a {ngii di} el hong pro* er a elecha el sils?
    2SG read.PAST.IMPFV {any} LNK book you PREP now LNK day
    “Did you read any (a single) book today?”

Nevertheless, humanness trumps all, and plural/non-specific direct objects must be marked with *er* if they are human, as (68) and (69).

(68) A Steven, a olengeseu *er tirke el chad pro*.
    Steven TOP help.IMPFV CASE those LNK people
    “Steven is helping those people.”

(69) Ke ullengeseu *er a {ngii di} el chad pro* er a elecha el sils?
    2SG help.PAST.IMPFV CASE {any} LNK book you PREP now LNK day
    “Did you help anybody today?”

I summarize the distribution of the overt accusative case marker *er* on direct objects of various types in Table 5.

<table>
<thead>
<tr>
<th></th>
<th>Human D.O.</th>
<th>Non-Human D.O.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singular D.O.</td>
<td>Plural D.O.</td>
</tr>
<tr>
<td>Specific D.O.</td>
<td><em>er</em></td>
<td><em>er</em></td>
</tr>
<tr>
<td>Non-Specific D.O.</td>
<td><em>er</em></td>
<td><em>er</em></td>
</tr>
</tbody>
</table>

*Table 5. Distribution of the Accusative Case Marker *er***

Table 5 is highly reminiscent of the lattice structure that Aissen (2003: 459, fig. 4) offers to characterize patterns of differential object marking cross-linguistically. Analyses of patterns in such languages (found in many language families) typically rely on some combination of animacy (or humanness) and specificity (or definiteness) hierarchies to determine whether or not a particular direct object DP receives overt or null case morphology. I argue that Palauan is another such language, and that the *er* that is the morphological reflex of accusative case is just that: a case marker, and not a preposition.

DPs in other positions do not manifest a similar alternation. For instance, subjects are never marked with *er*. Examples (70) and (71) show that human and non-human subjects, respectively, are not marked with *er*, regardless of whether they are singular (specific or non-specific) or plural.

(70) a. Ng *songerenger *ngke el chad.
    3SG hungry that LNK person
    “That person is hungry.”

b. Te *songerenger *tirke el chad.
    3PL.HUM hungry those LNK people
    “Those people are hungry.”
It seems safe to conclude, then, that subjects are simply DPs. I turn now to possessor DPs. There are two patterns by which possession is expressed in Palauan. Under both patterns, the possessor follows the possessed noun. The first pattern involves possessor agreement, realized morphologically on the possessed noun. The possessor itself is not marked morphologically (with er or otherwise), regardless of whether it is individuated. This is shown in (72) and (73).

(72) a. A Melii a melemed a tebel-el ngke el chad SBJ Melii TOP wipe off tables-3SG that LNK person “Melii is wiping off that person’s tables.”

b. A Melii a melemed a tebel-ir tirke el chad SBJ Melii TOP wipe off tables-3PL those LNK people “Melii is wiping off those people’s tables.”

c. Ng melemed a tebel-el a ngii di el chad a Melii? 3SG wipe off tables-3SG any LNK person Melii “Is Melii wiping off anyone’s tables?”

(73) a. A Droteo a menged a rechel-el se el kerrekar SBJ Droteo TOP cut off branches-3SG that LNK tree “Droteo is cutting off that tree’s branches.”

b. A Droteo a menged a rechel-ir aike el kerrekar SBJ Droteo TOP cut off branches-3PL those LNK trees “Droteo is cutting off those trees’ branches.”

c. Ng mo menged a rechel-el a ngii di el kerrekar a Droteo? 3SG aux fut cut off branches-3SG any LNK tree Droteo “Is Droteo going to cut off branches from a tree? (lit. Is Droteo going to cut off any tree’s branches?)”

Possessors that trigger possessor agreement morphology on the nouns they possess may thus also be analyzed as DPs. Under the second pattern of possession, possessors are introduced by the preposition er, while the possessed noun is not inflected for possessor agreement. Individuation again plays no decisive role; under this pattern of possession, possessors are always introduced by er.
(74) a. Ak mo omekedong a katuu er ngke el chad pro.
   1SG AUX.FUT call cats PREP that LNK person I
   “I will call that person’s cats.”

b. Ak mo omekedong a katuu er tirke el chad pro.
   1SG AUX.FUT call cats PREP those LNK people I
   “I will call those people’s cats.”

c. Ke mo omekedong a katuu er a {ngii di} el chad pro?
   2SG AUX.FUT call cats PREP {any} LNK person you
   “Are you going to call anyone’s cats?”

(75) a. Ng so-al a redil a chazi er se el kuabang.
   3SG desire-3SG woman taste PREP that LNK guava
   “The woman likes the taste of that guava. (lit. The taste of that guava is the woman’s desire.)”

b. Ng so-al a redil a chazi er aike el kuabang.
   3SG desire-3SG woman taste PREP those LNK guavas
   “The woman likes the taste of those guavas.”

c. Ng so-al a redil a chazi er a {ngii di} el kuabang?
   3SG desire-3SG woman taste PREP {any} LNK guava
   “Does the woman like the taste of guava? (lit. Is the taste of any guava the woman’s desire?)”

It appears to be safe to analyze possessors that are introduced by *er* as PPs, as their featural composition plays no role in determining whether *er* will co-vary with an (unattested) null form.

Now, oblique arguments in Palauan are introduced in a variety of ways. Here, I examine recipient and goal arguments. Recipients and goals may be introduced with the expression *el mo er* (lit. “to go to”), and *er* remains even if the goal DP is not individuated.

(76) a. A Gigi a ngil-uu a kall pro, el mo er a del-al pro.
   Gigi TOP bring.PAST-3SG food to go to mother-3SG her
   “Gigi brought the food to her mother.”

b. A Gigi a ngil-uu a kall pro, el mo er a reokiak.
   Gigi TOP bring.PAST-3SG food to go to guests
   “Gigi brought the food to the guests.”

c. Ng ngil-uu a kall a Gigi el mo er a {ngii di} el chad?
   3SG bring.PAST-3SG food Gigi to go to {any} LNK person
   “Did Gigi bring the food to anyone?”

(77) a. A Ioseb a ulemekall er a ml-il pro pro, el mo er a bl-ik pro.
   Joseph TOP drive.PAST ER car-3SG him to go to house-1SG me
   “Joseph drove his car to my house.”

b. A Ioseb a ulemekall er a ml-il pro pro, el mo er aike el stoang.
   Joseph TOP drive.PAST ER car-3SG him to go to those LNK stores
   “Joseph drove his car to those stores.”
c. Ng ulemekall er a ml-il pro a Ioseb el mo er a {ngii di} el beluu?
3SG drive.PAST ER car-3SG him Joseph to go to {any} LNK place
“Did Joseph drive his car anywhere? (lit. Did Joseph drive his car to any place?)”

The data in (76) and (77) strongly suggest that recipient/goal arguments are encased in PPs as well. There is no empirical basis for analyzing er in the expression el mo er as anything other than a preposition.

Many non-human adjunct DPs (e.g. locative and temporal adverbials) are also introduced by the preposition er. The pair of sentences in (78), below, demonstrates that plurality of the DP in the adjunct phrase does not determine whether er is licensed — er co-occurs with both singular and plural DPs.

(78) a. Ak ulemechar er tia el siats er a Merilang pro.
    1sg buy.PAST ER this LNK shirt in Manila I
    “I bought this shirt in Manila.”

b. Ak ulemechar er tia el siats er a iungs er a Marialas pro.
    1sg buy.PAST ER this LNK shirt in islands PREP Marianas I
    “I bought this shirt in the Mariana Islands.”

Although there is no data to indicate how human and non-specific DP adjuncts behave, the fact that the [3PL, +SPEC] adjunct in (78b) is introduced with er — just as its singular counterpart is in (78a) — provides preliminary evidence that the differential object marking pattern described in Table 5 does not extend to er’s introduction of locative adverbials. It seems safe to conclude (tentatively) that these are PPs as well.

What all of these examples illustrate, then, is that there is a feature-driven alternation between er and Ø on the direct object DPs in sentences (64) – (69) that does not occur when er introduces other types of DPs. The values of the number, animacy, and specificity features on the direct object DP condition whether er appears. This state of affairs makes the analysis in which accusative er is treated as a preposition (in the narrow syntax) highly unattractive. Recall the quasi-“solution” proposed at the end of §2.2 in which any combination of functional and lexical heads could form a numeration, and then only the numerations containing both imperfective transitive v₀ and Pₑr would converge. Even this approach cannot explain — at least in any sort of satisfying way — the restrictions on the co-occurrence of er with only human and singular, specific DPs. In §3.2, I will propose an alternate analysis in which er is inserted post-syntactically at PF (cf. McFadden 2004: Ch. 2, who imports many of Schütze’s (1997) insights into the Distributed Morphology framework).

3 DP-Licensing and Morphological case

3.1 The Role of “Agree” in the (Narrow) Syntax

The morphological analysis of er (and object agreement morphology) that I propose in §3.2 crucially depends on the (narrow) syntactic Agree relation between transitive v₀ and the DP it licenses. Aspect features of the transitive v₀ head must be shared with the DP it licenses, while φ-features of the DP must be shared with v₀. While I postpone discussion of the details regarding which features must be shared (and why) until §3.2, I now will motivate the proposed Agree relation with evidence from coordinated direct objects.
The theory of Agree that I assume is essentially Chomsky’s (2000, 2001). Agree is a relation instantiated by one of the set of heads that bears an \([\text{epp}]\) feature. This head is called the probe \(P\), whose domain \(D(P)\) is its c-command domain (Chomsky 2000: 122). The Agree relation is established with the closest “active” DP (in the Relativized Minimality sense of Rizzi 1990), which is then identified as the goal \(G\). The uninterpretable (or, unvalued) Case feature on \(G\) is what renders it active (Chomsky 2000: 127).

Now, coordinated DPs provide an interesting testing ground for this theory of Agree. Binding asymmetries such as those in (79) suggest an asymmetric analysis of coordination. The left conjunct DP is able to bind a pronoun in the right conjunct DP, but the reverse is impossible.

(79) a. \([\text{DP Every student}]\) and \([\text{DP his}_{i/j}\text{ advisor}]\) attended the charity benefit.

b. \([\text{DP His}_{i/j}\text{ advisor}]\) and \([\text{DP every student}]\) attended the charity benefit.

If binding is contingent upon c-command, then a symmetric analysis of coordination leaves the asymmetry in (79) mysterious. In part to address concerns of this sort, Munn (1993) and Zoerner (1995) advocate an asymmetric structure for coordination, \&\(P\). The coordinator \&\(e\) heads a functional projection with one DP in its complement position and another DP either adjoined to \&\(P\) (as Munn argues) or in the specifier position of \&\(P\) (as Zoerner argues). In the context of bare phrase structure advanced by Chomsky (2000, 2001), the distinction between specifiers and adjuncts is reduced to the selectional properties of the head of the projection.

Coordinated DPs in Palauan take the form \([\text{DP me}\text{ DP}]\), where \(me\) is a conjunction. Finessing the issue of whether the higher DP is in an adjunct or specifier position, I give a schematic representation of \&\(P\) in (80), below.

(80) **The Munn/Zoerner View of &\(P\):**

a. \([\&\(P\) se el \[\text{ringngo me aike el tuu}\] that \[\text{LNK apple}\] and those \[\text{LNK bananas}\] “that apple and those bananas”

b. 

```
```

What is immediately relevant is that, assuming the configuration in (80), the left conjunct DP is syntactically more prominent than the right conjunct DP due to the asymmetric c-command relation established between the two DPs. If the asymmetric analysis of DP-coordination is correct for Palauan, then there are at least two possible patterns of agreement that we might expect if Agree is established between a transitive \(v^0\) probe and the coordinated DP goal, described in (81) and (82).

(81) The \&\(e\) head represents a function that — in some way — combines the \(\varphi\)-features of the two DPs, yielding a new set of features that are salient to the Agree relation. E.g., coordination of two [sg] DPs could yield a [pl] \&\(P\) that is accessible to Agree.
The \& leaves the $\phi$-features of the DPs intact: only the features of the highest DP are salient to the Agree relation. E.g., coordination of two [sg] DPs would, for Agree, be treated as if only the higher DP were present.

The situation in (81) would also be compatible with a symmetric analysis of DP-coordination. However, the situation in (82) would be difficult to formalize using a symmetric analysis, but would fall out cleanly from an asymmetric analysis like that proposed in (80).

I will now demonstrate that, in Palauan, when an Agree relation is established between a transitive $v^o$ head and a coordinated DP in direct object position, the coordinated DP triggers the same morphology that the left conjunct DP would trigger if it occurred in the same syntactic position (complement of $V^o$). This is the case with direct objects of both perfective and imperfective verbs, as (84) and (83) suggest, respectively.

(82) The \& leaves the $\phi$-features of the DPs intact: only the features of the highest DP are salient to the Agree relation. E.g., coordination of two [sg] DPs would, for Agree, be treated as if only the higher DP were present.

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(83) a. Ak milengang (*er) se el ringngo me aike el tuu pro. 1sg eat.PST.IMPVF CASE that LNK apple and those LNK bananas I “I was eating that apple and those bananas.”

b. Ak milengang (*er) aike el tuu me se el ringngo pro. 1sg eat.PAST.IMPVF CASE those LNK bananas and that LNK apple I “I was eating those bananas and that apple.”

(84) a. Ak mo kol-ii se el ringngo me aike el tuu pro. 1sg AUX.FUT eat.PF-3SG that LNK apple and those LNK bananas I “I am going to eat (up) that apple and those bananas.”

b. Ak mo kmang aike el tuu me se el ringngo pro. 1sg AUX.FUT eat.PF those LNK bananas and that LNK apple I “I am going to eat (up) those bananas and that apple.”

The contrast between the obligatory presence of the accusative case marker er in (83a) and its obligatory exclusion in (83b) strongly suggests that the feature values of the left conjunct DP are the ones that condition whether er will appear. Furthermore, the lack of er on the right conjunct DP in (83b) strongly suggests that it is not true that the feature values of each DP conjunct determine its own morphological case marking. If this were the case, er should mark the right conjunct DP in (83b), since it is singular and specific (assuming demonstrative DPs are specific).

The agreement morphology on the perfective verbs in (84) further supports the situation described in (82), rather than (81), supporting the notion that an asymmetric analysis of Palauan DP-coordination is tenable. Perfective verb forms agree with the $\phi$-features of the left conjunct DP, not some combination of the $\phi$-features of both DPs. The data in (83) and (84), then, at best provide some evidence for an asymmetric analysis of DP-coordination in Palauan and an Agree-based system of DP-licensing, and at worst are merely consistent with such an analysis.

With some (potential) evidence for Agree in tow, I am now in a position to develop an analysis of the morphological reflexes of DP-licensing — namely, the distribution of the differential object marker er and the verb suffixes on perfective verbs that agree with the direct object DP.

### 3.2 A Distributed Morphology Account

The primary goal of this section is to devise an account of the divergent morphological realizations of direct objects of imperfective and perfective verbs. In §2.3–2.4 (with supporting evidence from
§1, it was argued that these verbs uniformly subcategorize for DPs that are licensed by imperfective and perfective \( \nu^0 \) heads, rather than, e.g., by an \( \text{Asp}^0 \) head. §2.4 examined the distribution of the accusative case marker \( \text{er} \), which marks all human and all other singular, specific direct objects. It was demonstrated that — despite its homophony with the preposition \( \text{a} \) — this morpheme displays properties associated with a differential object marking accusative morpheme, perhaps similar to the infamous “personal \( a \)” in Spanish.

In Spanish, human, specific direct objects are typically marked for accusative case with \( a \), which is homophonous with the preposition \( \text{a} \). Compare the following examples in (85).

(85) 

a. En el mercado vi *(a) los vecinos.
   at the market saw.1sg pers.a the neighbors
   “At the market (I) saw the neighbors.”

b. En el escritorio vi *(a) los papeles.
   on the desk saw.1sg pers.a the papers
   “On the desk (I) saw the papers.”

(Zagona 2002: 13, ex. 15)

The morpheme \( a \) is also used to mark indirect objects, and its presence does not depend on animacy, as it does when it marks accusatives, as (86) shows.

(86) 

a. Le mandé un paquete a José.
   clitic.dat sent.1sg a package to José
   “I sent a package to José.”

b. Le mandé el formulario al departamento.
   clitic.dat sent.1sg the form to the department
   “I sent the form to the department.”

(cf. Zagona 2002: 14)

Now, Demonte (1987) argues for a distinction between DPs that are marked with the so-called “personal \( a \)” and those that should be analyzed as the objects of a preposition \( a \). Only the former can control secondary predication in Spanish.

(87) 

a. Juan la encontró a María borracha.
   Juan clitic.acc found.3sg pers.a Maria drunk
   “Juan found Maria drunk.”

b. * Juan le habló a María borracha.
   Juan clitic.dat found.3sg to Maria drunk
   “Juan spoke to Maria drunk.”

McFadden (2004: 74) takes the contrast in (87) as evidence that the \( a \) in sentences like (87a) is simply a case marker inserted on the direct object DP in the morphology after Spell-Out, while the \( a \) in sentences like (87b) is the morphophonological exponent of a syntactically realized \( P^0 \) morpheme in the syntax. Such an analysis accounts for the uniform presence of \( a \) on both human and non-human indirect objects as in (86), while leaving room for an analysis of its variability in marking only human direct objects as in (85).

The situation involving \( \text{er} \) in Palauan is strikingly similar, modulo a minor difference in which features of the direct object trigger its appearance. Recall that \( \text{er} \) marks all human direct objects, and all singular specific direct objects. Furthermore, the alternation only occurs on direct objects
of imperfective verbs, making an analysis of er as a case-marker inserted on DPs in the morphology even more attractive.

Consider the other option, in which the case marker er is treated as the realization of a syntactic P (or maybe a K) node. Under this analysis, one might argue that DPs that bear the features [+HUM] and/or [sg, +spec] must be encased in a PP/KP in the syntax. Verbs would then need to select either PP/KP or DP complements if they were imperfective as in (88), but only DP complements if they were perfective as in (89).

(88) a. Imperfective verbs with human or singular, specific direct objects:

```
  VP
     |  ↓  |
     V   PP/KP
         |  ↓  |
        P/K       DP
           |  ↓  |
        er   [+HUM]/[sg, +spec]
```

b. Imperfective verbs with non-human plural/non-human non-specific direct objects:

```
  VP
     |  ↓  |
     V   DP
         |  ↓  |
        [-HUM, pl]/[-HUM, -spec]
```

(89) Perfective verbs with direct objects of any type:

```
  VP
     |  ↓  |
     V   DP
         |  ↓  |
        [±HUM, sg/pl, ±spec]
```

The first problem with this syntacticized analysis of the Palauan differential object marking pattern is that it is unclear why features like humanness, number, and specificity should play a role in determining whether or not a given DP must be realized as the syntactic object of a preposition. These features clearly interact to condition the distribution of er in Table 5, but they arguably have very different provenances. Humanness/animacy has been characterized as an inherent semantic feature of nominals (see, e.g., Comrie 1989, Dahl 2008). In other words, animacy feature values for nouns are perceivable from the lexical semantics of the nouns: humans are by definition [+hum], stones are [−anim], etc. Specificity features, on the other hand, are determined by the discourse, and as such cannot be construed as purely syntactic or semantic. Put differently, semantically identical nominals with the same ϕ-feature values may still differ in specificity on the basis of how they are used in the preceding discourse (if at all). And finally, grammatical number features have typically been analyzed as syntactic ϕ-features (see Bejar 2003 and references therein), which may be introduced into the syntax by a functional head like Num\(^0\).\(^{34}\) It would appear difficult to devise

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\(^{34}\)For present purposes, I remain agnostic with regard to the manner in which ϕ-features are introduced into the syntax of DPs. The only crucial assumption for my analysis is that they are present by the time a given DP is fully formed.
a satisfactory analysis of when (and whether) a P/K morpheme\textsuperscript{35} must be merged on the basis of some interaction of features as diverse as these.

A simple (but possibly unappealing) workaround would be to assume an account in which direct objects of imperfective verbs are uniformly treated as PP/KPs (with P\textsuperscript{0} or K\textsuperscript{0} optionally realized as \(\emptyset\) after Spell-Out). Still, there is no reason to assume the PP/KP analysis for direct objects of perfective verbs, which never exhibit case morphology such as \(er\).

A major (and more concrete) drawback of either version of the \(er\)-as-P/K analysis stems from the fact that there is no reason to assume that the verb in \(V^0\) — which, in Distributed Morphology, is analyzed as a category-neutral root (see Marantz 1997) — contains any information regarding aspect. If this were the case, then there would need to be two parallel listings of verb roots that are specified as [imperfective] or [perfective] in the list of feature bundles that is assumed to replace Chomsky’s (2000, 2001) “lexicon” in Distributed Morphology. Such an analysis would brand these roots as verbs, forcing there to be yet another listing of roots that would eventually become nouns in the syntax. Under the analysis constructed in §2.2, aspect features are not introduced until a particular transitive \(v^0\) merges, completely circumventing the issue. Roots are simply roots, and they can combine uniformly with DP complements if those DPs are later licensed by either imperfective \(v^0\), perfective \(v^0\) or finite \(T^0\). Furthermore, recall that there is no aspectual alternation in passives, a fact that would be difficult to explain if aspectual features were inherent to roots rather than introduced by a higher functional head.

The analysis I propose assumes McFadden’s (2004) principle regarding the position of morphological case in the grammar, given in (90).

\begin{equation}
\text{(90) Morphological case is determined after Spell-out on the PF branch and thus is not present in the narrow syntax or on the LF branch.} \quad \text{(McFadden 2004: 39)}
\end{equation}

In adopting this principle, it is possible to assume a uniform syntax for transitive \(vPs\), corresponding essentially to the \(vP\) in the simple model of Palauan phrase structure I proposed in (8) corresponding to example (4), both repeated below. As the variation in realization of theme DPs in direct object position is — on this analysis — purely morphological, there is no need to invoke syntactic stipulations to explain the discrepancy between the case morphology on direct objects of imperfective verbs and the corresponding direct objects of perfective verbs, if (90) is adopted.

\begin{equation}
\text{(4) Te ulemekall a mlím \(er\) a kesus a rebuik.}
3PL drive.\text{PAST.IMP}FV \text{your.cars prep} \text{last.night boys} \quad \text{“The boys were driving your cars last night.”}
\end{equation}

\begin{footnote}
\text{\textsuperscript{35}Here, I use the term “morpheme” in the Distributed Morphology sense of a bundle of features that occupy a terminal node in the syntax.}
\end{footnote}
Instead, there is a short series of Palauan-specific Spell-Out rules that govern the morphological forms of verbs and their associated direct objects. To govern these Spell-Out rules, I make the (relatively uncontroversial) assumption that the Agree relation between a direct object DP and the functional head that licenses it enables sharing of features in both directions (see Chomsky 2000). The functional head becomes specified for \[ [\text{upers}] \] and \[ [\text{inum}] \] features, essentially copying the values of these \( \varphi \)-features from the DP it licenses via Agree. Furthermore, the DP is valued for an uninterpretable Case feature, \[ [\text{u-case}] \].

Up to this point, the interpretable Case features on functional heads — i.e., the features that license DPs for syntactic Case — have been given intuitive labels like \[ [\text{nom}] \] (on finite \( T^0 \)) and \[ [\text{acc}] \] (on transitive \( v^0 \)). These should be construed as strictly mnemonic: what is important is that the DP that is licensed by a functional head inherits some sort of feature value from this functional head (via Agree) such that the morphology has a way to know which functional head has licensed the DP. That is, I think it is worth exploiting the fact that different DPs with the same syntactic Case may surface with different morphological cases, as McFadden (2004) emphasizes.

For direct objects of transitive verbs in Palauan, it might be useful to conflate the features \[ [\text{acc}] \] and \[ [\text{(im)perfective}] \]. That is, it is just by virtue of the fact that both imperfective \( v^0 \) and perfective \( v^0 \) introduce external arguments that they may also license syntactic Case on a lower DP (Kratzer 1996, following Perlmutter 1978; Burzio 1986). The actual features that are shared between the licensing head and the DP that is licensed is completely immaterial as far as the narrow syntax is concerned. That is, if one construes uninterpretable features as simply an indicator of which feature values a syntactic head (or its projection) must copy from somewhere via Agree, then it makes no difference whether a direct object DP’s Case feature \[ [\text{u-case}] \] is specified as \[ [\text{acc}] \] or, e.g., \[ [\text{perfective}] \].

For instance, McFadden adopts the features \[ [+T] \] and \[ [+v] \] to replace \[ [\text{nom}] \] and \[ [\text{acc}] \], respectively, to drive the point home that a DP’s being licensed with syntactic Nominative/Accusative Case does not entail that it will be marked with the language’s morphological nominative/accusative case at PF. This is the idea that I am pushing one step further: if a DP can inherit some feature
from transitive \( v^o \) to check its \([u\text{case}]\), there is no reason that this feature can’t be \([\text{imperfective}]\) or \([\text{perfective}]\). As McFadden (2004: esp. Ch. 2) emphasizes, syntactic Case is really just DP-licensing. As long as the direct object DP does not end up with an unvalued \([u\text{case}]\) feature at Spell-Out when it is sent to LF and PF, the narrow syntax may converge successfully.

This leaves us well-suited to explain the actual morphology of the transitive perfective/imperfective alternation. The two sets of Spell-Out rules required to capture the morphology of transitive verbs in Palauan are given in (91) and (92). (91) gives the set of (two) Spell-Out rules necessary for the appropriate morphological realization of DPs, while (92) gives the set of (seven) Spell-Out rules for verbs, i.e., the roots that occupy \( V^o \).36

\begin{align*}
(91) \quad & \text{Spell-Out Rules for DP} \\
& a. \quad \emptyset \rightarrow \text{er} / \_ \_ \_ \_ \_ \text{DP}\{[\text{mpfv, +hum}]\} \\
& b. \quad \emptyset \rightarrow \text{er} / \_ \_ \_ \_ \_ \text{DP}\{[\text{mpfv, sg, +spec}]\}
\end{align*}

\begin{align*}
(92) \quad & \text{Spell-Out Rules for V (Root)} \\
& a. \quad \emptyset \rightarrow \text{-ak} / \text{V\{pfv, 1sg\}} \_ \_ \_ \\
& b. \quad \emptyset \rightarrow \text{-au} / \text{V\{pfv, 2sg\}} \_ \_ \_ \\
& c. \quad \emptyset \rightarrow \text{-ii} / \text{V\{pfv, 3sg\}} \_ \_ \_ \\
& d. \quad \emptyset \rightarrow \text{-id} / \text{V\{pfv, 1pl, incl\}} \_ \_ \_ \\
& e. \quad \emptyset \rightarrow \text{-emam} / \text{V\{pfv, 1pl, excl\}} \_ \_ \_ \\
& f. \quad \emptyset \rightarrow \text{-emiu} / \text{V\{pfv, 2pl\}} \_ \_ \_ \\
& g. \quad \emptyset \rightarrow \text{-terir} / \text{V\{pfv, 3pl, +hum\}} \_ \_ \_
\end{align*}

Two points are worth mentioning.

First, the issue of how the root has access to the aspect features introduced by \( v^o \) has been finessed. While it is possible that the root (or \( V^o \)) moves to \( v^o \), I know of no empirical evidence for such movement. Despite the fact that perfective verbalizer morphology is infixed into the verb stem, I see no reason why this infixation cannot happen in the morphology/phonology component of PF, after (or as) everything is linearized. Nevertheless, Grimshaw’s Extended Projection theory (Grimshaw 2005: Ch. 1) once again provides us with a solution that is consistent with Phase Theory (Chomsky 2001): if \( vP \) is simply treated as an extended projection of \( VP \), then the features introduced (or acquired via Agree) by \( v^o \) should be available to \( V^o \) before the VP is sent for Spell-Out. An analysis of this sort avoids the possibly unnecessary assumption that \( V^o \) must undergo head movement.

Second, the Spell-Out rules in (91) and (92) do not comprise an exhaustive list describing the morphological realization of every DP or verb (with any combination of feature values) sent to PF. One attractive aspect of the morphological analysis given above is that it only requires morphological rules to insert case markers or agreement suffixes if they are actually instantiated morphologically. In other words, there is neither a need for nodes in the syntax (Distributed Morphology’s “morphemes”) nor for rules in the morphology to explain when DPs do not get case marking (the set of \([-\text{hum}, \text{pl}]\) and \([-\text{hum}, -\text{spec}]\) DPs) or do not trigger agreement (just the set of \([-\text{hum}, -\text{spec}]\))

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36\( V^o \) could also easily be called Root\(^o\) if one adopts the standpoint of Marantz (1997) and Arad (2003), but cf. Gribanova 2008 for a careful critique of certain aspects of this theory. The label of the syntactic node above the root is irrelevant for present purposes — all that matters is that this is the node that will be spelled out as the verb stem.
—spec] DPs. Subject DPs, adverbial DPs, indirect object DPs, etc. do not need separate morphological rules to characterize their morphological shape, as they do not alternate between er-marked forms and Ø-marked forms. If they are marked by er, then this er can be analyzed as the morphological exponent of a syntactic P⁰ head rather than as a piece of dissociated case morphology inserted by one of the rules in (91).

Another welcome consequence of the DM analysis of DP case morphology in (91) is that it ties in seamlessly with the theory of Palauan A-bar extraction advanced by Georgopoulos (1991b; see also Georgopoulos 1985). She argues that there are no true A-bar gaps in Palauan, and that apparent gaps are instead better analyzed as resumptive pronouns. There are at least two reasons for this analysis. The first is that Palauan is apparently not sensitive to the standard array of island effects, and the second is that the “base” positions corresponding to the dislocated DPs host either overt pronouns or gaps under the same conditions that pronouns are overt or null. Both of these facts are illustrated in (93), in which topicalized DPs that are linked to positions within sentential subjects (violating the subject island constraint; Ross 1967) may either be coreferent with a gap in subject position as in (93a) or an overt pronoun if it is the complement of an imperfective verb as in (93b).

(93) a. A Mary, a klukl {el kmo} ng oltoir er a John __.
   Mary TOP clear {comp} 3SG love.impfv case John
   “Mary, (it’s) clear that ___ loves John.”

   b. A John, a klukl el l-oltoir er ngii, a Mary.
   John TOP clear comp 3SG irr-love.impfv case him Mary
   “John, (it’s) clear that Mary loves him.” (Georgopoulos 1991b: 80, ex. 36)

Georgopoulos turns to contrasts like these to argue for a base-generation analysis of A-bar-extracted DPs, claiming that they are base-generated in their surface positions rather than appearing there after A-bar movement. These higher DPs bind resumptive pronouns in what would typically be called the extracted DP’s “base position” — though since there is no movement, such terminology is somewhat of a misnomer on the base-generation analysis. Thus, the “gap” in (93a) should be reanalyzed as a null resumptive pronoun on par with the overt resumptive pronoun in (93b).

If Georgopoulos’s analysis is correct (and I know of no empirical evidence against it), then the analysis that I advance in (91) does not need to be modified to account for the morphological shape of A-bar resumptive pronouns bound in a direct object position, as the aspectual contrast in (94) indicates. For the most part, they are null whenever they trigger agreement (whether it be subject agreement, possessor agreement, or perfective object agreement as in (94a)) and overt otherwise.¹³

¹³It should not be entirely too surprising that Palauan can violate the subject island constraint, since subjects are in rightward-branching positions in Palauan. Palauan does, however, appear to violate just about every other island constraint on A-bar movement, e.g. extraction from relative clauses in (94). See Georgopoulos 1985, 1991b for an abundance of examples illustrating violations of the other island constraints.

¹⁴Though the parallel does not hold 100% of the time. The wh-(anti-)agreement pattern in which the verb fails to agree with a resumptive pronoun in subject position (specifier of T⁰) occurs when the TP is embedded in a CP headed by the complementizer el, as well as in nominalized clauses. However, the anti-agreement pattern is not triggered by subject resumptive pronouns in all TPs: there can be overt (realis) subject agreement with an A-bar-bound resumptive pronoun in Spec TP if the TP is embedded in an el kmo CP, as examples like (93a) show. For more examples of this type, see Georgopoulos 1991b: 48, ex. 42b–c. Other cases in which pronouns can be null in the absence of agreement include all [3PL, -hum] direct objects (of either imperfective or perfective verbs) and pronominal theme arguments of some double object verbs — like msang “give” — which agree with the goal/recipient instead of the theme.
Object agreement and insertion of *er* proceed as normal, according to the Spell-Out rules in (91) and (92).

(94) a. A buk̕ a ku-dengel-ii a redil̕ [el uldurukl-ii pro] [el mo er a book TOP 1SG.IRR-KNOW.PFV-3SG woman COMP send.PAST.PFV-3SG to go to delak pro] __ pro. mother-1SG.poss me I

“The book, I know the woman who sent __ to my mother.”

b. A buk̕ a ku-dengel-ii a chādi [el ulemchar er ngiij __] pro. book TOP 1SG.IRR-KNOW.PFV-3SG man COMP buy.PAST.IMPFV CASE it I

“The book, I know the man who bought (it).”

In sum, the DM analysis advanced in this section goes one step farther than simply providing an explanation of the morphological object agreement/differential object marking patterns. It also extends cleanly to cases in which the associated morphology disappears under A-movement (e.g. of a theme DP to subject position in a passive), which presumably leaves a trace, as well as to cases in which the associated morphology remains under A-bar-“movement,” which involves the binding of a resumptive pronoun by a higher DP.

4 Conclusion

4.1 Summary

This paper has examined some of the various ways in which theme arguments are expressed in Palauan, both syntactically and morphologically. An investigation into Palauan’s passive construction was undertaken first, in which I argued that intransitive *me*- and *o*- verbs — in contrast with their transitive *meN*- and *oN*- counterparts — select theme arguments that are promoted to subject position. Independent evidence for this analysis was drawn from three different domains of Palauan syntax: the syntax of quantifier float, syntactic causation, and wh-agreement. I concluded that the relevant *me*- and *o*- verbs were passives, formed via merge of a passive *v* head with a VP. The Palauan passive construction appeared to share some properties with the class of English unaccusative verbs — namely incompatibility with the agent-oriented adverbial *blak a rengul* “intentionally” and failure to control an agentive PRO in purpose/rationale clauses. These tests signal the likely absence of an implicit agent argument (a feature that distinguishes English and other Indo-European passives from unaccusatives). Still, Palauan *me*- and *o*- verbs are much more productive than the typical set of unaccusatives in more familiar languages.

Keeping in mind the simple analysis of passive verbs, I turned to the syntax of theme DPs in transitive predicates. It was shown that transitive verbs exhibit not only a morphological distinction between imperfective and perfective verbs (located in their respective verbalizer morphologies), but also a distinction in the way their respective direct object DPs are realized morphologically. A unified Minimalist analysis of the syntax of imperfective and perfective transitive verbs was then proposed, arguing that passive verbs — in which there is no morphologically-realized aspectual distinction — provide evidence that aspectual features cannot be introduced by a functional head lower than *vP*, such as an (inner) Asp*. Furthermore, syntactic Case is uniformly licensed by transitive *v* heads, of which there are two: transitive imperfective *v* and transitive perfective *v*.

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The accusative case marker that appears on direct objects of imperfective verbs, *er*, was then shown to exhibit properties distinct from its usage as a preposition. Prepositional *er* was shown to introduce a sub-class of possessor DPs, certain indirect object DPs in periphrastic constructions, and locative adverbial DPs. Accusative *er* was analyzed as a differential object marker similar to Spanish’s “personal *a*” and other differential object markers in many other languages (see Aissen 2003 and de Swart 2007 for numerous examples). On this basis, I argued that the most satisfying account of the distribution of accusative *er* is morphological rather than syntactic, revealing the challenges that a purely syntactic account of its distribution would face. In response, an alternate analysis was articulated in the Distributed Morphology framework, allowing the morphological idiosyncracies associated with *er* and its (aspect-governed) complementary distribution with object agreement morphology to be handled in the morphological component of the grammar, rather than in the syntactic component alone. In this way, the syntactic analysis of imperfective and perfective transitive verbs in Palauan was rendered truly Minimalist: syntactic Accusative Case is always licensed by one of the transitive *v₀* heads, and direct objects are always just DPs.

The welcome result of this analysis of Palauan transitive verbs is that it is fully compatible with the syntax of related passive verbs and need not be modified to accommodate the typologically unusual case of Palauan A-bar dependencies. The careful balance between the amount (and distribution) of featural information introduced in the verbal complex and its reflexes in the morphology leaves it possible to explain the various syntactic and morphological properties of theme DPs in, I think, a very satisfying way.

4.2 Directions for Further Research

There are many unresolved issues in this paper that merit further research, the first of which involves the status of passive *v₀* as conceptualized in Table 3. It is not at all clear that what I have called the passive construction is actually a passive, as opposed to an extremely productive unaccusative construction. If this were the case, then the apparent lack of compatibility with implicit agent arguments would make much more sense. The fact that overt agentive *er*-phrases could ever occur at all in these constructions, then, would much more probably be due to interference from English in bilingual speakers.

To shed more light on this issue, a detailed investigation into the syntax of intransitive verbs is warranted. The class of intransitive verbs is morphologically very diverse: they can be formed not only from the familiar set of verbalizer morphemes also used to create transitive verbs (*meN-*, *oN-*, -*m-*, -*u-*, and -*o-*) but also by the prefixes *be-*, *ke-*, *se-*, and even some combinations of these. If I am able to identify any reliable diagnostics for unergativity or unaccusativity in Palauan, then it will become possible to postulate some preliminary classes of intransitive verbs along these lines. It might then be possible to determine whether any of these groups of verbs exhibit similar verbalizer morphology or have similar thematic structures (though Levin & Rappaport Hovav (1995) argue that there is no reason to assume that unergative or unaccusative verbs should necessarily correspond to classes of verbs with similar semantic properties or thematic structures).

Even if it sheds no light on the syntax of *vP* in Palauan, an investigation into prototypically unergative verbs is nevertheless valuable in its own right. I have not yet investigated the situation surrounding cognate objects in Palauan. On the account of passives that I’ve developed in §1, there would be no reason to assume that Palauan analogues of sentences like “He screamed a horrible scream.” or “The child skipped a joyful skip along the sidewalk.” (if they are attested) couldn’t
also be passivized. If this is the case, some parallel might be able to be drawn with the impersonal passives of, say, German, as in *Es wurde getanzt.* “It was danced.” It would be interesting to see whether such examples exist in Palauan, and how they behave syntactically.

In footnote 4 on p. 3, I noted that I found an arbitrary plural pronominal construction in Palauan that — at first glance — appears to behave similarly to constructions in Spanish (Jaeggli 1986) and Irish (McCloskey 2007). It would be interesting to probe the syntax and semantics of such constructions further to see how they relate to passives and object topicalizations, and how they fare with agent-oriented adverbials and purpose/rationale clauses. At this point in time, I know too little about the Palauan construction to make any concrete claims about it.

Perhaps most interestingly, the status of the internal arguments in applicative and causative predicates still deserves further research. The differences among these different constructions appear to be more complex than I originally thought. While most goal/source applied arguments are realized periphrastically in *el mo er* “to go to” or *el me er* “to come from” clauses (which are quite possibly relative clauses) attached to theme DP arguments), there is definitely a subclass of ditransitive verbs that allow indirect objects to appear between the verb and the direct object, including at least the verbs *give, show,* and *bring.* Perfective forms of these verbs agree with the indirect object rather than the direct object, and the indirect object is subject to the differential object marking pattern typical of direct objects in imperfective vPs. The morphosyntax of the theme argument (i.e. a type of second object) in these applicative constructions is much more difficult to pin down. Pronominal second objects may still be null even though perfective verbs do not agree with them, and the judgments regarding whether they may be marked with *er* after imperfective verbs have been quite varied thus far.

There are also the three classes of “causative” verbs described by various researchers. These verbs are typically formed with the prefixes *omek-, ol-, and om-.* I have already begun an investigation into the properties of the three morphological classes to look for systematicity in their semantics, what types roots they attach to, their argument structures, etc. The class of ditransitive causatives appears to share many morphological properties with the ditransitive verbs discussed above, e.g. the causee DP triggers object agreement (perfective) and differential object marking (imperfective), while the properties of the theme DP are much more difficult to describe systematically. If a well-motivated syntax of applicative/causative predicates can be constructed, then it should prove interesting to see how it interacts with the analyses of Palauan phrase structure I advocate in this paper, as well as with the conclusions reached by Georgopoulos (1991b).

And finally, the role of aspect in Palauan vPs requires further exploration. It seems clear that what has been called “perfective” or “imperfective” aspect in the Palauan literature probably corresponds with lexical aspect, rather than propositional/viewpoint aspect (see Vendler 1957, 1967; Comrie 1976; Chung & Timberlake 1985; Smith 1991; Travis 1992). The relevant distinction is perhaps more accurately characterized as telicity vs. atelicity, but I have remained consistent with the perfective/imperfective terminology adopted in the vast majority of the Palauan literature. For instance, the “perfectivity” of Palauan perfective verbs can be cancelled by a higher aspectual verb, in cases like: “He has not finished eating. PFV the apple.” in which “eating.PFV” still shows perfective morphology in Palauan. Given the fact that various elements in the VP/vP can contribute to the calculation of lexical aspect (e.g., direct objects, directional/temporal PPs, etc.; see Tenny 1987 for numerous examples) it should prove interesting to see how adverbials — which appear in a number of syntactic guises in Palauan — should be appropriately incorporated into any current theory of Palauan phrase structure, and how they interact with lexical aspect.
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