

# Architecture of the Palauan Verbal Complex

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## 1 Introduction

This grant supports Justin Nuger's dissertation research on the syntax of the Palauan verbal complex (also known as *vP*). Palauan is an Austronesian VOS language spoken in the Republic of Palau that contains a wide array of verbal morphology, with overt morphemes expressing mood, tense, aspect, and both subject and object agreement (presumably morphological reflexes of syntactic Case licensing). The primary goal of Nuger's dissertation research is to investigate the extent to which Palauan's rich verbal morphology can provide a window into the language's *vP*-internal syntax, following much recent empirical and theoretical research on the syntax-morphology interface. For example, it has been argued by various researchers (see Arad 1998; Ritter & Rosen 2000; Kratzer 2004; Travis 2005) that lexical (or inner) aspect may be realized on a functional head such as *Asp(ect)* that projects to an *AspP* in the verbal complex. Such proposals appear to be well-grounded for certain languages, such as Hebrew, German, and Malagasy. Nuger explores issues like these in more depth to gain a clearer picture of the syntactic architecture of Palauan verbal predicates.

The dissertation has two primary goals: to present a comprehensive description of the syntax and morphology of the Palauan verbal complex, and to contribute to the theory of the syntax of mood, tense, aspect, and syntactic Case — all areas of concern in generative grammar. The dissertation is written in the Minimalist theoretical framework (Chomsky 2000, 2001), incorporating elements from Distributed Morphology (Halle & Marantz 1993, 1994) where appropriate.

## 2 Palauan: the Language Situation

Palauan is a member of the Austronesian language family and is considered to be one of two languages in Micronesia (along with Chamorro) belonging to the Western Malayo-Polynesian group. Historically, Palau was governed by other nations for many years, starting with the country's colonization by Spain in the 19th century. Spain sold Palau to Germany in 1899, and Germany administered Palau until 1914, when control passed to Japan. The United States took control of Palau in 1944, during World War II. Palau was later passed formally to the United States under United Nations auspices in 1947 as part of the Trust Territory of the Pacific Islands. Palau's own constitution went into effect on October 1, 1994, at which point it became an autonomous independent nation. The Palauan language has emerged as the dominant language in Palau despite these periods of colonization and occupation, but with a vocabulary that has been augmented by each of the four colonial languages: primarily Japanese and English, and to a lesser extent Spanish and German.

According to the 2005 Palau Census, there are 18,544 people aged 5 years or older residing in the Republic of Palau, of whom 13,826 speak Palauan. This number does not include native Palauan speakers residing outside of Palau, and the total number of Palauan speakers worldwide is — by

some estimates — around 15,000. Palauan is one of the two nationally recognized official languages of the Republic of Palau, the second being English. While English is used in many government, business, educational, and other public settings, most native Palauans use the Palauan language among themselves in domestic and social settings. The language is still acquired by a majority of Palauan children. Thus, despite the fact that Palauan is spoken by a relatively small number of people worldwide, it cannot be classified as endangered, and it still enjoys a high level of prestige in Palauan culture.

The small body of literature already available on Palauan phonology, morphology, and syntax is of high quality and very useful. The most widely-cited and complete reference grammar is Josephs 1975, a comprehensive work with an in-depth description of the syntax. The grammar has been updated as Josephs 1997/1999, which reworks much of the analysis of Josephs 1975 and is much more accessible to non-linguists. Josephs 1990 serves as an excellent companion dictionary. Several earlier works that provide descriptions of Palauan grammar include Walleiser 1911, Capell 1949, and Pätzold 1969. Two monograph-length theoretical treatments of the language exist in French — Hagège 1986 and Lemaréchal 1991 — which analyze various aspects of Palauan syntax within different theoretical frameworks.

In their doctoral dissertations, Wilson (1972) and Flora (1974) made significant contributions to the understanding of Palauan’s incredibly complex morphophonology, and DeWolf’s dissertation (1979) is among the first that approach Palauan syntax from the perspective of generative grammar. DeWolf (1988) also makes a convincing argument for the status of Palauan as a Nominative-Accusative language and gives one view of how the language may have arrived at this state from its Proto-Austronesian roots. Contrary to the analysis of Josephs (1975), Waters (1980) examines major syntactic rules operating in Palauan, concluding that the underlying word order of the language is VOS. Much later work strongly supports this conclusion, particularly that of Georgopoulos (1985, 1991), who formulates (in *Government and Binding Theory*; see Chomsky 1981) a careful analysis of Palauan A-bar dependencies within a larger, explicit analysis of the language’s syntax.

### 3 A Theoretical Approach to Verb Phrase Architecture

The architecture of the verbal complex bears directly on many phenomena in the syntax of particular languages, including the appropriate treatment of argument structure and its effects on the semantics and morphology of predication. Nuger’s dissertation approaches the topic within the Minimalist theoretical framework (Chomsky 2000, 2001). In this framework, the lexicon contains fully-inflected lexical words as well as functional heads. The *numeration* is a small subset of lexical items that are extracted to be used in the derivation. Heads are combined via the operation Merge, which forms a binary subtree. The Extension Condition mandates that only the highest node in a subtree may be merged with a new head, which ensures both (i) that the tree will be binary branching and (ii) that trans-derivational Merge operations will be prohibited. Finally, phase theory dictates that sub-portions of the tree will be sent to the interfaces (LF and PF) at various stages of the derivation, as defined by a finite set of “phase heads.” It is currently believed that at least C, D, and transitive *v* form the set of phase heads. In other words, when a phase head is fully projected (i.e., a CP, DP, or transitive *v*P is complete), the complement of the phase head is sent to LF for interpretation and to PF for Spell Out.

In Minimalism, verb phrases are not simply VPs, though the (lexical) VP is a crucial component

of the larger verb phrase architecture. Kratzer (1996) argues that there is a syntactic projection between VP and TP in which the external argument is introduced. She calls this projection VoiceP, and it has been incorporated into Minimalism as  $\nu$ P. One of the areas of Minimalism that makes crucial use of the  $\nu$ P layer — and an area of immediate interest to the proposed project — is the theory of syntactic Case licensing. Syntactic Accusative Case is licensed by a transitive  $\nu$  head, while syntactic Nominative Case is licensed by finite T. The licensing mechanism is Agree, a relation between the Case-licensing head and the highest DP its c-command domain (in the Relativized Minimality sense of Rizzi 1990). DPs that are licensed for syntactic Case may also bear case morphology.

Yet when morphological case-markers are independent words (e.g., if they are homophonous with prepositions), the Minimalist theory dictates that they must be merged as independent lexical items — possibly as K, or case, heads. Recent work in Distributed Morphology (Halle & Marantz 1993, 1994) has concluded that such a treatment of morphological case is at best undesirable and at worst untenable for some languages, and that syntactic Case licensing and its morphological reflexes — i.e., case morphemes — should be dissociated (see McFadden 2004 for an overview and references). To mitigate this issue, Distributed Morphology treats lexical items differently from Minimalism: syntactic heads do not correspond to fully-inflected words, but rather to bundles of syntactic, semantic, and phonological features, all of which can be manipulated by the syntax. The phonological form of words is not determined until after the (narrow) syntax at PF (Spell Out). Lexical items are inserted at this point, and the surface forms of other morphemes corresponding to tense, case, etc. are determined. As such, Distributed Morphology provides a means to negotiate some of the tradeoffs between the syntax and the morphology of a given language. For instance, given Distributed Morphology, one need not assume that case morphemes that are independent words are the reflexes of K heads that are present in the syntax. They can be inserted post-syntactically according to language-specific Spell Out rules, and the morphological disparity between different types of case morphemes is relegated to the morphological component of the grammar, greatly simplifying the narrow syntax.

There have been proposals to expand the now standard view of the verbal complex as a VP contained within a  $\nu$ P shell to include projections of additional functional heads, including Asp(ect), Mood, and so forth (see Grimshaw 2005, Ch. 1 for a detailed theory). Given the abundance of verbal affixes in Palauan, it is natural to wonder whether such a theory is tenable. Is every Palauan verbal affix the morphological realization of a functional head in the extended VP projection? Put differently, is it necessary for a dedicated functional head like Asp to introduce aspectual information or a Mood head to introduce information regarding mood, rather than bundling aspect or mood features onto other functional heads that are independently motivated? These are the sorts of questions that Nuger investigates in his dissertation.

Any account of the Palauan verbal complex will have to explain how the various semantic reflexes of mood, tense, and aspect relate to the appearance of mood, tense, and aspect morphology. As argument structure clearly plays a role in determining mood and aspect morphology in Palauan (more on this in §4), one way to account for the relations between semantics and morphology is to use some version of the syntactic Y-Model (explicitly formulated in Chomsky & Lasnik 1977). The Minimalist framework described above adopts a slightly modified version of the Y-Model and is thus compatible with an analysis in which syntax feeds both semantics and morphology and, further, serves as a mediator between them.

## 4 Overview of Research to Date

Nuger (2008, 2009) proposes an architecture of the Palauan  $\nu$ P that accounts for the divergent case morphology found on direct objects of transitive verbs, which depends on the aspect of the verb: perfective or imperfective. Direct objects of perfective verbs trigger object agreement suffixes on the verb — the direct object DPs are not case-marked. Examples of the object agreement paradigm are given in (1).

- (1) a. Ng        mo        mes-ang    a tolechoi *pro*.  
         3SG.AGRS AUX.FUT see.PFV-3SG baby    he  
         “He will see a/some/the baby.”
- b. Ng        mo        mes-terir   a retolechoi *pro*.  
         3SG.AGRS AUX.FUT see.PFV-3PL babies    he  
         “He will see (the/some) babies.”

By contrast, direct objects of imperfective verbs trigger no object agreement morphology on the verb; instead, the direct object is canonically marked with the Palauan preposition *er*, which Nuger argues is a case marker. Animacy, number, and specificity determine the presence of *er*, suggesting a differential object marking system (see Aissen 2003 and de Swart 2007), indicated by the English translations in (2).

- (2) a. Ng        mo        mengang er    a bobai *pro*.  
         3SG.AGRS AUX.FUT eat.IMPFV CASE papaya he  
         “He will be eating a (particular) papaya/the papaya.”
- b. Ng        mo        mengang a bobai *pro*.  
         3SG.AGRS AUX.FUT eat.IMPFV papaya he  
         “He will be eating (some) papaya(s)/the papayas.”
- c. Ng        mo        omes        er    a tolechoi *pro*.  
         3SG.AGRS AUX.FUT watch.IMPFV CASE baby    he  
         “He will watch a/some/the baby.”
- d. Ng        mo        omes        er    a retolechoi *pro*.  
         3SG.AGRS AUX.FUT watch.IMPFV CASE babies    he  
         “He will watch (the/some) babies.”

Nuger identifies the constraints on the differential marking pattern as follows: direct objects of imperfective verbs must be marked with *er* if they are either human as in (2c–d) or both singular and specific as in (2a). If a direct object of an imperfective verb is not marked with *er*, then the direct object is necessarily non-human, as well as either plural or non-specific (or both) as in (2b). The possible interpretations are reflected in the English translations of (2a–d).

There is no differential marking pattern in the agreement paradigm triggered by direct objects of perfective verbs, however. While non-human [3PL] direct objects do not trigger overt agreement morphology on the verb, there is no variation that depends on specificity, as is the case with direct objects of imperfective verbs like those in (2a–b). In demonstrating that the null agreement form cannot be triggered by non-specific indefinites (i.e. DPs containing the NPI *ngii di* “any” in downward entailing contexts like (3); see Ladusaw 1979), Nuger (2007: 33–40, to appear) argues that

the non-human [3PL] null agreement is a simple paradigm gap and does not signify a full-fledged differential object *agreement* system in perfective  $\nu$ Ps.

- (3) Ng dimlak [Ø-chuieu-ii a {ngii di} el hong *pro*] *pro*.  
 3SG.AGRS false.PAST 1SG.IRR-read.PFV-3SG {any} LNK book I it.EXPL  
 “I didn’t read any book.”
- a. # Ng chedelekelek *pro*/se el hong.  
 3SG.AGRS black it/that LNK book  
 “It/The book is black.”

Nuger (2008: 36–43, 2009) constructs an analysis of the Accusative Case licensing mechanisms in Palauan as well as their morphological reflexes, adopting concepts from Minimalism and Distributed Morphology. He argues that there are two flavors of transitive  $\nu$  — perfective  $\nu$  and imperfective  $\nu$  — supported morphologically by the fact that perfective and imperfective transitive verbs are formed from distinct sets of verbalizer morphemes. Perfective transitive verbs are formed with verbalizer infixes such as *-m-*, *-em-*, *-u-*, or *-o-*, while imperfective transitive verbs are formed with the verbalizer prefixes *meN-* and *oN-*; Nuger analyzes these as exponents of the respective  $\nu$  heads.<sup>1</sup> The two transitive  $\nu$  heads may both license syntactic Accusative Case, and the Case-licensed DP can access the aspectual features on  $\nu$  via the Agree relation established between the  $\nu$  probe and its DP goal (see Chomsky 2000, 2001).

At PF, accusative case morphology may be realized in two distinct ways: as agreement suffixes on perfective verbs, or as differential object marking with *er* marking the DP direct objects of imperfective verbs. Syntactic Case is thus dissociated from its morphological Spell Out, following much recent work (see, e.g., McFadden 2004). Some examples of Palauan-specific Spell Out rules that could generate the case morphology are given below: object agreement rules in (4) and differential *er*-marking in (5).

- (4) a. Ø → *-ak* / V<sub>[PFV, 1SG]</sub> \_\_\_\_  
 b. Ø → *-au* / V<sub>[PFV, 2SG]</sub> \_\_\_\_  
 c. Ø → *-ii* / V<sub>[PFV, 3SG]</sub> \_\_\_\_  
 d. Ø → *-id* / V<sub>[PFV, 1PL, INCL]</sub> \_\_\_\_  
 e. Ø → *-emam* / V<sub>[PFV, 1PL, EXCL]</sub> \_\_\_\_  
 f. Ø → *-emiu* / V<sub>[PFV, 2PL]</sub> \_\_\_\_  
 g. Ø → *-terir* / V<sub>[PFV, 3PL, +HUM]</sub> \_\_\_\_
- (5) a. Ø → *er* / \_\_\_\_ DP<sub>[IMPFV, +HUM]</sub>  
 b. Ø → *er* / \_\_\_\_ DP<sub>[IMPFV, SG, +SPEC]</sub>

Recent research (e.g., Travis 2005; cf. Arad 1998, Ritter & Rosen 2000, Kratzer 2004) has proposed that aspectual information is introduced into the verbal complex via a functional head, such as Asp. While there is ample evidence that such an analysis is appropriate for some languages (such as Malagasy), Nuger’s analysis of Palauan suggests that perfective and imperfective features are introduced into the syntax by  $\nu$  heads rather than by a dedicated aspectual head like Asp. Evidence for Nuger’s analysis comes from his further research on passives (Nuger 2008, 2009).

<sup>1</sup>The N in *meN-* and *oN-* represents a placeless nasal that triggers Palauan nasal substitution. See Wilson 1972 and Flora 1974, or see Blust 2004 for a recent survey of Austronesian nasal substitution.

There is a productive class of Palauan intransitive verbs derived from transitive stems, whose external arguments have been suppressed and whose internal arguments are promoted to subject. Nuger analyzes these as passive verbs: (6a–b) gives examples of the passive correlates of (1a–b) and (2c–d) (see Josephs 1975: 131–136 for more examples).

- (6) a. **Ng** mo obes a **tolechoi**.  
 3SG.AGRS AUX.FUT see.PASSIVE baby  
 “The baby will be seen/watched.”
- b. **Te** mo obes a **retolechoi**.  
 3PL.AGRS AUX.FUT see.PASSIVE babies  
 “The babies will be seen/watched.”

In Palauan, the verb *omes* has developed conventionalized meanings when used in the perfective or imperfective aspect. The perfective forms (*mesang*, *mesterir*, etc.) correspond to English “see,” whereas the imperfective form (*omes*) means “watch.” What is interesting about the passives in (6) is that the aspectual contrast is neutralized: passive verbs do not have separate perfective and imperfective forms. The sentences are thus ambiguous, and aspect is gleaned from context. The co-varying pre-verbal subject agreement clitics in (6) — *ng* and *te* — indicate that the internal argument serves as the subject. Nuger identifies two more tests indicating that the internal argument has advanced to subject position, given below.

In Palauan, only subjects (i.e., DPs with syntactic Nominative Case) have the ability to float quantifiers if they are topicalized. Direct objects cannot float quantifiers, regardless of whether they are direct objects of imperfective verbs as in (8a) or of perfective verbs as in (8b).

- (7) **A rengalek er a skuul a ulerrenge**s er a **chelitakl** [<sub>PP</sub> er a **elecha el sils**]  
 children PREP school TOP hear.PAST.IMPFV CASE song PREP now LNK day  
**el rokui**.  
 LNK all  
 “The students have all listened to the song today.”
- (8) a. \* **A tuu** a l-onga **el rokui** a Lulu.  
 bananas TOP 3PL.IRR-eat.IMPFV LNK all Lulu.  
*intended*: “The bananas are all being eaten by Lulu. (lit. The bananas, Lulu is eating them all.”
- b. \* **A tuu** a mo le-kang **el rokui** a Lulu.  
 bananas TOP AUX.FUT 3PL.IRR-eat.PFV LNK all Lulu.  
*intended*: “The bananas will all be eaten (up) by Lulu. (lit. The bananas, Lulu will eat them all.”

Internal arguments of passive verbs pattern with the subjects in (7) rather than the direct objects in (8) with respect to their ability to float quantifiers, as shown in (9).

- (9) **A tuu** a mo mekang **el rokui**.  
 banana TOP AUX.FUT eat.PASSIVE LNK all  
 “The bananas will all be eaten.”

The grammaticality of (9) suggests that the internal argument occupies subject position before it is topicalized. If this is true, then a straightforward analysis is possible: quantifier float in Palauan is licensed by movement of DPs with syntactic Nominative Case.

The periphrastic causative construction involves a conjunction of two clauses: the first clause contains a causative verb *meruul* ‘cause, make,’ and the second clause contains a null pronominal that is controlled by the causee in the first clause. The null pronominal must be in subject position in the second clause, as in (10a). It cannot be in direct object position, as in (10b).

- (10) a. [A delengerenger-el<sub>i</sub> a Steve a milruul er a bos<sub>j</sub> pro<sub>i</sub>] me  
 bad.behavior-3SG.POSS Steve TOP cause.PAST.IMPFV CASE boss and  
 [ng oldik er ngii er a urur-el pro pro<sub>j</sub>].  
 3SG.AGRS banish.IMPFV CASE him from job-3SG.POSS him he  
 ‘Steve’s bad behavior caused the boss to fire him from his job.’
- b. \* [A delengerenger-el<sub>i</sub> a Steve a milruul er ngii<sub>j</sub> pro<sub>i</sub>] me  
 bad.behavior-3SG.POSS Steve TOP cause.PAST.IMPFV CASE him and  
 [ng oldik pro<sub>j</sub>/er ngii<sub>j</sub> er a urur-el pro a bos<sub>j</sub>].  
 3SG.AGRS banish.IMPFV him/CASE him from job-3SG.POSS him boss  
*approximately*: ‘Steve’s bad behavior caused him for the boss to fire from his job.’

However, if the second clause is passivized, the internal argument of the passive verb can be controlled by the causee in the first clause, as shown in (11).

- (11) [A delengerengerel<sub>i</sub> a Steve a milruul er ngii<sub>j</sub> pro<sub>i</sub>] me [ng  
 bad.behavior-3SG.POSS Steve TOP cause.PAST.IMPFV CASE him and 3SG.AGRS  
 odik er a urur-el pro pro<sub>j</sub>].  
 banish.PASSIVE from job-3SG.POSS him he  
 ‘Steve’s bad behavior caused him to get fired from his job.’

Null pronominals that are internal arguments can only be controlled by the causee when the second clause is passive, not transitive. Once again, the fact that internal argument DPs in passives pattern with subjects rather than direct objects serves as evidence that they have been promoted to subject position.

So, why do passives lack an aspectual distinction? Nuger (2007) analyzes the verbalizer morphemes in Palauan as instances of *v*. Nuger (2008, 2009) argues that the aspectual distinction is neutralized in passives because the passive verbalizer prefixes *me-* and *o-* are also *v* heads that carry no aspectual information of their own. As only one verbalizer morpheme may merge with the verb root, the passive *v* competes with the transitive perfective *v* and imperfective *v* heads. If aspectual information were introduced in an AspP between VP and *v*P, then an Asp head should have no problem merging before a passive *v*, making the false prediction that passive verbs should manifest an aspectual contrast, just as transitive verbs do.

## 5 The Dissertation

The dissertation investigates different aspects of Palauan verbal predication in order to construct a unified theory of the architecture of the Palauan verbal complex. No previous research has dedicated itself to this topic, and it is clear that a study of the rich verbal morphosyntax in Palauan can

provide a window into verbal predication cross-linguistically. Already the study of internal arguments in Palauan has shed light on the nature of  $\nu$ P and the (non-)status of aspect as a separate, independent syntactic projection in the verbal complex.

Nuger’s analysis of Palauan transitive and passive  $\nu$ Ps raises interesting questions for the general typology of verbal domains. The evidence for an independent Asp projection between VP and  $\nu$ P is strong in other languages (see, e.g., Travis 2005 for Malagasy), but it appears that aspectual features are simply bundled with  $\nu$  heads in Palauan. If the Palauan analysis is correct, then it constitutes evidence that the architecture of the verbal complex is not fixed across languages. Rather, the relevant features can be bundled differently in different languages — something one might expect given the operation Select proposed by Chomsky (2000: 101), and which has already been proposed for the IP (TP) domain on similar grounds by Bobaljik & Thráinsson (1998).

An investigation into the syntax of  $\nu$ P-internal arguments that do not receive syntactic Accusative Case (or are somehow introduced by functional heads rather than by a lexical V head) is necessary to further develop Nuger’s current theory of the architecture of the Palauan verbal complex. Such arguments include the external arguments of unergative verbs, the internal arguments of unaccusative verbs, applied goal/source arguments and themes in applicative (double object) constructions, and both causees and themes in causativized verbal predicates.

No previous research has investigated the syntactic properties of intransitive verbs in Palauan. The class of intransitive verbs in Palauan is morphologically very diverse: they can be formed not only from the familiar set of verbalizer morphemes also used to create transitive verbs (i.e., *-m-*, *-em-*, *-u-*, *-o-*, *meN-*, and *oN-*) but also from the prefixes *ou-*, *be-*, *ke-*, and *se-* (and various combinations thereof), the infixes *-l-* and *-el-*, and the suffixes *-all*, *-oll*, *-el*, *-iil*, and *-uul*. There are also monomorphemic stative verbs that do not exhibit overt verbalizer morphology. Given the morphological and syntactic differences between unaccusative and unergative verbs in other languages (see, e.g., Perlmutter 1978, Burzio 1986, Levin & Rappaport Hovav 1995, Alexiadou et al. 2003, among others), it is natural to wonder whether there are any such relationships among intransitive verbs formed with the same verbalizer prefixes in Palauan. Nuger’s immediate concern is identifying reliable syntactic diagnostics for unergativity and unaccusativity in Palauan, such that it will become possible to postulate classes of intransitive verbs along these lines. Whether these groups of verbs exhibit similar verbalizer morphology or have similar thematic structures is one question Nuger addresses in this research.

Though an investigation into Palauan intransitive verbs is useful in its own right, it will also lead to a re-examination of whether Nuger’s (2008) passive construction is actually a passive or an extremely productive unaccusative construction. On one hand, there are passive correlates of almost all transitive verbs (including derived transitives such as causativized intransitives). On the other hand, the Palauan passive exhibits some properties of prototypical unaccusatives, such as inability to control a null PRO in a purpose/rationale clause — compare (12) to (13) — and lack of compatibility with agent-oriented adverbials — compare (14) to (15).

- (12) Ak silsebii a blai *pro*<sub>i</sub> [el ngmai a insurance PRO<sub>i</sub>].  
 1SG.AGRS burn.DOWN.PAST.PFV house I COMP receive insurance  
 “I burned down the house to collect the insurance.”
- (13) \*Ng milseb a blai [el ngmai a insurance PRO].  
 3SG.AGRS burn.DOWN.PAST.PASSIVE house COMP receive insurance  
*intended*: “The house was burned down to collect the insurance.”

- (14) Ak [blak a reng-uk *pro*] el kilemedii a chanakangari *pro*.  
 1SG.AGRS [intent heart-1SG.POSS I] LNK sew.up.PAST.PFV button.hole I  
 “I sewed up the button hole intentionally. (lit. I sewed up the button hole with an intent heart.)”
- (15) Ng [\*blak a reng-ul *pro*] el mla mekemed a  
 3SG.AGRS [\*intent heart-3SG.POSS 3SG.ARB] LNK AUX.PERF sew.up.PASSIVE  
 chanakangari.  
 button.hole  
 “The button hole has been sewn up (\*intentionally).”

If these verbs were unaccusative rather than passive, then their lack of compatibility with implicit agents and agent-oriented adverbials would make more sense. As noted above, identification of clearer (possibly language-specific) diagnostics for unaccusativity should clarify this issue, and Nuger’s initial fieldwork is devoted to uncovering such diagnostics.

The syntax of applicative constructions is an area in which the theory of Palauan transitive *v*P that Nuger has developed thus far makes strong predictions. Recent approaches to the syntax of applicatives (such as McGinnis 2001, Pytkäinen 2008) treat applied arguments as introduced into the verbal complex by a functional applicative (Appl) head. As the applied argument is more prominent than the internal argument, Chomsky’s theory of Agree (2000, 2001) dictates that the applied argument DP will function as an intervening DP between a transitive *v* probe and the internal argument DP. The applied argument should then receive syntactic Accusative Case, and Nuger’s theory of the Palauan verbal complex predicts that it should pattern morphosyntactically like canonical direct objects. Preliminary results suggest that it does.

There is a subclass of ditransitive verbs in Palauan that allow indirect object DPs to appear between the verb and the direct object, including at least the verbs *msa* “give,” *olecholt* “show,” and *melai* “bring.” Perfective forms of these verbs agree with the indirect object DP rather than the direct object DP, and the indirect object is subject to the differential object marking pattern typical of direct objects in imperfective *v*Ps, just as Nuger’s theory would predict. However, the morphosyntax of the internal (theme) arguments in these applicative constructions is mysterious. Pronominal internal arguments may *pro*-drop even though perfective verbs do not agree with them, and Nuger reports that the judgments have been quite varied among his consultants regarding whether they may be marked for case with *er* after imperfective verbs.

Nuger’s fieldwork in Palau will also investigate ditransitive verbs in Palauan. Using many of the generalizations in Green 1974, he has found additional verbs that may be followed by two DP objects among the apparently large class of verbs that encode indirect objects periphrastically as “*el mo er* + DP” or “*el me er* + DP” (approximate correlates of English “to + DP” or “from + DP”). Nuger will examine the morphosyntax of their arguments, searching for patterns and generalizations. He will then return to UC Santa Cruz for three months for transcription, analysis, and further consultation with his advisors and language consultants in the Bay Area.

The syntax of causation is another area in which Nuger’s analysis of *v*P makes strong predictions. In addition to the periphrastic causative construction mentioned in §4, there are three classes of morphological causative verbs described by previous researchers (see Josephs 1975 for a useful summary). These verbs are formed from the prefixes *omek-*, *ol-*, and *om-*, which are in complementary distribution with the verbalizer morphemes described in §4. Nuger has already begun to investigate the properties of the three morphological classes to look for systematicity in (i) their

semantics, (ii) which types of roots they attach to, and (iii) their argument structures. The class of ditransitive causatives also appears to share many morphological properties with ditransitive applicatives. For instance, the causee DP triggers object agreement and can be *pro*-dropped if the verb is perfective, and differential object marking occurs with causees in imperfective causative predicates. As with applicatives, the morphological properties of the theme DP are much more variable.

During Nuger’s second trip to Palau, he will investigate the syntax of causation in Palauan. By that point, he should have already formed a preliminary analysis of applicative verbs from the data collected during his first fieldtrip, serving as a foundation for comparison with the syntax of Palauan causative verbs. For instance, how similar are causees and applied arguments? Do theme arguments in applicatives share morphosyntactic properties with the demoted theme arguments in causative structures? It should prove interesting to see how the syntax of applicative and causative predicates interacts with the analysis of Palauan  $\nu$ P structure that Nuger has already advocated for monotransitive verbs.

Nuger has also discovered an arbitrary plural pronominal construction in Palauan that appears to behave like constructions in Spanish (Jaeggli 1986) and Irish (McCloskey 2007).

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

The [3PL] subject agreement suggests that a null plural pronominal is in subject position, but speakers agree that its referent may be unknown and may just refer to a single individual.

Nuger plans to conduct an investigation of this arbitrary plural construction in tandem with his investigation of the other constructions mentioned above — especially with an eye toward explaining the distribution and licensing of the arbitrary [3PL] pronoun. Previous work on arbitrary constructions in other languages has mentioned asymmetries between unaccusative and unergative intransitive verbs. Over the course of his dissertation research, Nuger should gain a greater understanding of the properties of Palauan intransitive verbs, and will increasingly better-equipped to investigate their interaction with the arbitrary plural construction. This project should contribute to our understanding of the syntax and semantics of agentivity in Palauan. Under Minimalist assumptions, the arbitrary [3PL] pronoun is presumably base-generated in Spec  $\nu$ P. As the arbitrary plural construction seems to be compatible with many types of (active) verbs, it is unlikely that the pronoun is licensed by a single particular  $\nu$  head. It will be interesting to see how the arbitrary plural construction relates to passives and object topicalizations, and how it fares with agent-oriented adverbials and purpose/rationale clauses.

Nuger plans to leave the final six weeks of his second fieldtrip open, so as to round out the areas of all of these projects that warrant further investigation or clarification. After he returns to UC Santa Cruz, he will continue working with his advisors and Bay Area consultants to synthesize the results of his research into a cohesive theory of Palauan verbal architecture.

All of these topics bear directly on the nature of verbal predication in Palauan. A study of this type will not only improve our understanding of the Palauan verbal complex, but it will also serve as a contribution to the comparative study of verbal predication cross-linguistically. As the properties of each of the Palauan constructions outlined above become clearer, it should be possible to construct a uniform theory of the architecture of the verbal complex that has empirical support from a number of different areas. In particular, Nuger hopes to determine whether functional projections

that have been argued to exist in the verbal architecture of other languages have any realization in Palauan, and how various syntactic, semantic, and morphological features are distributed syntactically among the inventory of the functional heads in the extended verbal projection.

## 6 Schedule of Research

Nuger has planned to make two extended fieldtrips to Koror, Palau — the first from late February 2009 to late April 2009, and the second from mid-August 2009 to mid-November 2009. His living expenses will be covered by his Jacob Javits Fellowship from the U.S. Department of Education. After each fieldtrip, he will return to UC Santa Cruz to transcribe his data, continue analysis, and progress under close consultation with his advisors.

Language data will be collected on a schedule not to exceed 10 hours per week, with other time devoted to organization and interpretation of the data. It is anticipated that for every hour of elicitation at least four hours will be needed for analysis and preparation of forthcoming elicitation sessions. Data will be collected using standard elicitation techniques and recorded manually. Consultants will be asked to read a session's findings into a digital recording device at the end of the session, whenever possible. Subjects will be asked for translation of English sentences into Palauan, completion or variation of Palauan sentences, and grammaticality/felicity judgments. Samples of spontaneous discourse and spoken narratives will be recorded digitally for later transcription. Data will also be gathered from pedagogical texts, stories, newspaper articles, and other written sources in the language. Speakers will be asked to give interpretive information about written sources and otherwise to voice their linguistic intuitions. All audio recordings will be archived with PARADISEC digital archive for endangered materials from the Pacific Region. Nuger's Palauan data will be available online both at PARADISEC (as transcriptions of the recorded data) and via a searchable online database of Palauan linguistic example sentences that Nuger has developed.

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