The Case of Objects

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Abstract

The role of direct objects in computing the predicative aspect of telicity has been the subject of some debate in recent literature, e.g. Tenny (1987 *et seq.*), Arad (1998), Ritter & Rosen (2000). In some languages like Finnish, Latin, and Greek, direct objects of telic verbs are marked for accusative case, whereas direct objects of atelic verbs are marked with other available object cases. This paper investigates the properties of direct object case marking in Palauan. Direct objects of telic verbs trigger object agreement morphology on the verb while the direct object DPs, themselves, are not marked for case. By contrast, direct objects of atelic verbs trigger no object agreement morphology on the verb and instead exhibit a dependent-marked pattern in which the direct object is canonically marked with the Palauan preposition *er*. Occasionally, and depending on particular features of the direct object, *er* may be substituted for null case marking, a phenomenon known as Differential Object Marking (DOM; see Aissen 2003, de Swart 2007). I argue that the Palauan data can be explained straightforwardly if two independent Agree relations are recognized in Palauan: one that licenses direct objects of atelic verbs (Agree between v^o and the direct object), and one that licenses direct objects of telic verbs (Agree between telic Asp^o and the direct object). Coordinated direct objects — which trigger left conjunct agreement — provide evidence for this Agree-based analysis of direct object licensing.

1 Transitivity and Aspect in Palauan

The relationship between the aspectual interpretation of verbs in Palauan and the realization of their internal arguments is closely interconnected. Palauan, an Austronesian language spoken on the islands forming the Republic of Palau in Western Micronesia, is a language in which so-called "perfective aspect" — or, more precisely, telicity — is realized morphologically only on transitive verbs. These perfective verb forms invariably have morphological "imperfective" (i.e. atelic) forms, which may or may not also select a direct object.

1.1   Palauan Aspectual Morphology

Perfective verb forms are composed morphologically of a verbalizer morpheme, a transitive root that selects a direct object, and an object agreement suffix which agrees with the direct object in person, number, and animacy. Imperfective verb forms are composed morphologically of a verbalizer morpheme, a root with any subcategorization frame, and an imperfective morpheme: no object agreement ever occurs on imperfective verb forms.[1] The imperfective morpheme surfaces between the verbalizer prefix and the verb stem, and it exhibits a great deal of allomorphy. In contrast, there is no overt perfective morpheme, but perfective verbs almost invariably host a different allomorph of the verbalizer morpheme than that of the corresponding imperfective form of the same verb.

   As an example, consider the root *kall* "food." *Kall* may be verbalized as *menga* "eat (impf.)" as in (1) or, e.g., *kolii* "eat (pf.)" as in (2).[2]

(1)   Ng   mo   **me-nga**   a bobai   *pro.*
       3SG.AGRS AUX.FUT VBLZ-eat.IMPF   papaya he
       "He will be eating papaya."

(2)   Ng   mo   **k[o]l-ii**   a bobai   *pro.*
       3SG.AGRS AUX.FUT eat[VBLZ].PF-3SG.AGRO   papaya he
       "He is going to eat (up) the papaya."

In (1), the root *kall* takes the form *nga*. Word-final [l] in Palauan is often unpronounced, a fact which is reflected in the language's orthography. The imperfective morpheme in *menga* is simply a nasal, which transforms the initial [k] in *kall* to [ŋ], written in Palauan orthography as *ng*. In (2), by contrast, the [l] from the root *kall* is maintained, as [l] does not appear word-finally. Moreover, the imperfective morpheme is notably absent: there is no nasalization of [k]. One further distinction between the imperfective form *menga* in (1) and the perfective form *kolii* in (2) lies in the form of verbalizer morpheme present in each: the prefix *me-* versus the infix *-o-*, respectively. Finally, the perfective stem *kol* in (2) hosts an object agreement suffix *-ii* (3SG, -ANIM), which agrees with the direct object *a bobai* "the papaya" in person, number, and animacy.

   In what follows, I will simply gloss verbs as IMPF (imperfective) or PF, ignoring the morphological composition of root + verbalizer (+ imperfective morpheme). What is important to note is that there are very systematic — though complex — morphological and phonological factors that govern what appear on the surface to be very different imperfective and perfective forms of the same verb.

   Palauan transitive imperfective and perfective verb forms differ further in how their direct objects are marked for case. Direct objects of imperfective verbs are either marked for case *overtly* by the preposition *er*, or they may surface without this preposition, exhibiting (by hypothesis) *null* case marking. There are several factors that condition this variation, including specificity and animacy, which are canonical signs of a differential object marking system (see Aissen 2003 for extensive discussion). Direct objects of perfective verbs, on the other hand, are *never* marked for case with the preposition *er*: instead they trigger object agreement morphology on the verb, as shown in (2).

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[1] The morphological analysis of imperfective verb forms is adopted from Josephs (1975). cf. DeWolf (1988) for a slightly different analysis.
[2] Unless the source is otherwise indicated, all data in this paper is taken from my own fieldnotes. Any errors are therefore, obviously, mine.

1.2   A Taste of What's to Come

There are two fundamental questions that I address in this paper: (i) how does aspect interact with syntactic case licensing in Palauan, and (ii) why are nominal arguments realized the way they are in Palauan, morphosyntactically? Both of these questions prove interesting for current Minimalist theory. I adopt the standard Minimalist assumptions regarding case licensing of VP-internal arguments (see Chomsky 2000/2001) to test their compatibility with the Palauan data. I augment Chomsky's proposal by arguing that the morphological realization of object case conforms to additional constraints, in an attempt to import the descriptive insights in Aissen 2003 into the Minimalist framework. Thus, the basic case-licensing strategy for Palauan internal arguments consists of an Agree relation established between $v°$ and the direct object nominal selected by V°, under which $v°$ licenses and checks the uninterpretable case feature on the direct object. To account for the marking itself, I propose that the direct object's nominal complex in imperfective predications is a KP whose K° head can be realized either as *er* or Ø depending on semantic and discourse-functional feature values, resulting in a dependent-marked pattern of case (see Nichols 1986). If the KP analysis is tenable, then the differential object marking system in Palauan can be shown to conform to the same principles governing differential object marking systems in other languages (cf. Woolford 2000).

In addition to this standard case-licensing strategy, I argue that a second case-licensing strategy must be recognized to account for the divergent behavior of direct objects of perfective verbs. Following Travis (1992, 2005) and Kratzer (2004), I assume that the category AspP intervenes between the vP and VP projections which carries lexical-aspectual information. Telic predications include an AspP containing a head bearing the [TELIC] feature, which instantiates an Agree relation with the nearest VP-internal argument (in the Relativized Minimality sense of Rizzi 1990). The Agree relation serves to ensure that the predication includes a delimiting DP at LF which serves as a "measurer" (see Arad 1998) for telicity. The overt object agreement morphology on verb is a morphological reflex of this Agree relation. If this analysis is correct, the Palauan facts provide evidence both for the positioning of AspP between vP and VP and for a correlation between the predication-internal computation of telicity and the argument structure of the predicate, as is advanced by Tenny (1987 *et seq.*), as well as Arad (1998), Ritter & Rosen (2000), and Kratzer (2004).

The rest of the paper proceeds as follows. Background information about the clause structure of Palauan is provided in §2. The facts surrounding the differential case marking of direct objects of imperfective verbs is explored in §3, and the section concludes with a preliminary analysis of the pattern. The conditions governing object agreement morphology on perfective verbs is examined in §4, which shows that previous characterizations of the agreement pattern have been at least partially misinformed. §5 motivates, extends, and unifies the initial analyses proposed in §3 and §4 to explain the distribution of objects in both imperfective and perfective predications. §6 concludes.

2 A Sketch of Palauan Syntax

The following brief introduction to some relevant aspects of the grammar of Palauan will equip the reader with the necessary background to understand and evaluate the data and theoretical discussions that follow.[3]

2.1 Word Order and Subject Agreement

Palauan is a VOS language (Waters 1980, Georgopoulos 1986, DeWolf 1988) which manifests a relatively strict word order. All categories (except for C[omp], potentially) are head-initial.

(3) Ng   olsiseb   er   a reḳodoll er   a rasm   a Mary.
     3SG.AGRS put.through.IMPF PREP   thread   PREP needle   Mary
     "Mary is threading the needle. (lit. Mary is putting the thread through the needle.)"

In (3), the verb *olsiseb* "put through" is preceded by *ng*, a 3SG marker which agrees with the subject, *Mary*, in person, number, and animacy. The direct object is the theme *reḳodoll* "thread," which immediately follows the verb. The indirect object is the goal *rasm* "needle," which then follows the direct object. The agentive subject *Mary* comes last.

   Palauan is a *pro*-drop language: when a subject, direct object, or possessor is pronominal, it must be a null *pro* if it participates in agreement.[4] For instance, if the subject *a Mary* in (3) is changed to the overt pronominal *ngii* "she," the sentence is ungrammatical. The pronominal must be realized as null *pro*, as in (4).

(4) Ng   olsiseb   er   a reḳodoll er   a rasm   ***pro*/*ngii**.
     3SG.AGRS put.through.IMPF PREP   thread   PREP needle she
     "She is putting the thread through the needle."

   Although the underlying word order is VOS, there is a very productive topicalization operation (Waters 1980, DeWolf 1988) which ordinarily places the subject before the verb. In (5), the subject *a Mary* from (3) has been preposed and appears in topic position.

(5) **A Mary**ᵢ a   olsiseb   er   a reḳodoll er   a rasm   *pro*ᵢ.
     Mary   TOP put.through.IMPF PREP   thread   PREP needle
     "Mary is putting the thread through the needle."

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[3]For a more complete sketch of the grammar of Palauan, a number of further references are available. According to Georgopoulos (1991: 21), the earliest grammar of Palauan is Walleser's (1911) *Grammatik der Palausprache* ("Grammar of the Palauan Language" –JN). Several other works have provided various degrees of description of the language, including Capell's (1949) *Grammar of the Language of Palau*, Pätzold's (1969) *Die Palau-Sprache und ihre Stellung zu anderen indonesischen Sprachen* ("The Palauan Language and its Relationship to Other Indonesian Languages" –JN), Josephs's (1975) *Palauan Reference Grammar* and (1997/1999) *Handbook of Palauan Grammar* vol. I and II, and Hagège's (1986) *La Langue Palau: une Curiosité Typologique* ("The Palauan Language: a Typological Curiosity" –JN). While the focus of Georgopoulos (1991) is primarily on a generalized analysis of constructions involving A-bar gaps in Palauan, this work places many of the descriptive observations of the previously mentioned works in the context of modern linguistic theory.

[4]Pronominal second objects in causative/applicative constructions may optionally be null even if they do not participate in agreement. From what I have observed, it seems that they must be recoverable from the discourse context.

Georgopoulos (1991) argues that Palauan topics are base-generated in their surface positions and are co-indexed with null resumptive pronouns further down the tree in a pseudo-cleft configuration. Thus, a sentence with a topicalized subject appears to have SVO word order, the order I have found to be dominant in elicitation contexts.

In the subject-as-topic construction, there is no overt subject agreement morphology; instead, a topicalization morpheme *a* appears between the topicalized DP and the verb (Georgopoulos 1986, 1991; DeWolf 1988: fn. 16), glossed as TOP in (5). This construction is highly reminiscent of Palauan equational nominal predications, in which there is no subject agreement registered overtly, as shown in (6).

(6) A Esteban a sechel-iḳ   *pro.*
      Esteban   friend-1SG.AGRPOSS me
      "Estban is my friend."

Waters (1980) carefully shows that the topicalization operation need not target subjects, but may apply to direct objects, indirect objects, and nominal possessors. When non-subjects topicalize, verbs along the path of the dependency between the topic and the resumptive pronoun exhibit *wh*-agreement (Chung & Georgopoulos 1988, Georgopoulos 1991, Chung 1998). In (7), the agent (subject) is preposed and co-indexed with a null *pro*, whereas in (8), the patient (direct object) has been preposed and is co-indexed with a resumptive pronoun. The form of the verb in these two sentences alternates accordingly. In (8), when the direct object is preposed, the verb displays irrealis morphology, agreeing with the (non-preposed) subject.

(7) **A sensei**$_i$ a   omes   er   a re-ngaleḳ ***pro***$_i$.
      teacher TOP see.IMPF PREP   PL-child
      "The teacher is looking at the children."   (Georgopoulos 1991: 84, ex. 42a)

(8) **A re-ngaleḳ**$_i$ a   l-omes   er   **tir**$_i$ a sensei.
      PL-child   TOP 3SG.IRR.AGRS-see.IMPF PREP them   teacher
      "The teacher is looking at the children."   (Georgopoulos 1991: 84, ex. 42b)

2.2   VP, *v*P, and TP

The VP and *v*P are head-initial. Still, the main verb may be preceded by tense-aspect-mood auxiliaries, suggesting the presence of a head to the left of V° and *v*°. Consider the following two means of expressing past tense in Palauan. The first involves the past tense auxiliary *mle* "was/were," which selects stative verbs and (most) non-verbal predicates, as in (9).[5]

(9) A ḳotai$_i$ a   **mle**   merang *pro*$_i$.
      answer TOP AUX.PAST correct
      "The answer was correct."

In the second pattern, the past tense infix *-(i)l-* marks action verbs, as in (10). The infix *-(i)l-* shows a considerable degree of allomorphy.

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[5]The auxiliary *mle*, itself, resembles a lexicalized form of *me* 'come' + *-(i)l-* (past tense).

(10)   A Susan$_i$ a   m[**il**]enga   er   a ringngo *pro*$_i$.
         Susan TOP eat.IMPF[PAST] PREP   apple
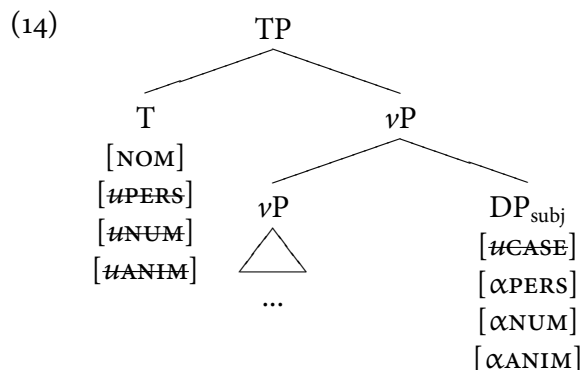   "Susan was eating the apple."

Future tense is indicated by the auxiliary verb *mo* "go," which occupies the same preverbal position as other auxiliaries, as shown in (11).

(11)   a. A kotai$_i$ a **mo**   merang *pro*$_i$.
             answer TOP AUX.FUT correct
           "The answer is going to be correct."

       b. A Susan$_i$ a **mo**   menga   er   a ringngo *pro*$_i$.
             Susan TOP AUX.FUT eat.IMPF PREP   apple
           "Susan is going to be eating the apple."

Subject agreement morphemes precede auxiliaries as shown in (12a) and (13a), and they never intervene between an auxiliary and a verb as in (12b) and (13b).

(12)   a.   Ng   mle   merang a kotai.
             3SG.AGRS AUX.PAST correct   answer
             "The answer was correct."

       b. * Mle   ng   merang a kotai.
             AUX.PAST 3SG.AGRS correct   answer
             "The answer was correct."

(13)   a.   Ng   mo   menga   er   a ringngo a Susan.
             3SG.AGRS AUX.FUT eat.IMPF PREP   apple   Susan
             "Susan is going to be eating the apple."

       b. * Mo   ng   menga   er   a ringngo a Susan.
             AUX.FUT 3SG.AGRS eat.IMPF PREP   apple   Susan
             "Susan is going to be eating the apple."

Since phrases are head-initial, and subject agreement morphemes surface to the left of all verbal elements (including auxiliaries), it is plausible to assume that there is some category higher than *v*P which establishes an Agree relation with the subject in Spec *v*P. Consistent with the assumptions in Chomsky 2000, 2001, I assume that T^o selects *v*P, and it is this T^o that probes for the subject DP goal to establish the requisite Agree relation that licenses nominative case on the subject.

(14)

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                      TP
              _____|_____
             T                 vP
          [NOM]          _____|_____
         [uPERS]        vP          DP_subj
         [uNUM]         /\          [uCASE]
         [uANIM]       /__\         [αPERS]
                       ...          [αNUM]
                                    [αANIM]
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I assume that auxiliaries are base generated as heads of VP/AuxP projections below TP. Subject agreement morphemes occupy T° and are the morphological realization of the Agree relation between the T° probe and the subject DP goal.

2.3 Negation and Existentials

Negation is expressed with the stative predicates *diak* "is false" or *dimlak* "was false." These negation verbs take clausal complements over which they scope.[6] The predicate in the negated complement clause shows irrealis morphology.

(15) A Doug$_i$ a **diak/dimlak** [$_{CP}$ el **lo**-ngedecheduch er a re-chad *pro$_i$*]
    Doug TOP false/false.PAST COMP 3SG.AGRS.IRR-talk.IMPF PREP PL-person
pro.
it.EXPL
"Doug isn't/wasn't talking to anyone. (lit. Doug, it is false that he is/was talking to anyone.)"

The canonical existential construction in Palauan is formed with the expression *ngar er ngii* "exists" (present tense) or *mla er ngii* "existed" (past tense). That they invariably take 3SG subject agreement suggests that they agree with a null expletive *pro* subject that corresponds to English "there."

(16) Ng **{ngar er ngii/mla er ngii}** a ngau er a Chicago *pro.*
    3SG.AGRS {exist/exist.PAST} fire PREP Chicago there.EXPL
"There is/was a fire in Chicago."

The verb *ngar* "be located" is a component of the existential construction (its past tense form is *mla*), but these two expressions seem to be best construed as idiomatic. Palauan speakers often write them as *ngarngii* and *mlarngii* and pronounce them as single words ([ŋarŋi] and [mlarŋi]).

In the negative existential construction, *ngar er ngii* and *mla er ngii* are replaced by the negation predicates *diak* and *dimlak*, respectively, as shown in (17).

(17) Ng **diak/dimlak** a ngau er a Chicago *pro.*
    3SG.AGRS not.exist/not.exist.PAST fire PREP Chicago there.EXPL
"There wasn't a fire in Chicago."

I leave the question of the syntax of Palauan existentials open, but it is worth remarking that the definiteness effect is observed in Palauan existentials. That is, the so-called "pivot" of the existential must not be definite. In (18) below, the pivot of the existential *se el bilis* "this dog" is a definite demonstrative, resulting in ungrammaticality.

(18) *Ng {mla er ngii} **se el bilis** er a blai *pro.*
    3SG.AGRS {exist.PAST} this.3SG.NONHUM LNK dog PREP house there.EXPL
"There was this dog in the house."

Existentials (and the associated definiteness restriction) will play a role in the argument to be developed below.

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[6]When negative sentences do not have sentence-initial topics, the complementizer *el* can occasionally be replaced by *a* as in example (108) in §4.2.1. This leads me to think that the clause over which negation scopes can be nominalized and occur in subject position. I currently do not understand the conditions on this alternation well enough to provide an analysis.

2.4 DP-Internal Syntax

This section aims to provide evidence for (and for the structure of) DP in Palauan. The first piece of evidence pertains to the distribution of adjectival modifiers. These may either precede or follow the noun they modify. The linker morpheme *el* (glossed as LNK) surfaces between the modifier and the noun.

(19) a. Ak   m[il]cher-ar   a **bekerkard el   mlai** *pro.*
          1SG.AGRS buy.PF[PAST]-3SG.AGRO   red   LNK car   I
          "I bought the red car."

      b. Ak   m[il]cher-ar   a **mlai el   bekerkard** *pro.*
          1SG.AGRS buy.PF[PAST]-3SG.AGRO   car   LNK red   I
          "I bought the red car."

Chung (1998: 44-45) analyzes the Chamorro linker as inflection on N°, but data like (20) suggests that this analysis might be untenable for Palauan. If the Palauan linker were inflection on N°, it should not occur twice, and the occurrence of the adjective *bekerkard* "red" between the second instance of the linker *el* and the noun *mlai* would be unexpected.

(20) A Kiyoki$_i$ ng   m[il]cher-ar   [$_{DP}$ se **el** bekerkard **el**   mlai] t_i?
      Kiyoki$_i$ 3SG.AGRS buy.PF[PAST]-3SG.AGRO   that LNK red   LNK car
      "Did Kiyoki buy that red car?"

I remain agnostic regarding the syntactic status of the Palauan linker *el*, as it does not play a crucial role in the phenomena discussed here.

   The Palauan morpheme *a* precedes a vast majority of nouns and has a superficially idiosyncratic distribution. First, *a* does not co-occur with pronouns as in (21) or demonstrative NPs as in (22).

(21) A Mark$_i$ a u[l]lengeseu   er   (*a) **kau** *pro$_i$.*
      Mark TOP help.IMPF[PAST] PREP   you
      "Mark was helping you."

(22) A Steven$_i$ a u[l]lengeseu   er   (*a) **tirke**   **el   chad**   *pro$_i$.*
      Steven TOP help.IMPF[PAST] PREP   those.HUM LNK person
      "Steven was helping those men."

Next, *a* marks free relatives as in (23) and nominalized clauses as in (24), e.g. in *it*-clefts (Georgopoulos 1991: 64-69).

(23) Ke   medengel-ii   a [$_{NP}$ e_i [$_{IP}$ m[l]o   er   a stoang __$_i$]] *pro*?
      2SG.AGRS know.PF-3SG.AGRO   go[PAST] PREP   store   you.SG
      "Do you know who went to the store? (lit. Do you know the one that went to the store?)"
      (Georgopoulos 1991: 65, ex. 6c)

(24) Ng   techa$_i$ a [$_{NP}$ e_i [$_{IP}$ k[il]eld-ii   a sub   __$_i$]]?
      3SG.AGRS who?   heat.PF[PAST]-3SG.AGRO   soup
      "Who heated up the soup? (lit. It was who that was the one that heated up the soup?)"
      (Georgopoulos 1991: 73, ex. 27a)

Quantified/modified nouns are also marked with *a*. Quantifiers like *rokui* "all" do not appear to be determiners, as they may appear either to the left or to the right of the noun over which they quantify and trigger the linker, just as adjectival modifiers do.

(25) Ak   ch[il]uiu-Ø   **a rokui el**   hong *pro*.
      1SG.AGRS read.PF[PAST]-3PL.AGRO   all   LNK book I
      "I read all of the books."

(26) Ak   ch[il]uiu-Ø   aika   el   hong **el   rokui** *pro*.
      1SG.AGRS read.PF[PAST]-3PL.AGRO   these.NONHUM LNK book LNK all   I
      "I read all of these books."

As was shown above in (19a-b), *a* surfaces to the left of modifiers and quantifiers and cannot be reordered with respect to them, indicating that the noun and its modifiers form a constituent from which *a* is excluded. *a* cannot surface on the right of a nominal and does not trigger the presence of the linker, suggesting that *a*, itself, is not a modifier. Given the head-initial nature of Palauan and the distribution facts of *a*, I tentatively analyze *a* as a determiner D°, which selects an NP complement (see also Georgopoulos 1991: 75).[7]

   Possessors in Palauan follow the noun they possess. Possession is indicated in two ways, either via head marking (agreement) or via dependent marking (with the preposition *er*). The vast majority of possessed nouns display the head-marking pattern of possessor agreement morphology. The subset of nouns that exploit the dependent-marking pattern is rather small and overwhelming consists of loanwords. As with subject agreement, pronouns must be null if they participate in possessor agreement as in (27), otherwise they are overt if they are complements of the preposition *er* as in (28).

(27) A Fred_i a   u[l]lengeseu   er   [_DP a re-sechel-**im**   **pro**] *pro_i*.
      Fred TOP help.IMPF[PAST] PREP   a PL-friend-2SG.AGRPOSS you.SG
      "Fred was helping your friends."

(28) A Fred_i a   m[il]enguiu   [_DP a hong **er   kau**] *pro_i*.
      Fred TOP read.IMPF[PAST]   books PREP you.SG
      "Fred was reading your books."

   Non-pronominal possessors have the same distribution, following the noun they possess. Possessor DPs may contain nouns which can themselves also be possessed in a nested configuration like (29).

(29) [_DP a chim-al   [_DP a ngelek-ek   [_DP *pro*]]]
          hand-3SG.AGRPOSS   child-1SG.AGRPOSS   me
      "my child's hand"   (Josephs 1999: 93)

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[7]What has been called a plural prefix *re-* has been argued to attach to human nouns (Josephs 1975). However, this prefix "shifts" to the left when certain other words (including quantifiers and modifiers) precede these nouns. I believe that *re-* actually forms part of a plural determiner *ar* (cf. Capell 1949; see also Smith-Stark 1974), but to maintain consistency with the previous literature, I will continue to analyze it as a prefix, as it is beyond the scope of this paper to provide a full analysis of *ar*. If this analysis is correct, however, the distribution facts of *ar* would provide evidence of φ-feature "percolation" from NP into DP, via selection, extended projection, or agreement.

I adopt the standard Minimalist analysis of possessed NPs, in which the possessor DP surfaces in the specifier of the D^o that selects the NP. Most likely, the possessor raises to this position from an NP-internal base position.[8]

Now that a basic sketch of Palauan syntax has been presented, I will turn to the relevant data concerning transitive verbs and the (morpho-)syntactic realization of their direct objects.

3   Objects of Imperfective Verbs

As was mentioned briefly in §1, direct objects of imperfective verbs are usually marked with the preposition *er*, as in (30a). Yet sometimes *er* is absent, as in (30b).

(30) a. Ng   mengang er   a bobai *pro.*
          3SG.AGRS eat.IMPF PREP   papaya he
          "He is eating a/the papaya."

      b. Ng   mengang a bobai   *pro.*
          3SG.AGRS eat.IMPF   papaya he
          "He is eating papaya/(the) papayas."

A number of factors condition the presence or absence of *er* as an overt case marker, including animacy/humanness, grammatical number, and specificity. These are hallmarks of a differential object marking system (Aissen 2003). To give a preview of the analysis to come, I will argue that direct objects of imperfective verbs receive case in a uniform manner from transitive v^o. However, the form of case morphology varies according to the φ-feature values and semantic feature values of the direct object DP, perhaps in a manner parallel to that of languages with richer systems of case morphology, such as German.

3.1   Differential Object Marking: a Survey

Dependent-marking languages (Nichols 1986) commonly mark some, but not all, direct objects with overt case morphemes depending on semantic and pragmatic features of the direct object.[9] The higher in prominence a direct object is, the more likely it is to be overtly case-marked (Aissen 2003: 436).

Prominence is argued to be measured along two independent (but sometimes interacting) scales.

(31) ANIMACY SCALE: Human > Animate > Inanimate

(32) DEFINITENESS SCALE: Pronoun > Proper name > Definite NP > Indefinite Specific NP > Non-specific NP

Prominence is measured in opposite directions depending on whether subjects or objects are being considered. There is a parallel often invoked in phonology: Harmonic Alignment (Prince &

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[8]Note that possessors might actually *surface* within NP, given the head-initial nature of DP and NP, as well as the presence of possessor agreement on N^o. The relative ordering of NP modifiers/quantifiers and possessors would easily provide an answer to this question. I have not collected the decisive data at this point in time.

[9]The majority of the points in this survey are taken directly from the discussion in Aissen 2003.

Smolensky 1993/2004). Harmonic Alignment dictates that syllable *peaks* are least marked when they are vowels, more marked when they are sonorants, and the most marked when they are obstruents. Syllable *margins* observe the opposite correlation: obstruents are the least marked syllable margins, followed by sonorants, and then vowels.

Substituting peaks and margins for subjects and direct objects, the correlate of Harmonic Alignment using the animacy and definiteness scales is straightforward. The least marked subject (and, simultaneously, the most marked object) would a human pronominal, while the most marked subject and least marked object would be a non-specific inanimate. The lattice in (33) represents the relative markedness (for direct objects) of each combination of features from the animacy and definiteness scales, in a two-dimensional DOM system.

(33)   ***Most marked for objects →***   Human Pronoun

                            Human Proper Noun   Animate Pronoun

                    Human Definite   Animate Proper Noun   Inanimate Pronoun

            Human Specific   Animate Definite   Inanimate Proper Noun

    Human Non-Specific   Animate Specific   Inanimate Definite

            Animate Non-Specific   Inanimate Specific

                    Inanimate Non-Specific   ← ***Least marked for objects***

                                                    (Aissen 2003: 459, fig. 4)
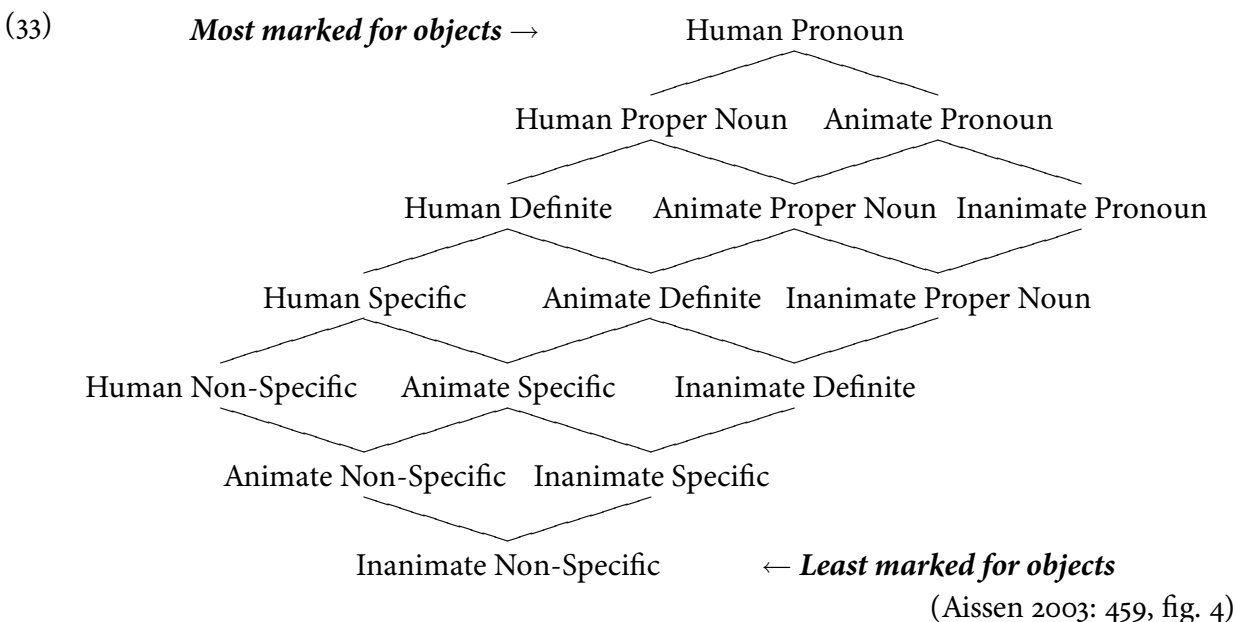
Persian provides examples of a two-dimensional differential object marking system that conform to the predictions implied by the lattice in (33).[10]

First, objects with the same animacy feature values may differ in specificity. Definite objects obligatorily bear the accusative case marker *râ*.

(34)   Ketâb-râ   xândam.
        book-ACC I.read
        "I read the book."   (Aissen 2003: 468, ex. 39)

Indefinite objects can be specific or non-specific and do not uniformly bear the case marker *râ*. Specific indefinite objects can be partitive as in (35) or have the sense of *a certain* as in (36). Persian specific indefinite direct objects bear the case marker *râ*, regardless of which of these two interpretations they have.

(35)   Yeki   az ân   ketâbhâ-râ xândam.
        INDEF of DEM books-ACC I.read
        "I read one of these books."   (Aissen 2003: 468, ex. 40)

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[10]The Persian examples are originally from Lazard 1982.

(36) (Yek) ketâb-i-râ   xând   ke
     INDEF book-INDEF-ACC he.read which
     "He read a certain book which..."   (Aissen 2003: 469, ex. 41)

In contrast, non-specific indefinite objects do not bear the accusative marker *râ*. Compare (37) below to (34).

(37) Ketâb-Ø mixânad.
     book   CONTIN.he.read
     "Er liest (irgend-)ein Buch."   (Bossong 1985: 63)
     (tr. *"He is reading some book (or other)." –JN*)

However, the lack of *râ*-marking on non-specific indefinite direct objects can be overridden if the direct object is sufficiently animate. The pairs of examples below are intended to be minimal pairs, where the direct objects are treated as non-specific indefinites that differ only in animacy.

(38) a. Mard-i-râ   did.
        man-INDEF-ACC he.saw
        "He saw a man"   (Aissen 2003: 469, ex. 42a)

     b. Medâd-i-Ø   xarid.
        pencil-INDEF he.bought
        "He bought a pencil."   (Aissen 2003: 469, ex. 42b)

(39) a. Xarguç-râ dust dâram.
        rabbit-ACC liking I.have
        "I like rabbits."   (Aissen 2003: 470, ex. 44a)

     b. Xarguç-Ø dust   dâram.
        rabbit   liking I.have
        "I like rabbit."   (Aissen 2003: 470, ex. 44b)

In (38a-b), both *mardi* "a man" and *medâdi* "a pencil" are to be construed as non-specific indefinites. *Mardi* "a man" is marked with *râ* in (38a) presumably because it is human, while *medâdi* "a pencil" is not marked with *râ* in (38b), as it is inanimate. Similarly, the direct object *xarguç* "rabbit" in (39a-b) is to be construed as non-specific in both sentences except for the fact that (39a) refers to living rabbits, whereas (39b) refers to rabbit meat. Predictably, the direct object in (39a) is marked with *râ*, and the direct object in (39a) is not. Hence, we have evidence of an interaction between the animacy and definiteness scales. Among non-specific NPs, humans must be marked by *râ*, non-human animates optionally display *râ*, and inanimates must not be marked with *râ*.

The Persian system is an example of a two-dimensional DOM system, i.e. where DOM is determined by both the animacy and definiteness scales. In the next section, data from Palauan will show that direct objects are treated in a way similar to those in Persian.

3.2   DOM in Palauan

In Palauan, *nearly* all direct objects of imperfective verbs are case marked with the preposition *er*. There are, however, two effects which prohibit overt case marking from appearing on two types of non-human (i.e. animate non-human or inanimate) DPs. For ease of reference in the following discussion, the descriptive generalizations have been named in (40) – (42).

(40) THE NUMBER-ANIMACY EFFECT: Plural non-human DP objects are not marked with *er*, regardless of definiteness or specificity.

(41) THE SPECIFICITY EFFECT: Non-specific non-human DP objects are not marked with *er*, regardless of number feature values.

(42) THE EXHAUSTIVITY CLAUSE: All other objects are marked with *er*.

The Number-Animacy Effect applies to DPs that have a particular set of φ-feature and semantic feature values. The Specificity Effect refers to DPs that not only have particular semantic feature values, but also have a particular interpretation (non-specific indefinite). The Exhaustivity Clause is the elsewhere generalization: any DP that is unaffected by either the Number-Animacy Effect or the Specificity Effect has the default overt case marking.

If the descriptive generalizations in (40) – (42) are correct, then three separate claims must be made and substantiated regarding the pertinent feature sets/values to sustain a plausible analysis of Palauan DOM. I describe each claim now, in turn.

First, reference must necessarily be made to [ANIMACY], which I take to be a semantic feature of nominals (see Comrie 1989, Dahl in press). 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. Although [ANIMACY] is not a syntactic feature, I will argue that the syntax is sensitive to it. Human objects are always marked with *er*, while non-human objects do not pattern uniformly.[11] Thus, at least one form of the *er*-marker is marks DPs that are semantically [+HUM].

Second, there must be some sensitivity to [SPECIFICITY] features in the syntax of Palauan. Specificity features 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). Specificity interacts both with semantic [ANIMACY] features and syntactic φ-features (namely grammatical [NUMBER] features). Non-specific indefinites are not marked with *er* if they are non-human, but they must be marked with *er* if they are human. Specific indefinites and definites are marked with *er* if they are singular, but not if they are plural. On this basis, I assume that specificity must have some formal representation in the syntax. It should be noted that the alternation between overt and null case marking has relevance both in the syntax and the phonology: if specificity in Palauan were a purely semantico-pragmatic feature, then the case marking alternation would be left unexplained. I thus argue that there is another form of the *er*-marker that marks (singular[12]) specific DPs.

Finally, grammatical [NUMBER] features must play a role in the analysis. Among non-human objects, plural objects are never marked with *er*, whereas singular objects do not pattern uniformly. Aissen (2003) does not include grammatical number as a relevant feature that conditions DOM patterns, but the Palauan data (to be examined below momentarily) provides evidence for the relevance of grammatical number in determining the Palauan DOM pattern. If this claim is correct, then there is evidence of a three-dimensional DOM system.

These claims will now be motivated, one by one.

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[11]While the Palauan DOM phenomenon occurs exclusively in the domain of 3rd person objects, I do not include [PERSON] as a relevant feature in conditioning Palauan DOM because I take all 1st and 2nd person DPs to be human (or animate enough to pattern with humans, grammatically), and thus to bear the feature [+HUM].

[12]See Smith-Stark 1974 for a cross-linguistic examination of plurality splits.

3.2.1 Plural Non-Human Objects are Bare

In (40), the generalization that I have called the Number-Animacy Effect states that plural, non-human DP objects are not marked with *er*. If this generalization is true, one predicts this distribution of *er* even with pronominal objects (the direct object type which is highest on the Definiteness Scale). This is indeed the distribution that is attested: not only is it true that a [3PL] pronominal direct object cannot be marked with *er*, the direct object pronoun itself is obligatorily null.

The table in (43) summarizes the distribution of overt case marking (with *er*) of pronominal direct objects of imperfective verbs.

(43) PALAUAN PRONOMINAL OBJECTS OF IMPERFECTIVE VERBS

	Singular	Plural	
		Inclusive	Exclusive
1st person	*er ngak*	*er kid*	*er kemam*
2nd person	*er kau*	*er kemiu*	
3rd person [+HUM]	*er ngii*	*er tir*	
3rd person [-HUM]	*er ngii*	Ø	

The relevant data is provided below. Note that the [3PL, -HUM] pronoun object in (44) is obligatorily null. However, its human counterpart in (45) is obligatorily overt and obligatorily marked with *er*.

(44) [3PL, -HUM] PRONOMINAL OBJECT:

Ke   mes   aike   el   hong *pro*? Ak   m[il]enguiu   Ø / (*__er ngii__
2SG.AGRS see.PF those.NONHUM LNK book you.SG 1SG.AGRS read.IMPF[PAST]   / PREP it
/ *__er   tir__) *pro*.
/ PREP them I

"Do you see those books? I was reading them."

(45) [3PL, +HUM] PRONOMINAL OBJECT:

Ke   mes-terir   tirke   el   ngalek *pro*? Ak   u[l]lengeseu
2SG.AGRS see.PF-3PL.HUM.AGRO those.HUM LNK child   you.SG 1SG.AGRS help.IMPF[PAST]
__er   tir__   / (*Ø) *pro*.
PREP them /   I

"Do you see those children? I was helping them."

In contrast, [3SG] pronominal objects must be marked with *er* regardless of whether they are human as in (46) or non-human as in (47), which demonstrates that the alternation is found only in the plural.

(46) [3SG, +HUM] PRONOMINAL OBJECT:

Ke   mes-a   ngke   el   redil   *pro*? Ak   u[l]lengeseu   *__(er)__
2SG.AGRS see.PF-3SG.AGRO that.HUM LNK woman you.SG 1SG.AGRS help.IMPF[PAST] PREP
__ngii__ *pro* {er se er a} el   chull.
her   I   {during}   LNK rain

"Do you see that woman? I was helping her when it rained."

(47)   [3SG, -HUM] Pronominal Object:

Ke   mes-a   se   el meradel *pro*?   Aḳ   u[l]mechar
2SG.AGRS see.PF-3SG.AGRO that.NONHUM LNK orange   you.SG 1SG.AGRS buy.IMPF[PAST]
*(er) **ngii** *pro* e   a chad~i~ a   mle   mengedecheduch *pro*~i~.
PREP it   I   while person TOP AUX.PAST talk.IMPF

"Do you see that orange? I was buying it while somebody was talking."

As 1st and 2nd person pronominal objects bear the feature [+HUM], they are marked with *er* as well. The first person pronouns (singular and plural) are direct objects in (48), and their second person counterparts are direct objects in (49).

(48)   [1SG/1PL] Pronominal Object:

Ke   mes-terir   tirke   el ngalek *pro*?   Te   u[l]lengeseu
2SG.AGRS see.PF-3PL.AGRO those.HUM LNK child   you.SG 3PL.HUM.AGRS help.IMPF[PAST]
*(er) **ngak/kid/kemam** *pro*.
PREP me/us.INC/us.EXC they

"Do you see those children? They were helping me/us."

(49)   [2SG/2PL] Pronominal Object:

Aḳ   mes-terir   tirke   el ngalek *pro*. Te   u[l]lengeseu
1SG.AGRS see.PF-3PL.AGRO those.HUM LNK child   I   3PL.HUM.AGRS help.IMPF[PAST]
*(er) **kau/kemiu**   *pro*?
PREP you.SG/you.PL they

"I see those children. Were they helping you/you guys?"

To fully motivate the Number-Animacy Effect in (40), it must be shown that plural, non-human DP objects of any degree of definiteness follow the exact same pattern of not receiving *er*-marking, in contrast to their human counterparts which must be marked with *er*. The data below shows that this is the exact situation found in Palauan.

Demonstratives:

(50)   [3PL, -HUM] Demonstrative Object:

A Sally~i~ a   m[il]enguiu   (***er) aike**   el hong *pro*~i~.
  Sally TOP read.IMPF[PAST] PREP those.NONHUM LNK book

"Sally was reading those books."

(51)   [3PL, +HUM] Demonstrative Object:

A Steven~i~ a   u[l]lengeseu   *(er) **tirke**   el chad *pro*~i~.
  Steven TOP help.IMPF[PAST] PREP those.HUM LNK person

"Steven was helping those men."

Possessed DPs:

(52)   [3PL, -HUM] POSESSED DP OBJECT:

A Robert_i a   m[il]lemed   (*er) **a tebel-el**   **pro** *pro*_i.
Robert TOP wipe.IMPF[PAST] PREP   table-3SG.AGRPOSS him

"Robert was wiping up his tables."

(53)   [3PL, +HUM] POSESSED DP OBJECT:

A Katrina_i a   u[le]mes   *(er) **a re-ngelek-ir**   **pro** *pro*_i.
Katrina TOP watch.IMPF[PAST] PREP   PL-child-3PL.AGRPOSS them

"Katrina was watching their children."

Quantified DPs:

(54)   [3PL, -HUM] QUANTIFIED OBJECT:

A Doug_i a   u[lle]rrenges   (*er) **a rokui el   chelitakl**_j [_{CP} el   ngar   er   a
Doug TOP listen.IMPF[PAST] PREP   all   LNK song   COMP be.located PREP
CD ___j] *pro*_i.
CD

"Doug listened to all the songs on the CD."

(55)   [3PL, +HUM] QUANTIFIED OBJECT:

A Suzanne_i a   u[l]lengeseu   *(er) **a re-chad   el   rokui** er   se   el
Suzanne TOP help.IMPF[PAST] PREP   PL-person LNK all   PREP that.NONHUM LNK
delmerab *pro*_i.
room

"Suzanne was helping all the people in the room."

Now, there are few morphological distinctions between definite and indefinite DPs in Palauan. The determiner *a* does not mark definiteness. However, the plural objects in (56) and (57) can be interpreted as definite, specific indefinite, or non-specific indefinite DPs, but each of the particular readings can be — and have been — forced with contexts. These will be explored further in §3.2.2 below. For now, I present the data.

(56)   [3PL, -HUM] (IN)DEFINITE OBJECT:

Ak   u[l]mechar   (*er) **a mlai** *pro*.
1S.AGRS buy.IMPF[PAST] PREP   car   I

"I was buying (the/some) cars."

(57)   [3PL, +HUM] (IN)DEFINITE OBJECT:

Ak   u[lle]mekang   *(er) **a re-ngalek** *pro*.
1S.AGRS feed.IMPF[PAST] PREP   PL-child   I

"I was feeding (the/some) children."

In this section, we have seen pieces of data in (44) through (57) that lend strong support for the Number-Animacy Effect in (40). In the next section, the Specificity Effect will be similarly motivated with relevant data.

3.2.2   Non-Specific Non-Human Objects are Bare

The second claim I made in (41) about Palauan DOM was that non-specific non-human DP objects are not marked with *er*, regardless of their number feature values. This is what I have called the Specificity Effect. The Specificity Effect is more difficult to demonstrate clearly, given the fine-grained distinctions between specific vs. non-specific indefinite DPs and the relative dearth of Palauan morphology that distinguishes specific and non-specific indefinite DPs from definite DPs. Nonetheless, scenarios can be constructed to bring out the relevant readings, indicating that there is, indeed, a distinction to be made — a distinction that triggers a morphological difference in direct object case marking in Palauan.

The specificity alternation is manifested overtly in other languages, e.g. Turkish, as shown in (58). In Turkish, specific direct objects bear overt accusative case marking as in (58a), while non-specific direct objects are not marked overtly for case as in (58b).

(58)   TURKISH OBJECTS: Specific with overt Acc case, Non-Specific without Acc case[13]

    a.   Ali bir **kitab-ı**   aldı.
         Ali one book-ACC bought
         "A book is such that Ali bought it."   (Enç 1991: 5, ex. 14)

    b.   Ali bir **kitap** aldı.
         Ali one book bought
         "Ali bought some book or other."   (Enç 1991: 5, ex. 15)

In Palauan, 1st and 2nd person objects are not only [+HUM] (or treated as such) but also definite. Because definite DPs are also specific, the specificity distinction is only relevant for 3rd person objects. Bearing this in mind, consider the contrast between the non-human specific indefinite object in (59) and its non-specific counterpart in (60).

(59)   [3SG, -HUM] SPECIFIC INDEFINITE OBJECT:

    Ak   u[l]mechar   *(**er**) **a mlai** *pro.*
    1SG.AGRS buy.IMPF[PAST] PREP   car   I

    "I was buying this one car (a particular car)."

(60)   [3SG, -HUM] NON-SPECIFIC INDEFINITE OBJECT:

    Ak   u[l]mechar   (***er**) **a mlai** *pro.*
    1SG.AGRS buy.IMPF[PAST] PREP   car   I

    "I was shopping for cars (lit. I was buying a car)."

The singular non-specific object in (60) cannot be marked with *er*, unlike its specific counterpart in (59).

Note that there is no such alternation if the singular objects are human.[14]

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[13]See also Diesing 1992: 83 (citing Reuland 1988) for another example from Dutch.
[14]Under negation, I have elicited a small percentage of examples in which non-specific human objects can surface without *er*. I am not sure what to make of this variability at present.

(61)   [3SG, +HUM] SPECIFIC INDEFINITE OBJECT:

   Aḳ   u[lle]meḳang   *(er) a ngalek *pro.*
   1SG.AGRS feed.IMPF[PAST] PREP   child   I

   "I was feeding this one child (a particular child)."

(62)   [3SG, +HUM] NON-SPECIFIC INDEFINITE OBJECT:

   Aḳ   u[lle]meḳang   *(er) a ngalek *pro.*
   1SG.AGRS feed.IMPF[PAST] PREP   child   I

   "I was feeding a child."

It is worth mentioning that the notion of specificity is notoriously ill-defined (Farkas 2002), and so the precise flavor of specificity we are dealing with here should be clarified. It seems as though the correct characterization of the Palauan facts will necessitate a definition of specificity that appeals to presuppositionality of existence, whereas non-specificity involves non-presuppositionality of existence (or, assertion of existence).

To illustrate this point, the non-specific and specific interpretations are forced in Scenarios A & B in (63) and (64), respectively.

(63)   SCENARIO A: You are going on a fishing trip hoping to catch fish. You will be satisfied even if you only catch one single fish: any fish. Upon returning home the next day, you report your activities of the previous day.

   a.   Aḳ   m[il]ngereel   **a ngikel** *pro* er   a elii.
        1SG.AGRS fish.IMPF[PAST] fish   I   PREP   yesterday
        "I was fishing for a fish yesterday."

   b.   # Aḳ   m[il]ngereel   **er   a ngikel** *pro* er   a elii.
        1SG.AGRS fish.IMPF[PAST] PREP   fish   I   PREP   yesterday
        "I was fishing for a particular fish yesterday."

(64)   SCENARIO B: You are going to a lake in which there is a notoriously large fish that fishermen from far and wide have been trying to catch for years. Several fishermen have come close, but nobody has succeeded yet. Your only objective on this fishing trip is to catch this large fish. Upon returning home the next day, you report your activities of the previous day to somebody who does not know the story of this large fish.

   a.   # Aḳ   m[il]ngereel   **a klou el   ngikel** *pro* er   a elii.
        1SG.AGRS fish.IMPF[PAST] large LNK fish   I   PREP   yesterday
        "I was fishing for a large fish yesterday."

   b.   Aḳ   m[il]ngereel   **er   a klou el   ngikel** *pro* er   a elii.
        1SG.AGRS fish.IMPF[PAST] PREP   large LNK fish   I   PREP   yesterday
        "I was fishing for a particular large fish yesterday."

The following data in (65) and (66) reaffirms that this alternation exists only in the singular. As was demonstrated in §3.2.1, plural non-human objects are never marked with *er*, regardless of specificity (or definiteness). Scenario C in (65) ensures that a specific indefinite reading of the direct objects in (65a-b) is forced, whereas Scenario D in (66) forces a non-specific indefinite reading of the direct objects in (66a-b). These direct objects all surface without *er* as an overt case marker.

(65) SCENARIO C: You are going on a fishing trip hoping to catch fish. You promised your family a dinner of freshly caught fish the next evening, and you need at least two fish to feed them all: any two fish. Upon returning home the next day, you report your activities of the previous day.

  a. Ak   m[il]ngereel   **a ngikel** *pro* er   a elii.
      1SG.AGRS fish.IMPF[PAST]   fish   I   PREP yesterday
      "I was fishing for fish yesterday."

  b. # Ak   m[il]ngereel   **er** **a ngikel** *pro* er   a elii.
      1SG.AGRS   fish.IMPF[PAST] PREP   fish   I   PREP yesterday
      "I was fishing for a[15] particular fish yesterday."

(66) SCENARIO D: You hear that there was a fishing boat that has tipped and lost hundreds of live, very valuable fish in a particular lake. You have been hired to go to this lake and try to recover all of them. You somehow succeed, miraculously; all the fish are accounted for. Upon returning home the next day, you report your activities of the previous day to somebody who does not know the story of the lost fish.

  a. Ak   m[il]ngereel   **a milengubel el   ngikel** *pro* er   a elii.
      1SG.AGRS fish.IMPF[PAST]   spilled   LNK fish   I   PREP yesterday
      "I was fishing for lost fish yesterday."

  b. # Ak   m[il]ngereel   **er** **a milengubel el   ngikel** *pro* er   a elii.
      1SG.AGRS   fish.IMPF[PAST] PREP   spilled   LNK fish   I   PREP yesterday
      "I was fishing for a[16] particular lost fish yesterday."

In this section, we have seen pieces of data in (59) through (66) which serve to provide evidence for the Specificity Effect in (41). Having motivated both the Number-Animacy Effect and the Specificity Effect, I will now show that these two effects comprise the only idiosyncrasies in an otherwise regulated system of object case marking.

3.2.3   Other Objects are Marked with *er*

The final claim I made about Palauan DOM was the Exhaustivity Clause, defined in (42). The Exhaustivity Clause is simple; it merely states that all other objects of imperfective verbs that are not subject to the Number-Animacy Effect or the Specificity Effect are marked with *er*.

I know of no non-pronominal DPs that bear 1st or 2nd person features. All 1st and 2nd pronominal objects of imperfective verbs were shown to be marked with *er* in (48) and (49), respectively. This limits the Palauan DOM phenomenon to 3rd person DP objects — a restriction that is not at all unfamiliar in DOM systems.

[3PL, -HUM] DPs were shown in §3.2.1 not to be marked with *er* when they serve as objects of imperfective verbs, regardless of definiteness. Their human counterparts were shown to be marked with *er* whether they are pronominal DPs as in (45), demonstrative DPs as in (51), possessed DPs as in (53), quantified DPs (55), definite/specific indefinite/non-specific indefinite DPs as in (57). This

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[15] The presence of *er* forces an obligatorily singular interpretation of the object, as non-human plurals are never marked with *er*.

[16] See fn. 15.

discussion summed up the evidence for the Number-Animacy Effect, which covers all [3PL] DP objects. The only remaining gaps in the set of direct object DPs lie in the [3SG] paradigm.

[3SG, -HUM] non-specific indefinite DPs were shown not to be marked with *er* when they serve as direct objects of imperfective verbs. Their specific counterparts were shown to be marked with *er* in (59). [3SG, +HUM] DPs were shown to be marked with *er*, whether they are specific as in (61) or non-specific as in (62). This concludes discussion of [3SG] indefinite DPs. The only other type of [3SG] DPs we have looked at were the pronominal DPs, which were shown to be marked with *er* whether they are human as in (46) or non-human as in (47).

It remains to be demonstrated that all other [3SG] DP objects of imperfective verbs are marked with *er*, regardless of whether they are definite, demonstrative, possessed, etc. and regardless of their values for animacy features.

Definite DPs:

(67)　[3SG, +HUM] DEFINITE OBJECT:

　　　Ak　　　u[lle]mekang　　*(er) a ngalek *pro*.
　　　1SG.AGRS feed.IMPF[PAST] PREP　child　I

　　　"I was feeding the child."

(68)　[3SG, -HUM] DEFINITE OBJECT:

　　　Ak　　　u[l]mechar　　*(er) a mlai *pro*.
　　　1SG.AGRS buy.IMPF[PAST] PREP　car　I

　　　"I was buying the car."

Quantified DPs:

(69)　[3SG, +HUM] QUANTIFIED OBJECT:

　　　A Kevin_i a　u[l]lengeseu　　*(er) a ta　　el chad　*pro*_i.
　　　　Kevin TOP help.IMPF[PAST] PREP　one.HUM LNK person

　　　"Kevin was helping one person."

(70)　[3SG, -HUM] QUANTIFIED OBJECT:

　　　A Tanya_i a　m[il]engang　*(er) a chimong　　el ringngo *pro*_i.
　　　　Tanya TOP eat.IMPF[PAST] PREP　one.NONHUM LNK apple

　　　"Tanya was eating one apple."

Possessed DPs:

(71)　[3SG, +HUM] POSSESSED DP OBJECT:

　　　A Alice_i a　u[l]lengeseu　　*(er) a ngelek-ed　　　　*pro*　*pro*_i.
　　　　Alice TOP help.IMPF[PAST] PREP　child-1PL.INCL.AGRPOSS we.INCL

　　　"Alice was helping our child."

(72)   [3SG, -HUM] POSSESSED DP OBJECT:

A Fred$_i$ a   m[il]enguiu   *(er) a hong er   kau   pro$_i$.
   Fred TOP read.IMPF[PAST] PREP   book PREP you.SG

"Fred was reading your book."

Demonstrative DPs:

(73)   [3SG, +HUM] DEMONSTRATIVE OBJECT:

A Steven$_i$ a   u[l]lengeseu   *(er) ngke   el   chad pro$_i$.
   Steven TOP help.IMPF[PAST] PREP that.HUM LNK person

"Steven was helping that man."

(74)   [3SG, +HUM] DEMONSTRATIVE OBJECT:

A Sally$_i$ m[il]enguiu   *(er) se   el   hong pro$_i$.
   Sally read.IMPF[PAST] PREP that.NONHUM LNK book

"I was reading that book."

With these gaps filled in, I conclude that it is reasonable to assert that the Exhaustivity Clause is accurate. Thus, all objects for which neither the Number-Animacy Effect nor the Specificity Effect holds are overtly case-marked with *er*.

3.3   Case Licensing by v^o

§3.2.1–3.2.3 served to motivate the descriptive generalizations in (40) – (42) posited to describe the conditions on Palauan differential object marking for these objects. I turn now to the development of an analysis of how case is licensed for objects of imperfective verbs in Palauan.

Primarily, I claim that case is licensed uniformly for all objects of imperfective verbs, whether or not they are overtly marked with *er*. Furthermore, I argue in §5 that *er* is the overt realization of a case head K^o, while direct objects of imperfective verbs that are not marked with *er* are KPs headed by a null K^o. Thus, all direct objects of imperfective verbs are KPs that must be licensed. Following standard assumptions from Chomsky 2000/2001, I assume that an Agree relation between transitive v^o and this local KP object (in the sense of Rizzi 1990) licenses the KP. The conditions on this Agree relation are given in (75).

(75)   Conditions on Agree between a Probe P and a Goal G:
   a.   Command.
   b.   Relativized Minimality.
   c.   Absolute locality.

KP has an uninterpretable case feature that must be checked, and the v^o head has an interpretable case feature that can license the direct object. In Minimalist terms, v^o is the *probe* P, whose domain D(P) is its c-command domain (Chomsky 2000: 122). The Relativized Minimality requirement in (75b) identifies the direct object KP as the *goal* G, as P seeks the closest goal G within D(P), where G is *closest* if there is no G′ in D(P) such that G is in D(G′) [D(G′) is the c-command domain

of G′]. The uninterpretable case feature on G renders it *active* (Chomsky 2000: 127). The absolute locality requirement in (75c) states that G must be sufficiently local to P, under some definition of locality. This requirement is not entirely relevant here, as the Agree relation at issue is between v^o and an argument KP in its selected VP complement. It would be difficult to formulate a plausible definition of locality that would exclude these KPs.

Thus, case licensing of direct object DPs in this framework depends on transitive v^o serving as the probe P and the direct object KP itself serving as the goal G. This much is straightforward, but what is not immediately clear is why some KP objects bear the overt case marker *er* while others do not.

It is well-known that the morphological realization of case on nominals in some languages is dependent on the set of feature values borne by the nominal. Consider the data from German in (76) and (77) below, which contrast a nominative DP in subject position with an accusative DP of the same gender in direct object position.

(76) **Der**   Mann füttert **den**   Affe.
the.NOM.MASC man   feeds   the.ACC.MASC monkey
"The man is feeding the monkey."

(77) **Die**   Frau   fotografierte **die**   Gazelle.
the.NOM.FEM woman photographed the.ACC.FEM gazelle
"The woman took a picture of the gazelle."

With definite masculine nouns, accusative case is realized morphologically as the accusative form of the definite masculine determiner *den* (cf. the nominative form *der*) as shown in (76). With feminine nouns, accusative case is not morphologically distinct from nominative case: both the nominative and accusative forms of the determiner are *die* as shown in (77). The different φ-feature values of the nominal trigger different morphological realizations of the same Agree relation between v^o and DP_{obj}. In a theory like Extended Projection (Grimshaw 2005: Ch. 1), φ-feature values percolate from the lexical head N^o through its projections to any functional head that selects NP, e.g. D^o, and presumably through DP to K^o.

It seems difficult to argue that the same situation holds for Palauan. The default case marker for object DPs in Palauan is *er*, which is homophonous with the preposition *er*, arguably the only true preposition in the language (see Josephs 1975, Georgopoulos 1991). That the case-marker for 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." To say that *er* is simply a reflex of percolation of particular sets of φ-feature values carries at least three potentially problematic presuppositions: (i) *er* itself has no semantically interpretable content of its own, (ii) there is only one variant of *er* in its function as an object marker, and (iii) [ANIMACY] and [SPECIFICITY] must necessarily be construed as φ-features.[17]

We have already seen that *er* is conditioned not only by covarying φ-feature values (e.g. [NUMBER]) but also on the basis of lexical semantic features such as [ANIMACY] and discourse-functional

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[17]It is less clear that [ANIMACY] is not treated as a φ-feature in Palauan. Subject agreement is incontrovertibly sensitive to animacy in Palauan: human plural subjects trigger *te* (distinct from [3SG] *ng*), while non-human plural subjects trigger *ng* (homophonous with [3SG] *ng*).

features like [SPECIFICITY]. It is not immediately clear to me how (or even whether) such non-syntactic feature values can percolate through the projections within a DP (or KP) the way φ-feature values evidently can. Thus, it seems as though the Palauan situation is not entirely analogous to the German situation: I claim that while German determiner forms with different case specifications are determined purely syntactically, the presence or absence of Palauan *er* as an object case marker relies (at least partially) on extra-syntactic information. The Number-Animacy Effect and the Specificity Effect might shed some light on the status of *er* as an object case marker. Two particular points arise.

First, neither the Number-Animacy Effect and the Specificity Effect prevent [+HUM] DPs from bearing *er*, regardless of their status in the discourse as [±SPEC] or their syntactic status as [SG] or [PL]. Indeed, *all* human DP objects of imperfective verbs are marked with *er*. For this reason, I think it is reasonable to claim that there is at least one version of the object case marker *er* that signifies that its DP complement is semantically [+HUM] — call it Human *er*. When all Merge operations have constructed a complete DP, an K° is then merged with the DP, and then it is lexicalized as Human *er* if the lexical semantics of the nominal dictate that it is [+HUM]. Human *er* overrides the prohibition on overt case-marking of plurals; even plural nouns must be marked with *er* if they are [+HUM]. This discrepancy between overt case marking of [+HUM] plurals and null case marking of [-HUM] plurals may be thought of as an instance of plurality split (see Smith-Stark 1974), which is not uncommon in other languages from diverse language families.[18]

Second, the Specificity Effect ensures that non-specific DPs are not marked with *er*. While the Number-Animacy Effect conspires to prevent specific DPs from forming a uniform class in terms of case marking, all *singular* specific DPs — human and non-human — are marked with *er*. Thus, it might be plausible to say that there is another variant of *er* that encodes the fact that its DP complement is singular and is to be interpreted as [+SPEC] — call it Specific *er*. As non-human DPs are not prefixed with the plural marker *re-*, the use of Specific *er* is (sometimes) the only way that singular non-human DPs are distinguishable from plural non-human DPs when they are objects of imperfective verbs. While the overwhelming majority of nouns have [NUMBER] feature values that can be recovered via agreement morphemes (e.g. overt agreement with subjects, objects of perfective verbs, and the majority of possessors), it might be said that the lack of morphological agreement with objects of imperfective verbs and the ungrammaticality of *re*-prefixation on non-human DPs induces a different strategy for marking grammatical number on these nominals: namely via overt versus null case marking.[19] From the point of view of the syntax, this Specific *er* could be merged

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[18]Mandarin Chinese (Sino-Tibetan; genetically unrelated to Palauan) is one 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.　mǎ "horse(s)"

　　　　ii.　? mǎ-**men** "horses"

　　c.　i.　shítou "stone(s)"

　　　　ii.　* shítou-**men** "stones"

[19]Admittedly, this characterization of [NUMBER] feature recoverability sheds no light on why a similar pattern does not manifest itself to mark number on non-human possessor DPs that do not participate in possessor agreement.

in exactly the same way as Human *er*: after the DP is built from a series of Merge operations, information about specificity from the discourse and the φ-feature values of the DP together dictate whether the K° head merged with the DP must be spelled out overtly as at Specific *er* or as null.

Under this construal, Human *er* and Specific *er* arise for different reasons. De Swart (2007: 180) analyzes the difference between the Hindi correlates of what I have been calling Human *er* and Specific *er* as one of production versus interpretation. In the Minimalist syntactic framework assumed here, I believe that de Swart's production/interpretation constraints are best imported as conditional Spell Out constraints that dictate what the phonological form of K° must be on the basis of feature values taken from the syntax. Consider the constraints in (78).

(78)   SPELL OUT CONSTRAINTS ON K°:
    a.   *Productive:* $K_{[\pm SPEC]} \rightarrow er \: / \underline{\quad} DP_{[+HUM]}$
    b.   *Interpretive:* $K_{[+SPEC]} \rightarrow er \: / \underline{\quad} DP_{[3SG]}$ (cf. de Swart 2007: 180, ex. 68)

Reformulated as constraints on Spell Out, the productive versus interpretive distinction is merely mnemonic or expositional. In other words, when K° is spelled out as *er* because its DP complement is [+HUM] (under the auspice of the constraint in (78a)), any specificity distinction on K° is neutralized. There is no phonological difference between [+SPEC] and [-SPEC] human KPs since the [+HUM] feature forces K° to be spelled out as *er* in either case. When the rule in (78a) is inapplicable (i.e. when its DP complement is [-HUM]), K° may be spelled out as *er* because it is [+SPEC] (as mandated by the constraint in (78b)), and different specificity feature values trigger different phonological forms of K°. In either case, the Spell Out of K° is formally determined by features borne by the KP-DP-NP complex imported from the narrow syntax.

While humanness is an inherent lexical semantic feature of nominals, specificity is not. For example, languages do not systematically have "humanizing" or "dehumanizing" morphemes that indicate variation in animacy features of a particular noun, whereas they quite commonly have morphemes that indicate variation in specificity or definiteness. De Swart takes constraints of the form in (78a-b) to be a reflection of this fact. Taken from the point of view of information structure, it might be said that Human *er* is used to case-mark human nominals *because* they are interpreted as human, whereas specific KP objects are interpreted as specific *because* they are marked by Specific *er*. De Swart comments:

> "Due to the fact that animacy is an inherent feature of nouns, a case system in which animacy takes priority over definiteness/specificity is the only possible way in which one case morpheme can make reference to both features. The reverse situation is hard to think of: a system in which case is first assigned on the basis of definiteness[/specificity –JN], and for nouns which do not have the required definiteness[/specificity –JN] feature case can be used to indicate the animacy of a noun."   (de Swart 2007: 182)

If this is the situation in Palauan, then the distribution of overt case marking on objects of imperfective verbs using *er* falls out from the two constraints in (78). There are several important Minimalist theory-internal issues that arise from adopting such an analysis of Human *er* and Specific *er*. The Minimalist framework (Chomsky 2000/2001) mandates that this analysis be implemented in a particular way in the syntax, which will be discussed further in §5. For now, (79) sketches the *v*P-internal syntax of an imperfective verbal predication in which the direct object DP

is marked overtly for case via *er* (realized as K°). (80) and (81) illustrate similar examples in which the Number-Animacy Effect and the Specificity Effect apply, and case is not registered morphologically.
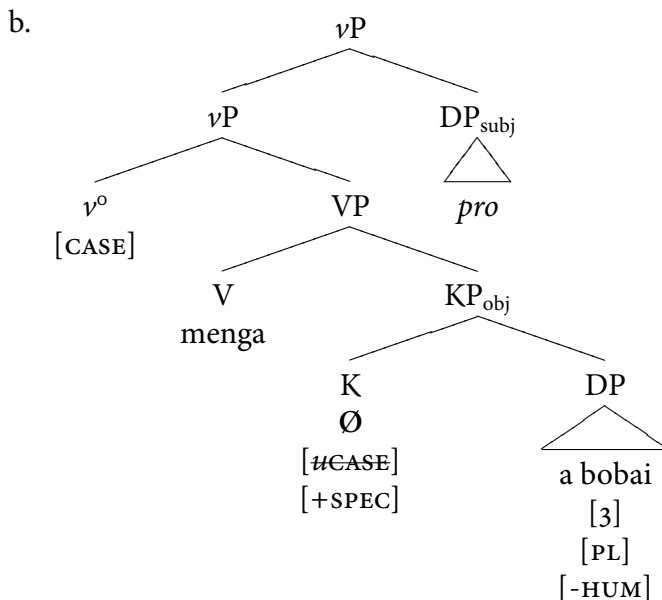
(79)   DEFAULT CASE ON DIRECT OBJECT:

    a.   [$_{vP}$ menga   er   a bobai   *pro*]
           eat.IMPF PREP   papaya
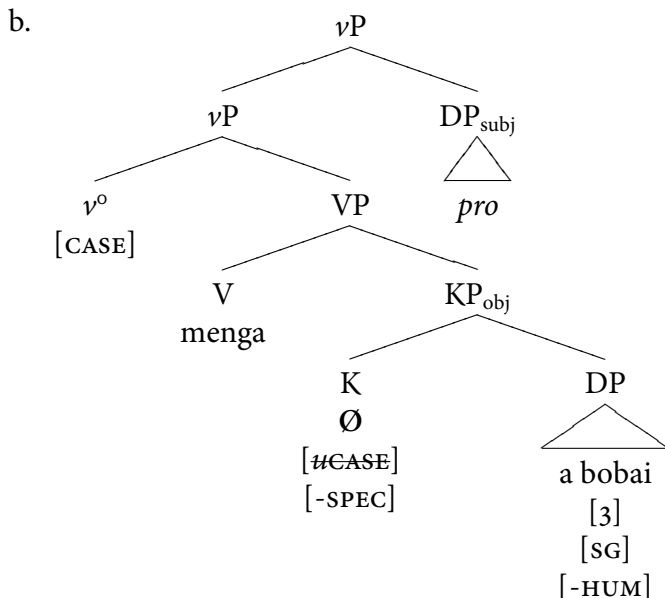   "*pro* be eating a (particular) papaya"

    b.
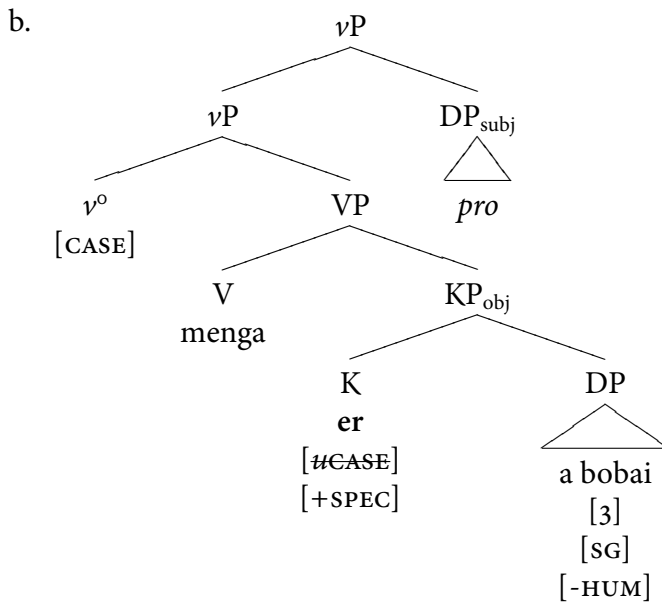
(80)   THE NUMBER-ANIMACY EFFECT:

    a.   [$_{vP}$ menga   a bobai   *pro*]
           eat.IMPF   papaya
      "*pro* be eating some (particular) papayas"

    b.

(81)   THE SPECIFICITY EFFECT:

    a. [$_{vP}$ menga   a bobai   *pro*]
             eat.IMPF   papaya
      "*pro* be eating papaya"

    b.

In each of the trees in (79) – (81), I maintain consistency with Minimalist assumptions and argue that an Agree relation is established between v^{o} and KP to check the uninterpretable case feature. The morphological form of the case marker is selected after the phase is sent for Spell Out on the basis of the [NUMBER] φ-feature values, the semantic [ANIMACY] feature values, and the discourse-functional [SPECIFICITY] feature values on KP.[20] That is to say, there are different forms of the case marker (K^{o}) in the lexicon — *er* and Ø — which are selected for lexical insertion on the basis of the values of the features on the KP-DP-NP complex.

The productive/interepretive constraints in (78) guide spell out of K^{o}. If the KP-DP-NP complex is [+HUM], then K^{o} *must* be realized as *er* in the morphology, according to (78a), possibly overriding any information about specificity brought by *er*. If the KP-DP-NP complex is [-HUM], (78a) is inapplicable, and the specificity features brought to the derivation by K^{o} can be spelled out. If K^{o} is spelled out as *er*, the KP will be interpretable to the listener as [3SG, +SPEC] (as is already guaranteed by the features present on the KP in the syntax). If K^{o} is null (i.e. spelled out as Ø), then any of the remaining interpretations is possible ([3PL, -HUM, ±SPEC] or [3SG, -HUM, -SPEC]).

This analysis of Palauan DOM as variability in the morphological Spell Out of K^{o} relies on the claim that direct objects of imperfective verbs that are not marked by *er* are still KPs headed by a null K^{o}. This claim is defended in §5. Essentially, I have argued that *er* can carry discourse-functional information regarding the specificity of its DP complement. However, the productive Spell Out constraint in (78a) will trigger overt morphology even on K^{o} specified as [-SPEC]. Thus, I assume that even non-specific direct objects of imperfective verbs are contained within KPs, even though K^{o} is not always morphologically overt.
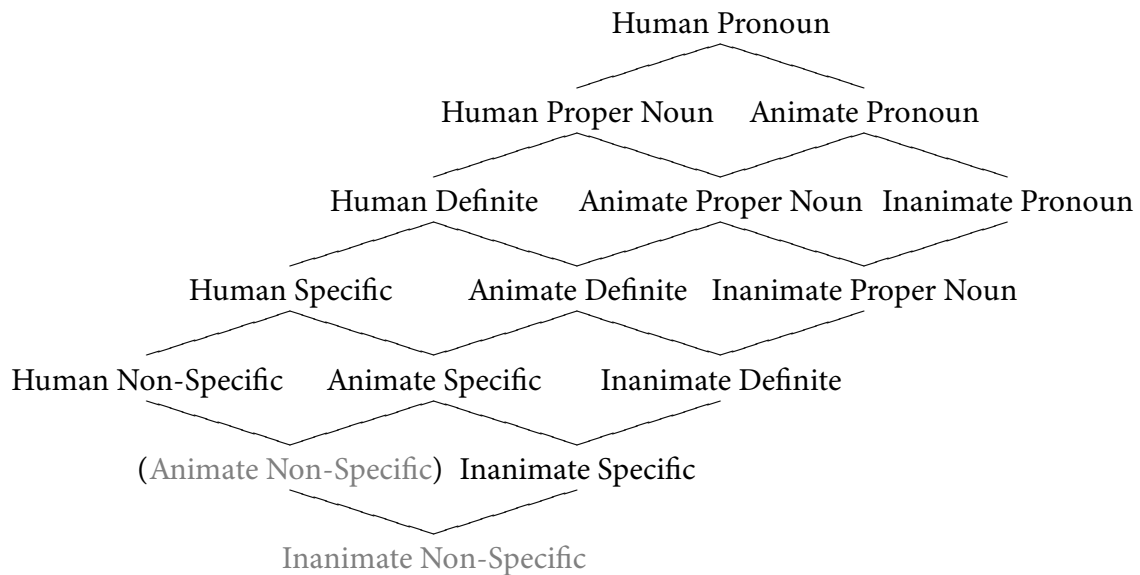
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[20]Recall that the features present on the N^{o} head can percolate through DP to KP if it is assumed that KP-DP-NP form an extended projection (Grimshaw 2005).

3.4   A Well-Formed DOM System

To close this section, it is worth discussing the extent to which the DOM pattern sketched above is actually idiosyncratic. Despite the apparently peculiar set of conditions that trigger morphological alternations in Palauan object case marking, it is important to recognize that the Palauan pattern constitutes a well-formed DOM system in view of the typology predicted by Aissen (2003).

The lattice in (33) has been marked to show how Palauan [3SG] objects pattern in (82) and how [3PL] objects pattern in (83).[21] The key observation to make is that no node on the lattices for which overt case marking is possible is dominated by a node for which overt case marking is impossible.

(82)   *Palauan DOM (*[3SG] *Objects)*:

Human Pronoun

Human Proper Noun   Animate Pronoun

Human Definite   Animate Proper Noun   Inanimate Pronoun

Human Specific   Animate Definite   Inanimate Proper Noun

Human Non-Specific   Animate Specific   Inanimate Definite

(Animate Non-Specific) Inanimate Specific

Inanimate Non-Specific

grey: Ø as case marker
black: *er* as case marker
parentheses: speaker variation between *er* and Ø

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[21]This separation is necessary since Palauan has a three-dimensional DOM system, and so cannot be represented in a two-dimensional lattice.

(83)   *Palauan DOM (*[3PL] *Objects)*:

<div align="center">

Human Pronoun

Human Proper Noun   (Animate Pronoun)

Human Definite   (Animate Proper Noun) Inanimate Pronoun

Human Specific   (Animate Definite) Inanimate Proper Noun

Human Non-Specific   (Animate Specific)   Inanimate Definite

(Animate Non-Specific) Inanimate Specific

Inanimate Non-Specific

</div>
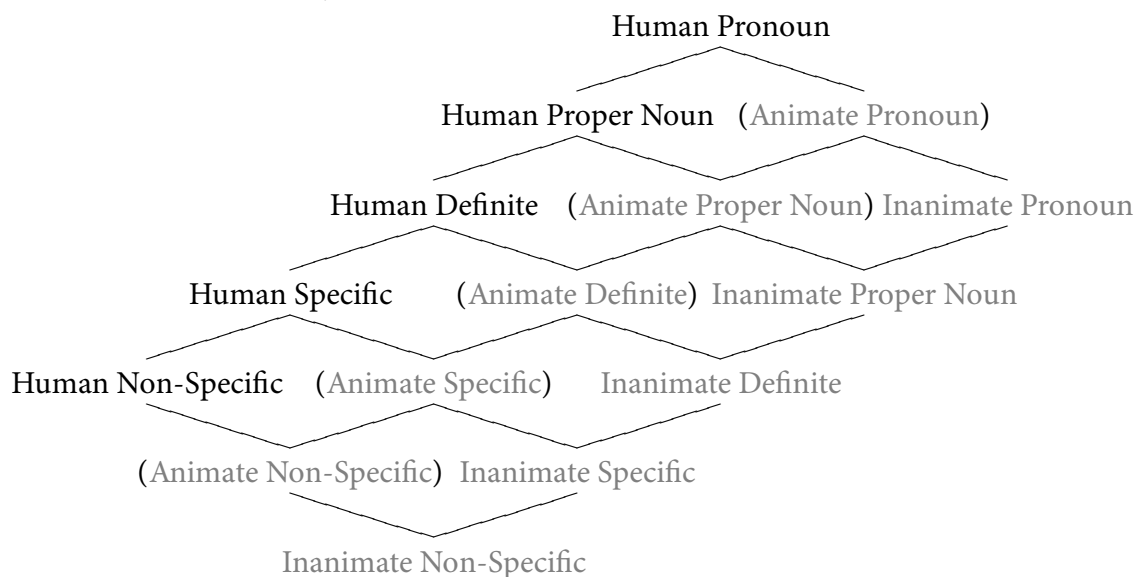
grey: Ø case marker
black: *er* as case marker
parentheses: speaker variation between *er* and Ø

Up to this point, the treatment of animate, non-human DPs (e.g., animals) has been deliberately finessed. The relevant animacy distinction that has been highlighted thus far is between human and non-human DPs. There is evidence that some speakers of Palauan may draw the distinction differently, i.e. between animate and inanimate DPs. Consider the following data. In (84), the DP object *a teblo el bilis* "the two dogs" is not marked with *er*, as would be predicted given the Number-Animacy Effect. However, (85) is the Palauan translation of the same sentence elicited from a different informant.

(84)   Ak   u[le]mes   **a teblo**   **el** **bilis**ᵢ [CP el   ngar   er   a
        1SG.AGRS see.IMPF[PAST]   two.NONHUM LNK dog   COMP be.located PREP
        bita   er   a kerrekar __ᵢ] *pro.*
        space.beside PREP   tree   I
        "I watched the two dogs near the tree."

(85)   Ak   u[le]mes   **er** **a teblo**   **el** **bilis**ᵢ [CP el   ngar   er   a
        1SG.AGRS see.IMPF[PAST]   PREP   two.NONHUM LNK dog   COMP be.located PREP
        bita   er   a kerrekar __ᵢ] *pro.*
        space.beside PREP   tree   I
        "I watched the two dogs near the tree."

In view of the distinction between human and non-human plural DP objects which I claimed conditioned the alternation between overt and null case marking, the presence of *er* in (85) is not predicted. However, some Palauan speakers think of common household animals (such as dogs, pigs, etc.) as more "human" (Josephs 1997: 69). Some Palauans think that this "humanizing" tendency is due to the influence of Western cultures, where pets are often given special treatment. Compare the English examples in (86), where either non-human or human pronouns can be used to describe a puppy, and (87), where only the non-human pronoun can be used to describe a brick.

(86) Watch out for that puppy!

    a.   It's going to fall off the roof!

    b.   S/he's going to fall off the roof!

(87) Watch out for that brick!

    a.   It's going to fall off the roof!

    b.   # S/he's going to fall off the roof!

There are at least four morphological indications that a similar phenomenon is attested in Palauan. First, common animal NPs can optionally co-occur with the human forms of demonstratives as in (88), rather than the usual non-human forms as in (89).

(88) Ke   mes-a   **ngke**   **el** **bilis** *pro*?
      2SG.AGRS see.PF-3SG.AGRO that.HUM LNK dog you
      "Do you see that dog?"

(89) Ke   mes-a   **se**   **el** **bilis** *pro*?
      2SG.AGRS see.PF-3SG.AGRO that.NONHUM LNK dog you
      "Do you see that dog?"

Second, the numeral classifiers that are used to mark humans may optionally be used with these animals. Compare (84) and (85) above to their perfective counterparts in (90) and (91).

(90) Ak   m[il]es   **a teblo**   **el** **bilis**ᵢ [_CP_ el   ngar   er   a bita
      1SG.AGRS see.PF[PAST] two.NONHUM LNK dog   COMP be.located PREP space.beside
      er   a kerrekar __ᵢ] *pro*.
      PREP   tree   I
      "I saw the two dogs near the tree."

(91) Ak   m[il]s-terir   **a teru**   **el** **bilis**ᵢ [_CP_ el   ngar   er   a
      1SG.AGRS see.PF[PAST]-3PL.HUM.AGRO two.HUM LNK dog   COMP be.located PREP
      bita   er   a kerrekar __ᵢ] *pro*.
      space.beside PREP   tree   I
      "I saw the two dogs near the tree."

Sentence (91) furthermore illustrates the third morphological indicator that *bilis* "dog" can be construed as human: the [3PL] direct object DP *a teru el bilis* "the two dogs" triggers the [3PL, +HUM] object agreement suffix *-terir* on the perfective verb *milsterir*.

Finally, animate non-human DPs like *a bilis* optionally trigger the [3PL, +HUM] subject agreement marker *te* as in (92) rather than the [3PL, -HUM] subject agreement marker *ng* — which is homophonous with the [3SG] subject agreement marker *ng* — as in (93).

(92) Te   mekerang   a bilis?
      3PL.HUM.AGRS do.what?.IMPF   dog
      "What are the dogs doing?"

(93) Ng   mekerang   a bilis?
      3PL.NONHUM.AGRS do.what?.IMPF dog
      "What are the dogs doing?"

What should be taken away from this discussion is the fact that the optional alternation in case marking between the null form Ø in (84) and the overt form *er* in (85) manifests itself in the exact contexts that would be consistent with the well-formed DOM system represented in the lattices in (82) and (83) [optionally overt case marking is indicated in (82) and (83) with parentheses]. Recall that these lattices represent the relative prominence of different types of objects. Aissen (2003: 439), following Bossong (1985: 8), maintains that "objects at a particular rank [in the lattice –JN] may be obligatorily case-marked, optionally case-marked, or never case-marked. The boundaries which separate the obligatorily case-marked objects from those which are optionally case-marked or never case-marked may shift, but the resulting systems are apparently always consistent [with the relative prominence relations between the objects –JN]." The Palauan DOM lattices in (82) and (83) feature clear lines of demarcation between the types of direct objects that are obligatorily, optionally, and never overtly case-marked.

4   Objects of Perfective Verbs

In contrast to direct objects of imperfective verbs, direct objects of perfective verbs are *never* overtly case-marked with the preposition *er*. Instead, object agreement suffixes appear on the verb, which agrees with the direct object in person, number, and animacy.[22]

(94)   Ak   k[il]l-**ii**   a bobai   *pro.*
       1SG.AGRS eat.PF[PAST]-3SG.AGRO   papaya I
       "I ate (a/the) papaya."

I argue that direct objects of all types — regardless of their values for features such as person, number, animacy, or specificity — enter into an object agreement relation with perfective verbs. This view marks a departure from what has been claimed in previous literature. Various authors have asserted that the conditions under which object agreement suffixes appear on a perfective verb perfectly mirror the conditions under which objects of imperfective verbs are marked with *er* (see, e.g., Josephs 1975: 260; Georgopoulos 1991: 24–25; Woolford 2000: 218). Put in familiar terms, these authors claim that the Number-Animacy and Specificity Effects in the imperfective system have correlates in the perfective system. I argue against this claim below.

With respect to the (apparent) Number-Animacy Effect in the perfective system, I follow Josephs (1975) in hypothesizing that [3PL, -HUM] direct objects trigger null object agreement morphology on perfective verbs. This situation parallels the following facts: (i) that [3PL, -HUM] pronominal objects of imperfective verbs are obligatorily null, and (ii) that [3PL, -HUM] subjects do not trigger unique subject agreement morphology distinct from that of [3SG] subjects. These facts conspire to suggest that [3PL, -HUM] DPs have some unique status in Palauan.

Regarding the question of whether the Specificity Effect has a correlate in the perfective system, there is data (presented below) that shows that specificity does *not* condition perfective object agreement in any way, contrary to previous claims.

I conclude the section with an analysis of case marking of objects of perfective verbs. Given the limitation of object agreement to perfective verbs and the fact that direct objects do not participate in a differential object marking alternation, I argue that an alternate means of object case licensing

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[22]The only morphologically realized animacy distinction is found with [3PL] nominals. For ease of exposition, only [3PL] object agreement morphemes will be glossed as HUM or NONHUM.

is instantiated by Asp° bearing the [TELIC] feature, following the observations of Tenny (1987 *et seq.*), Arad (1998), Ritter & Rosen (2000), and Kratzer (2004).

4.1   No *Syntactic* Number-Animacy Effect

This section aims to support the notion that the Number-Animacy Effect does not necessarily have a direct correlate in the case licensing of direct objects of perfective verbs. The previous claim is that [3PL, -HUM] objects do not trigger agreement. Consider example (95) below.

(95)   A ngalek_i a   cholebed a bilis *pro*_i!
      child   TOP hit.PF   dog
      "The child is about to hit the dogs!"   (Josephs 1975: 96, ex. 44)

Notice that the verb *cholebed* is glossed as perfective (PF) but does not appear to host an object agreement suffix. Josephs (1975) speculates on this situation as follows.

> "The form *cholebed* in [(95) –JN] is ... a perfective verb form, but one which does not seem to have any object pronoun suffix. ... In this form, the absence of any object pronoun suffix results in a particular meaning: *cholebed* can only be used if the object is **non-human plural**, as in [(95) –JN]. Because the form *cholebed* forms a ... paradigm with the other perfective verb forms ..., many linguists would attempt to assign *cholebed* a structure similar to that of the other perfective forms, which consist of *verb stem + object pronoun*. ... Using this analysis, linguists would say that there is a zero (symbol: Ø) object pronoun which is suffixed to perfective verbs when the object is non-human plural. Thus, all the perfective forms of a given verb would be identical in pattern."
> (Josephs 1975: 96–97)

If I understand Josephs's discussion correctly, I take him to be arguing that there is a syntactic agreement relation that holds between the perfective verb *cholebed* "hit (pf.)" and a syntactically present [3PL, -HUM] pronominal object (which is morphologically null *pro*, as are all other pronominal objects of perfective verbs in Palauan). As a result, he is forced to argue that the morphological realization of this syntactic agreement relation is null, and that this [3PL, -HUM] null agreement suffix completes the morphological paradigm of object agreement suffixes.

    I adopt the same view as Josephs, arguing that the only morphologically perfective verb forms that lack *overt* object agreement morphology are the [3PL, -HUM] forms, and their absence signifies a marking in number. Consider the contrast between the possible English translations of the object *a hong* "book" in following two sentences (96) and (97). In (96), the object co-occurs with [3SG] object agreement on the verb and can only be interpreted as singular. By contrast, in (97), the lack of overt object agreement morphology signals that the direct object must be construed as plural.

(96)   Ak   m[il]s-a   a hong *pro*.
      1SG.AGRS see.PF[PAST]-3SG.AGRO   book I
      "I saw the book/a book/*the books/*books."

(97)   Ak   m[il]es-Ø   a hong *pro*.
      1SG.AGRS see.PF[PAST]-3PL.NONHUM.AGRO   book I
      "I saw *the book/*a book/the books/books."

If we analyze the absence of syntactic agreement as the lack of morphological realization of [3PL, -HUM] agreement, the agreement paradigm is complete and the distinction in interpretation of *a hong* as obligatorily singular in (96) and obligatorily plural in (97) is predictable. The -Ø morpheme may furthermore function to reflect non-humanness of the object, even though animacy is much more easily detectable on N° in Palauan (from pragmatic world knowledge) than is grammatical number. Compare (98) to (99). In (98), the object is [3PL, +HUM] and crucially triggers an overt object agreement suffix on the perfective verb, *-terir*. In (99), the object is [3PL, -HUM], and does not trigger the appearance of the overt [3PL, +HUM] agreement marker *-terir*.

(98)   a.   Ak   ng[il]ti-terir   **a re-ngalek**$_i$ [$_{CP}$ el   mo er   a
             1SG.AGRS take/bring.PF[PAST]-3PL.HUM.AGRO   PL-child   COMP go   PREP
             stoang __$_i$] *pro*.
             store   I
             "I took the children to the store. (lit. I took the children to go to the store.)"

       b.   *Ak   ng[il]ai-Ø   **a re-ngalek**$_i$ [$_{CP}$ el   mo er   a
             1SG.AGRS take/bring.PF[PAST]-3PL.NONHUM.AGRO   PL-child   COMP go   PREP
             stoang __$_i$] *pro*.
             store   I

(99)   a.   *Ak   ng[il]ti-terir   **a hong**$_i$ [$_{CP}$ el   mong   __$_i$] *pro*.
             1SG.AGRS take/bring.PF[PAST]-3PL.HUM.AGRO   book   COMP go.there   I

       b.   Ak   ng[il]ai-Ø   **a hong**$_i$ [$_{CP}$ el   mong   __$_i$]
             1SG.AGRS take/bring.PF[PAST]-3PL.NONHUM.AGRO   book   COMP go.there
             pro.
             I
             "I took the books there. (lit. I took the books to go there.)"

Further evidence for an agreement relation between perfective verbs and [3PL, -HUM] direct objects can be established when the direct objects are *animate* non-human DPs, i.e. animals. As discussed in §3.4, certain types of common animals can optionally be treated as though they have human-like properties.

(100)   Ak   m[il]dengel-terir   **a bilis** er   se   el   park *pro*.
         1SG.AGRS know.PF[PAST]-3PL.HUM.AGRO   dog   PREP that.NONHUM LNK park I
         "I knew the dogs at that park."

(101)   Ak   m[il]dengei-Ø   **a bilis** er   se   el   park *pro*.
         1SG.AGRS know.PF[PAST]-3PL.NONHUM.AGRO   dog   PREP that.NONHUM LNK park I
         "I knew the dogs at that park."

In (100), the direct object DP *a bilis* "the dogs" triggers the overt object agreement suffix *-terir*, which is ordinarily associated with [3PL, +HUM] objects. In (101), the same DP *a bilis* "the dogs" triggers null object agreement in the exact same context. (100) and (101) form a minimal pair that attests to the optionality of overt morphology signaling agreement between the perfective verb and the [3PL, -HUM] (animate) direct object. Two theories might be constructed to explain this optionality.

First consider a theory which postulates that the absence of overt agreement morphology signifies the lack of a syntactic agreement relation. Let us now assume that it is true that Palauan speakers occasionally treat common animals as bearing the feature [+HUM] rather than [-HUM]. This theory must stipulate that a syntactic agreement relation between the perfective verb and the [3PL] animal DP will be established if and only if this "westernized" characterization of the animal is intended. It is not clear to me what the justification for this syntactic stipulation would be.

Now consider a theory which postulates that the object agreement morphology paradigm is complete, and that there are two different morphological realizations of syntactic agreement with [3PL] direct objects: the suffix *-terir* signals agreement with [+HUM] DPs, but no overt morphology is triggered by agreement with [-HUM] DPs. Assuming that Palauan speakers optionally treat common animal DPs as bearing the feature [+HUM] rather than [-HUM], the variation in the corresponding agreement falls out naturally from the morphological paradigm. The syntax works the same way with both [3PL, -HUM] and [3PL, +HUM] direct object DPs: an Agree relation is established in both cases, but the morphological realization of the Agree relation on the verb differs on the basis of the values of the φ-features checked by the DP.

Unless empirical evidence can be found to support the first theory, I tentatively accept the second theory, which is essentially parallel to Josephs's hypothesis outlined above. Accepting this hypothesis effectively implies the recognition of syntactic agreement between perfective verbs and direct objects with any combination of values for the features [PERSON], [NUMBER], and [ANIMACY]. It also implies rejection of the idea that the Number-Animacy Effect has a correlate in the *syntax* of perfective object agreement. That is, any correlate of the Number-Animacy Effect is manifested only in the *morphology* of agreement. I think both of these implications are welcome, given the data in (100) and (101).

4.2   No Specificity Effect, Syntactic or Morphological

I mentioned above that previous literature has claimed that the Specificity Effect that holds in imperfective predications applies to internal arguments in perfective predications as well. That is to say, it has been argued that perfective verbs do not participate in a syntactic Agree relation with non-specific DP objects. In this section, I argue against this claim by examining some new data.

Recall from §3.2.2 that the fish scenarios in (63) – (66) suggested that the correct characterization of specificity in Palauan is one which appeals to presuppositionality of existence, whereas non-specificity involves non-presuppositionality of existence (or, assertion of existence). But how can we tell whether a given DP should be construed as specific or non-specific without a scenario? Karttunen (1969/1976) provides a diagnostic for distinguishing definite DPs, specific indefinite DPs, and non-specific indefinite DPs, based on the notion of discourse referentiality. The determiner system of English, for example, makes it very simple to tell when a nominal is definite or indefinite: *the* marks definite nominals and *a(n)* marks indefinite nominals. Thus, definiteness is encoded syntactically and morphologically in English, but not in Palauan. Karttunen argues for a notion of definiteness that characterizes definite nominals as those that have a previously established referent in the discourse. Then, under the characterization of specificity as presuppositionality of existence, definite nominals are always specific.

Indefinite nominals, on the other hand, may be either specific or non-specific. This distinction in specificity is not marked morphologically in English. Karttunen argues that nominals are interpreted as indefinites if they do not have a previously established discourse referent. The difference

between specific and non-specific indefinites defined in terms of discourse referentiality becomes a matter of whether or not the nominal *establishes* a discourse referent. Indefinite nominals that establish a discourse referent are treated by Karttunen as specific, while those that do not successfully establish a discourse referent are considered non-specific. This contrast is illustrated in English below in (102) and (103).

(102)   Bill has a car.   (Karttunen 1969: 4, ex. 3a)
    a.   It is black.
    b.   The car is black.
    c.   Bill's car is black.

(103)   Bill doesn't have a car.   (Karttunen 1969: 4, ex. 4a)
    a.   # It is black.
    b.   # The car is black.
    c.   # Bill's car is black.

As Karttunen (1969) observes, *a car* in (102) establishes a discourse referent which can later be referred to with a pronoun as in (102a), a definite DP as in (102b), or a possessed nominal DP as in (102c). Hence, *a car* in (102) is interpreted as specific. The same indefinite *a car* in (103) does not establish a discourse referent; it occurs in the scope of negation. Because there is no discourse referent, it is infelicitous to try to refer back to one with a pronoun as in (103a), a definite DP as in (103b), or a possessed nominal DP as in (103c). By Karttunen's diagnostic, *a car* in (103) is interpreted as non-specific.

Turning back to Palauan, we should now be able to use Karttunen's discourse referentiality diagnostic to test whether direct object DPs are specific indefinites or non-specific indefinites. Consider (104). The object *a hong* can be interpreted either as indefinite (translated as *a book*) or definite (translated as *the book*).

(104)   Ak ch[il]iu-ii   a hong *pro.*
    I   read.PF[PAST]-3SG.AGRO   book I
    "I read a/the book."
    a.   Ng   chedelekelek *pro.*
       3SG.AGRS black   it
       "It's black."

By Karttunen's diagnostic, *a hong* is treated in (104) as specific.

If it is true that the Specificity Effect applies to direct objects of perfective verbs as well, then we should be able to construct an example containing a perfective verb form — identifiable by its morphology — that selects a non-specific [3SG, -HUM] DP direct object, expecting no morphological realization of agreement. This is not what we find. This sentence appears in (105), but the verb agrees with the direct object, contrary to expectation.

(105)   Ng   di[ml]ak   [Ø-chiu-ii   a hong *pro*] *pro.*
    3SG.AGRS false[PAST]   1SG.IRR.AGRS-read.PF-3SG.AGRO   book I   it.EXPL
    "I didn't read a/the book."

a. #? Ng   chedelekelek *pro*.
  3SG.AGRS black   it
  "It's black."

However, the morphology of definiteness in Palauan conspires to cloud the evidence. If the direct object *a hong* "a book" in (105) were really a non-specific indefinite, then Karttunen would argue that it should not establish a discourse referent. Ergo, his diagnostic predicts that we should not be able to refer to one with a pronoun. As the judgment of (105a) — as well as the English translation of (105) — indicates, the situation is hardly clear.

The problem is that Palauan does not mark definiteness morphologically using different determiners the way English does with *the* and *a(n)*. As a result, Karttunen's diagnostic yields questionable results in (105a) because the DP under negation in (105) may refer to a previously established discourse referent if it is interpreted as definite, or it might neither refer to a discourse referent nor establish one if it is interpreted as indefinite. What we need, then, is a DP that we can be sure is interpreted as an indefinite.

4.2.1   The NPI *ngii di el*

Fortunately, Palauan does contain an expression that approximately correlates with English *any*, which can be shown to co-occur only with indefinite DPs when it functions as a negative polarity item (NPI). Like the determiner *any*, the expression *ngii di el* can function both as a free choice item and a negative polarity item. *Ngii di el* is pronounced as a single word [ŋi.ðíl] and is often spelled *"ngiidil"* in informal writing. It is almost certainly not a determiner since it does not covary with the determiner *a*, and it is morphologically complex, consisting of *ngii* "it," *di* "just/only," and *el*, the linker.

My immediate aim is to demonstrate that, like NPI *any*, NPI *ngii di el* co-occurs only with non-specific indefinites. To do this, I will first discuss the distribution of NPI vs. free-choice *ngii di el*. Next, I will use the Palauan existential construction to demonstrate that DPs containing the NPI *ngii di el* must be construed as indefinite. Finally, I will show that NPI *ngii di el* induces a non-specific interpretation of DPs, using Karttunen's diagnostic.

Distribution of *ngii di el*

Kadmon & Landman (1993) argue that both NPI and free choice *any* contribute a sense of domain widening and are licensed only in contexts where such widening creates a stronger statement. While a full analysis of the Palauan expression *ngii di el* is beyond the scope of this paper, I can demonstrate that Palauan DPs that contain *ngii di el* share a distribution similar to NPIs and free choice items in other languages.

First, the use of the English NPI *any* is illustrated in (106) and (107). According to Ladusaw's (1979) analysis, NPIs are only licensed if they fall within the scope of a downward entailing operator, such as negation.

(106) I don't have any potatoes.   (Kadmon & Landman 1993: 353, ex. 1)

(107) * I have any potatoes.   (Kadmon & Landman 1993: 353, ex. 2)

The Palauan NPI *ngii di el* exhibits the same effect as *any*, as is illustrated in (108) and (109).

(108) Ng   diak a   ku-nguiu   **a {ngii di el} hong** *pro.*
       3SG.AGRS false NMLZ 1SG.AGRS-read.IMPF {any}   book I
       "I am not reading any book."

(109) * Ak   menguiu **a {ngii di el} hong** *pro.*
       1SG.AGRS read.IMPF {any}   book I
       "I am reading any book."

Menéndez-Benito (2005) demonstrates that the Spanish free choice item *cualquiera* can be licensed in sentences with deontic modality such as (110), but not in episodic sentences such as (111).

(110) Juan puede   coger   cualquier carta.
       Juan can.3SG take.INF any   card
       "Juan can take any card."   (Menéndez-Benito 2005: 31, ex. 23)

(111) * Ayer,   Juan cogió   cualquier carta.
       yesterday Juan took.PAST.PF any   card
       "Yesterday, Juan took any card."   (Menéndez-Benito 2005: 2, ex. 3)

Similarly, Palauan DPs containing free choice *ngii di el* are licensed under the nominal deontic modal *sebech* "ability (to...)" as in (112), but not in episodic sentences such as (113).

(112) Ng   sebech-em   *pro*ᵢ [꜀ₚ el   ng-uu   **a {ngii di el} kat**
       3SG.AGRS ability-2SG.AGRPOSS you.SG COMP take.PF-3SG.AGRO {any}   card
       PROᵢ] *pro.*
       PRO   it.EXPL
       "You can take any card. (lit. It is your ability to take any card.)"

(113) * Ke   ng-il-uu   **a {ngii di el} kat** *pro* er   a elii.
       2SG.AGRS take.PF-PAST-3SG.AGRO {any}   card you.SG PREP yesterday
       "You took any card yesterday."

Now that we have explored the basic distribution of the Palauan NPI/free choice item *ngii di el*, I will show that DPs that contain the NPI variant of *ngii di el* are interpreted as indefinites.

Palauan's Definiteness Effect

According to Milsark (1974/1979, 1977: 4–9 *et seq.*), the pivot of an existential in English cannot be occupied by what he calls "strong" DPs, and the subject of an individual-level predication must not be "weak." The strong/weak DP distinction correlates loosely with the notions of presupposition vs. non-presupposition (or assertion) of the existence of the entity named by the DP. Milsark (1977: 8, ex. 13) provides a table listing strong and weak DPs in English, which Ladusaw (1994: 220) has updated.

(114) Milsark/Ladusaw's Classification of English Strong and Weak DPs

Strong	Weak
the + NP	*a* + NP
demonstrative determiner + NP	"existential" (unstressed) *this* + NP
pronouns (and presumably proper names)	
possessed DPs	
	DPs containing mass nouns
free choice *any* + NP	NPI *any* + NP
universally quantified DPs	
bare plurals (universal/generic)	bare plurals (existential)
(quantificational) *several/many* + NP	(cardinal) *several/many* + NP
(quantificational) number determiners + NP	(cardinal) number determiners + NP
(quantificational) *some* + NP	(cardinal) *some*[23] + NP

These phenomena have been called the definiteness effects. While I will not undertake an investigation of Palauan stage-level and individual-level predicates at present, evidence from Palauan existential constructions suggests that at least the first definiteness effect carries over from English to Palauan.

(115) exemplifies a Palauan existential sentence in which the pivot *a resensei* "teachers" must be construed as indefinite, and the sentence is grammatical with positive polarity (*ngar er ngii*) and negative polarity (*diak*). When the pivot is replaced with a demonstrative DP, which is strong, the sentence becomes ungrammatical, as (116) shows.

(115) Ng   {ngar er ngii}/diak **a re-sensei**   er   a delmerab *pro.*
    3sg.agrs {exist}/not.exist   pl-teacher prep room   there.expl
    "There are/aren't (*the) teachers in the room."

(116) *Ng   {ngar er ngii}/diak **tirke   el   sensei** er   a delmerab *pro.*
    3sg.agrs {exist}/not.exist   those.hum lnk teacher prep   room   there.expl
    "There are/aren't those teachers in the room."

Pronouns and proper names cannot occur in the pivot of an existential, as shown in (117) and (118), respectively.

(117) *Ng   {mla er ngii}/dimlak   **kau**   er   a delmerab *pro.*
    3sg.agrs {exist.past}/not.exist.past you.sg prep   room   there.expl
    "There was/wasn't you in the room."

(118) *Ng   {mla er ngii}/dimlak   **a Samantha** er   a delmerab *pro.*
    3sg.agrs {exist.past}/not.exist.past Samantha prep   room   there.expl
    "There was/wasn't Samantha in the room."

We have now seen several types of DPs that cannot occur in the pivot of an existential, including demonstratives, pronouns, and proper names. These, so far, pattern with their English correlates as "strong" DPs. There is, however, a type of DP that patterns as strong in English but as weak in Palauan. Possessive DPs, as we will see below in (119), may occur in the pivot of an existential.

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[23]This is the unstressed variant of *some* that Milsark dubs *sm.*

As in some other Austronesian languages, the English verb *have* is expressed with the existential construction, where the relationship between the possessor and the possessed entity is expressed pivot-internally as a possessive DP (cf. Chamorro in Chung 1998: 264–265). In Palauan, the possessor can also be topicalized. This is the situation in (119).

(119)　A Droteo$_i$ a　　{ngar er ngii} **a ml-il**　　***pro***$_i$ *pro.*
　　　　Droteo　TOP {exist}　　　car-3SG.AGRPOSS　　there.EXPL
　　　　"Droteo has a car. (lit. There is Droteo's car.)"

Sentence (119) yields evidence that possessive DPs pattern with weak DPs in Palauan, rather than strong DPs.

　　Now that it has been established that a definiteness effect exists in Palauan, the time has come to investigate how DPs containing *ngii di el* pattern. A DP containing *ngii di el* can occupy the position of the pivot of an existential, as shown in (120).

(120)　Ng　　　diak　　**a {ngii di el} kerrekar** er　　a sers　　*pro.*
　　　　3SG.AGRS not.exist　{any}　　　tree　　　PREP　garden
　　　　"There wasn't any tree in the garden."

Sentence (120) supports the notion that DPs containing *ngii di el* pattern as weak in Palauan. Note however that the DP must be in the scope of negation. Compare (120) which contains the negative existential predicate *diak* to the ungrammatical (121) which contains the positive existential predicate *ngar er ngii*.

(121)　＊Ng　　　{ngar er ngii} **a {ngii di el} kerrekar** er　　a sers　　*pro.*
　　　　3SG.AGRS {exist}　　　{any}　　　tree　　　PREP　garden there.EXPL
　　　　"There is any tree in the garden."

The difference in grammaticality between (120) and (121) is unsurprising if we consider the difference between NPI *any* and free choice *any* in English. NPI *any* patterns as weak, as shown in (123), while free choice *any* patterns as strong, as shown in (122).

(122)　＊There are any teachers in the room.

(123)　There aren't any teachers in the room.

Sentence (122) is ungrammatical because *any* does not appear in the scope of a downward-entailing operator, such as negation. The ungrammaticality of (122) disappears if the sentence is tranformed into a polar question, as in (124).

(124)　Are there any teachers in the room?

　　Suppose that the Palauan sentence (121) is ungrammatical for the same reason that the English sentence (122) is. That is, the DP containing *ngii di el* is treated as strong because it does not occur in the scope of a downward-entailing operator. If this is true, then we should predict an improvement in grammaticality if sentence (121) is transformed into a polar question like (124). This is exactly the case in (125).

(125)　Ng　　　{ngar er ngii} **a {ngii di el} kerrekar** er　　a sers　　*pro*?
　　　　3SG.AGRS {exist}　　　{any}　　　tree　　　PREP　garden there.EXPL
　　　　"Is there any tree in the garden?"

The data above suggests that when a DP contains NPI *ngii di el*, it is interpreted as weak. Put differently, the existence of the entity named by the DP is not presupposed. Applying Karttunen's diagnostic, we can establish that the DP must be indefinite because if the existence of the entity it refers to is not presupposed, then it must not have a previously established discourse referent.

Non-Specific Indefinite Objects of Perfective Verbs

We are now equipped with a type of Palauan DP that is unambiguously indefinite: DPs containing NPI *ngii di el*. Under negation, they should most likely pattern as non-specific. Given what we know about the DOM pattern arising with imperfective verbs in Palauan, a DP containing NPI *ngii di el* should not be case marked with *er* if it is a [3SG, -HUM] non-specific DP. This is what we find in (126).

(126) Ng   di[ml]ak   a ku-nguiu   **a {ngii di el} hong** *pro.*
       3SG.AGRS false[PAST] 1SG.IRR.AGRS-read.IMPF   {any}   book   I
       "I wasn't reading any book."

A potential objection is that the direct object *a ngii di el hong* "any book" may be treated as plural, which would trigger null (Ø) case marking via the Number-Animacy Effect. This objection is circumvented in (127) where a perfective verb is used. The direct object *a ngii di el hong* contains NPI *ngii di el* and triggers [3SG] object agreement morphology on the verb.

(127) Ng   di[ml]ak   Ø-chiu-ii   **a {ngii di el} hong** *pro.*
       3SG.AGRS false[PAST] 1SG.IRR.AGRS-read.PF-3SG.AGRO   {any}   book   I
       "I didn't read any book."
   a. # Ng   chedelekelek *pro.*
         3SG.AGRS black   it
         "It's black."
   b. # Ng   chedelekelek se   el   hong.
         3SG.AGRS black   that.NONHUM LNK book
         "The book is black. (lit. That book is black.)"
   c. # Ng   chedelekelek a hong er   ngak.
         3SG.AGRS black   book PREP me
         "My book is black."

Example (127) is exactly the example we needed to show that the Specificity Effect has no correlate when the predication is projected from a perfective verb. The direct object is a [3SG, -HUM] non-specific indefinite. That the DP contains NPI *ngii di el* indicates that the DP is indefinite. Karttunen's diagnostic indicates that the DP is non-specific because *a ngii di el hong* does not establish a discourse referent: it is infelicitous to try to refer to one with a pronoun as in (127a), a definite (demonstrative) DP as in (127b), or a possessive DP as in (127c). If the Specificity Effect applied, no object agreement morphology would be predicted to appear on the verb, contrary to fact. The *-ii* suffix on the verb *chiuii* is the [3SG] object agreement suffix.

To recapitulate, I have now motivated my arguments that neither the Number-Animacy Effect nor the Specificity Effect have any syntactic reality in perfective predications. In other words, perfective verbs — which, in Palauan, are necessarily transitive — agree with direct objects of *any* DP

type: singular or plural, human or non-human, specific or non-specific. The immediate question that arises is why previous authors have not made the same claim. Why was specificity heretofore considered to be so crucial for the licensing of agreement morphology?

One possible explanation is that the most well-known grammar of Palauan by Josephs (1975) analyzes the object agreement suffixes as pronouns, which are inherently referential. The argument is that if all object agreement suffixes are actually pronouns and all pronouns are referential (and thus specific), then object agreement suffixes are licensed by all and only specific objects.

Georgopoulos (1991: 56–59) has convincingly argued that object agreement suffixes are indeed affixes, not clitic pronouns (but cf. Clark 1983). However, the semantic implications that this analytical shift had for the licensing of object agreement were tangential to the focus of her line of research in that book and are not discussed, most likely for that reason. However, if object agreement suffixes are *not* pronouns, there is nothing that necessitates their being referential (and, by extension, specific). As far as I am aware, subsequent authors who have conducted original fieldwork on Palauan have not focused on agreement phenomena and have adopted Josephs's assumption that definiteness (or, more precisely, specificity) is what licenses object agreement.

There is another possible explanation for the claim that non-specific objects do not trigger object agreement. In previous literature, e.g. Woolford 2000, there have been attempts to draw a parallel between the presence or (apparent) absence of object agreement morphology on perfective verbs and the presence or absence of overt case marking on direct objects of imperfective verbs. Keeping this in mind, the analysis I propose in §5 does not depend on a complete parallelism between these two phenomena.

4.3   A Second Agree Relation

Object agreement in Palauan is limited to what — up to this point — have been called "perfective" verbs. Before constructing an analysis of Palauan object agreement, we must consider what is actually meant by "perfective."
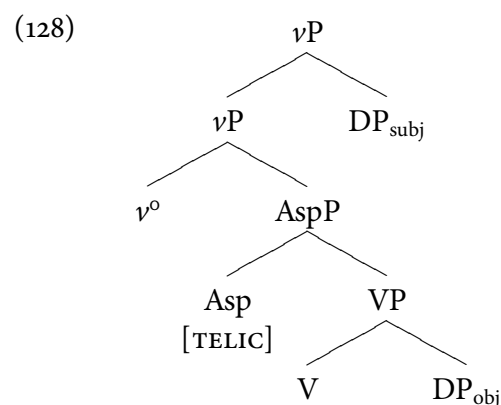
It is important to distinguish the propositional sense of "perfective" from the predicative sense of "telic" (see Comrie 1976: 16–51; Chung & Timberlake 1985: 213–240). I assume that true perfective is a propositional aspect (or viewpoint aspect; Smith 1991) that encodes evaluation of events with respect to some temporal point or interval that serves as the basis for narration (Chung & Timberlake 1985: 218), while telic is a predicative aspect that encodes what has sometimes been called *aktionsart* (see Vendler 1967), or the lexical/inherent aspect within the predication.

In Palauan, the verbs that we have been calling "perfective" should more likely be characterized as telic, but I will continue to refer to them as "perfective forms" to maintain consistency with the Palauan descriptive literature. Telic predications have a clearly delineated endpoint, whereas atelic predications do not. Argument structure figures in the computation of telicity: e.g. *draw* (atelic) vs. *draw a circle* (telic) (see also Tenny 1987, Arad 1998). Telic predications can still occur in utterances that have imperfective propositional aspect, e.g. *Julie was drawing a circle(, but she didn't finish)*. While the predicate *draw* is rendered telic by its direct object *a circle* which provides a delimited endpoint for the event, propositional aspect may dictate that the event was not actually completed (by Julie).

Travis (1992, 2005) argues that predicate-internal aspectual distinctions like telicity — i.e., what she calls *Inner Aspect* — can be encoded by syntactic heads which are realizations of Asp°. Asp°

selects a VP complement,[24] while AspP itself is selected as a complement of v°.[25] Kratzer (2004) indirectly extends Travis's proposal in her analysis of accusative case licensing in Finnish, German, and Russian. Kratzer argues that accusative case is licensed in telic predications from a projection whose head bears a feature [TELIC].[26] Kratzer's proposal is consistent with Travis's: the head she describes resembles Travis's characterization of Asp°.

If we adopt Travis's AspP and Kratzer's analysis of telic predications, the phrase structure of Palauan "perfective" (telic) vPs would be arranged according to the hierarchy in (128).

(128)

```
                          vP
                         /  \
                       vP    DP_subj
                      /  \
                    v°    AspP
                         /    \
                       Asp     VP
                      [TELIC]  /  \
                             V    DP_obj
```

If Kratzer's argument is valid — namely, that the [TELIC] feature on Asp° must be checked by a DP in its c-command domain — then the syntax of telicity feeds the semantic requirement that there be a DP to delimit the (telic) event (Tenny 1987, Ritter & Rosen 2000), i.e. what Arad (1998) calls the *measurer*. The mechanics of object agreement ensure that two conditions hold in the semantics. First, there must be a DP in the domain of Asp° in order for the event to be construed as telic. If there is no DP in the domain of Asp°, an atelic interpretation is obligatory and is reflected in the syntax by the inability of the Asp° head to agree with a *measurer* DP. Second, the morphological realization of syntactic agreement serves as a means of identifying this DP *as* the *measurer*.

I propose that the syntax of Palauan should recognize a syntactic Agree relation between a [TELIC] Asp° and a DP in its c-command domain, whereby the [TELIC] feature licenses the DP object of what might have been an intransitive verb. For this proposal to be plausible, a telic Asp° must have uninterpretable φ-features, which probe for a goal DP against which to check them. This goal DP must have an uninterpretable case feature for it to be viewed as "active" for the probe. If all these conditions hold, then an Agree relation is established between Asp° and DP, checking uninterpretable features on both. This Agree relation is registered morphologically on the verb in the form of object agreement suffixes. Below is a tree illustrating the Agree relation between Asp° and a [3SG, -HUM] DP in (129).[27]

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[24]Presumably, if a language allows predicates of categories other than V, like Palauan, Asp° can select a complement of any such category.

[25]Alternatively, Grimshaw's (2005) Extended Projection Theory would simply treat AspP as a subpart of the extended verbal projection. For present purposes, it might be simpler to bear this view in mind, though I doubt that any formal distinction can be drawn between selection and projection in the case of Palauan AspP.

[26]While the semantics of the [TELIC] feature are not directly relevant to the present discussion, see Kratzer 2004: 390–394 for her view of the semantics of [TELIC], which I believe could be applied to the Palauan predications we have been calling "perfective."

[27]The infixation of the past tense morpheme *-il-* into perfective verb forms like *k[il]l-ii* suggests that V° head-moves to Asp and then v so that it may still be visible when T° is merged. This potential head movement is irrelevant to

(129)   a.   [$_{vP}$ ḳol-ii   a bobai   *pro*]
             eat.PF-3SG.AGRO   papaya
        "*pro* eat up the/a papaya"

b.
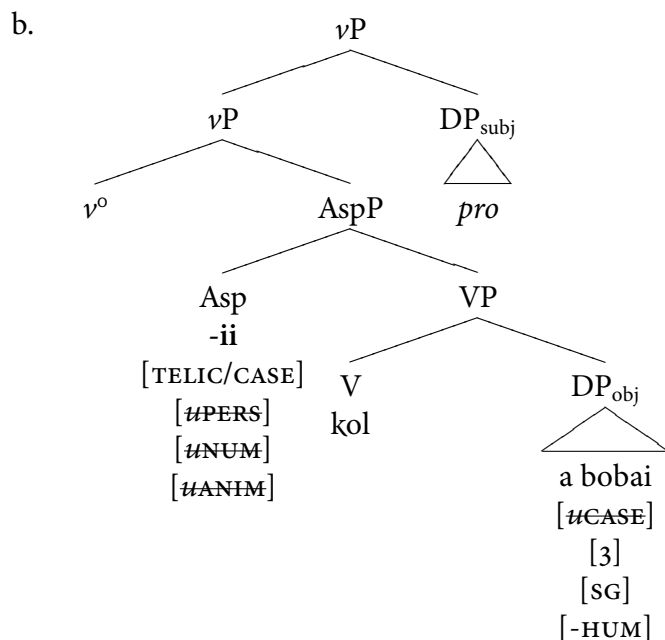
For this account to be compatible with the theory advanced by Chomsky (2000/2001), then Asp° must license case on the DP with which it agrees by checking its uninterpretable case feature [*u*CASE]. This amounts to saying that direct objects with which perfective verbs agree are licensed for case in a manner distinct from direct objects of imperfective verbs. In other words, v° licenses case on internal arguments of imperfective verbs, while Asp° licenses case on direct objects of perfective verbs.

5   Interaction of Object Agreement and Case Licensing

Two different Agree relations were posited in §3 and §4 to account for the divergent case-licensing patterns of internal arguments of imperfective and perfective verb forms in Palauan. The dual-Agree analysis relies on the assumption that direct objects of imperfective verbs are KPs, while direct objects of perfective verbs are DPs. As aspect is clearly a relevant factor in the case licensing of direct objects, I begin this section with further discussion of the integration of AspP into the extended verbal projection. Next, evidence for the KP/DP split and the two associated Agree relations is examined in the form of data illustrating the patterns of case marking of and agreement with co-ordinated objects. The implications of the combined analyses for Minimalist theory are considered last.

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my analysis, so I leave the development of the idea to future work. Though see Matushansky 2006 for an analysis of head movement which would most likely work for Palauan and remain compatible with the framework in Chomsky 2000/2001.

5.1   Telic and Atelic AspP

In §4.3, AspP was integrated into the extended verbal projection to account for agreement between telic verbs and direct objects. I now examine the ramifications of this assumption in perfective predications and attempt to extend the AspP hypothesis to imperfective predications.

In perfective (telic) predications, since the object DP's participation in the Agree relation with telic Asp° is mandatory, it cannot get case licensed by v°. In order for the analysis to be tenable, then, the theory dictates that I must posit separate v° heads that select either telic or atelic Asp° heads, but not both. The v° head that selects atelic AspPs must have uninterpretable φ-features and a case feature, while those that select telic AspPs must have neither. This split is perhaps better thought of as an instance of Extended Projection (Grimshaw 2005). In both configurations, AspP and vP are members of the extended verbal projection, and in both configurations, only one head may license case. They differ only in whether this head is Asp° or v°. The allomorphy of the verbalizer prefixes may provide evidence for a split between v° heads that select atelic AspPs and those that select telic AspPs.

Up to this point, nothing has been said about atelic Asp° heads, but morphological evidence for an atelic Asp° arises from the fact that the so-called "imperfective" verbs in Palauan contain what Josephs (1975: 137) calls the "imperfective marker." This morpheme can loosely be represented phonologically as a [+nasal] prefix, causing the first segment of a consonantal root to nasalize.[28] Since /n/ is not phonemically distinct from /ŋ/ in Palauan, the first segment in coronal-initial roots becomes /l/, the modern Palauan reflex of Proto-Austronesian *n.[29] Some example forms are listed on the next page in (130), which is an excerpt reproduced from Josephs 1975: 137-139 and augmented.

Perfective verbs that exhibit overt (or null) object agreement morphology do not exhibit the nasal morpheme associated with imperfective forms, suggesting that object agreement morphology and the imperfective morpheme are in complementary distribution.[30] This would be entirely unsurprising from the standpoint of aspect and *aktionsart*: if the imperfective morpheme signals atelicity, then it should be incompatible with perfective (telic) verb forms. For these reasons, I suggest that the imperfective morpheme is an overt realization of atelic Asp°, which would explain why it cannot appear on perfective verbs. Under this analysis of the imperfective morpheme, imperfective predications are built in exactly same way as perfective predications, as shown in (131).

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[28] Numerous examples from Josephs 1990 indicate that *m*-initial and some vowel-initial stems might contain *-u-* as an imperfective morpheme infix between the verbalizer *o-* and the root. However, I have not yet examined the dictionary exhaustively or carefully enough to make any strong claims regarding this possible allomorphy.
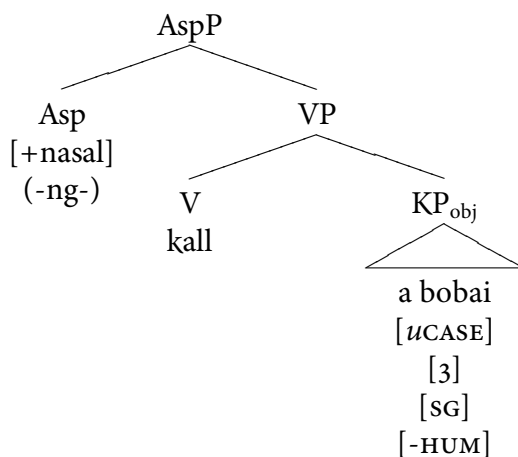
[29] Note that the first segment in [ŋ]-initial (orthographically: *ng*-initial) roots also becomes [l]. I speculate that this may be an OCP-like effect of the feature [+nasal], but see also fn. 28 for discussion of further possible allomorphy of the imperfective morpheme when attaching to nasal-initial roots.

[30] Though an alternative analysis is discussed at the end of §5.

(130) PALAUAN IMPERFECTIVE VERB FORMATION

Verbalizer	+	Imperfective Morpheme	+	Verb Stem	→	Imperfective Form
me	+	l	+	teḳoi "word, language"	→	meleḳoi "talk, speak"
me	+	l	+	dasech "carving"	→	melasech "carve"
me	+	l	+	seseb "fire"	→	meleseb "burn"
me	+	l	+	lechet "bandage"	→	melechet "put bandage on"
me	+	l	+	nguḳed "fine"	→	meluḳed "pay a fine"
me	+	ng	+	ḳiis "key"	→	mengiis "unlock"
me	+	ng	+	chaus[31] "lime"	→	mengaus "put lime on"
o	+	m	+	boes "gun"	→	omoes "shoot"

(131)

```
                AspP
              /      \
           Asp        VP
        [+nasal]     /   \
         (-ng-)     V      KP_obj
                   ḳall    /\
                          /  \
                      a bobai
                      [uCASE]
                        [3]
                        [SG]
                      [-HUM]
```

The principal syntactic difference between the telic AspP structure advanced in §4.3 and the atelic AspP structure in (131) is that the atelic Asp° head has no case feature to license the object KP. An Agree relation cannot be established in (131), which leaves the KP unlicensed for case, whereas the DP direct object in a telic predication gets case via the Agree relation in which it participates with telic Asp°. This discrepancy is why two different v° heads must be available: one needs to be active, while the other necessarily cannot be. Under the analysis I have constructed of telic and atelic Asp° heads projecting to form telic and atelic AspPs, this separation of v° can at least have standard selectional restrictions: both v° heads select an Asp head. Once again, if the relationship between v° and AspP is characterized as one of extended projection rather than pure selection, the complementarity between the case-licensing capabilities of v° in atelic predications and Asp° in telic predications is conceptually more natural.

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[31]The Palauan orthographic representation of the glottal stop [ʔ] is *ch*.

Fortunately, it appears that there is also morphophonological evidence that Palauan has at least two v^o heads in its lexical inventory, if what I have been calling the verbalizer morphemes are overt instances of v^o. Imperfective verb forms may be prefixed either with *me-* or its phonologically conditioned allomorph *o-*, while perfective verb forms may exhibit an infix *-(e)m-*, *-o-*, or a null allomorph Ø. The phonological facts divide cleanly to pattern with the discrepancies in featural composition and selectional restrictions of the two v^o heads I have posited, the properties of which are summarized in (132).

(132) CLASSIFICATION OF TRANSITIVE v^o HEADS IN PALAUAN

	Label	Phonological Form	Features	Selects
$v^o{}_1$	*Atelic v^o*	*me-, o-*	[CASE]	Asp
$v^o{}_2$	*Telic v^o*	*-(e)m-, -o-, Ø*	Ø	Asp[32]

I have now argued that AspP is present in all active predications in Palauan in the same articulated vP structure advanced by Travis (1992, 2005), providing some clarification of how the two Agree relations are integrated into the extended verbal projection. I now offer evidence for an Agree-based analysis of case-licensing based on data involving conjoined DP direct objects.

5.2 Coordinated Objects

Coordinated DPs in Palauan take the form [DP *me* DP], where *me* is a conjunction. There has been a great deal of disagreement regarding what the category of the constituent formed from the conjoined DPs is. Munn (1993) and Zoerner (1995) advocate an asymmetric structure &P. &^{o} heads a 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 in Chomsky 2000/2001, the distinction between specifiers and adjuncts is reduced to the selectional properties of the head of the projection. Finessing this issue, I give a schematic representation of &P in (133), below.

(133) STANDARD VIEW OF &P:

    a. [&P se   el   ringngo me aike   el   tuu]
            that.NONHUM LNK apple   and those.NONHUM LNK banana
            "that apple and those bananas"

    b.

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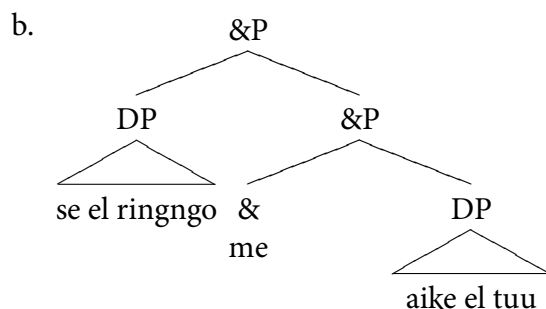
[32]It is not necessary to stipulate that Telic v^o select an Asp projection that bears the feature [TELIC]. If we let Telic v^o combine with any kind of AspP complement, then the only derivations that will converge will be the ones in which AspP has the [TELIC] feature. Otherwise, transitive atelic vP predications will contain internal arguments that cannot get case, causing the derivation to crash.

What is immediately relevant is that, assuming the configuration in (133), the left-conjunct DP is syntactically more prominent than the right-conjunct DP due to the asymmetric c-command relation between the left-conjunct DP and the right-conjunct DP.

5.2.1 Coordinated Objects of Imperfective Verbs

Now that a syntax for coordinated DPs has been proposed, let us examine the behavior of coordinated DP direct objects of imperfective verbs. If the analysis in §3 is correct, then v^o will establish an Agree relation with the most local active KP in the coordinate structure. However, there is evidence — examined below — that there is just one K^o head that is sister to an &P containing coordinated DPs. In (133), the left-conjunct DP asymmetrically c-commands the right-conjunct DP: the left conjunct is more prominent. We might therefore expect the φ-feature values of the left conjunct to determine whether the overt case marker *er* will surface. This is precisely what we find.
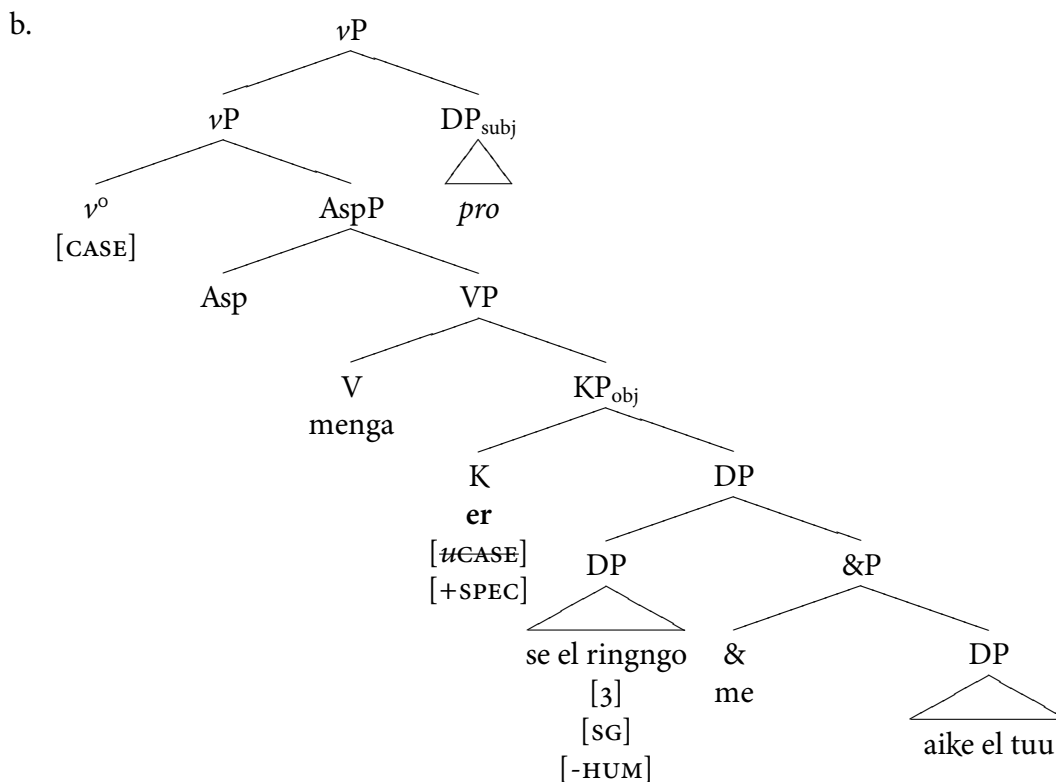
Coordinated direct objects consisting of two DPs do not combine their feature values. If the features of the left conjunct DP would condition the presence of overt *er* on its own, *er* is licensed to mark the entire coordinate structure. This is the scenario in (134). That both DPs are demonstratives in (134) nullifies the Specificity Effect, but the second DP is [3PL, -HUM] which should ordinarily trigger the Number-Animacy Effect, blocking overt case marking on this DP. Nevertheless, the features of the left conjunct are [3SG, -HUM], and the entire coordinated direct object must be marked with *er*.

(134) Ak   m[il]engang   *(er) se   el ringngo me aike   el tuu
      1SG.AGRS eat.IMPF[PAST] PREP that.NONHUM LNK apple   and those.NONHUM LNK banana
      pro.
      I
      "I was eating that apple and those bananas."

One might object that the feature values on each DP in the coordinated direct object determine whether that DP will be marked with *er* or not. In other words, the second DP might very well actually be a KP with a null K^o in a structure where KPs — and not DPs — are conjoined. (135) suggests that this is not the case. When the two conjuncts in (134) are inverted, *er* does not mark either conjunct. (136) illustrates the *v*P-internal syntax of (134), which can be modified simply to accommodate (135) according to the analysis laid out in §3.

(135) Ak   m[il]engang   (*er) aike   el tuu   me se   el ringngo
      1SG.AGRS eat.IMPF[PAST] PREP those.NONHUM LNK banana and that.NONHUM LNK apple
      pro.
      I
      "I was eating those bananas and that apple."

(136) a. [$_{vP}$ mengang **er** **se**   **el ringngo me aike**   **el tuu**   *pro*]
               eat.IMPF PREP that.NONHUM LNK apple   and those.NONHUM LNK banana
           "*pro* be eating that apple and those bananas"

b.

```
                              vP
                    ┌─────────┴─────────┐
                   vP                  DP_subj
            ┌───────┴───────┐            △
           v°             AspP          pro
         [CASE]      ┌──────┴──────┐
                    Asp           VP
                           ┌───────┴───────┐
                           V             KP_obj
                         menga      ┌──────┴──────┐
                                    K            DP
                                   er      ┌──────┴──────┐
                                [uCASE]    DP           &P
                                [+SPEC]     △      ┌─────┴─────┐
                                      se el ringngo &         DP
                                           [3]     me          △
                                          [SG]           aike el tuu
                                         [-HUM]
```

The contrast between the obligatory presence of the overt case marker *er* in (134) and its obligatory exclusion in (135) strongly suggests that the feature values of the left conjunct condition the DOM pattern when the direct object is conjoined. Furthermore, the lack of overt *er* on the second conjunct in (135) strongly supports the idea that it is indeed DPs that are conjoined, not KPs. If coordination establishes an asymmetric c-command relation in which the left conjunct is higher than the right conjunct, then the left conjunct serves as an intervener blocking Agree between $v°$ and the right conjunct. Relativized Minimality (Rizzi 1990) would then cause the probe to agree with the left conjunct.

5.2.2   Coordinated Objects of Perfective Verbs

Coordinated DP objects also provide evidence for an Agree-based analysis of direct objects of perfective verbs. In §4, I argued that direct objects of perfective verbs are DPs licensed by an Agree relation between a telic Asp° and the object DP. The animacy and φ-feature values of the direct object DP determine which object agreement morpheme will suffix onto the verb. Under the formulation of Agree developed in Chomsky 2000/2001 and the analysis of coordinated DPs given in (133), it is predicted that the feature values of the left conjunct will function in selecting the correct paradigm member from the set of object agreement suffixes.

Again, the data indicates that this is the situation that holds: perfective verb forms agree with left conjunct DPs. The [3SG] object agreement suffix in (137) matches the φ-feature values of the left conjunct *se el ringngo* "that apple," not the right conjunct *aike el tuu* "those bananas." When the conjuncts are inverted as in (138), the object agreement suffix changes to the null -Ø form that corresponds with [3PL, -HUM] φ-feature values, as I argued in §4.1.

(137) Ak   mo   kol-ii   se   el ringngo me aike   el
      1SG.AGRS FUT.AUX eat.PF-3SG.AGRO that.NONHUM LNK apple   and those.NONHUM LNK

      tuu   *pro.*
      banana I

      "I am about to eat that apple and those bananas."

(138) Ak   mo   ḳmang-Ø   **aike**   el tuu   me
      1SG.AGRS FUT.AUX eat.PF-3PL.NONHUM.AGRO those.NONHUM LNK banana and

      se   el ringngo *pro.*
      that.NONHUM LNK apple   I

      "I am about to eat those bananas and that apple."

Assuming the analysis of coordination in (133), the data in (137) and (138) supports the Agree-based analysis advocated in §4 for the same reason that the data in (134) and (135) provided evidence for Agree between v^o and a KP in its c-command domain. Since Agree depends on Relativized Minimality, it follows that the asymmetric hierarchical relations between the two DPs in a conjoined object would figure in the sharing of features between the probe and only one conjunct DP. I give a schematized representation in (139) of the vP-internal syntax of a perfective predication that includes a conjoined direct object.

(139)   a. [$_{vP}$ koḷii   se   el ringngo me aike   el tuu   *pro*]
            eat.PF-3SG.AGRO that.NONHUM LNK apple   and those.NONHUM LNK banana

        "*pro* be about to eat that apple and those bananas"

        b.
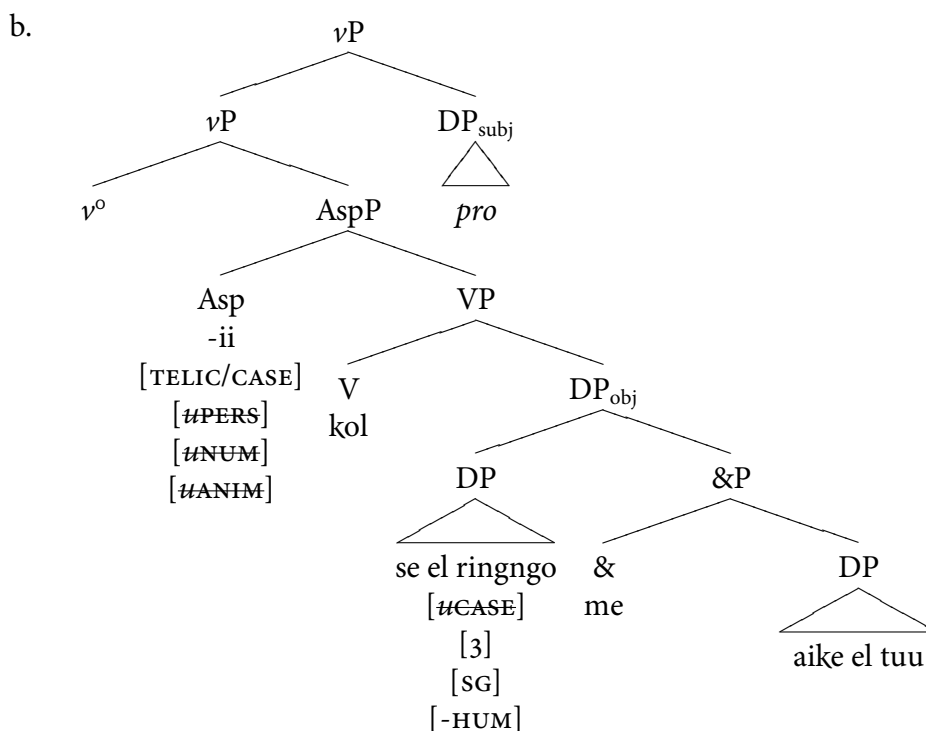
5.3 Theoretical Implications

The fact that the left conjunct in a conjoined direct object conditions the presence or absence of *er* in imperfective predications and determines the appropriate object agreement suffix on perfective verb forms strongly supports the dual-Agree based analysis I laid out in §4 and §5. The data further supports the KP status of direct objects of imperfective verbs. What has not yet been discussed is *why* direct objects of imperfective verbs are KPs while direct objects of perfective verbs are DPs.

   Let us recall the pattern. Direct objects of perfective verbs *never* display overt case marking with the preposition *er*, even when a DP with an identical featural composition would be marked with *er* if it were selected as the direct object of an imperfective verb. The minimal pair in (140) and (141) illustrates this fact.

(140) Ak   ḳol-ii   se   el   ringngo *pro.*
       1SG.AGRS eat.PF-3SG.AGRO that.NONHUM LNK apple   I
       "I am about to eat that apple."

(141) Ak   menga **er   se**   el   ringngo *pro.*
       1SG.AGRS eat.IMPF PREP that.NONHUM LNK apple   I
       "I am eating that apple."

If *se el ringngo* were licensed for case in the same manner in both (140) and (141) and the overt occurrence of *er* is conditioned by feature values of its complement, then the discrepancy between overt and null case-marking would be mysterious because the DP has the same feature values in both sentences.

   When two distinct Agree relations are recognized, one in which v^o is a probe and a separate one in which telic Asp° is a probe, then the difference in case marking between (140) and (141) can be explained. DOM is a hallmark of nominals that are case-licensed by v^o (i.e. KPs), while object agreement is a hallmark of case licensing of nominals from telic Asp° (i.e. DPs). This much is straightforward. The problem, however, is how the direct object DP itself knows that it will later be licensed by v^o or telic Asp°. Put differently, how can a KP be built before the necessary information about whether a KP can be licensed is even available?

   The assumptions laid out in the present framework (Chomsky 2000/2001) stipulate that phrase structure is built up through the operations Merge (or, alternatively, External Merge) and Move (or, Internal Merge). The Extension Condition further stipulates that any Merge or Move operation must extend the tree upward. That is, nothing can be merged with anything that has already been merged with something else. To illustrate the functionality of the Extension Condition schematically, I provide the diagram in (142), which illustrates an illicit Merge operation.

(142)   *

                    α   α
                  ╱   ╲   +   X   →   ╱   ╲
                β   γ   β   XP
                                                                    ╱   ╲
                                                                  X   γ
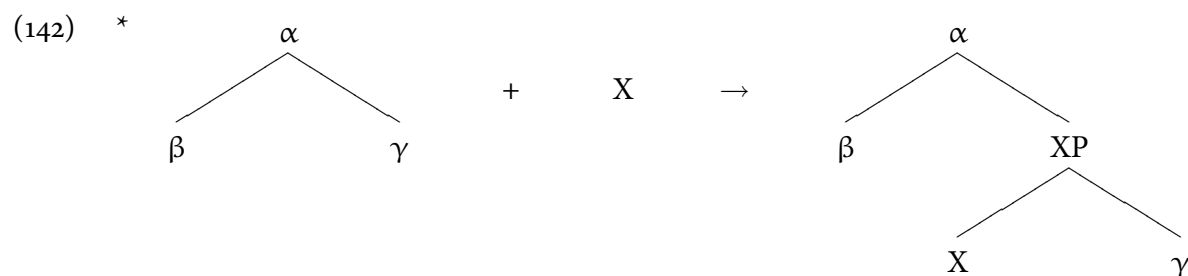
The problem in Palauan is that, to satisfy the Extension Condition, direct objects must be built up as DPs or KPs *before* they are selected by a verb. That is, if a K° head must merge with a DP, it must

do so before the syntax provides any information about whether a KP is even licensed as a direct object.

One solution, very common in the Minimalist framework, is to assume that any set of lexical and functional heads can occupy the numeration but only certain combinations can lead to converging derivations. That is, if a KP is built from the numeration and then merged as the direct object of a telic verb, then the derivation will crash. Similarly, if a DP is built from the numeration and then is merged with an atelic verb, the derivation will crash.

Even this solution provides no rationale for *why* imperfective predications license KPs while perfective predications license DPs. I suggest that the answer may stem from the crosslinguistic observation (in Arad 1998: 77–78) that measuring objects of telic predicates are uniformly marked for accusative case, whereas direct objects of atelic predicates may be marked with any object case available in the language (e.g. accusative, dative, partitive, ablative, genitive, etc.). Up to this point, I have set this issue aside, remaining agnostic about what exact case is licensed by telic Asp° and v°. If Arad's observation is correct, then it is possible that case licensed by telic Asp° is accusative, whereas case that is marked by K° might be better off being called something else. In this sense, Palauan would more closely mirror the situation in Finnish, where accusative case marking on a direct object implies a telic, perfective interpretation of the verbal predication, whereas partitive case marking implies an atelic or imperfective interpretation (see Kiparsky 1998 and references therein for details). If this parallel between Palauan and Finnish is valid, the difference would simply be that the Agree relation that licenses accusative case in Palauan is registered by head-marking morphology, while the Palauan equivalent of Finnish partitive is registered by dependent-marking morphology.

At this point, one may question whether (and which of) my assumptions are empirically motivated and which are solicited by the framework in which I am working. The dual-Agree analysis advanced in this paper is constructed from a number of pieces that I attempted to motivate individually. The two most important components of the analysis are (i) the aspectually correlated KP/DP split, and (ii) the distribution of case licensing features within the extended verbal projection. I turn to both of these points below in turn.

The KP/DP split, in which I argued that direct objects of imperfective verbs are KPs and direct objects of perfective verbs are DPs, was motivated empirically by the coordination data in §5.2. Beyond what I have speculated in this section, I have nothing further to say about why this split occurs. In a theory like Minimalism where all nodes on a phrase structure tree are either bundles of features taken from the numeration (and, by extension, the lexicon) or projections of these bundles of features, it is interesting — and perhaps problematic — that there is a class of lexical items in Palauan (the K° functional heads) that may appear only on DPs serving one particular grammatical relation: direct objects of imperfective verbs. In theory-internal terminology, K° heads are only compatible with DPs whose [uCASE] features have been checked (or will be checked) by a particular head (atelic v°), if my analysis is correct.

I also argued that there were two independent case licensing mechanisms for direct objects: case licensing by telic Asp° on one hand, and by atelic v° on the other. In §5.1 I argued that this analysis forces me to posit two separate v° heads, each one being able to select atelic AspP or telic AspP, but not both. I cited morphological evidence for this division of v° into two lexical items on the basis of the allomorphy of the Palauan verbalizer morphemes. I think it is worth considering, however, whether these v° heads might subsume the functionality of the Asp° heads argued for in this paper. I believe that an alternate analysis of this sort may in fact be possible.

What might it look like? If we eliminate AspP from the extended verbal projection, then several revisions to the analysis must be made as well — most of which involve redistributing the work of the Asp° heads onto the *v*° heads. First, direct objects of perfective verbs must be case licensed by a different head. The most natural choice is telic *v*°, the head that would have selected telic AspP. This shifting of the [CASE] feature upwards to *v*P establishes unity between telic and atelic predications: in both, case is then licensed by *v*°. Second, the locus of aspectual information can no longer be situated in AspP: it might be argued that *v*° itself might bear a [TELIC] feature or not, giving a tight explanation of the allomorphy between the verbalizer infixes (in telic predications) and the verbalizer prefixes (in atelic predications). Third, the imperfective morpheme can no longer be generated as an overt instance of atelic Asp°. The most natural revision would be to make it part of the imperfective prefixes, e.g. *om-* + *boes* → *omoes* "shoot" or *meng-* + *kiis* → *mengiis* "unlock."[33] Finally, the appearance of object agreement suffixes on perfective verbs must be triggered by a different mechanism. Under this revised analysis, the suffixes cannot be overt instances of telic Asp°, so one might argue that they appear on the verb itself (i.e. on V°. Rather than positing verb movement from V° to Asp°, it might be said that Palauan V° heads carry no aspectual information of their own, and that this information is introduced by the later merge of telic *v*° (with its associated uninterpretable [PERSON], [NUMBER], and [ANIMACY] features). The valuation of these uninterpretable features via Agree could ensure lexical insertion of the appropriate verb form (inflected for object agreement) at PF if we assume some sort of feature-sharing mechanism like Extended Projection (Grimshaw 2005).

I believe that the choice between these two analyses remains a matter of preference for one implementation over another. The research of Tenny (1987), Travis (1992, 2005), Arad (1998), Ritter & Rosen (2000), and Kratzer (2004) has furnished us with new ways of thinking about the relationships between verbs and their arguments. I have attempted to follow this line of research by showing that the apparently very idiosyncratic case-marking pattern of direct objects in Palauan can be given a straightforward syntactic analysis that centers around the distinction between telic and atelic aspect. Whether or not aspect is encoded on a functional head Asp — as I have implemented it here — is not crucial to the analysis, but I believe it serves to highlight the pivotal role that aspect plays in the case marking system in Palauan, as well as to draw potential parallels between the Palauan case-marking system and other languages whose syntactic behavior relies on distinctions in aspect.

That there are two divergent direct object case-licensing strategies in Palauan is also interesting from a typological perspective. Nichols (1986) argues that head-marking grammars are the unmarked type for verb-initial languages (like Palauan), as they set up the relations between heads and their dependents clause-initially. She states further that "many consistently dependent-marking languages exhibit verbal agreement with one or two arguments; but few consistently head-marking languages have an analogous dependent-marked pattern" (Nichols 1986: 104). It is worth asking whether Palauan could be such a language. The answer seems to me to be yes. Palauan is a verb-initial language, and it is *almost* entirely head-marking: the subject triggers subject agreement morphology clause-initially even though the subject itself is typically clause-final, perfective verbs agree with their direct objects, and (most) nouns agree with their possessors. The only arguments of verbs that do not trigger head-marking agreement morphology are direct objects of imperfective verbs. In this sense, Palauan is a mixed system.

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[33]This analysis is also entertained by DeWolf (1988).

6   Conclusion

I have argued for an articulated structure of Palauan verbal predications that encodes aspectual differences in vP, AspP, and VP. These three projections work together to construct an extended system of case-licensing on internal arguments of transitive verbs. I summarize the system below as succinctly as possible.

In this paper, I focused on an explanation of transitive imperfective (atelic) predications, though they may also be intransitive.If they are intransitive, then the verb stem in V° merges with an atelic Asp° to form AspP, which merges with intransitive v° to form vP. The subject is then merged into vP. In an imperfective transitive predication, the verb stem in V° merges with a direct object KP, forming a VP. This VP is selected by atelic Asp°, with which it merges to form AspP. Atelic Transitive v° is merged with AspP, and it licenses case on the KP complement of V° via Agree, and a transitive vP is formed. The subject is then merged.

Transitive perfective (telic) predications were also considered. Perfective predications may not be intransitive due to the semantic restrictions on delimitedness that the internal argument must satisfy (Tenny 1987). Either way, the verb stem in V° merges with a direct object DP, forming a VP. That this is a DP and not a KP can be determined by the fact that it does not participate in DOM and never exhibits overt case marking. The VP is then selected by telic Asp°, with which it merges to form AspP. The [TELIC] feature on Asp° instantiates an Agree relation with the DP complement of V°, which is registered morphologically as an object agreement suffix on the verb, and the DP is licensed for case. Telic Transitive v° merges with telic AspP, and a transitive vP is formed. The subject is then merged.

Though this analysis may initially seem idiosyncratic, I believe that there are several good reasons to adopt it. I have shown that an analysis that focuses solely on specificity distinctions cannot account for the differential object marking phenomenon, due to the influence of number and animacy features on the alternation between overt and null case marking. In other words, the presence of Palauan *er* as a K° head does not necessarily indicate that the DP it marks is specific: all non-specific human singluar DPs are also marked with *er*. Conversely, the absence of *er* does not necessarily indicate that a DP is non-specific: no 3rd person plural non-human DPs can be marked with *er* either, even if they are specific. In other words, a tree-splitting account (Diesing 1992) of Palauan differential object marking will not work.[34] If *er* were simply a syntactic marker that indicated that the DP it marks must move out of the VP at LF to receive a specific interpretation (by avoiding existential closure), then the marking of all human objects with *er* — even if they are non-specific — would pose a problem for this analysis, as would the lack of *er* on specific plural inanimate DPs.

In response, I have argued that *er* and its null counterpart Ø are simply co-varying forms of a syntactic case marker that sits in K°, licensed by transitive v°, as in English. Since objects of perfective verbs never exhibit overt case marking and thus do not participate in DOM, I posited that they are DPs — not KPs — and receive case from a different source. Following Kratzer (2004), I assume that an Asp° that bears the feature [TELIC] can license case on a DP it agrees with. This is the analysis I adopted for transitive perfective verbs because not only do direct objects that trigger agreement not bear overt case marking, but object agreement morphology also appears only on perfective (telic) verb forms. Evidence from conjoined DPs suggested that the dual-Agree-based analysis I constructed for direct objects of imperfective and perfective verbs was correct, including

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[34]But see Woolford 2000 for an OT analysis based on Diesing's (1992) Mapping Hypothesis.

the notion that nominals that are case-licensed by telic Asp° are DPs and nominals that are not are KPs.

Woolford (2000: 244) emphasizes that "the striking difference that aspect makes in the behavior of objects in Palauan cannot be easily accounted for using conventional syntactic mechanisms." This is exactly the type of account I have attempted to construct in this paper. If this analysis proves correct, then it is my hope that it might serve as a foundation for other linguists and inspire further research on other areas of Palauan syntax.

References

Aissen, Judith. 2003. Differential Object Marking: Iconicity vs. Economy. *Natural Language & Linguistic Theory* 21:435–483.

Arad, Maya. 1998. VP-Structure and the Syntax-Lexicon Interface. Doctoral Dissertation, University College London. Published as MITOPL 16.

Bossong, Georg. 1985. *Empirische Universalienforschung: differentielle Objektmarkierung in den neuiranischen Sprachen*. Tübingen: Gunter Narr Verlag.

Capell, Arthur. 1949. *A Grammar of the Language of Palau*. Coordinated Investigation of Micronesian Anthropology (CIMA) 1947–1949. Part 6b of the Final Report to the Pacific Science Board, National Research Council.

Chomsky, Noam. 2000. Minimalist Inquiries: the Framework. In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, Mass.: MIT Press.

Chomsky, Noam. 2001. Derivation by Phase. In *Ken Hale: a Life in Language*, ed. Michael Kenstowicz, 1–52. Cambridge, Mass.: MIT Press.

Chung, Sandra. 1998. *The Design of Agreement: Evidence from Chamorro*. Chicago: University of Chicago Press.

Chung, Sandra, and Carol Georgopoulos. 1988. Agreement with Gaps in Chamorro and Palauan. In *Agreement in Natural Language: Approaches, Theories, Descriptions*, ed. Michael Barlow and Charles A. Ferguson, 251–267. Stanford: CSLI.

Chung, Sandra, and Alan Timberlake. 1985. Tense, Aspect, and Mood. In *Language Typology and Syntactic Description. Volume III: Grammatical Categories and the Lexicon*, ed. Timothy Shopen, 202–258. Cambridge/New York: Cambridge University Press.

Clark, Robin. 1983. Clitics in Palauan. Master's thesis, University of California, Los Angeles.

Comrie, Bernard. 1976. *Aspect*. Cambridge/New York: Cambridge University Press.

Comrie, Bernard. 1989. *Language Universals and Linguistic Theory*. Chicago: University of Chicago Press.

Dahl, Östen. in press. Animacy and Egophoricity: Grammar, ontology, and phylogeny. *Lingua* .

DeWolf, Charles M. 1988. Voice in Austronesian lanugages of Philippine type: passive, ergative, or neither? In *Passive and Voice*, ed. Masayoshi Shibatani, 143–193. Amsterdam: John Benjamins.

Diesing, Molly. 1992. *Indefinites*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 20).

Enç, Mürvet. 1991. The Semantics of Specificity. *Linguistic Inquiry* 22:1–25.

Farkas, Donka. 2002. Specificity Distinctions. *Journal of Semantics* 19:1–31.

Georgopoulos, Carol. 1986. Palauan as a VOS language. In *FOCAL I: Papers from the Fourth*

International Conference on Austronesian Linguistics, ed. Paul Geraghty, Lois Carrington, and Stephen A. Wurm, 187–198. Canberra: Pacific Linguistics, C-93.

Georgopoulos, Carol. 1991. *Syntactic Variables: Resumptive Pronouns and A' Binding in Palauan.* Dordrecht: Kluwer.

Grimshaw, Jane. 2005. *Words and Structure.* Stanford: CSLI.

Hagège, Claude. 1986. *La Langue Palau: une Curiosité Typologique.* Munich: Wilhelm Fink Verlag.

Josephs, Lewis. 1975. *Palauan Reference Grammar.* Honolulu: University of Hawaii Press.

Josephs, Lewis. 1990. *New Palauan-English Dictionary.* Honolulu: University of Hawaii Press.

Josephs, Lewis. 1997. *Handbook of Palauan Grammar: Volume I.* Koror: Ministry of Education, Republic of Palau.

Josephs, Lewis. 1999. *Handbook of Palauan Grammar: Volume II.* Koror: Ministry of Education, Republic of Palau.

Kadmon, Nirit, and Fred Landman. 1993. Any. *Linguistics and Philosophy* 16:353–422.

Karttunen, Lauri. 1969. Discourse Referents. In *The Proceedings of the 1969 International Conference on Computational Linguistics [COLING 69]*. Sång-Säby, Sweden.

Karttunen, Lauri. 1976. Discourse Referents. In *Syntax and Semantics, Volume 7*, ed. James McCawley, 363–385. New York: Academic Press.

Kiparsky, Paul. 1998. Partitive Case and Aspect. In *The Projection of Arguments: Lexical and Compositional Factors*, ed. Miriam Butt and Wilhelm Geuder, 265–307. Stanford: CSLI.

Kratzer, Angelika. 2004. Telicity and the Meaning of Objective Case. In *The Syntax of Time*, ed. Jacqueline Guéron and Jacqueline Lecarne, 389–423. Cambridge, Mass.: MIT Press.

Ladusaw, William. 1979. Polarity Sensitivity as Inherent Scope Relations. Doctoral Dissertation, University of Texas, Austin. Published by the Indiana University Linguistics Club, 1980.

Ladusaw, William. 1994. Thetic and Categorical, Stage and Individual, Weak and Strong. In *Proceedings of the 4th Conference on Semantics and Linguistic Theory [SALT IV]*, ed. Mandy Harvey and Lynn Santelmann, 220–229. Ithaca: Cornell University, Department of Modern Languages and Linguistics.

Lazard, Gilbert. 1982. Le morphème *râ* en persan et les relations actancielles. *Bulletin de la société de linguistique de Paris* 73:177–208.

Li, Charles N., and Sandra Thompson. 1981. *Mandarin Chinese: A Functional Reference Grammar.* Berkeley/Los Angeles: University of California Press.

Matushansky, Ora. 2006. Head Movement in Linguistic Theory. *Linguistic Inquiry* 37:69–109.

Menéndez-Benito, Paula. 2005. The Grammar of Choice. Doctoral Dissertation, University of Massachusetts, Amherst.

Milsark, Gary. 1974. Existential Sentences in English. Doctoral Dissertation, MIT. Published 1979, New York: Garland.

Milsark, Gary. 1977. Toward an Explanation of Certain Peculiarities of the Existential Construction in English. *Linguistic Analysis* 3:1–30.

Munn, Alan. 1993. Topics in the Syntax and Semantics of Coordinate Structures. Doctoral Dissertation, University of Maryland, College Park.

Nichols, Johanna. 1986. Head-Marking and Dependent-Marking Grammar. *Language* 62:56–119.

Pätzold, Klaus. 1969. Die Palau-Sprache und ihre Stellung zu anderen indonesischen Sprachen. Doctoral Dissertation, Universität Hamburg.

Prince, Alan, and Paul Smolensky. 1993. *Optimality Theory: Constraint Interaction in Generative Grammar.* New Brunswick, NJ: Rutgers University Center for Cognitive Science. Technical Re-

port RuCCS-TR-2. [Available on the Rutgers Optimality Archive: ROA-537] Published Malden, Mass.: Blackwell, 2004.

Reuland, Eric. 1988. Indefinite Subjects. In *Proceedings of the 18th Annual Meeting of the North East Linguistic Society [NELS 18]*, ed. James Blevin and Juli Carter, 375–395. Amherst, Mass.: GLSA.

Ritter, Elizabeth, and Sara Rosen. 2000. Event Structure and Ergativity: the Converging Perspectives of Lexical Semantics and Syntax. In *Events as Grammatical Objects*, ed. Carol Tenny and James Pustejovsky, 187–238. Stanford: CSLI.

Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, Mass.: MIT Press.

Smith, Carlota. 1991. *The Parameter of Aspect*. Dordrecht: Kluwer. 1997, 2nd edition.

Smith-Stark, T. Cedric. 1974. The Plurality Split. In *Papers from the Tenth Regional Meeting of the Chicago Linguistic Society [CLS 10]*, ed. Michael W. La Galy, Robert A. Fox, and Anthony Bruck, 657–671. Chicago: Chicago Linguistic Society.

de Swart, Peter. 2007. Cross-linguistic Variation in Object Marking. Doctoral Dissertation, Radboud Universiteit Nijmegen. Published in the LOT Dissertation Series (no. 168).

Tenny, Carol. 1987. Grammaticalizing Aspect and Affectedness. Doctoral Dissertation, MIT.

Travis, Lisa. 1992. Inner Aspect and the Structure of VP. *Cahiers de Linguistique de l'UQAM* 1:130–146.

Travis, Lisa. 2005. Articulated vPs and the Composition of Aspectual Classes. In *Aspectual Inquiries*, ed. Paula Kempchinsky and Roumyana Slabakova, 69–94. Dordrecht: Springer.

Vendler, Zeno. 1967. *Linguistics in Philosophy*. Ithaca: Cornell University Press.

Walleser, P. Salvator. 1911. Grammatik der Palausprache. *Mitteilung des Seminars für Orientalische Sprachen* 14:121–231.

Waters, Richard. 1980. Topicalization and Passive in Palauan. Ms., MIT.

Woolford, Ellen. 2000. Object Agreement in Palauan: Specificity, Humanness, Economy and Optimality. In *Formal Issues in Austronesian Linguistics*, ed. Ileana Paul, Vivianne Phillips, and Lisa Travis, 215–245. Dordrecht: Kluwer.

Zoerner, Cyril Edward. 1995. Coordination: the Syntax of &P. Doctoral Dissertation, University of California, Irvine.