

## ON DOWNWARD-ENTAILING EXISTENTIALS AND DIFFERENTIAL OBJECT MARKING IN PALAUAN\*

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Josephs (1975) describes two distinct phenomena in Palauan that may be classified as differential object marking (DOM—Comrie 1979; Bossong 1985; Aissen 2003; de Swart 2007). I call them *imperfective differential object marking* (I-DOM) and *perfective differential object agreement* (P-DOA). In I-DOM, the direct object of an imperfective verb may either co-occur with the overt accusative case marker *er* or bear no morphological case, an alternation conditioned by the animacy and definiteness hierarchies argued to govern DOM patterns in many other languages. By contrast, the direct object of a perfective verb is never case-marked, but the DP triggers object agreement on the verb that matches its  $\phi$ -features. Still, not every direct object triggers agreement—this “differential object agreement” constitutes P-DOA. Josephs (1975), Georgopoulos (1991), and Woolford (2000) hypothesize that the class of DPs that are not case-marked under I-DOM is identical to the class of DPs that do not trigger object agreement morphology under P-DOA. Despite the significant overlap between these two classes, I offer empirical evidence that they are not entirely identical: singular, non-human, non-specific DPs are not case-marked in I-DOM, but they do trigger object agreement in P-DOA. The evidence arises from two different areas of Palauan syntax: the licensing of NPIs and the existential construction’s definiteness effect. If the proposed analysis is correct, then the Palauan data reveals that the pertinent features governing DOM alternations (e.g. specificity, humanness, etc.) may differ not only across languages, but even across constructions within a single language.

### 1. Differential Object Marking Systems

Differential object marking (DOM) phenomena have been noted in languages from a variety of different families around the world (for examples, see Comrie 1979; Bossong 1985; Aissen 2003; de Swart 2007; and many others). DOM phenomena are characterized by non-uniform morphological case-marking of direct object DPs, and whether or not a given DP is marked depends on the DP’s

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features. It has been observed (Aissen 2003: 436) that the higher in prominence a direct object is, the more likely it is to be overtly case-marked. Prominence can be measured along the animacy and definiteness scales—see (1) and (2) below—and possibly others.

- (1) ANIMACY SCALE: Human > Animate > Inanimate
- (2) DEFINITENESS SCALE: Pronoun > Proper name > Definite DP > Specific indefinite DP > Non-specific indefinite DP

Prominence is measured in opposite directions depending on whether subjects or objects are being considered. Aissen formulates a robust cross-linguistic analysis of DOM in which different languages may draw cutoffs at different points along the prominence scales, resulting in different types of differential object marking systems. Aissen's analysis predicts that if morphological case marking is obligatory (or optional) for a direct object DP with feature values that place it at some position on the animacy and definiteness scales, then it is also obligatory (or optional) for any other DP with features that place it at any higher position on the scales.

Morphologically, DOM comes in two flavors. In dependent-marking languages (such as Hindi, Indo-European; see Mohanan 1994), a case marker appears on the DP direct object. In head-marking languages (such as Kiyaka, Bantu; see Kidima 1987), object agreement morphology appears on the verb. Cross-linguistically, languages are typically either head-marking or dependent-marking (Nichols 1986) and thus ordinarily employ either the case marker strategy or the object agreement strategy in the differential marking of direct objects, but not both strategies. However, Palauan provides an example of a language that not only has both dependent-marking and head-marking properties but also utilizes both morphological differential object marking strategies.

## 2. Differential Object Marking in Palauan

Palauan is a Western Austronesian VO(X)S language with approximately 15,000 speakers in the Republic of Palau. Palauan features a typically Austronesian syntax: there are predicates of any lexical category and no copula, all major syntactic categories are head-initial, and there is widespread subject (left-)topicalization (see Josephs 1975; Waters 1980; Hagège 1986; Georgopoulos 1991; Lemaréchal 1991 for details). Palauan's dependent-marking and head-marking DOM systems are conditioned by the aspect of the verb.<sup>1</sup> To distinguish the two systems, I call them *imperfective differential object marking* (I-DOM) and *perfective differential object agreement* (P-DOA). Below in (3) and (4), examples of direct object DPs with various degrees of animacy and definiteness are provided with the marking conditioned by I-DOM and P-DOA, respectively.<sup>2</sup>

<sup>1</sup> Henceforth, the terms *imperfective* and *perfective* aspect will be used pre-theoretically to identify the morphological variants of the verbs, following the Palauan literature. This usage should not be taken to imply that the Palauan aspectual system necessarily exhibits the properties of more familiar aspectual systems in other languages. An investigation of the interesting semantic and pragmatic properties of the Palauan aspectual system must be left aside.

<sup>2</sup> The verbs in (3) and (4) are all formed from the root  $\sqrt{kal} \approx$  'food.' The morphemes *meN-* and *oN-* are allomorphs of the imperfective verbalizer prefix, while *-m-* and *-o-* are allomorphs of the perfective verbalizer infix (Nuger 2007; see also Wilson 1972 and Flora 1974). The *bek-* prefix is a causative/applicative morpheme (Nuger forthcoming; see also Josephs 1975, 1997, 1999).

- (3) I-DOM: inanimate direct objects bear ACC case marker, *er*, if singular AND specific. All human direct objects are case-marked.<sup>3</sup>
- a. Ng menga (>  $\sqrt{k\bar{a}l}$  + *meN-*) er a meradel a sechelik.  
3SG eat.IMPFV ACC orange my.friend  
“My friend is eating *an orange* (i.e., *a particular orange*)/*the orange*.”
  - b. Ng menga (>  $\sqrt{k\bar{a}l}$  + *meN-*) a meradel a sechelik.  
3SG eat.IMPFV orange my.friend  
“My friend is eating *oranges/some oranges/the oranges*.”  
*or*: “My friend is eating *orange/some orange (or other)*.”
  - c. Ng omeka (>  $\sqrt{k\bar{a}l}$  + *bek-* + *oN-*) er a ngalek a sechelik.  
3SG feed.IMPFV ACC child my.friend  
“My friend is feeding *a child/some child/the child*.”
  - d. Ng omeka (>  $\sqrt{k\bar{a}l}$  + *bek-* + *oN-*) er a rengalek a sechelik.  
3SG feed.IMPFV ACC children my.friend  
“My friend is feeding *children/some children/the children*.”
- (4) P-DOA: inanimate direct objects trigger agreement on the verb if singular AND specific. All human direct objects trigger agreement.
- a. Ng mo kol-ii (>  $\sqrt{k\bar{a}l}$  + *-o-* + *-ii*) a meradel a sechelik.  
3SG go eat.PFV-3SG orange my.friend  
“My friend is going to eat *an orange/the orange*.”
  - b. Ng mo kma (>  $\sqrt{k\bar{a}l}$  + *-m-*) a meradel a sechelik.  
3SG go eat.PFV orange my.friend  
“My friend is going to eat *oranges/some oranges/the oranges*.”
  - c. Ng mo mekel-ii>(\*meka) (>  $\sqrt{k\bar{a}l}$  + *bek-* + *-m-* (+ *-ii*)) a ngalek a sechelik.  
3SG go feed.PFV-3SG/feed.PFV baby my.friend  
“My friend will feed *a child/some child/the child*.”
  - d. Ng mo mekel-terir>(\*meka) (>  $\sqrt{k\bar{a}l}$  + *bek-* + *-m-* (+ *-terir*)) a rengalek a sechelik.  
3SG go feed.PFV-3PL/feed.PFV children my.friend  
“My friend will feed *children/some children/the children*.”

As suggested by the English translations of the sentences above, the descriptive generalization to draw from the data is that inanimate direct objects get morphological accusative case marking via either a marker on the DP (if the verb is imperfective) or an object agreement suffix on the verb (if the verb is perfective). What is clear is that both markers reflect (or induce) a singular interpretation of the inanimate DP. What is much less clear is whether the markers also reflect (or induce) a specific interpretation.

<sup>3</sup> That the accusative case marker *er* is homophonous with the language’s only preposition *er* is probably not noteworthy. Palauan’s very limited set of function words serve multiple purposes. Still, accusative *er* does not seem to be prepositional: the disappearance of *er* before plural/non-specific inanimate DPs as in (3b) is particular to DPs in object position. DPs that cannot be marked with accusative *er* can nevertheless be introduced by *er* without any problem in true prepositional environments like PP-adverbials, goal/source arguments, etc.

Previous research (e.g., Josephs 1975: 260; Georgopoulos 1991: 24–25; Woolford 2000: 218; *inter alia*) has taken the class of DPs that must be marked by the accusative case marker *er* in I-DOM to be identical to the class of DPs that trigger object agreement in P-DOA. If this is indeed the case, then I-DOM and P-DOA can be construed as a single syntactic phenomenon with two different morphological instantiations. For instance, the licensing of syntactic Accusative Case could be formalized in terms of an Agree relation between transitive *v* and the direct object DP (following Chomsky 2000, 2001, 2004) with the morphology determined post-syntactically by the aspectual features in the verbal complex, resulting in a case-marker on one hand and object agreement morphology on the other (following McFadden 2004). Of course, this analysis relies on the assumption that a DP with particular feature values can either trigger *both* I-DOM and P-DOA (depending on the aspect of the verb that selects the DP) or *neither* of them. There should be no class of DP that triggers one but not the other.

New data suggests that this assumption is untenable. (3) and (4) contain only count noun DPs in direct object position. Once mass noun DPs are taken into account, the parity begins to break down—compare (5) and (6).

SCENARIO: *Lani and Bino have gone on a walk together. Bino's stomach suddenly starts to hurt, and he feels dizzy. Lani is trying to figure out why.*

(5) I-DOM: non-specific direct object optionally marked with ACC marker *er* (with an associated difference in meaning).

a. Ke millim er a ralm [er a blil a delak el mechas] *pro*? Ng  
 2SG drank.IMPFV ACC water at house my.mother LNK old.woman you 3SG  
 mekngit *pro*.

bad it

“Were you drinking *the water* at my grandmother’s house? It’s bad.”

b. Ke millim a ralm [er a blil a delak el mechas] *pro*? Ng  
 2SG drank.IMPFV water at house my.mother LNK old.woman you 3SG  
 mekngit *pro*.

bad it

“Were you drinking *water* at my grandmother’s house? It’s bad.”

(6) P-DOA: non-specific direct object must trigger agreement.

a. Ke ngilelm-ii a ralm [er se er a do-muchel el merael *pro*] *pro*?  
 2SG drank.PFV-3SG water at that.time of 1PL.INCL-start LNK walk we you  
 “Did you drink (*the*) *water* when we started walking?”

b. \*Ke ngilim a ralm [er se er a do-muchel el merael *pro*] *pro*?  
 2SG drank.PFV water at that.time of 1PL.INCL-start LNK walk we you  
 (“Did you drink (*the*) *water* when we started walking?”)

What do (5) and (6) tell us? The mass noun direct object *a ralm* ‘water’ shows the same difference in meaning with the I-DOM pattern in (5a–b) as its count noun correlate in (3a–b), unsurprisingly. In both instances, the absence of *er* reflects a plural and/or non-specific interpretation of the DP

direct object. Yet while the lack of object agreement with the count noun DP *a meradel* ‘orange(s)’ in (4b) is perfectly acceptable, the lack of agreement with the mass noun DP *a ralm* ‘water’ in (6b) is ungrammatical.

This disparity between (4b) and (6b) strongly suggests that the presence or absence of object agreement morphology in P-DOA does not depend on the specificity of the direct object DP, whereas the presence or absence of the case-marker *er* in I-DOM is almost surely sensitive to specificity—note the difference in meaning between (5a) and (5b). If this is true, then only I-DOM shares the cross-linguistic properties of two-dimensional DOM systems that are determined by definiteness and animacy (though number also seems to be relevant in Palauan; this will be discussed below in more detail). P-DOA, by contrast, is just a standard object agreement paradigm with a paradigm gap for 3PL non-human objects. Given this difference between the two constructions, a unified DOM analysis of I-DOM and P-DOA is much less attractive. An analysis that treats I-DOM and P-DOA as different phenomena seems preferable.

If only P-DOA is truly insensitive to specificity, then a clear prediction arises: the disparity observed in the case-marking of mass nouns should extend to the domain of count nouns. Non-specific non-human singular count noun DPs, like *a meradel* ‘orange’ in (3b) and (4b), should pattern with mass noun DPs and trigger singular object agreement in P-DOA if specificity is irrelevant. In the next section, an examination of the distribution of the Palauan negative polarity item *ngii di* and the syntax of existentials will help us see that this is exactly what happens.

### 3. Teasing Apart the Facts: Polarity and Existentials

A complication arises from the fact that there are no morphological differences between definite and indefinite DPs in Palauan—the nouns themselves are not marked for definiteness, and both definite and indefinite DPs are marked with the determiner *a*. Due to this complication, one might wonder whether object agreement just forces a definite or specific interpretation of the direct object. This would mean that *a ralm* ‘water’ would have to be construed as either definite or specific in (6), contrary to fact. But it is not necessary to rely on the English translations for evidence; Karttunen’s (1969) diagnostic for discourse referentiality will let us probe for (non-)specificity in Palauan, leading to more concrete evidence in favor of the analysis outlined above. The Palauan negative polarity item *ngii di* will be instrumental to the discussion below, so I will begin by briefly sketching its distribution.

Like English *any*, Palauan *ngii di* may serve as both a negative polarity item (NPI) and as a free choice item (FCI). Ladusaw (1979) and many others have shown that NPIs are licensed in the scope of a downward-entailing operator, like under negation. Palauan *ngii di* is subject to the same restriction.

- (7) a. I don’t have *any* potatoes. (Kadmon & Landman 1993: 353, ex. 1)  
 b. \* I have *any* potatoes. (Kadmon & Landman 1993: 353, ex. 2)
- (8) a. Ng diak [k-ulab a *ngii di* el chemutii *pro*].  
 3SG false 1SG.IRR-hold.PFV any LNK sweet.potato I  
 “I’m not holding any sweet potatoes.”

- b. \* Ak olab a ngii di el chemutii pro.  
 1SG hold.PFV any LNK sweet.potato I  
 (“I’m holding any sweet potatoes.”)

Giannakidou (to appear; see also numerous references therein) provides further examples of NPIs licensed in other non-veridical environments that do not necessarily have to be downward-entailing (such as questions). Palauan NPI *ngii di* is also licensed in questions with both positive and negative polarity.

- (9) a. Ng ngar er ngii a ngii di el chemutii er tiang pro?  
 3SG exist any LNK sweet.potato at here there.EXPL  
 “Are there any sweet potatoes here?”  
 b. Ng diak a ngii di el chemutii er tiang pro?  
 3SG not.exist any LNK sweet.potato at here there.EXPL  
 “There aren’t any sweet potatoes here?”

Turning to some contexts in which free choice items are licit, Menéndez-Benito (2005) demonstrates that Spanish FCI *cualquiera* is licensed under deontic modality as in (10a), but not in episodic sentences as in (10b).

- (10) a. Juan puede coger *cualquier* carta.  
 “Juan can take any card.” (Menéndez-Benito 2005: 31, ex. 23)  
 b. \* Ayer, Juan cogió *cualquier* carta.  
 (“Yesterday, Juan took any card.”) (Menéndez-Benito 2005: 2, ex. 3)

Similarly, Palauan *ngii di* is licensed and receives a FCI interpretation under the nominal deontic modal *sebech* “ability (to...)” as in (11a), but not in episodic sentences such as (11b).

- (11) a. Ng sebechem [el ng-uu a ngii di el kat] pro.  
 3SG your.ability LNK take.PFV-3SG any LNK card it.EXPL  
 “You can take any card.” (lit. “It is your ability to take any card.”)  
 b. \* Ke ngil-uu a ngii di el kat er a kesus pro.  
 2SG took.PFV any LNK card on last.night you  
 (“Last night, you took any card.”)

We have now seen that Palauan *ngii di* may function either as an NPI or as an FCI, depending on the operator that licenses it. For our purposes, the key point in the discussion is simply that *ngii di* functions as an NPI in the scope of downward-entailing and non-veridical operators.

Leaving *ngii di* aside for a moment, let us turn to the syntax of existentials. A growing body of research has lent cross-linguistic support to Milsark’s (1977: 4–9, 1979 [1974], *et seq.*) claim that the pivot of an English existential cannot be occupied a “strong” DP (one of the two so-called definiteness effects)—see (12).

- (12) a. There is(n’t) a teacher in the room.  
 b. \* There is(n’t) the teacher in the room.

Palauan appears to be another language that exhibits this sort of definiteness effect—compare (13a) and (13b).

- (13) a. Ng ngar er ngii/diak a sensei er tiang *pro*.  
 3SG exist/not.exist teacher at here there.EXPL  
 “There is/isn’t a/(\*the) teacher here.”
- b. \*Ng ngar er ngii/diak {ngke el sensei / ngii / a Aki} er tiang *pro*.  
 3SG exist/not.exist that LNK teacher / him / Aki at here there.EXPL  
 (“There is/isn’t {that teacher / him / Aki} here.”)

The only difference between (13a) and (13b) is the DP that occupies the pivot position, so the difference in grammaticality between them likely results from some sort of restriction on the DPs that may occupy the pivot position, just as in English. Furthermore, the fact that *a sensei* ‘teacher’ in (13a) cannot be interpreted as definite suggests that the restriction has to do with definiteness. Now, the examples in (14a–b) show that DPs containing the NPI *ngii di* can also appear in the pivot of an existential, but as expected, *ngii di* is still infelicitous in a pivot position that is not in the scope of a downward-entailing or non-veridical operator, as shown in (14c).

- (14) a. Ng dimlak a ngii di el kerrekar er a sers *pro*.  
 3SG not.existed any LNK tree in garden there.EXPL  
 “There wasn’t any (kind of) tree in the garden.” NEGATION
- b. Ng mla er ngii a ngii di el kerrekar er a sers *pro*?  
 3SG existed any LNK tree in garden there.EXPL  
 “Was there any (kind of) tree in the garden?” QUESTION
- c. \*Ng mla er ngii a ngii di el kerrekar er a sers *pro*.  
 3SG existed any LNK tree in garden there.EXPL  
 (“There was any tree in the garden.”) POSITIVE POLARITY

The crucial point to take away from (14) is that DPs containing NPI *ngii di* pattern with the indefinite DP in (13a) rather than with the various definite DPs (pronouns, demonstratives, and proper names) in (13b). This suggests that DPs containing NPI *ngii di* are also indefinite.

The pieces are now in place to test for specificity following Karttunen’s (1969) diagnostic: indefinite DPs are specific if they establish a discourse referent—see (15)—but non-specific if no discourse referent is established—see (16).

- (15) Bill has a car. (Karttunen 1969: 4, ex. 3a)
- a. It is black.
- b. The car is black.
- c. Bill’s car is black.
- (16) 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.

After (15) is uttered, (15a–c) can refer back to the discourse referent established by *a car*, indicating that *a car* in (15) is specific. In (16), on the other hand, *a car* appears under negation so there is no discourse referent established. Examples (16a–c) are infelicitous, so *a car* in (16) is non-specific. Thus, an indefinite is non-specific iff it neither establishes a new discourse referent nor refers to a previously established discourse referent.

Theoretically, we should be able to apply this diagnostic to Palauan. In Palauan, as we have seen above, “bare” DPs (consisting of the determiner *a* + NP) are ambiguous between either a definite or an indefinite interpretation.

(17) Ak chiliu-ii                      *a hong pro.*  
 1SG read.PAST.PFV-3SG book I  
 “I read *a book/the book*.”

a. Ng chedelekelek *pro.*  
 3SG black it  
 “It’s black.”

b. Ng chedelekelek se el hong.  
 3SG black that LNK book  
 “The book is black.” (lit., “That book (that I mentioned) is black.”)

The felicity of (17a–b) indicates that *a hong* either refers to a previously established discourse referent (if definite) or establishes a new discourse referent (if indefinite). According to Karttunen’s diagnostic, *a hong* in (17) is either a definite DP or a specific indefinite DP. But under negation, the situation gets more complicated. If Palauan behaves the way English does, then indefinites under negation are expected to be non-specific, but definites under negation should remain definite. As the judgments of (18a–b) indicate—as well as the English translation of (18)—the situation is hardly clear.

(18) Ng dimlak k-chuieu-ii                      *a hong pro.*  
 3SG false.PAST 1SG.IRR-read.PFV-3SG book I  
 “I didn’t read *a book/the book*.”

a. #? Ng chedelekelek *pro.*  
 3SG black it  
 “It’s black.”

b. #? Ng chedelekelek se el hong.  
 3SG black that LNK book  
 “The book is black.” (lit., “That book (that I mentioned) is black.”)

I claim that the felicity judgments for (18a–b) are clouded because there are two competing interpretations for the DP *a hong* in (18) available:

- *A hong* is definite: reference in (18a–b) to the entity it names is felicitous.
- *A hong* is indefinite (and non-specific because it is under negation): reference in (18a–b) to the entity it names is infelicitous (there is no discourse referent to refer to).



This is the type of situation in which we can use our knowledge of the properties of existentials and the NPI *ngii di* to tease apart the ambiguity. In particular, three facts are relevant. First, definite DPs cannot appear in the pivot of an existential, which we saw in (13a–b). Second, DPs containing NPI *ngii di can* appear in the pivot of an existential, suggesting that they are not definite. Third, Karttunen’s diagnostic shows that an indefinite under negation should receive a non-specific interpretation.

Putting these three facts together, we predict that the addition of *ngii di* to the direct object DP *a hong* ‘book’ in (18) to form *a ngii di el hong* ‘any book’ should resolve the ambiguity, since it should be treated as a non-specific indefinite under negation. (18a–b) should then be judged sharply infelicitous. This is exactly what we find in (19) and (20).

(19) Ng dimlak k-chuieu-ii a ngii di el hong pro.  
 3SG false.PAST 1SG.IRR-read.PFV-3SG any LNK book I  
 “I didn’t read *any book*.”

- a. # Ng chedelekelek pro.  
 3SG black it  
 “It’s black.”
- b. # Ng chedelekelek se el hong.  
 3SG black that LNK book  
 “The book is black.”

(20) Ng dimlak k-chuiu a ngii di el hong pro.  
 3SG false.PAST 1SG.IRR-read.PFV any LNK books I  
 “I didn’t read *any books*.”  
*cannot mean:* (“I didn’t read *any book*.”)

- a. # Ng chedelekelek pro.  
 3PL.INAN black they  
 “They’re black.”
- b. # Ng chedelekelek aike el hong.  
 3PL.INAN black those LNK book  
 “The books are black.”

What is interesting about examples (19) and (20) is that they conform to the pattern established for the mass noun DPs in (6). From this, I take away the following. P-DOA is a (mostly) standard object agreement system but with one peculiarity: there are distinct agreement forms for human plurals (*-terir*) and non-human plurals (no suffix). If P-DOA really were identical to I-DOM, then we should predict that *a ngii di el hong* in (20) should be ambiguous between a plural and a singular interpretation. While this is impossible in (20), note that its corresponding sentence containing an imperfective verb in (21) does in fact allow for the singular/plural ambiguity.

(21) Ng dimlak ku-nguiu a ngii di el hong pro.  
 3SG false.PAST 1SG.IRR-read.IMPFV any LNK book I  
 “I wasn’t reading *any book/any books*.”

- a. # Ng chedelekelek *pro*.  
 3SG/3PL.INAN black it/they  
 “It’s/They’re black.”
- b. # Ng chedelekelek *se/aike el hong*.  
 3SG/3PL.INAN black that/those LNK book  
 “The book(s) is/are black.”

There is now evidence that case-marking disparities between I-DOM and P-DOA are not limited to sentences containing mass noun direct objects, but also those with count noun DPs in direct object position. As a consequence, an attempt to save the unified DOM analysis of I-DOM and P-DOA by explaining the disparity as a consequence of the properties of mass nouns would fail to account for the differences between (19), (20), and (21). The unified DOM analysis of I-DOM and P-DOA is no longer viable.

Nonetheless, the situation is not alarming. As an alternative to the unified DOM analysis, I have already suggested that perhaps only I-DOM is a true DOM system. That P-DOA is not a differential object agreement system is somewhat surprising given the overlap in the instances of non-human plurals triggering neither agreement morphology in P-DOA nor accusative case-marking in I-DOM. But these are not the only areas in Palauan syntax in which non-human plurals fail to exhibit morphology associated with human plurals. Independent evidence that non-human plurals are treated differently from other classes of DPs arises from at least five other domains in Palauan morphosyntax.

#### 4. Peculiarities Surrounding Non-Human Plurals in Palauan

Smith-Stark (1974; see also Corbett (2000: Ch. 3) describes what he calls “plurality splits,” in which plural nouns have different morphological forms or different syntactic behavior depending on their animacy features. In Palauan, non-human plurals nouns are treated differently from human plurals in a handful of ways other than their behavior as direct objects.

There are two different ways in which the forms of DPs themselves differ morphologically depending on animacy. First, distinct sets of demonstrative morphemes exist for human plurals and non-human plurals, and second, the plural noun prefix *re-* may only attach to human plurals—non-human plurals are morphologically identical to singulars.

(22) Non-human plurals and human plurals select different demonstrative morphemes.

- a. *aika el bad / aike el bad*  
 these LNK stones / those LNK stones  
 “these stones” / “those stones”
- b. *tirka el chad / tirke el chad*  
 these LNK person / those LNK person  
 “these people” / “those people”

(23) (Bare) non-human plurals do not allow the plural *re-* prefix; human plurals require it.

- a. a bad / (\*a *re*-bad)  
stones / stones  
“(the/some) stones”
- b. (\*a chad)<sup>4</sup> / a *re*-chad  
people / people  
“(the/some) people”

Next, there are also two ways in which non-human plurals differ from human plurals from the point of view of agreement (besides the object agreement pattern at issue here). Human plurals trigger a pre-verbal subject agreement clitic *te*. 3SG nouns trigger a different clitic *ng*, which is also used for non-human plurals. The same situation holds for possessor agreement: non-human plural possessors trigger the same possessor agreement inflection (usually a form of *-(e)l*) on the possessed noun as 3SG possessors, rather than the human plural form *-(r)ir*.

(24) Non-human plurals share the 3SG subject agreement clitic *ng*; human plurals trigger a distinct pre-verbal clitic *te*.

- a. *Ng* klebokel a bad.  
3SG/3PL.INAN pretty stone  
“The stone is pretty.”  
*or*: “The stones are pretty.”
- b. *Te* klebokel a rechad.  
3PL pretty people  
“The people are pretty.”

(25) Non-human plurals share the 3SG possessor agreement suffix *-(e)l*; human plurals trigger a distinct suffix *-(r)ir*.

- a. a bedeng-*el* a bad  
body-3SG/3PL.INAN stone  
“the color of the stone”  
*or*: “the color of the stones”
- b. a bedeng-*ir* a rechad  
body-3PL people  
“the people’s complexion”

And finally, there is no overt resumptive pronoun for an object gap after an imperfective verb in an A-bar dependency with a non-human plural, whereas an object gap in an A-bar dependency with a human plural must be filled with the resumptive pronoun *tir*, which gets case-marked (see Georgopoulos 1991 for discussion).

<sup>4</sup> Note that *a chad* is grammatical on its singular interpretation, just not on its plural interpretation.

- (26) Non-human plurals leave a an object gap after imperfective verbs in A-bar dependencies; human plurals are co-indexed with a resumptive pronoun.
- a. [DP Aike el siasing]<sub>i</sub> a ku-lemes     <sub>i</sub>/(*\*er tir<sub>i</sub>*) *pro er a elii*.  
 these LNK photos TOP 1SG.IRR-saw.IMPFV GAP/ACC 3PL I on yesterday  
 “These photos, I was looking at (them) yesterday.”
- b. [DP Tirke el ngalek]<sub>i</sub> a ku-lemes *er tir<sub>i</sub>*/(*\**) *pro er a elii*.  
 these LNK child TOP 1SG.IRR-saw.IMPFV ACC 3PL/GAP I on yesterday  
 “These children, I was watching them yesterday.”

In all of these examples, non-human plurals differ from human plurals in some morphological way. Non-human plurals may entirely lack morphological marking that characterizes human plurals as in the case of (23) and (26), they may share the morphology of 3SG DPs while human plurals have distinct morphology as in (24) and (25), or they may have their own morphology distinct from both human plurals and 3SG DPs as in (22). Together, these facts suggest that the peculiar behavior of non-human plurals in both I-DOM and P-DOA might be attributable to some greater language-internal factor in Palauan that treats them separately from human plurals. If this is the case, an explanation of their properties in I-DOM and P-DOA could be centered around their unique properties as DPs rather than as esoteric characteristics of the constructions they appear in.

## 5. Conclusion

In this paper, we have seen that Palauan serves as an example of a language in which two distinct DOM systems appear to co-exist—each associated with a particular verbal aspect (imperfective or perfective). The imperfective system, which I have called I-DOM, is a dependent-marking system in which the accusative case marker *er* appears before most (but not all) direct object DPs. The perfective system, which I have called P-DOA, is a head-marking system in which most (but not all) direct object DPs trigger object agreement morphology on the verb. A simple explanation of the co-existence of these two systems has traditionally assumed that they are morphological variants of the same syntactic phenomenon, i.e., that there is actually just one DOM system that has two different morphological disguises.

Examining the data containing mass noun direct objects in (5) and (6) from the point of view of Aissen’s (2003) DOM analysis emphasizes that the two systems are not one and the same: I-DOM is sensitive to number, animacy, and specificity, while P-DOA is sensitive only to number and animacy. Furthermore, an attempt to save the unified DOM analysis of I-DOM and P-DOA by explaining the disparity as a consequence of the properties of mass nouns would fail to account for the differences between (19), (20), and (21), which together offer evidence that the mass noun disparity also transfers to count nouns in particular contexts. It has been suggested to me that I elicit DPs of quantity, such as “a bag of apples” or “boxes of sugar,” to see whether the interaction of the measure DP with the quantity DP can shed more light on matters relevant to DOM.<sup>5</sup> At any rate, the unified DOM analysis of I-DOM and P-DOA no longer appears to be

<sup>5</sup> I thank Masha Polinsky for her insight here.

viable, given this new data. Still, Aissen's (2003) analysis successfully accounts for both of the systems, and an interesting effect of applying her hierarchy to the Palauan cases is that it highlights how different constructions within a single language can draw the cutoff point at different places along the feature hierarchies. As a result, the two Palauan systems show that parameterization might not just be across languages but also across constructions within a single language.

While it would be a trivial task to add the lack of *er*-marking in I-DOM (as well as the lack of an overt object agreement suffix in P-DOA) to the list of particularities of non-human plurals described in section 4, we would not come any closer to explaining why the various groups of feature values yield particular morphological patterns and others do not, rather than the other way around. Individuation (see Hopper & Thompson 1980, Nunberg 1983, and many others) may be a promising route to take to draw the relevant distinction in Palauan. Definitions of individuation vary, but (roughly) human DPs, referential DPs, and singular DPs may be thought of as more "individuated" than inanimate DPs, non-referential DPs, or plural DPs (see also Malchukov 2008 for discussion directly pertaining to DOM). Although an analysis based on individuation may be stipulative for Palauan (for instance, the extent to which individuation can explain differences in the behavior of mass nouns in I-DOM in a satisfying way is not obvious to me), but the typologically unusual grouping of (even definite) non-human plurals with non-specific indefinites would begin to make more sense if individuation was the relevant factor in determining the presence or absence of *er* in I-DOM.

Whatever the deeper reason for the organization of accusative case marking system in Palauan, this paper sheds light on several empirical issues. The properties of polarity operators were investigated to the extent that polarity can now be used as a limited diagnostic for hierarchical relations in Palauan. The discovery of a Palauan definiteness effect similar to that in English made it possible to identify indefinite DPs even in the absence of a morphological distinction from definite DPs. Investigations into polarity and the syntax of existentials showed that P-DOA is just a standard object agreement system. We can thus conclude that Palauan has only a single DOM system of (at least) three dimensions (animacy, specificity, and number) with a distribution limited to the domain of imperfective predicates, rather than two different full-fledged DOM systems. If this analysis is correct, then the apparently unusual status of Palauan in our cross-linguistic understanding of DOM systems is clarified, and Palauan is in many ways quite similar to languages with more familiar systems like those in Hindi (e.g., Mohanan 1994), Turkish (e.g., Enç 1991), Persian (e.g., Lazard 1982), and Spanish (e.g., Isenberg 1968), for instance.

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