



UNIVERSITY OF CALIFORNIA
SANTA CRUZ

**ARCHITECTURE OF
THE PALAUAN VERBAL COMPLEX**

A dissertation submitted in partial satisfaction
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

LINGUISTICS

by

Justin Nuger

June 2010

The Dissertation of Justin Nuger
is approved:

Professor Sandra Chung, Chair

Professor Judith Aissen

Professor James McCloskey

Professor Kie Zuraw

Tyrus Miller
Vice Provost and Dean of Graduate Studies

Copyright © by

Justin Nuger

2010

VERSION INFORMATION

Current version: vo.2

vo.0: filed at UC Santa Cruz (and available on ProQuest)

6/2010

vo.1: single spaced, re-paginated, uploaded to website

7/2010

vo.2: some typos corrected, pagination consistent with vo.1

9/2010

CONTENTS

Version Information	iii
Abstract	vii
Acknowledgments	viii
Remarks on the Palauan Data	xvii
I Introduction	I
I.1 The broader context	2
I.1.1 Core theoretical assumptions	2
I.1.2 Theoretical frameworks	3
I.1.2.1 Minimalism	4
I.1.2.2 Late-insertion of lexical material	6
I.1.3 Empirical breadth	9
I.2 A glimpse into the Palauan language	12
I.2.1 The language situation	12
I.2.2 Grammatical sketch	15
I.2.2.1 Word order	16
I.2.2.2 The nominal complex	16
I.2.2.3 Pronouns and agreement morphology	24
I.2.2.4 A' dependencies	28
I.2.2.5 Topicalization	33
I.3 Summary of key results	40
2 Encoding Grammatical Relations Syntactically	43
2.1 The notion of subject	44
2.1.1 The morphosyntax of subject agreement	44
2.1.2 The syntax of subjects	48
2.1.2.1 Expletive subjects	49
2.1.2.2 Possessor ascension	56
2.1.2.3 Raising-to-subject constructions	60

2.1.3	Interim conclusions about subjects	73
2.2	Licensing internal arguments	84
2.2.1	An aspectual alternation.....	85
2.2.2	Direct objects in Palauan	88
2.2.3	Transitivity and inner aspect (Aktionsart)	91
2.2.4	Differential object marking	99
2.2.5	DP-licensing and morphological case	105
2.2.5.1	The role of Agree in the (narrow) syntax	105
2.2.5.2	A DM account of direct object morphology	108
2.2.6	Interim conclusions about direct objects	115
3	Psych-Predicates and Phrasal Idioms	116
3.1	A typology of Palauan ψ -expressions	119
3.1.1	Ψ -idioms: the context	122
3.1.2	Accusative ψ -arguments and (non-)incorporation	127
3.2	The syntax of ψ -idioms.....	132
3.2.1	A' dependencies and ψ -idioms	132
3.2.2	Possessor ascension, raising, and ψ -idioms.....	140
3.2.2.1	Optional PP arguments	142
3.2.2.2	Raising-to-subject and aspectual modification.....	145
3.2.2.3	Raising-to-subject and clause extraposition	149
3.2.2.4	Raising-to-object.....	152
3.2.3	Ψ -idioms and coordination.....	154
3.3	Implications of the post-syntactic analysis	157
3.3.1	Transitivity alternations	165
3.3.2	Nominalizations of ψ -expressions	169
3.4	Conclusions.....	177
4	From Roots to Words: Selection and Projection	183
4.1	A history of Palauan <i>me-</i> intransitives	188
4.2	Evidence for a subclass of passive <i>me-</i> verbs	190
4.2.1	The elusive <i>by</i> -phrase	192
4.2.2	Licensing agent-oriented adverbials.....	194
4.2.3	Control into purpose infinitival clause modifiers.....	196
4.3	A diagnostic for unaccusative <i>me-</i> verbs	199
4.3.1	Palauan <i>di ngii</i> -predication.....	200
4.3.2	Distinguishing unaccusatives from passives	205
4.3.3	Testing a prediction.....	207
4.4	Notes on stative <i>me-</i> adjectives	208
4.5	Analysis	211

4.6	Predictions and implications	214
5	Resultatives and Word-Internal Syntax	222
5.1	Evidence for internal verbal structure	225
5.1.1	Internalized external arguments	225
5.1.2	The complex event structure of resultatives	228
5.1.2.1	Manner adverbials	228
5.1.2.2	Aspectual modifiers targeting telic endpoints.....	229
5.2	Resultatives as resulting state predicates	231
5.2.1	Truth conditions of resultatives	232
5.2.2	Auxiliary selection: <i>mla</i>	233
5.2.3	Resultatives have stative past tense morphology.....	237
5.3	Argument structure of resultatives	239
5.4	Syntactic analysis of Palauan resultatives	241
5.5	Consequences of the analysis.....	243
5.6	Conclusion.....	251
6	Overall Conclusions	252
	References	257

ABSTRACT

ARCHITECTURE OF THE PALAUAN VERBAL COMPLEX

Justin Nuger

This dissertation addresses two fundamental, difficult questions in linguistic theory. The morphological question involves the formal status of verbs as “words,” while the syntactic question is concerned with how verb phrases are constructed. Both questions arise in frameworks, including Distributed Morphology and recent versions of Minimalism, in which the material that constitutes a verb is distributed over multiple syntactic heads. To address these questions, I develop a theory of the verbal complex of Palauan, an Austronesian language spoken by approximately 15,000 people in the Republic of Palau and elsewhere. The data covers new empirical domains and is drawn both from my original fieldwork and from sources of naturally occurring data.

I begin by exploring the nature of grammatical relations in Palauan (subjects, direct objects, and possessors), concluding that they are instantiated by the operation Agree. The morphosyntax of accusative DPs also suggests that licensing heads that trigger Agree may have other features bundled with them, like tense, aspect, or mood. Next, Palauan phrasal idioms reveal a locality restriction on their subparts for which I propose a constraint that refers to linearized strings. If the analysis is correct, Palauan idioms provide a new type of evidence for a post-syntactic component of the grammar. Then, from one morphologically uniform class of intransitive verbs and adjectives, I conclude that there are three distinct syntactic subclasses — passive verbs, unaccusative verbs, and stative adjectives. The result bears on the nature of the relations between functional heads and their complements, which I take to be something like feature-unification (rather than category-selection). Finally, the internal structure of resultative adjective phrases suggests that Palauan words are derived (at least partially) syntactically, where a syntactic head can merge with a phrasal XP but form a morphophonological word with just a proper subpart of that XP.

The overall picture that emerges is that while the (morpho)syntax of Palauan appears initially baroque, it is not tremendously different from that of other languages. Still, its sometimes unusual properties can help shed light on long-standing questions about similar phenomena in better-studied languages.

ACKNOWLEDGMENTS

“Celui qui ne meurt pas une fois
par jour ignore la vie.”

Remy de Gourmont (1858–1915)

Don't get me wrong — I have every confidence that it's an impossible task to thank everyone who has helped me get to where I am now. Having now read my fair share of other people's dissertations, it occurs to me that the acknowledgments section ordinarily follows one of two models: (i) BREVITY >> EXHAUSTIVITY (keep it brief, thank the committee/family/close friends, and apologize for not thanking everyone else); or (ii) EXHAUSTIVITY >> BREVITY (try to thank as many people as possible while still attempting to keep the individual messages to each person brief). Though erring on the side of the latter model, I'm going to opt to throw BREVITY right out the window. I mean, let's be realistic. The majority of people who deserve thanks may not understand (or even care about) anything written here other than the acknowledgments. I really want to make this section count for those people. Feel free to skip ahead to Chapter 1 at any point.

It's obvious that this dissertation could not have been written without the hundreds upon hundreds of hours I spent with the friendly and patient Palauans who tolerated my slow progress in learning their amazing and difficult language. My fieldwork began the Bay Area in December 2005 with Maria Mersai over a cup of coffee in Alameda, California. Special thanks to you, Maria, for making this project possible from start to finish. Thanks also to Bob Naito and Ilana Seid for giving me my first tastes of your Palauan lives in California, just up the road from Santa Cruz. And when I arrived in Koror for my first on-site field trip in August 2008, I didn't know a single person and had no idea how I was going to find language consultants. Fortunately for me, Palauans are a friendly and tight-knit group, and it didn't take long for my first acquaintances to introduce me into their networks. I suddenly found myself with more consultants than I had time to work with regularly — an enviable position for any field linguist. My deepest gratitude goes to

Romana Anastacio, Theodoro Borja, Leilani Brel, Masa-Aki Emesiochl, Wilma Kumangai, Midori Mersai, Debra Neas, Nik Ngirailild, Albino Oda, Destin Penland, Faustina Rehuher-Marugg, Ted Rengulbai, Ebil Ruluked, Sharon Sakuma, Appolonia Sasao, Faith Swords, Patrick Tellei, Debbie Tkel-Sbal, (most especially) Masaharu Tmodrang, and Noe Yalap for the time you all have spent introducing me to your language, your culture, and your lives.

I can't imagine having a committee better suited to the topic of this dissertation. Sandy Chung is quite possibly the most qualified person in the world to serve as the supervisor of this dissertation, and I am incredibly fortunate to have had the chance to work with her on it. Sandy, you have helped me in so many ways over the last several years that I feel like I could write an entirely separate acknowledgements section to thank you for all you've done to get me where I am now — instead, I'll just thank you for everything and hope you know how sincerely I mean it. Judith Aissen's and Jim McCloskey's extreme dedication to syntactic theory and linguistic fieldwork have inspired numerous stimulating conversations that I will never forget. Thank you, Judith and Jim, for always welcoming me into your offices whenever I felt confused, concerned, unsure of myself, or ignorant about something I was sure everyone else knew and helping me resolve my problems with panache. Incredibly, I managed to have a Palauan specialist, Kie Zuraw, as my external committee member. Kie, thank you for our email exchanges on data points during my field trips (and especially when these coincided with your sabbatical), for our lunches and conversations during AFLAs, and most especially for treating me as a "real" advisee even though I was not at UCLA — this dissertation is so much better than it would have been if you had not been on the committee.

In addition to my committee members, I would also like to acknowledge all of the other professors I've worked with at UCSC: Donka Farkas (thanks for welcoming me into your office whenever I needed semantic clarification), Junko Ito (thanks for showing me how things really work in the department, for better or for worse), Jorge Hankamer (thanks for being the last one "standing" at any important social event), Armin Mester (thanks for being my first advisor, and for being hilarious!), Jaye Padgett (thanks for always being supportive and, among many other things, letting me love your rabbit), and Geoff Pullum (thanks for taking the time to give me inspiration during your busy transition to Edinburgh). Other faculty that I've worked less closely with for various reasons include Lev Blumenfeld (thanks for pushing my phonology career further than it would have gone without you), Pranav Anand (thanks for being willing to spend three hours talking to me in a single meeting), Veerle van Geenhoven (thanks for helping me see what is and is not appropriate in a semantics class), Paula Menendez-Benito (thank you for your average of 1.5 pages of comments for each page of written work and for stretching my presentation about French free choice items over a span of four weeks), and Bill

Shipley (or whoever has been impersonating him over the last few years by sending mysterious emails and leaving mysterious gifts around the department). To all the faculty: between the insanity of first year sequence courses and subsequent seminars all of you taught, the parties at your houses, the conversations we've had, and the impromptu downtown run-ins, I feel like I got a lot of the "UCSC linguistics experience" that everyone told me about when I was deciding where I wanted to go to grad school — it's been incredible. I don't know if I could justly describe the certain demise the UCSC linguistics department would face were it not for the dedicated work of Ashley Hardisty, Connie Creel, Debbie Belville, and especially Tanya Honig — thanks to all of you for making the impossible possible (for me). Yi Zhang and Beth Ann Hockey also deserve special thanks for introducing me to my "other life" as a computational linguist and opening the door to the opportunities I've had to work at the NASA Ames Research Center, Ford Research Labs, and Google (not to mention a surprising and wonderful trip to Singapore for the ACL meeting).

Many of the students that I've overlapped with during my time at UCSC have had great impacts on my life in one way or another. Vera Gribanov (Gribanova? Liar.) was my deskmate for four years in "the cave," and my officemate for another two years "upstairs." Thank you, Vera, for all the times your lunacy has made me feel sane, your self-induced illnesses have made me feel healthy, your complaining about everything has made me feel virtuous, and your patience and friendship have held me together so many times when I thought I was going to fall apart. Jesse Saba Kirchner is the third member of my cohort — were it not for our commiseration sessions, Tuesday complaining-party snax with Vera at Saturn (before it sucked)/Santa Cruz Diner (did it ever not suck?)/Seabright Brewery (why did we not just always go there?), and reality checks, I don't think I could have made it through the program. Thanks, Jesse, for being one of my closest and possibly most unlikely friends (we are so weird). Jeremy Weissmann was the fourth member of our cohort, and even though he only stayed in the department for one year, our friendship has been a driving force in my life in many ways. Jeremy, thanks for pushing me, for making me think, for being so much fun (and thanks to Sarah Morris for fun, too), but most especially for making sure I never made a complete transformation into "*the individual*." Noah Constant, Stuart La Rosa, Allison Largent, Jessamy Norton-Ford, Ember Van Allen, and Gigi Ying were all close friends while they did their MAs at UCSC (*i.e.*, during my first couple of years) — I've missed you all. I think of Pete Alrenga and James Isaacs as mentors of sorts: thank you for showing me adventure, discipline, shenanigans, and the way. Pete (and Nora), thanks for the nights at your house spent watching the OC, for your openness to everything as long as it was done in the right place ("Parking lot!? Nooooo..."). James, thanks for sharing an amazing birthday bash with me in San Francisco in 2008, for being a true,

loyal friend, and for listening to way more than your fair share of my complaints (amusing as they sometimes may have been to you). Thanks to Ascander Dost for being my partner in crime during the summer of TARMS (2006), and for helping to eternally ensure its terminological survival in the minds of all mortals (seriously, *so* many people say TARMS now!). Thanks to Ascander Dost again for once saying the best thing: “Why do you boZER to swear to God when ee cannot HEEven EAR you!” Thanks to Andrew Dowd for being Princess Cupcake, for showing a conference full of linguists (at WCCFL 24 that academic prestige does not always correlate with intelligence or careful work), for being the resident bad-ass, and for being the most awesome person on the 2nd floor of Stevenson. Ruth Kramer, Kyle Rawlins, Dave Teeple, and (for a while) Randall Orr were all a year ahead of me in the program, and they kind of served as honorary members of our cohort, going through the same ups and downs that we did — whether you know it or not, you have all been major influences on my life for the past few years. Among the “olders,” I’d also like to acknowledge Aaron Kaplan, Vera Lee-Schönfeld, Emily Manetta, Line Mikkelsen (even though you graduated right when I started), Anne Sturgeon, and Lynsey Wolter for always being wonderful people. Thanks to the various inhabitants of “the linguist house” and friends thereof for various sorts of hospitality (but kind of even more thanks during the time when you all didn’t live there yet): Matt Barros, Paul Jensen, Whitney Larson, Sally Mirkin (Teeple!), Eduardo Neal, Nick Reynolds, Breanne Simmons (your eye-patch was bangin’ hot — no joke), Katrina Vahedi, and Paul Willis. Amanda Morris fell into this group later — Amanda, I am so happy I met you... there are too many reasons you are great. As I became an “older,” I started to have less to do with the “youngers,” sadly, but I’d still like to thank Angela Aiello, Scott AnderBois, Ryan Bennett, Boris Harizanov, Robert Henderson, Abby Kaplan, Tiffany Lake, Mark Norris, and Jeremy O’Brien for holding down the fort as the OLD “olders” graduated. Thanks, too, to the handful of UCSC undergrads from linguistics and myriad Stevenson Café employees that contributed to making my life not horrible on campus (and sometimes off campus, if they were lucky), in particular Rosie Gordon, Matt Williams, Sal Sanchez, and Cameron Taylor. And special thanks to Judith Fiedler for being the best co-TA I’ve had at UCSC and sharing the many varieties of both masochism and Schadenfreude associated with TA-ing some of the most notoriously labor-intensive classes in the department (Syntax 1, followed by Syntax 2) while writing my dissertation.

There are also several linguists who have been instrumental during my progress through the program at UCSC who are not connected to UCSC (or McGill) at all, or at least they weren’t while I was there. These include Edith Aldridge, Arto Anttila, Doug Ball, Rajesh Bhatt, Abby Cohn, Peter Cole, Peter Culicover, Dave Embick, Gaby Hermon, Sharon Inkelas, Dan Jurafsky, Hans-Martin Gärtner, Ed Keenan, Julie Legate, Beth Levin, Diane Massam, Bill Palmer, Ileana Paul, Matt

Pearson, Masha Polinsky, Norvin Richards, Joey Sabbagh, Ivan Sag, Peter Sells, Tim Stowell, and (at some especially crucial times) Anne-Michelle Tessier. There is also a group of (previously) UCLA-based graduate students who added pizzazz to my linguistics life and lured me down to LA for the occasional fun event. Chris Kim, I look up to you in so many ways, have had the best time with you at so many conferences (and also doing “real” things), and I hope that someday we can be real colleagues. Sameer Khan, you have spent countless nights up late talking to me, and as a result, you probably know more about me than anyone else on this planet — thank you for everything. Everything. Thanks to Asia Furmanska for drinking beers with me in a nameless, unknowing linguist’s hot tub, for a wonderful night at the Hollywood Bowl, and for being generally adorable — show. Thanks to Lauren Varner for being Jewish with me, for the Terried squid ring, for our sexually anti-climactic sleepover party on the hide-a-bed at Sameer’s parents’ house, and for moving to San Francisco (and now Oakland). Thank you to Shabnam Shademan for having the best house and hosting glorious beach days. And finally, thank you to Ananda Lima for being the most broom, the most Brazilian, and beautiful enough to get us into Largo to go see *Flight of the Conchords* before they were famous even though the venue was totally full and we had to stand in the corridor. And although she is not a linguist, Kathryn Roberts used to be the “Tanya” of the UCLA linguistics department before Tim Stowell lured her away to Murphy Hall. Kathryn, wherever you are, you have provided me with so much joy during the times we’ve spent together, and I really miss you.

I would never have had the chance to work with (or probably even meet) any of the aforementioned people if it weren’t for the outstanding undergraduate preparation I got from the linguistics department at McGill. Particular thanks to Lotus Goldberg, who (a graduate student at the time) taught me my first linguistics course in summer school and helped me discover what I’ve always been: a linguist. Equal thanks to Nigel Duffield (my first syntax teacher!) for showing me what I would become: a syntactician. And thanks to Lisa Travis for introducing me to the Austronesian language family — if it weren’t for her, my dissertation would probably have been about something far less interesting. Lotus, Nigel, and Lisa all had different reasons for directing me towards UCSC for my graduate studies — I’m really glad that they saw something in me that told them it would be a good fit. Heather Goad deserves credit for *almost* luring me over to the P-side — Heather, you are one of the greatest teachers I’ve ever had. Thanks to Peter Hallman for stepping in to supervise my undergraduate hono(u)rs thesis while Lisa was on sabbatical: you made my last year in the McGill linguistics department wonderful. And thanks to all the other professors and graduate students who taught me the rest of what I needed to know to succeed at UCSC (both academically and otherwise): Alan Bale, Brendan Gillon, Jen Mah, Corrine McCarthy, Raph Mercado, Heather Newell, Glyne Pig-

gott, Andrea Santi, Lydia White, and Alan Yu. Kyle Johnson was a visiting professor at McGill during my final semester. Thanks, Kyle, for your advice, your confidence in me, my A in your proseminar, unexpected employment, our friendship, and the inspiration. My undergrad friends in McGill linguistics also definitely played a role in my getting into grad school — to that end, thanks to Wid Al Bayaty, Meaghan Buckley, Caroline Chochol, Valerie Crystal, Meg Grant, Denis Jacquery, Raf Jeglinski, Jillian Mills, Natalie Liu, Nicole Perrin, Ali Pletch, Josée Poirier, Inna Tolskaya, and Derek Vincent. My posse at the 2003 LSA Institute at Michigan State were instrumental in helping me get through six weeks in (what I considered to be) the Bible Belt — for that, I thank Leszek Barczak (and thanks for an amazing week during WCCFL 24 in Vancouver), Natsuko Gomi, Natalie Klein (sorry I inadvertently presented you as a bedtime gift to Zach after your long trip from Rochester to Brooklyn), Ritik Tiwari (after staying with you in Chicago during LSA 2008, I have often thought about how immediately I would trade lives with you, regardless of how much you might hate yours), and Sarah Van Wagenen (thanks for hosting me as a prospective student at UCLA). The other people from the McGill era who all played key parts in my decision not to transfer to Berkeley (and deserve many thanks for it since it turned out to be a really important decision in my life) are Rachel Bray, Benjamin Girard-Bond, Srinivas Murthy (you are bar none the most mysterious roommate I've ever had), Dave Rempel, Randy Pierce (nephew of David Hyde Pierce!), Anthony Szabó, Sylvain Verstricht, and Katie Wolfe all deserve thanks for being awesome to me. Tim Castro, Shaun Dubreuil, Greg Ellerman, and Eleni Gogas deserve thanks for being really great friends, video game buddies, and inducteurs/-euses into the bizarre and magical world of the Montreal underground music scene — who'd have known at the time that we would be rubbing elbows with future internationally known rockstars? On that note, I thank Win Butler for the brief but generous hospitality at his apartment which now allows me to namedrop and tell people legitimately that I have hung out with the lead singer of Arcade Fire before they got signed. Emily and Becky McTavish should be especially recognized as probably the best people I met in Montreal, and I have greatly benefited from our continued shenanigans in San Francisco, Austin, New York, and most recently LA (and thanks for bringing me into both your family and the Clarke family, whether they liked it or not) — the two of you give me hope for humanity. And thanks (also to Emily and Becky) for rollin'/chillin' with Francesca Maximé and introducing me to your zany East Coast friends who have given me a home away from home: these include Dave-and-Leila, Carrie Burke, Ben Chertoff, Mike Fisher, Sara Katzoff, Emily Sottile, Pete Wise, Jason Woliner, and many more.

During my years in Santa Cruz, I was not only a linguistics student at UCSC, but also a resident of the St. George — Patrick Cooper and Carol Souza, thanks for being the most rocking (literally?) land... um... -people? ever! The friends I

have made through the St. George are some of the best I have ever had, and I can't thank you enough for all of the support you've given me throughout grad school. The first of the bunch was Hans Vermy, who quickly stepped in to essentially be my mental caretaker for a year or so — thanks for being there to help me through one of the most difficult times of my life, and for letting me in to help you through one of the most difficult times of yours. Thanks, too, for bringing me into both your Santa Cruz and your Cornell circles — your friends are lucky to have you. Another is Eugene Goldin, who as a fellow night owl accompanied me through many sessions of late night programming, reading, writing, bevving, and complaining. By far, Amy Morris and Lisa Ferguson are the most interesting, dynamic, and fun neighbors I've ever had — the adventures, the excursions, the late-night movies, the study parties, the *dance* parties, the trips to San Francisco and the East Bay (and LA!), the encounters with the crazies (*e.g.*, stompy-boots woman, Kelly [who burned down my apartment], Bubba [75% B], “other Justin,” Pablo the resident tweaker, and the weird old man at the end of the hall who died), and the debauches that we've shared have added an welcome element of intrigue to my life that gave me the balance I needed to decide when it's time to throw myself into linguistics and when it's time to stop — I can't thank you enough for everything. Now, as Amy's, Lisa's, and my circles merged, I found myself surrounded by wonderful people who had nothing to do with linguistics. They also deserve credit for helping me realize that things weren't as bad as they seemed, that sometimes I needed to kick my own ass, and sometimes I needed to put the books down and go for a bev (or... whatever). Kelly Kitagawa deserves special mention for being about the QTz-est person I know — never lose that, Kelly. Cassie Delieto equally deserves special mention for being about the craziest person I know — I can't tell you how many times I have been *so* happy that you have instantly agreed to go along with one of my crazy plans without any hesitation whatsoever (or proposed an even *crazier* one that far surpassed my original), and that you are a cold-hearted bitch. Thanks also to Nicole Delieto for being a totally hot model. Thanks to John O'Hagan and Tom Freeman for the relaxing nights of Super Mario Brothers and Kirby's Adventure, and for too many other things to list. Thanks to Jane Maker, Sondra Ortiz, and Mike Ortiz (backseat crew!) for being some of the most fun (and most chill) people I've ever met — I am so impressed at how you can be amazing all the time, under all circumstances, without any hesitation. Similarly for Maggie Fish and Drew Valentine — you are some of the most interesting, beautiful people I know. Thanks, Jenny Horton (and Mark), for your rollerskating, for your fellow appreciation of the Olympic Games, and for getting along with just about any person thrown your way. Thanks to Victoria Flores for sharing the glory of passing my qualifying exam and making that day (and night) one of the craziest and most memorable of my life (“No! 80s wants Blund back!”). Thanks to Dwayne Turner for bringing me into your circle (and for

letting me crash with you in the Mission and with your friends in Richmond), even though I was just “Kelly’s friend” — I really appreciate it. Thanks to Andrea Schiavoni for your incredible smile and your contagious laughter (and for being totally hot). Special thanks to Sara Stewart for being my surrogate girlfriend for about a year, for being beautiful and bubbly, and for opening up the Riverfront Twin Cinemas at midnight for illicit movie screenings under dubious circumstances — I have had so much fun with you. All of you.

Now, let’s not forget about my European friends who have provided me with much support from overseas, homes in various countries when I decided I needed to get away from it all, and unparalleled friendship from afar. Lisa Coen and Sarah Seymour, you have been my friends since our ridiculous year spent living in squalor on the French Riviera — I’m glad that *something* good came out of our time there (notice it has nothing to do with French people). Too bad we lost Matt somewhere in Cymru (or maybe Leeds?). Matthew Williams, if you ever read this, make yourself known! Ich muss mich auch super herzlich bei der Familie Lehmann (Marcus, Karina, und Norbert) bedanken. Ich kann es kaum glauben, dass es schon mehr als zehn Jahre sind, seitdem wir alle zusammen gewohnt haben. Ich habe euch sehr lieb, wünsche euch das Beste, und hoffe das wir noch mindestens zehn Jahre mehr noch ins Kontakt sind. Grüße auch zu meiner ganzen Klasse aus dem Dolnoserbški Gymnazium Chóšebuz — ich denke oft an euch. Und seit dem letzten Jahr, ich bin auch unglaublich glücklich (and I mean both “lucky” and “happy”) Petra Stegmaier und Guillaume Wiederhirn kennengelernt zu haben. Ihr habt mein Leben wirklich verändert, und ich hoffe, dass es sich noch weiter ändert, damit wir uns noch öfter sehen können.

And yes, it continues. I found myself with the unusual opportunity to go to grad school at one of my “local” universities. As such, many of the friends I had during high school re-entered my life and gave me hope that no matter how bizarre or difficult my new life as a grad student might be, there was stability among them. During my first term at UCSC, I had the surreal experience of overlapping with one of my best friends in the whole world, Sera Vorpahl, who was taking one extra term to finish her BA, also at UCSC. We had never gone to school together but always joked what an amazing team we would make if we ever did. And then we did. Sera, you are responsible for making what could have been an otherwise stressful life-transition into something not just familiar, but spectacular — every time I hang out with you I become a better person, and I hope we never lose touch. Adrienne Haynes also transferred to UCSC while I was there — I’m so happy that we got to have our run-ins on the bus, at just about every bar in Santa Cruz, and the occasional *planned* hang out. Various friends from home who for one reason or another found themselves living in San Francisco also provided me with a lot of support over the past few years. Lauren Olofson, I’m so glad that you (like me) had your fill of the

East Coast for a while and moved back where you belong — thanks for providing me with a temporary home whenever I needed to escape the Cruz. Thanks to Justine Wolitzer and Pablo Puerta for the same. Unexpectedly, Jeffrey Flynn and Emily Holtz gave me a chance to see what happens when burned bridges are rebuilt — thanks for showing me that I am capable of forgiveness (haha). And more recently, thanks to Thomas Jerde for being an all-around outstanding person. I'm glad that I could be there to talk you through your move up to the city, and I'm even more glad that you could be there to talk me through just about everything ever — I can't emphasize how much I value your friendship.

A romantic conversation with Jaime Durham in the spring of 2005 about how we were someday going to meet in Micronesia led me to peruse the University of Hawaii-published reference grammars on Yapese (Jensen 1977), Mokilese (Harrison 1976), Ponapean (Rehg 1981), Kusaiean (Lee 1975), Palauan (Josephs 1975), and Woleaian (Sohn 1975) at McHenry Library. If we had never had that conversation, this dissertation would probably not be about Palauan, and I probably wouldn't have had the extreme fortune to be able to write it on a tropical island. Thanks, Jaime, for that spark of inspiration, for being my Seoulmate in South Korea last year (and always), and for assuming everything is yours. Warsaw, here we come — I hope they can handle us.

And finally (for real), I owe a lifetime of gratitude to my family. They have made monumental sacrifices to provide me with the best opportunities, and I can only hope that I've lived up to their dreams for me. Mom and Dad, thank you for your unwavering support over the years, no matter how ridiculous my endeavors, and for all the more immediately tangible things you've done for me while I've been in grad school. It's been really nice having you up the road. My brother, Jeremy, is one of my favorite people in the whole world — I'm glad that we've gotten closer again during the grad school years.

I gratefully acknowledge all of the financial support I received for this research, which has generously been provided by the National Science Foundation under Grant #BCS-0846979 (Doctoral Dissertation Improvement Grant), the United States Department of Education under Grant #P170B050015 (Jacob K. Javits Fellowship), two Research & Travel Grants from the Institute for Humanities Research at UCSC, and a Summer Research Grant from the UCSC Department of Linguistics. The findings expressed here are my own and do not necessarily reflect the views of the funding organizations.

And despite trying to satisfy EXHAUSTIVITY at the expense of BREVITY, I'm sure I've left some of you out of these acknowledgments. It's because you're the most special of all.

REMARKS ON THE PALAUAN DATA

“I not only use all the brains I
have but all I can borrow.”

Woodrow Wilson (1856–1924)

In the interest of recognizing the efforts of those whose research on the Palauan language has made it possible to establish a standardized orthography, I present the Palauan data in the orthography found in Josephs 1997 & 1999, the two-volume *Handbook of Palauan Grammar* that the Palauan *Olbiil er a Kelulau* (Senate) officially recognized as the written standard when they passed Bill No. 7-79 on 10 May 2007. The orthography in those volumes is that of Josephs’s earlier (1990) *New Palauan-English Dictionary*. The Josephs Orthography, as I will refer to it, has been taught in Palauan schools since the 1990s — as a result, most Palauans in their twenties or younger control it (as of 2009), while those in their thirties or older are more likely to employ non-standard orthographies from the period before efforts to standardize the language began in the 1970s (see Yaoch et al. 1972). Much of the data in this dissertation has been drawn from published Palauan materials that were not originally written in the Josephs Orthography, but I have standardized it using this orthography with the aid of native speaker consultants and Josephs 1990. The original sources are always cited for comparison (see below for a key to the citations).

Probably the first obstacle for any linguist interested in the morphological structure of Palauan is the system of complex morphophonological processes and alternations in the language. But Palauan morphophonology plays only occasional minor roles in this dissertation. What will largely be important for our purposes is the morphosyntactic correspondence between syntactic features and individual morphophonological forms; I have nothing new to say about the phonological derivations of surface morphemes that goes beyond the discoveries made in the pioneering dissertations of Wilson (1972) and Flora (1974) on Palauan phonology and morphology. Before Wilson’s and Flora’s work, the relations between different words constructed from the same morphemes were often quite opaque. Even with the

help of dictionaries like Josephs 1990 (the aforementioned Palauan-English bilingual dictionary) and Ramarui and Temaël 1999 (a monolingual Palauan dictionary), non-native speakers of Palauan often find it difficult to parse complex words. For these reasons, I have opted to gloss as much of the morphology in the Palauan data as possible, even if it is not immediately relevant to the discussion at hand. From a syntactic perspective, however, I have taken measures to present the data in a straightforward way (aiming for maximal faithfulness to its natural spoken or written form) and to restrict my own syntactic analysis to the prose and to phrase structure trees wherever possible. In other words, I have tried to avoid including null elements (*viz.* null pronouns, traces, operators, and gaps) and marking syntactic constituents with brackets directly in the Palauan data except where such marking is necessary (or at least helpful) to follow the discussion in the prose.

Most of the letters/graphemes in written Palauan correspond to phonemes that can be represented by the corresponding segments in the International Phonetic Alphabet, *e.g.*, Palauan *b* is the phoneme /b/. Three notable exceptions are worth mentioning. The first is *cb*, which is invariably pronounced as a glottal stop. The *cb* digraph is a remnant of an earlier writing system developed during German occupation when the glottal stop was pronounced as a fricative [x] — older Palauans that I have spoken with still remember their grandparents pronouncing *cb* this way. The second is *e*, which represents either the full vowel [ɛ] in primary and secondary stressed syllables, or schwa in unstressed syllables; the conditions are similar to those of English vowel reduction.¹ The third is the digraph *ng*, which is a (phonemic) velar nasal but can assimilate to be pronounced as [m] or [n] — there is no phonemic /n/ in Palauan.

The glosses that I employ to annotate the Palauan data are listed in Table 0. I use dashes (-) to separate morphemes and periods (.) to separate multiple glosses that are associated either with the same morpheme or two morphemes that are not easily separated from each other. As infixes present a problem for the linear arrangement of morphemes, I adopt a *slanted typeface* to mark infixes within other morphemes, while corresponding glosses for infixes are marked in *SLANTED SMALL CAPS* and separated with a period, as in the case of the infixes *-o-* in *soiseb* “enter” and *-m-* in *ngmasech* “climb,” shown in example (i) below.

¹ Stress in Palauan is largely penultimate (with many semi-regular exceptions).

=	(realis) subject agreement clitic
I	first person
2	second person
3	third person
ACC	accusative case
ATC	anticipative
AUX	auxiliary
CAU	causative
C	complementizer
D	determiner
EMPH	emphatic morpheme/word
EXC	exclusive
EXP	expletive
FUT	future tense
<GAP>	A' gap
±HUM	human/non-human
IMP	imperative
IMPF	imperfective aspect — <i>ordinarily not glossed</i>
ICP	inceptive
INC	inclusive
INTR	intransitive
IRR	irrealis
L	linker
O	(perfective) object agreement suffix
P	possessor agreement suffix
PASS	passive
PAST	past tense
PF	perfective aspect
PL	plural
PRES	present tense — <i>ordinarily not glossed</i>
R	realis — <i>ordinarily not glossed</i>
RECIP	reciprocal
RES	resultative
S	(irrealis) subject agreement prefix
SG	singular
±SPEC	specific/non-specific
TOP	topic marker
VBLZ	verbalizer
VOC	vocative

TABLE 0 Glosses employed to annotate the Palauan data

- (i) Ng mo-cha soiseb er a bl-il el mo ngmasech er aika el
 3SG= go-ICP INTR.enter P D house-3SGP L go INTR.climb P these L
 dech-il a kerebou el mo er a beb-ul e mo
 manures-3PLP D cows L go P D top.area-3SGP and go
 dengchokl.
 sit
 “He (referring to a pig) got up to go indoors so he could climb to the top of
 the manure pile and sit down.” [CB 21]

The verbalizer prefixes *meN-* and *oN-* trigger nasal substitution² whenever the following morpheme begins with a consonant. This nasal substitution is the only perceivable phonological distinction between these prefixes and *me-* and *o-*, which do not trigger nasal substitution. Thus, *meN-* and *oN-* are not separated with a dash from the following morpheme in the Palauan data, but they are glossed and separated from the following gloss with a period. An example of this can be seen in (ii) below, where the verb *mengitakl* ‘sing’ is formed from the root $\sqrt{\text{CHITAKL}}$ and the imperfective verbalizer *meN-*.

- (ii) Ng mo-cha mengitakl.
 3SG= go-ICP sing
 “She is about to start singing.” [OO 12]

The Palauan data itself is taken from a variety of sources. Whenever possible, I have tried to augment data elicited from language consultants with data drawn from naturally occurring sources, which is not the easiest of tasks — very little written Palauan is available in any form. Data that is not cited is taken from my fieldnotes, based on fieldwork conducted in the greater San Francisco Bay Area between 2006 and 2010 and in Koror, Palau over the course of three fieldtrips: the first from August to September 2008, the second from February to April 2009, and the third from September to December 2009. Sentences that I have extracted from Palauan newspapers such as *Tia Belau* and *Roureor Belau* are cited in the format [*<NAME OF NEWSPAPER>*, *<DATE>*]. Sentences from newspapers are usually taken from Palauan language advertisements, editorials, gossip columns, and official announcements. Many examples are taken from the Palauan language Bible, which was translated by missionaries and native Palauan speakers from the Modern American English version of the *Good News Bible* — these examples are cited in the format [*Chedaol Biblia*, *<ENGLISH BOOK NAME> <CHAPTER>:<VERSE>*]. Much of the rest of the published data comes from Palauan language educational materials prepared by the Pacific

² See Blust 2004 for a recent survey of Austronesian nasal substitution.

Area Language Materials project at the University of Hawaii, the Palauan Ministry of Education in Koror, the Palau Society of Historians, and other sources, which I cite in the format [`<CODE>` `<PAGE#>`]; a key to the citation codes can be found below.

- AM Tmodrang, Masaharu. 1983. *Ak Mileka er a Ulengull er a Skuul* 'What I Did Over Summer Vacation.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- BL Rehuher, Tina. n.d. *Beltik el Reng* 'Love.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- BR Ais, Youlsau. 1983. *A Beab me a Rekung* 'The Mouse and the Land Crab.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- CB Anastacio, Romana. 1980. *Charlotte el Bubuul* 'Charlotte the Spider.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa. Palauan translation of White 1952.
- CK Rachel Nabeyama. n.d. *Charm me a Klengar* 'Animals and Life.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- CM Chiokai, Buik Redechor. 1971. *A Cheldechedechal a Meluadeangel* 'The Legend of Meluadeangel.' In Kesolei 1971: 7–9. Edited and revised as *Meluadcheangel* in Tmodrang 1997: 24–28.
- EI Otto, Maria. 1983. *Elilai me a Ius me a Uel* 'Elilai, and The Crocodile and the Turtle' (two stories). Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- IC Olsudong, Rita, Calvin T. Emersiochel, and Errolflynn T. Kloulechad. 1999. *Inventory of Cultural and Historical Sites and Collection of Oral History in Kayangel and Ngarchelong States, Volume 2*. Koror: Division of Cultural Affairs, Historic Preservation Office.
- IK Hezel, Francis X., and Sylvester Alonz. 1991. *Ikelesia Katolik er a Chelsel Belau* 'The Catholic Church in Palau.' Koror: Catholic Media Center.

- KC Emesiochel, Margaret, Lorenza Chin, and Yorang Miner (eds.). 1981. *Kakerous el Cheldecheduch* 'Various Stories.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- KK Marbou, Kalista. 1984. *A Kot el Klou el Sils er a Rebina* 'Rehina's Biggest Day.' Koror: Department of Education, Language Office.
- KM Faustino, Theodosia. n.d. *Keo me a Moku* 'Keo and Moku.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- KN Ruluked, Toyoko. 1983. *Kemril a Ngikel* 'The Fish's Tail.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- MI Ngirkiklang, Valentino. 1973. *Mongkii me a Ius me a Chedeng* 'Monkey, Crocodile, and Shark.' Koror: Micronesian Multilingual Materials Workshop.
- NB Ngiratecheboet, Rebes. 1971. *A Cheldechedechal a Ngeleket Budel me a Ngeleket Chelsel* 'The Legend of Ngeleket Budel and Ngeleket Chelsel.' In Kesolei 1971: 3-4. Edited and revised as *Ngeleketbudel me a Metechelsel* 'Ngeleketbudel and Metechelsel' in Tmodrang 1997: 17-20.
- OO Ngodrii, Santos. 1971. *A Cheldechedechal a Osilek me a Oreng* 'The Legend of Osilek and Oreng.' In Kesolei 1971: 11-12. Edited and revised as *Osilek me a Oreng* 'Osilek and Oreng' in Tmodrang 1997: 29-31.
- PC Tkel-Sbal, Debbie S. 1992. *Ngalek er a Belau: Ngeso el mo er a sensei* 'The Palauan Child: A Teacher's Resource.' Mangilao: BEAM Center, University of Guam.

- RE Ngiraklang, Ngiraibuuch Malsol, Johanes Ngirakesau Ruluked, Yosko O. Ngiratumerang Dirraii, Fritz Ngirusong Rubasech, Baumert Babul Tulei, Ngiratereked Rdechhor Obechadeltebechel, Tulop Etumeleu Ngiraibai, Ngirngeterang Iechad Ucheldikes, Dirramei Kumangai Dirramasubed, Paulus O. Sked Obakermechuu, Edeluchel Eungel Ilabsis, Retechang Meduu Madercholeb, Chiokai Kloulubak Buikredechor, and Augustine Smau Dib (Palau Society of Historians). 1995. *Rechuodel, Volume 1* 'Traditional Culture and Lifeways Long Ago in Palau.' Koror: Ministry of Community and Cultural Affairs.
- SD Thomas, Mahensia. n.d. *Sechou me a Deroech* 'Sechou and Deroech.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.
- UB Umetaro, Steve. 1974. *Belau: Uchelel Belau er a Uab el me er a Miladeldil* 'Palau: The Beginning of Palau from Uab to Miladeldil.' Koror: Department of Education.
- UR Rehuher, Maria. n.d. *Uldellomel el Reng* 'Responsibility.' Honolulu: Pacific Area Language Materials (PALM) Project, Social Sciences Research Institute, University of Hawaii, Manoa.

CHAPTER I

Introduction

“I’ve found you’ve got to look back at the old things and see them in a new light.”

John Coltrane (1926–1967)

This dissertation explores two foundational questions in linguistic theory, one morphological and the other syntactic. The morphological question involves the way in which a word enters the syntax to combine with other words, eventually forming sentences. At what point do words become words? One possibility is that they might be indivisible morphological units when they enter the syntax (*e.g.*, terminal nodes on a syntactic tree that have been drawn from a mental lexicon). Another possibility is that they begin their lives simply as abstract features that the syntax can manipulate into words that receive a phonological/phonetic form later on in the derivation. A hybrid of these two views could be a third possibility. The question essentially amounts to whether words, like phrases, have an internal syntactic structure. The syntactic question is similar in spirit and is concerned with how words combine with other words in the syntax to build intermediate levels of constituent structure on the way to constructing complete clauses. What constrains this structure such that all and only the grammatical sentences of a language are generated? How can we formalize such constraints?

To address these questions, this dissertation develops a theory of the verbal complex through investigation of the structure of Palauan, an Austronesian language spoken by somewhere around 15,000 people in the Republic of Palau and smaller communities elsewhere. Palauan has a very rich system of verbal morphology and an inventory of many different syntactic classes of verbal predicates. In some ways, these features make it an ideal language in which to examine the issues articulated above, particularly as they pertain to verbs: how verbs are formed,

how they enter the syntax, and how the syntax creates larger verbal predicates from them. Although much ground has already been covered in Palauan linguistics, the theoretical investigations I pursue here necessitate a careful approach to analyzing data from new empirical domains. The majority of the data discussed here has been drawn either from my own fieldwork or from naturally occurring sources like books, newspaper articles, children’s stories, pedagogical texts, and religious and cultural materials (the preceding *Remarks on the Palauan Data* contain a precise listing of these sources). To my knowledge, the Palauan descriptive literature has not previously capitalized on these sources of naturally occurring data, which (in conjunction with my fieldwork) have revealed generalizations that push beyond those in previous descriptions of the language. As a consequence, this dissertation not only serves as a contribution to linguistic theory, but it also represents a step forward in our understanding of the structure of Palauan.

I.I THE BROADER CONTEXT

I.I.I CORE THEORETICAL ASSUMPTIONS

Traditionally, research within generative linguistics aims to capture the set of properties that characterize human language, or the *faculty of language* assumed to be innate to all human beings (for details, see Hauser et al. 2002 and Fitch et al. 2005, and for further discussion and critique, see Pinker and Jackendoff 2005; Jackendoff and Pinker 2005). The theory of *Universal Grammar* postulates that each human being acquires one or more individual languages (such as Pittsburgh English, Parisian French, Palauan, or Puerto Rican Sign Language) through the development of his or her *faculty of language* from its initial state (the Universal Grammar that every human is born with) towards its final state (representing an individual language). The biolinguistic perspective views the faculty of language as being on par with an organ of the human body — one of many subcomponents of a human being that interact with each other in his or her everyday life. The study of many different languages is thus essentially the study of different possible states of the language faculty, which may develop differently in individuals as they interact with different linguistic environments.

As a guiding principle in the linguistic study of individual languages, it has recently been useful in the context of the Minimalist Program (Chomsky 2004, 2008; building on Chomsky 1995, 2000, 2001; see also Brody 1995) to consider what Chomsky (2008: 135) calls “an extremely far-reaching thesis ... which no one expects [to hold fully],” namely the *Strong Minimalist Thesis*. A recent formulation of the Strong Minimalist Thesis is given in (I.I), below.

- (I.I) **STRONG MINIMALIST THESIS:** Language is an optimal solution to interface conditions that the faculty of language must satisfy, *i.e.*, language is an optimal way to link sound and meaning. [Chomsky 2008: 135]

In the hypothetical and extremely unlikely case where the Strong Minimalist Thesis were tenable³ as formulated in (I.I), the faculty of language (or at the very least its initial stage, Universal Grammar) would be governed exclusively by principles stemming from conditions imposed by the sensory-motor and conceptual-intentional interfaces. The goal of the Minimalist Program is thus to determine the nature of the interfaces and the ways in which language satisfies the conditions they impose, as well as to find principled justification for necessary departures from the Strong Minimalist Thesis as they arise. Research conducted under the umbrella of different versions of syntactic theory developed by Chomsky and his collaborators (the Extended Standard Theory, Government and Binding Theory, and the Minimalist Program in its various guises) has made significant leaps forward in analyzing superficial morphological and syntactic differences between individual languages as traceable to hypothesized requirements imposed by these two linguistic interfaces.⁴

This dissertation explores topics in Palauan syntax, morphosyntax, argument structure, and semantics. If the theories of Universal Grammar and the faculty of language prove to be valid, then this study serves to augment both our knowledge of the possible cross-linguistic implementations of familiar constructions as well as our knowledge of the nature of the faculty of language through the investigation of the properties of one possible final state of the language faculty — Palauan.

I.I.2 THEORETICAL FRAMEWORKS

The Palauan data examined in this dissertation reveals patterns that inform us about how the syntax–morphology and syntax–semantics interfaces might be organized, and it is thus worthwhile to be explicit about the theoretical frameworks I adopt to construct my analysis. This section discusses the principles of two different models of the grammar — one based on the principles of Government-and-Binding Theory/Minimalism and another that is more compatible with morphological theories

³ Discerning whether the Strong Minimalist Thesis could be tenable would not be an easy task, as it is difficult to imagine how it might even be testable, as Kie Zuraw points out to me.

⁴ Much recent work in the Minimalist Program refers to the sensory-motor and conceptual-intentional interfaces as PF and LF, respectively. These are terminological remnants of Government and Binding Theory that described pre-interface syntactic levels of representation. In the interest of swimming with the tide, I too occasionally and perhaps confusingly adopt the terms PF and LF to refer both to the interfaces themselves and to the corresponding post-Spell Out, pre-interface levels of linguistic representation, hopefully without any significant loss of precision.

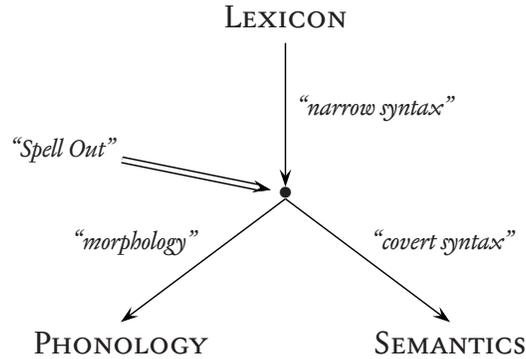


FIGURE 1.1 Inverted-Y Model (*cf.* Chomsky and Lasnik 1977: 428–429)

assuming late-insertion of lexical material (*e.g.*, Halle 1990; Anderson 1992; Halle and Marantz 1993, 1994).

1.1.2.1 MINIMALISM

Research on the nature of the sensory-motor and conceptual-intentional interfaces certainly predates the Minimalist Program — indeed, one of the biggest leaps forward since the advent of the generative linguistic enterprise (typified by Chomsky 1957, 1965; Lees 1960) has been the conceptualization of the syntactic inverted Y model (explicitly formulated in Chomsky and Lasnik 1977: 428–429 and shown in Figure 1.1), which assigns to syntax the role of mediator between sound and meaning, the two components of the Saussurean “sign” (de Saussure 1916).

On this model, words enter a syntactic derivation from the lexicon and are subject to operations imposed by the *narrow syntax*, in which structure is built and eventually shipped off to the interfaces at the point of *Spell Out*. After *Spell Out*, further syntactic operations are possible in the *covert syntax* that may affect semantic interpretation (such as scope and binding relations), but these are accessible *only* to the semantics. As far as pronunciation is concerned, syntactic operations that take place after *Spell Out* in the covert syntax are invisible to the phonology. Similarly, any post-syntactic operations that apply after *Spell Out* on the PF branch should not affect the semantics.

One version of the Minimalist framework (Chomsky 2000, 2001, 2004, which is approximately but not exactly the version I assume in this dissertation) adheres strictly to the Inverted Y Model of the grammar shown in Figure 1.1, and the lexicon contains fully-inflected lexical words as well as functional heads. Essentially, this version of Minimalism assumes some form of Lexical Morphology (*i.a.*, Chomsky 1970; Halle 1973; Jackendoff 1975; Aronoff 1976; Lapointe 1980; Selkirk 1982; Di Sciullo and Williams 1987; Lieber 1992; Chomsky 1995), which assumes that the

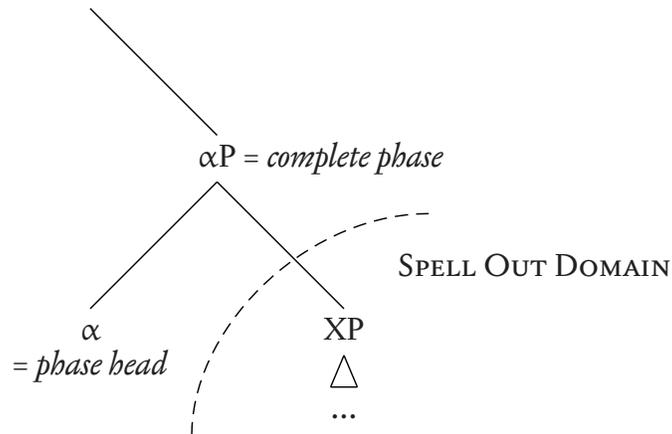


FIGURE 1.2 Phases and Spell Out Domains

morphological shape of words is determined in the lexicon and is not manipulated by the syntax (*i.e.*, the Strong Lexicalist Hypothesis; see Scalise 1984: 101ff; Pullum and Zwicky 1992: 389–390). From this lexicon, a small subset of lexical items are extracted to be used later in the derivation, forming the *numeration*. Members of the numeration are syntactic heads that combine via the operation Merge, which forms a binary-branching subtree. More recently, the theory of Bare Phrase Structure advances the idea that different projections of the same head are to be treated as identical as far as category is concerned; *i.e.*, there is no longer a formal distinction between X, X', and XP levels as there was in X-Bar Theory. As a consequence, the distinction between complements and non-complements remains, but the distinction between specifiers and adjuncts to what was formerly XP has become blurred.

The Extension Condition mandates that only the highest node in a subtree may be merged with a new head (or subtree), 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 total phrase structure 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 thought that (at least) C, D, and transitive *v* form the set of phase heads. Specifically, when a phase head is fully projected (*i.e.*, a maximal 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.

The *Phase Impenetrability Condition* mandates that any portion of the subtree that has been sent to Spell Out as a result of its being a complement of a phase-defining head is inaccessible to further syntactic operations. The Phase Impenetrability Condition is defined in (1.2).

- (I.2) PHASE-IMPENETRABILITY CONDITION: In phase α with head H, the domain of H is not accessible to operations outside α ; only H and its edge (the residue outside of H' — either specifiers or elements adjoined to HP) are accessible to such operations. [Chomsky 2000: 108, ex. 21; Chomsky 2001: 13, ex. 7]

Together, these elements of the theory of Minimalism (as outlined above) arguably provide syntacticians with enough theoretical machinery to describe the syntactic behavior of typologically diverse languages, but the theory is also constrained enough to make strong, testable empirical predictions about what the syntax of various languages can and cannot look like.

1.1.2.2 LATE-INSERTION OF LEXICAL MATERIAL

The developments of A-Morphous Morphology (Anderson 1982, 1992) and Distributed Morphology (*i.a.*, Halle 1990; Halle and Marantz 1993, 1994; Marantz 1997; Harley and Noyer 1999) have provided alternatives to the strict lexicalist view of morphology dominant during the 1970s and 1980s, and to some extent during the 1990s. To various degrees, these theories dissociate the process of word formation from the lexicon either partially/indirectly (in the case of A-Morphous Morphology) or entirely/directly (in the case of Distributed Morphology), essentially assigning to the syntax the additional function of constructing words as well as phrases.

Although the incarnation of the Minimalist syntactic framework outlined above adopts essentially lexicalist morphological assumptions, the modification of just a few of these assumptions allows Minimalism to be straightforwardly compatible with theories which construe the terminal nodes of syntactic structure simply as bundles of morphosyntactic features (but not phonological features; *cf.* Zwicky and Pullum 1986). Although both theories assume late insertion of lexical material, the theories differ somewhat in their mechanics.

A-Morphous Morphology (Anderson 1982, 1992) is essentially a theory of inflection. It retains a lexicon, but not in the traditional sense. Words are derived in the lexicon using Word Formation Rules, and these words fill positions at syntactic terminal nodes after the structure is built. Inflected forms are listed in the lexicon as blocks of related forms, and the appropriate form is selected based on the features present in the syntax. In other words, lexical items are extracted on the basis of features from the syntax — they are not themselves manipulated or formed syntactically.

Distributed Morphology, on the other hand, rejects the notion of a centralized lexicon, but instead treats the information that is localized in the lexicon in other theories (*i.e.*, syntactic and category features, phonological information, semantics,

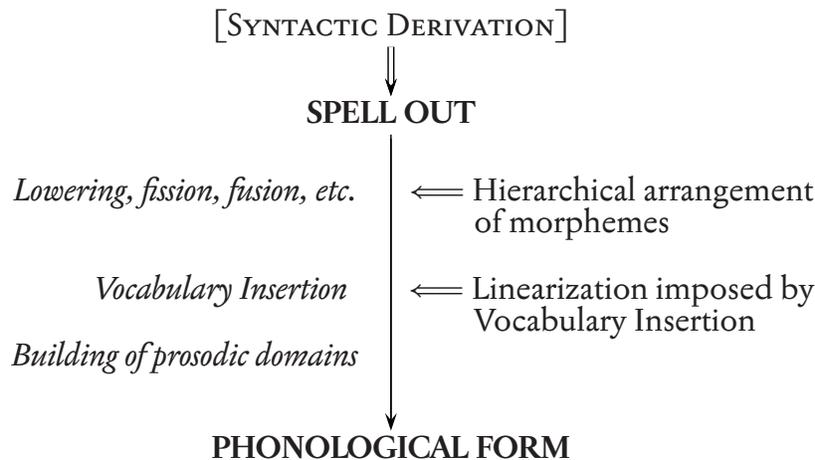


FIGURE 1.3 The PF branch of the derivation (cf. Embick and Noyer 2001: 566)

and so forth) as “distributed” throughout the grammar. In Distributed Morphology, syntactic terminal nodes are abstract “morphemes” composed of bundles of morphosyntactic features whose exponents are realized after Spell Out. Hierarchical structure retains its form in the initial stages of the PF derivation; the stages of PF as posited by Embick and Noyer (2001: 566) are shown in Figure 1.3.

The sub-derivation on the way to PF allows for additional operations to further manipulate terminal nodes before they are realized morphophonologically. These operations might fuse two terminal nodes into one, split one terminal node into two, and (in certain restricted domains) reorder terminal nodes or insert extra ones. The empirical motivation for such adjustments can be found in situations characterized by morphological structure that is not in an isomorphic relation to syntactic structure. Still, the basic tenet of the theory is that wherever there is a morpheme, there is a terminal syntactic node of which that morpheme is the realization.

Phonological forms of morphemes are listed in the *Encyclopedia* as *Vocabulary Items* along with idiosyncratic information about them, including our real-world knowledge (e.g., we know that the sky is not red, and so forth). While the appropriate forms of functional morphemes are selected on the basis of the features in the syntax on the basis of the *Subset Principle*, given below in (1.3), lexical morphemes (i.e., roots) are not usually considered to be in competition with one another and may be inserted freely (e.g., Acquaviva 2008; see also Siddiqi 2009 for potential exceptions, e.g., $\sqrt{\text{RUN}}$ being realized as either *run* or *ran*). In this way, the syntax is directly responsible for building words as well as phrases.

(I.3) SUBSET PRINCIPLE

- a. The phonological exponent of a Vocabulary Item is inserted into a position if the item matches all or a subset of the features specified in that position.
- b. Insertion does not take place if the Vocabulary Item contains features not present in the morpheme.
- c. Where several Vocabulary Items meet the condition for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen. [Halle 1997: 428]

In some varieties of Distributed Morphology, roots are category-neutral and must merge in the syntax with a category-defining functional head *n*, *a*, or *v* to form nouns, adjectives, and verbs respectively (Marantz 1997, 2001, 2007; Arad 2003, 2005; Borer 2005a, 2005b; Embick and Noyer 2007; Embick and Marantz 2008) — throughout the dissertation, I refer to such varieties collectively as *Category-Neutral Root Theory*.⁵ The category-defining heads may be null or overt, and they come in different “flavors” (*i.e.*, they specify different types of semantic information, just as other functional heads like T(ense), Asp(ect), or Mood might). For instance, the *v* head, of which I make extensive use in my analysis in Chapters 2–5, has varieties that mean CAUSE (as in *clarify* “cause to be clear”), BE (as in *fear* “be afraid of”), BECOME (as in *grow* “become grown”) and DO (as in *dance* “do a dance”). Recently, it has been proposed that the category-defining heads are all phase heads (*i.a.*, the *Phases in Words* theory of Marantz 2001; Arad 2003); that is, the argument structure, semantics, and morphophonology of roots are all fixed when they merge with a category-defining head due to the Phase Impenetrability Condition.

Now, if the Minimalist framework outlined above were modified to manipulate abstract feature bundles rather than lexical items, it could feed into a morphological theory assuming late-insertion like A-Morphous Morphology or Distributed Morphology. It is such a version of Minimalism that I assume in this dissertation. What corresponds to the Lexicon in “standard” Minimalism instead simply contains bundles of features which are extracted and then organized by the syntax into words and phrases using the operations Merge, Move, and Agree, and these words and phrases receive their phonological forms after Spell Out, when they are sent to PF. In this way, the Minimalist framework may work together with either A-Morphous Morphology or Distributed Morphology to build a new stage on which explorations at the syntactic interfaces can receive an audience.

⁵ Much of the discussion in this part is taken from Harley’s (2008: §7.2) very concise, well-written summary of the status of Distributed Morphology in 2008. See also Harley and Noyer 1999.

1.1.3 EMPIRICAL BREADTH

A logical starting point in an empirical investigation of any language’s verbal complex is to consider the issue of how a verb itself is introduced into a syntactic derivation. What formal status does a verb have at that point? Different theories of morphology have different answers to this question. Does a verb enter the syntax as a fully-inflected word? A category-neutral root that the syntax later transforms into a verb? A simple bundle of morphosyntactic features? For any analysis of Palauan verb morphology, a lot rests on this issue given the incredible morphosyntactic complexity of Palauan verbs. There are, for instance, cases in which well over a hundred different surface verb forms might be thought of as “morphologically related,” by which I mean they contain both phonological and semantic content whose sources could be analyzed as traceable to a single $\sqrt{\text{ROOT}}$ morpheme. If one adopts a $\sqrt{\text{ROOT}}$ -based analysis of this sort, it can be said that Palauan verbs are composed of a multitude of combinations of inflectional and derivational morphemes signaling realis/irrealis mood, present/past tense, imperfective/perfective aspect, active/passive voice, valence increasing and decreasing operations (*e.g.*, intransitivization, causativization), up to eight distinct forms of object agreement (on perfective verbs only), and up to five distinct forms of subject agreement (on irrealis verbs only, with two different sets of prefixes for imperfective and perfective forms).

To give an initial impression of the extent of the system, Tables 1.1–1.3 offer examples of surface verbs that arguably share phonological and semantic features with the intransitive verb *tuchakl* ‘take a detour; stop by.’ Table 1.1 lists verbs that differ from *tuchakl* in ways that involve regular changes in argument structure, meaning, or both (they are, arguably, derivationally related). Now, all of the verbs in Table 1.1 are in the realis mood. Realis verbs display subject agreement via clitics that may be separated from the verb by modifiers or auxiliary verbs. Irrealis verbs are marked

SHAPE	FORM	MEANING
<i>tuchakl</i>	ACTIVE INTRANSITIVE	take a detour; stop by
<i>meluchakl</i>	ACTIVE TRANSITIVE	change course of x; deflect x
<i>metuchakl</i>	PASSIVE	be thrown off course; get deflected
<i>teluchakl</i>	RESULTATIVE	off course; deflected
<i>oltuchakl</i>	CAUSATIVE ACTIVE	detain x; flag down x
<i>motuchakl</i>	CAUSATIVE PASSIVE	get detained; get flagged down
<i>ultuchakl</i>	CAUSATIVE RESULTATIVE	detained; flagged down

TABLE 1.1 Verbs morphologically related to *tuchakl*

SUBJECT	MELUCHAKL	METUCHAKL	OLTUCHAKL	MOTUCHAKL
ISG	<i>k-uluchakl</i>	<i>k-me-tuchakl</i>	<i>k-ul-tuchakl</i>	<i>k-mo-tuchakl</i>
IPL	INC <i>d-oluchakl</i>	<i>de-me-tuchakl</i>	<i>d-ol-tuchakl</i>	<i>de-mo-tuchakl</i>
	EXC <i>kim-oluchakl</i>	<i>ki-me-tuchakl</i>	<i>kim-ol-tuchakl</i>	<i>ki-mo-tuchakl</i>
2SG/2PL	<i>chom-oluchakl</i>	<i>cho-me-tuchakl</i>	<i>chom-ol-tuchakl</i>	<i>cho-mo-tuchakl</i>
3SG/3PL	<i>l-oluchakl</i>	<i>le-me-tuchakl</i>	<i>l-ol-tuchakl</i>	<i>le-mo-tuchakl</i>

TABLE I.2 Some forms of verbs related to *tuchakl* with irrealis subject agreement

DIRECT OBJECT		MELUCHAKL	OLTUCHAKL
ISG		<i>tuchekl-ak</i>	<i>o-tuchekl-ak</i>
2SG		<i>tuchekl-au</i>	<i>o-tuchekl-au</i>
3SG		<i>tuchekl-ii</i>	<i>o-tuchekl-ii</i>
IPL	INC <i>tuchekl-id</i>	<i>tuchekl-id</i>	<i>o-tuchekl-id</i>
	EXC <i>tuchekl-emam</i>	<i>tuchekl-emam</i>	<i>o-tuchekl-emam</i>
2PL		<i>tuchekl-emi</i>	<i>o-tuchekl-emi</i>
3PL	+HUM <i>tuchekl-eterir</i>	<i>tuchekl-eterir</i>	<i>o-tuchekl-eterir</i>
	-HUM <i>tuchakl</i>	<i>tuchakl</i>	<i>o-tuchakl</i>

TABLE I.3 Some forms of verbs related to *tuchakl* with perfective object agreement

morphologically by their selection of a special set of subject agreement *prefixes* distinct from the clitics that co-occur with realis verbs. Irrealis forms of some of the verbs in Table I.1 are given in Table I.2 (for comparison, the corresponding realis forms are shown at the top of Table I.2).

Under particular circumstances, Palauan transitive verbs obligatorily agree with their direct objects in person, number, and (for 3PL direct objects) animacy, with the verbs themselves hosting object agreement suffixes. In the Palauan literature, a generalization has emerged that object agreement correlates with a “perfective” interpretation of the predicate (Wilson 1972; Flora 1974; Josephs 1975, 1997; Hagège 1986; Georgopoulos 1991b; Lemaréchal 1991). Now, the two transitive verbs in Table I.1 — *meluchakl* and *oltuchakl* — are both given in the imperfective aspect, which is the citation form and the form under which a verb’s main entry in Josephs’s (1990) dictionary is listed. Table I.3 lists the perfective forms of *meluchakl* and *oltuchakl* based on the features of the direct object DP that triggers the agreement morphology.

The verbs in Tables I.1–I.3 can all be found in present tense clauses. However, there are other tenses (and aspects) that are expressed via auxiliary verbs or via morphological changes to the verbs themselves. Auxiliaries found in Palauan in-

clude *mle* (past), *m̄la* (≈ perfect/recent past), *mo* (future), and *mlo* (past change of state). Examples of morphological changes include infixation of *-il-* (past), reduplication (repetitive/habitual), suffixation of *-a(ng)* (inceptive), suffixation of *-u(ng)* (anticipative), and suffixation of *-all/-^(e)l/-iil/-ill/-oll/-ull/-uul* (anticipative resultative).⁶ I will not provide examples of verbs in these additional tenses and aspects, but it is easy to imagine how they dramatically increase the number of dimensions involved in building groups of verbs from a given root and various combinations of additional mood, aspect, voice, tense, and agreement morphemes. To be sure, the morphosyntactic complexity of the Palauan verbal system raises serious questions about the nature of verbal paradigms and the linguistic mechanisms involved in determining the morphological shape of verbs.

In order to determine which theory of morphology is best suited to capturing the facts surrounding Palauan verbal morphosyntax, we must inevitably investigate purely syntactic questions in tandem with morphological ones. The unusual splits in subject agreement and object agreement morphological paradigms along the lines of mood and aspect already suggest that the syntax has a definitive role either in directly conditioning which morphological forms a verb can have or in constraining the possible distributions of verbs with particular morphological shapes, depending on the theory of the syntax–morphology interface one assumes.

The dissertation explores the following empirical domains. Chapter 2 deals with clause structure, and a systematic investigation of Palauan grammatical relations will show that the notions of *subject* and *direct object* are empirically motivated in Palauan. Despite initial appearances, the basic syntax of Palauan is perhaps not so different from that of any familiar European/East Asian language. In Chapter 3, the properties of a particular class of Palauan idiomatic psych predicates — what I call ψ -idioms — provides strong support for an analysis of verbal morphology as (at least partially) being built up syntactically. Valence alternations in ψ -idioms also serve as a syntactic diagnostic for unaccusativity, the first such diagnostic I am aware of for Palauan. Chapter 4 concentrates on intransitive predication more generally, focusing on the properties of passives, anticausatives and other unaccusatives, and statives; I conclude that despite many very real and very revealing correlations between verb morphology and syntactic behavior, differences in verb morphology are neither necessary nor sufficient indicators of verb subclass membership. In Chapter 5, an analysis of Palauan resultative predicates suggests that not only may verbs and predicates of other categories be constructed syntactically, but that there may be entire classes of verbs with no minimal syntactic constituent that contains all and only the morphemes used to construct the verb. On an analysis built with

⁶ The anticipative resultative suffixes also occasionally appear in non-anticipative resultatives, but only when they co-occur with the canonical resultative infix *-(e)l-*. In such cases, I assume that they contribute nothing syntactically or semantically.

the assumptions underpinning Distributed Morphology, derivational morphemes (which determine category) may merge with syntactic objects that are larger than a V or $\sqrt{\text{ROOT}}$. The results of these investigations are synthesized and discussed from a much broader perspective in Chapter 6, which places them in the context of current research in linguistic theory.

1.2 A GLIMPSE INTO THE PALAUAN LANGUAGE

1.2.1 THE LANGUAGE SITUATION

Palauan is spoken in the Republic of Palau, an archipelago consisting of around 200 islands in the Western Pacific Ocean. Palau is located roughly within the triangle formed by the Philippines, Papua New Guinea, and Guam, about 7° north of the equator, as shown in Figure 1.4. Despite its geographical position within Micronesia, Palauan (along with Chamorro) is a Western Malayo-Polynesian language (Dempwolff 1934–38; Blust 1977; Jackson 1986; Zobel 2002; *cf.* Dyen’s 1965 placement of Palauan on its own branch of the Austronesian family tree), more closely related to the languages of Indonesia and the Philippines than to its nuclear Micronesian neighbors spoken on Chuuk, Ponape, Kosrae, the Marshall Islands, and Kiribati. A long history of trade relations among the various regions of Palau has resulted in little dialectal variation in any of the northern islands — Kayangel, Babeldaob, Koror, Peleliu, and Angaur — where the vast majority of the population lives. The remaining residents of the “Southwest Islands” that make up the states of Sonsorol and Tobi (located several hundred kilometers away from the northern islands) speak nuclear Micronesian languages that are not closely related to Palauan.

Historically, Palau was governed by other nations for many years, starting with the country’s colonization by Spain in the early 19th century. Along with the Caroline, Mariana, and Marshall Islands, Palau formed part of the Spanish East Indies, governed by the Spanish Philippines until the end of the Spanish–American War in 1898. Spain sold Palau to Germany in 1899, and Germany administered Palau from German New Guinea until 1914, when control passed to Japan during World War I. Following the war, Palau was officially recognized as Japanese by a League of Nations Mandate. The period of Japanese colonization lasted for about two decades until 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 a politically autonomous independent nation. The Palauan language has emerged as the dominant language in Palau despite these periods of colonization and occupation, but with a highly



FIGURE I.4 Location of Palau in the Pacific Ocean

stratified vocabulary augmented by 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 five years or older residing in the Republic of Palau, of whom 13,826 speak Palauan. This number did not include communities of native Palauan speakers residing outside of Palau, which some estimates place at an additional several thousand. For instance, the 2000 Guam Census is suggestive: although it does not contain Palauan language statistics, it does report that a total of 2,141 residents are of Palauan ethnic origin and that 1,334 residents were actually born in Palau. In addition to Guam, there are significant concentrations of Palauan speakers in (at least) the Commonwealth of the Northern Mariana Islands, Hawaii, and California.

Palauan is one of the two nationally recognized official languages of the Republic of Palau, the second being English. There are few if any monolingual speakers. While English is used in many government, business, educational, and other public settings, most native Palauans use Palauan among themselves in domestic, social, and cultural settings. Though I have no official or current statistics to back me up, my impression is that the language is still acquired (to some extent) by nearly

all Palauan children. English is the primary language of instruction in schools, as nearly all primary and secondary school textbooks and materials are written in English (though I hear that some teachers use Palauan in the classroom even while teaching from printed English materials). In the past, Palauan language newspapers enjoyed a reasonable circulation, but at the time of writing, only the occasional Palauan language editorial or advertisement can be found in predominantly English-language newspapers. However, written Palauan appears on many signs and storefronts around Koror, and all government documents are required to be published in Palauan (but may also be published in English). As far as broadcast media is concerned, there are three Palauan television channels (two public, and one private) and a handful of Palauan radio stations, one of which broadcasts a daily Palauan political talk show that is very popular and forms the topic of much discussion. Generally speaking, Palauan still enjoys a reasonably high level of prestige in Palauan culture, and it should thus probably not be classified as moribund or even endangered despite the fact that it is spoken by a relatively small number of people worldwide.

During the 1970s and 1980s, the Palauan language enjoyed a surge of theoretical interest through the work of linguists at the University of Hawaii in conjunction with the Trust Territory of the Pacific Islands and at a handful of other universities around North America and Europe. For the last two decades, however, Palauan has sat relatively dormant in the theoretical linguistics scene. In the context of the increased interest in research at the grammatical interfaces during this period — in particular the syntax–semantics interface and the syntax–morphology interface — new opportunities have arisen to examine the aforementioned morphological and syntactic questions.

The body of linguistic literature dedicated to Palauan is small in comparison to those of more familiar languages, and yet an impressive amount of ground has already been covered. Explorers and missionaries from the early periods of Palau's colonial history already made a great deal of progress in the description of the different sentence types and the inventory of predicates (verbal and otherwise) in the language (see Keate 1788; Hockin 1803; Walleser 1911, 1913; Conant 1915) which paved the way for more detailed and comprehensive linguistic descriptions by Capell (1949), Pätzold (1969), and Josephs (1975, 1990, 1997, 1999). After the advent of generative linguistics, the incredibly complex morphophonology of the language was made transparent by Wilson (1972) and Flora (1974), laying the necessary foundation for syntacticians to investigate topicality (DeWolf 1979), passive and active voice alternations (Waters 1980; DeWolf 1988), predication and specification (Hagège 1986/2008), the syntax of A-bar dependencies and variable binding (Georgopoulos 1985, 1986, 1991b; Cherney 1993; Gerassimova 2005), and the syntax-semantics interface (Lemaréchal 1991, 1993). Recent years have also seen

impressive work by native Palauan scholars, including the conversation books of Tkel-Sbal (1992, 1996) and Malsol (1999), revised compilations of traditional Palauan legends in print format by Tmodrang (1997), as well as a substantial monolingual Palauan Dictionary with 13,791 entries by Ramarui and Temaël (1999), which is, as far as I know, the first of its kind in Micronesia.

1.2.2 GRAMMATICAL SKETCH

In many respects, Palauan morphophonology and syntax initially appear parochial or mysterious to those first encountering it, particularly if they are unfamiliar with the linguistic features of other Austronesian languages. In this section, the goal is to eliminate much of this perceived mystery and to provide the necessary background for the reader to easily digest the Palauan data in subsequent chapters. The discussion here is deliberately cursory; I refer the curious reader to the aforementioned descriptive linguistics work for more details (in particular Josephs's excellent *Handbook of Palauan Grammar* Volume I (1997) and Volume II (1999), which can be accompanied by Josephs 1990, the *New Palauan-English Dictionary*).

Palauan features many syntactic properties that are typical of other languages in the Austronesian family. Some of these include:

- Basic underlying VOS word order (Waters 1980; Georgopoulos 1986).
- Predicates of any lexical category and no copula (Capell 1949; Josephs 1975).
- Head-initial syntactic categories and rightward-branching specifiers (Georgopoulos 1991b; *cf.* Guilfoyle et al. 1992).
- Null pronominal arguments, usually (but not exclusively) co-occurring with overt agreement morphology (Hagège 1986; Georgopoulos 1991b).
- Widespread subject (left-)topicalization (though its analysis has been controversial — see, *i.a.*, Josephs 1975; Waters 1980; Georgopoulos 1991b; Lemaréchal 1991 for details).

Many of these properties are directly relevant to my analysis of the Palauan verbal complex, and I will discuss them much more extensively in that context. At this point, I will simply provide representative examples to illustrate each point and reserve the bulk of the discussion for other aspects of Palauan grammar that do not fit as neatly into discussions of the verbal complex. These include the architecture of the nominal complex and the morphosyntax of modification, both of which are nevertheless quite important for a clear understanding of the data.

1.2.2.1 WORD ORDER

I assume throughout this dissertation that the underlying clausal word order in Palauan is VOS (Verb-Object-Subject). The issue of word order in Palauan has received much attention from linguists, as there were two competing proposals in the 1970s and 1980s: SVO vs. VOS. The underlying SVO analysis received widespread recognition when Josephs adopted it in his highly influential and important *Palauan Reference Grammar* in 1975. After its publication, however, new evidence was found in favor of the VOS analysis (as argued explicitly in Waters 1980; Georgopoulos 1986, 1991b), which Josephs, too, adopts in his later work, such as Josephs 1994, 1999. I do not intend to recapitulate the arguments that already exist in the literature, but I refer the reader to Georgopoulos 1991b: 32–41 (see also Josephs 1999: Ch. 15) for a clear and concise summary of the debate and the evidence in favor of the VOS analysis over the SVO analysis. The examples in (1.4) below illustrate the basic VOS word order. The subject is in **bold**, the direct object is in *italics*, and the verb is underlined.

- (1.4) a. Ng ulemekeroul *a bung* **a del-ak** er a sers-el.
 3SG= grew D flowers D mother-1SGP P D garden-3SGP
 “My mother was growing flowers in her garden.”
 [Georgopoulos 1991b: 40, ex. 34a]
- b. Te kilang *a rokui el ringngo* **a rengalek** er a elii.
 3PL= ate D all L apples D children P D yesterday
 “The children ate all the apples yesterday.”

1.2.2.2 THE NOMINAL COMPLEX

Presumably, an entirely separate dissertation could be written about the morphosyntax of the Palauan nominal system. Fortunately, the important properties of the Palauan nominal complex for the purposes of this dissertation are largely straightforward and will likely seem familiar even to linguists with no previous knowledge of Palauan.

When a nominal constituent is used as a predicate, it may minimally consist of a single noun or pronoun (but it may also consist of more than just the noun).

- (1.5) Ng **malk/beras/ngikel**.
 3SG= chicken/rice/fish
 “It’s chicken/rice/fish.” [PC 27]

- (1.6) Ng **kau** [a mo chuarm].
 3SG= you [D AUX.FUT INTR.suffer]
 “You are the one who will suffer.” [Chedaol Biblia, Proverbs 9:12]

Nominal predicates are used frequently in Palauan — modal sentences are good examples, as they utilize the nominal predicates *kir-* “must” and *sebech-* “can,” which might be better translated as “obligation/necessity” and “ability/possibility,” respectively. The modal nominals *kir-* and *sebech-* may either co-occur with a possessor nominal that would correspond with the subject of the English modal sentence, or they may inflect for default 3rd person possessor agreement and mean roughly “It’s possible (to...)” or “It’s necessary (to...).” Compare example (1.7) below, which contains the nominal predicate *sebech-* with default 3rd person possessor agreement, and example (1.8), which is inflected for agreement with a (null) 1SG pronominal possessor. Example (1.9) shows a non-modal noun *ngalek* ‘child’ in predicate position as well, but unlike in (1.7) and (1.8), the predicate nominal agrees with an *overt* possessor phrase *a Bkau me a Elibeob* “Bkau and Elibeob.”⁷

- (1.7) Ng **sebech-el**.
 3SG= possibility-3SGP
 “It’s possible.”

- (1.8) Ng diak **l-sebech-ek** el merael.
 3SG= NEG 3SGS.IRR-ability-1SGP L go
 “I can’t go.” (*approx.* “It is not my ability to go.”) [KN 33]

- (1.9) A Elilai me a Ltlatk a **ngelek-el** a Bkau me a Elibeob.
 D Elilai and D Ltlatk TOP child-3SGP D Bkau and D Elibeob
 “Elilai and Ltlatk are Bkau and Elibeob’s children.” [EI 16]

Many other constituents can appear inside a Palauan noun phrase. Their unmarked order is something along the lines of [Determiner, Quantifier, Adjectives, Noun, Possessor, PP/CP-Complements, Other Modifiers]. All optional elements inside the NP other than PPs (*viz.* quantifiers, adjectives, and other modifiers) condition the presence of a linker morpheme *el*, typical of many Austronesian languages, which I gloss as L. The noun phrases below in (1.10) through (1.12) serve as examples of the different orders.

⁷ Note the 3rd person singular possessor agreement suffix *-el* on *ngelekel* in (1.9). Like some other languages (*e.g.*, Irish: McCloskey and Hale 1984; Hebrew: Doron 2000; *cf.* Hindi and Tsez: Benmamoun et al. 2010), Palauan has left-conjunct agreement. More details are provided in Chapter 2, §2.2.

- (I.10) a me-kngit el ralm er a sewer el me tuobed er se
 D INTR-bad L water P D sewer L come INTR.emerge P this.(time)
 er a Ongedei me a Ongeuang el Ureor er tia el
 P D third and D fourth L work(day) P this L
 m/o merek el sandei
 PAST.become finished L week
 “the bad sewer water that came out on Wednesday and Thursday of last
 week” [Roureor Belau, 17 April 2002]
- (I.11) a kot el bli-l a ureor el omerek er a tekoi el chelid
 D first L house-3SGP D work L spread.IMPF ACC D word L god
 er tia el beluu
 P this L country
 “the first mission in this country” (*approx.* “the first house of work to spread
 God’s word in this country”) [IK 5]
- (I.12) a re-terung el kau-sechelei el chad el mi/lib er a mo er a
 D PL-two L RECIP-friends L people L PAST.plan P D go P D
 chei
 sea
 “the two friends who planned to go fishing” (*approx.* “the two friends-with-
 each-other people who planned on the going to the sea”) [IC 151]

The linker morpheme *el* is always adjacent to the quantifier/adjective/modifier, and it appears on the same side as the noun (regardless of whether other elements intervene between the linker and the noun). Consequently, there can be more than one linker in a single noun phrase. That numerals and quantifiers trigger the appearance of the linker just as adjectives and other modifiers do leads me to think that quantifiers and numerals are introduced into the nominal complex in adjunction structures, but I have not tested this empirically.

I assume that the linker does not occupy a syntactic position but is perhaps a piece of inflection (*cf.* Chung 1998 for a similar analysis of the Chamorro linker) or a dissociated morpheme (Embick 1997; McFadden 2004) inserted post-syntactically to indicate that the constituent it attaches to is a modifier. Nothing in this dissertation hinges on any particular analysis of the linker.

Though the ordering of many elements inside the noun phrase is fixed (restrictive) relative clauses may precede the noun, but this order is marked. Quantifiers and adjectives can also optionally, and much more freely, appear in NP-final positions among other adverbials, such as locative PPs. To illustrate, note the pre-

nominal position of the resultative adjectival modifier *telemall* “broken/injured” in (I.13) and its post-nominal position in (I.14).

(I.13) A Lurvey a mo-cha meleel er tia el **telemall** el sers-el
 D Lurvey TOP go-ICP nail.IMPF ACC this L RES.break L fence-3SGP
 a bli-l a Wilbur.
 D enclosure-3SGP D Wilbur
 “Lurvey began nailing up Wilbur’s broken pigpen.” [CB 30]

(I.14) A beab a mil/s-a a med-al a secheli-l el
 D mouse TOP PAST.see.PF-3SGO D face-3SGP D friend-3SGP L
telemall.
 RES.injure
 “The mouse saw his friend’s injured face.” [BR 5]

Now, whenever a nominal expression is not used as a predicate, the word *a* typically occurs somewhere to its left.

(I.15) Ak ou-charm a uel.
 1SG= VBLZ-pet D turtle
 “I keep turtles as pets.”

(I.16) Ng mla me-luches a babier.
 3SG= AUX INTR-write D letter
 “The letter has been written.”

The distribution of *a* is consistent with its analysis as a determiner if it is true that determiners and pronouns are in complementary distribution (Postal 1966; cf. Abney 1987). In Palauan, *a* cannot co-occur with pronouns as in (I.17) or with demonstratives as in (I.18).

(I.17) a. Ke olengit er **ngak?**
 2SG= ask.IMPF ACC me
 “Are you asking me?”
 b. *Ke olengit er a **ngak?**
 2SG= ask.IMPF ACC D me
 “Are you asking me?”

- (I.18) a. **Tirke** el chad a mla olengeseu er se el bilis.
 those L people TOP AUX help.IMPF ACC that L dog
 “Those people have helped that dog.”
- b. *A **tirke** el chad a mla olengeseu er a se el bilis.
 D those L people TOP AUX help.IMPF ACC D that L dog
 “Those people have helped that dog.”

Essentially, *a* introduces any non-predicative nominal constituent (DP) that is not headed by a pronoun or demonstrative. Given their similar (and complementary) distributions, I analyze demonstratives as a subclass of pronouns. Consider the data below.

- (I.19) a. A rrat a mla er **sei**.
 D bicycle TOP was P that
 “The bicycle was (over) there.”
- b. A rrat a mla er **tiang**.
 D bicycle TOP was P this
 “The bicycle was (right) here.”
- c. A rrat a mla er **ngii**.
 D bicycle TOP was P it
 “The bicycle was there.”

In (I.19a–b), the demonstrative words *sei* “that” and *tiang* “this” can also mean “there” and “here,” respectively. In (I.19c), the pronoun *ngii* “it” can also mean “there” in the same position. The similarity between pronouns and demonstratives is highlighted when they are the heads of DPs with more content.

- (I.20) a. a rokui el *smecher* el chad er ngii el beluu
 D all L INTR.sick L person P it L place
 “all the other sick people on the island” [Chedaol Biblia, Acts 28:9]
- b. **tirka** el rokui el chad
 these L all L people
 “all these people” [Chedaol Biblia, Numbers 11:11]
- c. **tirke** el rokui el ulsiik a kodell-em
 those L all L seek.PAST D death-2SGP
 “all those who wanted to kill you” [Chedaol Biblia, Exodus 4:19]

- d. *tir* *el* *rokui* *el* *sechal* *el* *mla* *er* *a* *bli-l*
 they L all L males L were P D household-3SGP
 “all the males in his household” [Chedaol Biblia, Genesis 17:23]

When the demonstratives *tirka* “these” and *tirke* “those” introduce larger DPs, as in (1.20b–c), they must be followed by the linker *el*, unlike the all-purpose determiner *a*, cf. (1.20a). If they were true determiners, the obligatory presence of the linker might be mysterious, as it ordinarily introduces modifiers and relative/embedded clauses, as will be shown below. But (1.20d) provides a clue; the pronoun *tir* may again appear in the same position as *tirka* and *tirke*, and it also requires the linker between it and the rest of the DP. What I propose is that the linker *el* is actually introducing a (non-restrictive) relative clause in a structure something like that in Figure 1.5. In that case, demonstratives are like pronouns insofar as they are determiners that are unable to select NP complements.

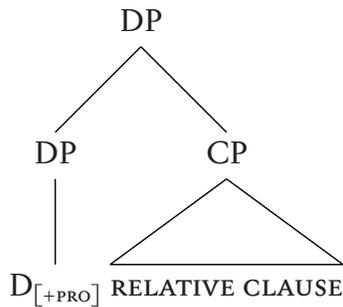


FIGURE 1.5 Demonstrative DPs: pronominal Ds with relative clause structures

One final, very important aspect of Palauan noun phrases is the morphosyntactic encoding of possessors. In Palauan, there are two strategies for encoding the possessor-possessee relationship within a DP, given in (1.21) and (1.22).

- (1.21) **POSSESSOR AGREEMENT:** The possessee noun bears a possessor agreement suffix that matches the φ -features of the possessor DP.
- (1.22) ***Er*-MARKING:** The possessee noun bears no agreement with the possessor DP, and the possessor DP is preceded by the marker *er*, homophonous with the preposition *er*.⁸

⁸ There is reason to believe that *er* is not a preposition when it marks possessors, but is rather something like a genitive case marker. This idea is explored in §2.1.2.1, when examples like (2.16) are taken into account.

An example of the possessor agreement strategy is given in (I.23) and discussed further below in §I.2.2.3, and an example of the possessor PP strategy is given in (I.24).

(I.23) a. a sechelei
D friend
“the friend”

b. a secheli-mam
D friend-IPL.EXCP
“our friend”

(I.24) a. a sensei
D teacher
“the teacher” (Japanese *sensei* “teacher” → Palauan *sensei*)

b. a sensei er kemam
D teacher P us.EXC
“our teacher”

Most native Palauan nouns (but not all; see (I.25) below) employ the agreement strategy in (I.21), and most nominal loans from Spanish, German, Japanese, and English (but, again, not all; see (I.26) below) employ the *er*-marking strategy in (I.22).

(I.25) a. a tebel
D table
“the table” (English *table* → Palauan *tebel*)

b. a tebel-id
D table-IPL.INCP
“our table”

(I.26) a. a llomeserreng
D wisdom
“the wisdom”

b. a llomeserreng er kid
D wisdom P us.INC
“our wisdom”

The morphosyntax of possessor DPs depends on the properties of the possessee noun. Following Georgopoulos (1991a), I assume that Palauan possessors are base generated in a (rightward) specifier position of the possessee noun phrase, and

something like an *m*-command relation between the head N and the possessor DP in its specifier can determine whether possessor agreement applies or whether no agreement takes place, perhaps with the aid of PF Spell Out rules.⁹

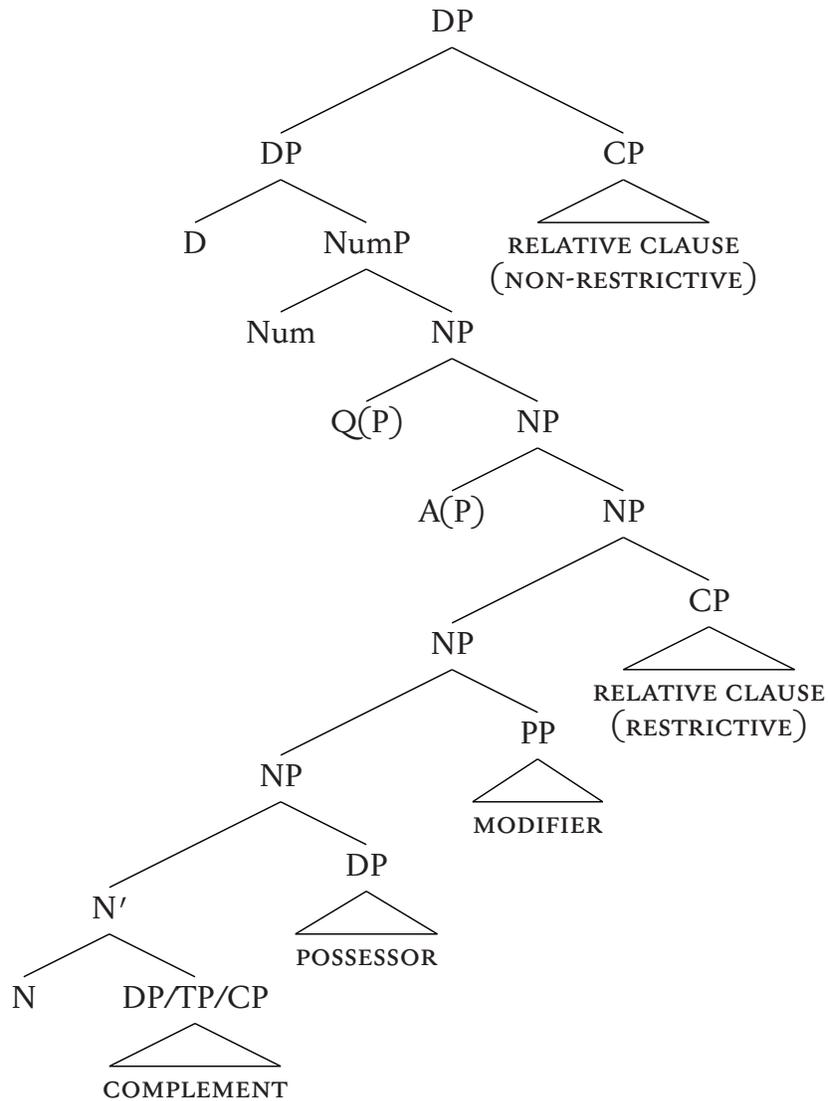


FIGURE 1.6 Basic assumptions about Palauan DP-internal structure

The structure I propose can be seen in Figure 1.6, which unifies the claims made

⁹ cf. Chung's (1982) analysis of possessors in Chamorro, an Austronesian language closely related to Palauan. In Chung 1998: 46–47, possessors are reanalyzed as occupying the (rightward) specifier position of DP, rather than NP. In Chapter 2, §2.1.3, I argue that possessors in Palauan also occupy the specifier of the possessee DP at some stage of the derivation. cf. Figure 2.9 on page 80.

in various parts of this section. Based on the distribution of the plural marker *re-*, which always appears immediately after the determiner *a* and before any material inside the NP (including modifiers, quantifiers, etc.), I assume a NumP projection between the DP and the NP (see Ritter 1991, 1992 for crosslinguistic motivation). Based on the fact that quantifiers and attributive adjectives both trigger linker morphology, I assume without argument that they are adjoined to the NP. As for relative clauses, I assume (again, without argument) that they attach to either NP or DP, with a difference in interpretation — relative clauses attaching to NP are restrictive and may optionally precede the N rather than following it, just like adjectives and quantifiers, while relative clauses attaching to DP are non-restrictive and obligatorily follow the D and all of the material in the NP, if the DP contains an NP at all.¹⁰

1.2.2.3 PRONOUNS AND AGREEMENT MORPHOLOGY

The SVO analysis of Palauan word order depends on an analysis of the preverbal element that indexes the person and number (and, to some degree, animacy) features of the subject as subject agreement morphemes rather than pronominal DPs. In other words, if Palauan is VOS, it must be analyzed as a *pro*-drop language. The *pro*-drop analysis appears plausible, and arguments in favor of it are presented in Georgopoulos 1991b: 43–51, to which I refer the curious reader. Consider first the forms of Palauan pronouns, shown in Table 1.4.

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>ngak</i>	<i>kid</i>	<i>kemam</i>
2ND PERSON	<i>kau</i>	<i>kemiu</i>	
3RD PERSON [+HUM]	<i>ngii</i>	<i>tir</i>	
3RD PERSON [-HUM]	<i>ngii</i>	∅	

TABLE 1.4 Palauan pronouns

These pronouns may appear in topic position or after any instance of the preposition/case-marker *er* (which may introduce both argument and non-argument DPs). Interestingly, none of these pronouns may appear overtly in a clause-final subject position, which was one of the original arguments against a VOS analysis of Palauan word order. The only overt indicator of a pronominal subject is the agreement morphology that appears pre-verbally. While clearly related to the pronoun

¹⁰ Although it is clear that embedded clausal arguments in Palauan can extrapose to the right edge of their containing clause, as is shown in §2.1.2.3, it is not clear whether relative clauses in Palauan can also extrapose to the right edge of an NP or DP. I leave the matter to future investigation.

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>ak</i>	<i>kede</i>	<i>aki</i>
2ND PERSON	<i>ke</i>	<i>kom</i>	
3RD PERSON [+HUM]	<i>ng</i>	<i>te</i>	
3RD PERSON [-HUM]	<i>ng</i>	<i>ng</i>	

TABLE 1.5 (Realis) subject agreement morphemes

forms in Table 1.4, the subject agreement morphemes, shown in Table 1.5, are nevertheless phonologically distinct from the full pronouns.

Some examples illustrating the ban on overt pronominal subjects are provided below in (1.27) through (1.29). In the grammatical (a) examples, there is no pronoun pronounced in subject position. When the corresponding pronoun is pronounced in subject position, as in the (b) examples, the sentences are ungrammatical.

- (1.27) a. Ng merang *pro*.
3SG= true it
‘‘It’s true.’’ [CB 49]
- b. *Ng merang **ngii**.
3SG= true it
(‘‘It’s true.’’)
- (1.28) a. Te mle bleketakl el olekebai er a rengalek *pro*.
3PL= AUX.PAST openly L restrain ACC D children they
‘‘They openly held the children back.’’ [IK 7]
- b. *Te mle bleketakl el olekebai er a rengalek **tir**.
3PL= AUX.PAST openly L restrain ACC D children they
(‘‘They openly held the children back.’’)
- (1.29) a. Ak dengchokl er a ulech-al a lius *pro*.
1SG= sit P D frond-3SGP D coconut I
‘‘I’m sitting on a coconut frond.’’ [AM 15]
- b. *Ak dengchokl er a ulech-al a lius **ngak**.
1SG= sit P D frond-3SGP D coconut I
(‘‘I’m sitting on a coconut frond.’’)

As we saw above in (1.4), the third person subject agreement morphemes *ng* (3SG or 3PL -HUM) and *te* (3PL +HUM) can freely co-occur with non-pronominal subjects.

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>-ak</i>	<i>-id</i>	<i>-emam</i>
2ND PERSON	<i>-au</i>		<i>-emiu</i>
3RD PERSON [+HUM]	<i>-ii</i>		<i>-(e)terir</i>
3RD PERSON [-HUM]	<i>-ii</i>		∅

TABLE I.6 (Perfective) Object Agreement Morphemes

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>-ek</i>	<i>-id</i>	<i>-am</i>
2ND PERSON	<i>-em</i>		<i>-iu</i>
3RD PERSON [+HUM]	<i>-el</i>		<i>-ir</i>
3RD PERSON [-HUM]	<i>-el</i>		<i>-el</i>

TABLE I.7 (Default) Possessor Agreement Morphemes

The descriptive generalization to draw from (I.4) through (I.29) is that the forms in Table I.5 are subject agreement morphemes that index the φ -features of the subject DP, and pronominal subjects cannot be pronounced.¹¹

In other words, Palauan is a *pro*-drop language. Perhaps unsurprisingly, both pronominal direct objects of transitive perfective verbs that bear object agreement morphology and pronominal possessors of nouns that bear possessor agreement morphology must also be null. The (perfective) object agreement morphemes are shown in Table I.6. The default possessor agreement morphemes are shown in Table I.7, but these are subject to variation based on lexically specified theme vowels (see Flora 1974 for analysis; Josephs 1997: 90–97 for the basic patterns; cf. Zuraw 2007). Some examples of direct object *pro*-drop are provided below in (I.30) and (I.31), while (I.32) and (I.33) give examples of possessor *pro*-drop.

- (I.30) a. Ng urreked-ii a chim-al a Rehina e chiltekl-ii
 3SG= hold.PF-3SGO D hand-3SGP D Rehina and PAST.sing.PF-3SGO
pro.
 it
 “She held Rehina’s hand and sang it.” [KK 6]

¹¹ The situation contrasts with other *pro*-drop languages which allow but do not force *pro*-drop, like Spanish, for instance.

b. *Ng urreked-ii a chim-al a Rehina e chi/tekl-ii
 3SG= hold.PF-3SGO D hand-3SGP D Rehina and PAST.sing.PF-3SGO
 ngii.
 it
 (“She held Rehina’s hand and sang it.”)

(I.31) a. A bersoech a chilebeld-kak pro me ak
 D snack TOP PAST.trick.PF-1SGO me so.that ISG=
 ki/l-ii pro.
 PAST.eat.PF-3SGO it
 “The snake tricked me into eating it.” [Chedaol Biblia, Genesis 3:13]

b. *A bersoech a chilebeld-kak ngak me ak
 D snack TOP PAST.trick.PF-1SGO me so.that ISG=
 ki/l-ii ngii.
 PAST.eat.PF-3SGO it
 (“The snake tricked me into eating it.”)

In the grammatical (a) sentences in (I.30) and (I.31), the pronominal direct objects of perfective verbs must not be pronounced. If they are, as in the (b) sentences, the result is ungrammatical.

Just as with the subject and direct object pronominals, pronominal possessors whose φ -features are indexed with agreement morphology on the possessed noun must not be pronounced. The (a) sentences in examples (I.32) and (I.33) illustrate this — compare these to the ungrammatical (b) sentences with pronounced pronominal possessors.

(I.32) a. A rokui el chad er a buai a ongtiall el mo lmuches
 D all L people P D public TOP asked.to L AUX.FUT PF.write
 a uldesu-ir pro.
 D thoughts-3PLP they
 “All interested persons are invited to submit comments.” (approx. “Everyone in the community is asked to write their thoughts.”)
 [Tia Belau, 26 October 2009]

b. *A rokui el chad er a buai a ongtiall el mo lmuches
 D all L people P D public TOP asked.to L AUX.FUT PF.write
 a uldesu-ir tir.
 D thoughts-3PLP they
 (“All interested persons are invited to submit comments.”)

- (I.33) a. Ak dirrek el mo omrotech a chim-ak *pro*, e
 ISG= also L AUX.FUT clap D hands-ISGP me and
 mo dobodeb a ngsech-el a reng-uk *pro*.
 AUX.FUT limit.PF D rising-3SGP D heart-ISGP me
 “I also will clap my hands, and my anger will be over.” (*lit.* “I also will
 clap my hands and limit the rising of my heart.”)
 [Chedaol Biblia, Ezekiel 21:17]
- b. *Ak dirrek el mo omrotech a chim-ak **ngak**, e
 ISG= also L AUX.FUT clap D hands-ISGP me and
 mo dobodeb a ngsech-el a reng-uk **ngak**.
 AUX.FUT limit.PF D rising-3SGP D heart-ISGP me
 (“I also will clap my hands, and my anger will be over.”)

I.2.2.4 A' DEPENDENCIES

Extensive research has been conducted on the nature of A' dependencies in Palauan, which are quite prevalent in spoken and written discourse. A definitive resource on the subject is Georgopoulos's (1991b) monograph *Syntactic Variables: Resumptive Pronouns and A' Binding in Palauan*. Georgopoulos analyzes topicalization, clefts and pseudoclefts, relative clauses and free relatives, and *wh*-questions. Examples of these constructions are given below.

(I.34) RELATIVE CLAUSES:

- a. Ak medengel-ii a chad_i [el mi/cher-ar tia el
 ISG= know.PF-3SGO D person [L PAST.buy.PF-3SGO this L
 buk ______i].
 book <GAP>]
 “I know the person who bought this book.”
 [Georgopoulos 1991b: 63, ex. 2a]
- b. Ak mi/s-a a mlai_i [el l-di/sech-ii
 ISG= PAST.see.PF-3SGO D canoe [L 3PLS.IRR-PAST.carve.PF-3SGO
 ______i tirke el chad].
 <GAP> those L men]
 “I saw the canoe that those men carved.” [Georgopoulos 1991b: 63, ex. 2b]

- c. A buik_i [el k-chi/lebed-ii [a obek-ul
 D boy [L ISGS.IRR-PAST.hit.PF-3SGO [D older.brother-3SGP
 ______i]] a secheli-k.
 <GAP>]] TOP friend-ISGP
 “The boy whose brother I hit is my friend.”
 [Georgopoulos 1991b: 63, ex. 2c]
- d. Tilecha a blai_i [el l-ulenga er a ngikel er ngii_i
 that TOP house [L 3SGS.IRR-PAST.eat.IMP ACC D fish P it
 a Robert].
 D Robert]
 “That’s the house that Robert was eating the fish in.”
 [Georgopoulos 1991b: 64, ex. 3b]

(I.35) FREE RELATIVES:

- a. Ng ngar er ngii a [_{e_i} [melamech a dekol ______i]] er
 3SG= exist P there D [[smoke D cigarettes <GAP>]] P
 kemiu?
 you.PL
 “Is there anyone among you who smokes cigarettes?”
 [Georgopoulos 1991b: 65, ex. 6a]
- b. Ak medengel-ii a [_{e_i} [chom-oruul er ngii_i]].
 ISG= know.PF-3SGO D [[2S.IRR-do.IMP ACC it]]
 “I know what you’re doing.” [Georgopoulos 1991b: 65, ex. 7b]

(I.36) CLEFTS:

- a. Ng obek-uk_i [a [mla mer-ngii a
 3SG= older.brother-ISGP [D [AUX slap.PF-3SGO D
 secheli-k ______i]].
 friend-ISGP <GAP>]]
 “It’s my brother who has hit my friend.” [Georgopoulos 1991b: 66, ex. 11a]
- b. Ng secheli-k_i [a [bla le-ber-ngii ______i a
 3SG= friend-ISGP [D [AUX.IRR 3SGS.IRR-slap.PF-3SGO <GAP> D
 obek-uk ______i]].
 older.brother-ISGP]]
 “It’s my friend who my brother has hit.” [Georgopoulos 1991b: 67, ex. 11b]

(I.37) PSEUDOCLEFTS:

- a. [A [mi/ruul er a malk _____i]] a Miriam_i.
[D [PAST.make.IMPF ACC D chicken <GAP>]] TOP Miriam
“The (one who) cooked the chicken is Miriam.”
[Georgopoulos 1991b: 67, ex. 12a]
- b. [A [l-omtanget er ngii_i a resechal]] a [chelib-el a
[D [3PLS.IRR-polish.IMPF ACC it D boys]] TOP [shell-3SGP D
uel]_i.
turtle]
“The (thing that) the boys are polishing is the turtle shell.”
[Georgopoulos 1991b: 67, ex. 13b]

(I.38) *Wh*-QUESTIONS (*i.e.*, *wh*-clefts):

- a. Ng techa [a [kileld-ii a sub _____i]]?
3SG= who? [D [PAST.heat.PF-3SGO D soup <GAP>]]
“Who heated up the soup?” [Georgopoulos 1991b: 70, ex. 19a]
- b. Ng techa [a [l-uiekod-ir _____i a rubak]]?
3SG= who? [D [3SGS.IRR-kill.PF-3SGO <GAP> D old.man]]
“Who did the old man kill?” [Georgopoulos 1991b: 70, ex. 19c]
- c. Ng techa [a [chom-uls-a [a del-al
3SG= who? [D [2S.IRR-see.PAST.PF-3SGO [D mother-3SGP
_____i]]]]?
<GAP>]]]?
“Whose mother did you see?” (*lit.* “Who did you see his mother?”)
[Georgopoulos 1991b: 70, ex. 20b]
- d. Ng ker [a [le-bilsk-au a buk er ngii_i a
3SG= where? [D [3SGS.IRR-PAST.give.PF-2SGO D book P there D
Ruth]]]?
Ruth]]
“Where did Ruth give you the book?” [Georgopoulos 1991b: 70, ex. 21a]

(I.39) TOPICALIZATIONS:

- a. A sensei_i a omes er a rengalek _____i.
D teacher TOP see.IMPF ACC D children <GAP>
“The teacher is looking at the children.” [Georgopoulos 1991b: 72, ex. 24a]

- b. A rengalek_i a l-omes er tir_i a sensei.
 D children TOP 3SGS.IRR-see.IMPF ACC them D teacher
 “The teacher is looking at the children.” (*lit.* “The children, the teacher
 is looking at them.”) [Georgopoulos 1991b: 72, ex. 25a]
- c. A ekebil_i a k-chi/iu-ii [a buk er ngii_i].
 D girl TOP 1SGS.IRR-PAST.read.IMPF [D book P her]
 “I read the girl’s book.” (*lit.* “The girl, I read her book.”)
 [Georgopoulos 1991b: 72, ex. 25b]
- d. Ngak_i a le-bil/s-kak ______i a buk a Harry.
 me TOP 3SGS.IRR-PAST.give.PF-ISGO <GAP> D book D Harry
 “Harry gave me the book.” (*lit.* “Me, Harry gave me the book.”)
 [Georgopoulos 1991b: 72, ex. 26b]

Georgopoulos concludes that there is no A' movement in any of these constructions. Instead, the displaced element is base-generated in its surface position and binds a null or overt resumptive pronoun variable in its θ -position. She presents a wealth of evidence for this analysis (and in my own research, I have found no evidence against it), but three points are particularly striking.

- (I.40) NO TRACES: The tail of an A' chain can be *either* a gap *or* an overt resumptive pronoun (Georgopoulos 1991b: 81).
- (I.41) *wh*-AGREEMENT: The mood morphology (realis or irrealis) on verbs appearing between the displaced element and its corresponding gap or resumptive pronoun varies based on the grammatical relation either of the gap or resumptive pronoun or of the clause (CP or TP) containing the gap or resumptive pronoun (Georgopoulos 1991b: 84–97).
- (I.42) NO ISLAND CONSTRAINTS: Palauan allows the full range of island violations (Georgopoulos 1991b: 80–82; *cf.* Ross 1967).

As far as (I.40) is concerned, we have already seen examples of A' constructions containing gaps and overt resumptive pronouns. On Georgopoulos’s analysis, all of these positions are filled with pronominal variables, and the conditions under which the pronominal variables are overt or null are the same as the conditions under which normal (non-resumptive) pronouns are overt or null, as described above in §1.2.2.3. As for (I.41), I refer the interested reader to Georgopoulos 1985, 1991b; I have nothing to add to her analysis of *wh*-agreement in this dissertation.

And regarding (I.42), the data is fascinating. (I.43) illustrates a topic linked to a direct object position inside of a relative clause. (I.44) shows that topics can be

extracted from embedded questions. (I.45) provides an example of a *wh*-question formed from a *wh*-word linked to direct object position inside of a relative clause. (I.46) shows that relatives can be embedded within relatives.

(I.43) [A chelib-el a uel]_j a k-ulemes er a resechal;
 [D shell-3SGP D turtle] TOP ISGS.IRR-see.PAST.IMPF ACC D boys
 [el omtanget er ngii; ______i].
 [L polish.IMPF ACC it <GAP>]
 “The turtle shell, I was watching the boys who were polishing (it).”
 [Georgopoulos 1991b: 80, ex. 37c]

(I.44) [A chelib-el a uel]_j a diak k-udengei [el kmo ng
 [D shell-3SGP D turtle] TOP NEG ISGS.IRR-know [L C 3SG=
 techa_i [a ulemtanget er ngii; ______i]].
 who? [D polish.PAST.IMPF ACC it <GAP>]]
 “The turtle shell, I don’t know who was polishing (it).”
 [Georgopoulos 1991b: 81, ex. 38b]

(I.45) Ng ngera_j [a chomo-mes er a resechal_i [el omtanget er
 3SG= what? [D 2S.IRR-see.IMPF ACC D boys [L polish.IMPF ACC
 ngii; ______i]].
 it <GAP>]]
 “What are you watching the boys who are polishing (it)?”
 [Georgopoulos 1991b: 81, ex. 39a]

(I.46) Ng techa_k [a mi/dechem-ii [a uel_j [el m-ulemes
 3SG= who? [D PAST.catch.PF-3SGO [D turtle [L 2S.IRR-see.PAST.IMPF
 er a resechal_i [el omtanget er [a chelib-el ______j]
 ACC D boys [L polish.IMPF ACC [D shell-3SGP <GAP>]
 ______i]]] ______k].
 <GAP>]]] <GAP>]]
 “Who caught the turtle that you saw the boys who are polishing its shell?”
 [Georgopoulos 1991b: 81, ex. 39b]

On an analysis of A’ dependencies/islands that assumed that moving a displaced DP to the specifier of CP blocked future movement of other DPs to the same specifier,

the data in (1.43) through (1.46) would be difficult to reconcile. Furthermore, the pronunciation of overt resumptive pronouns in positions that should contain traces or copies of the displaced DP (depending on whether one assumes a trace-theory or a copy-theory of movement) is mysterious. However, Georgopoulos’s analysis of A’ dependencies, while adopting the framework of Government and Binding Theory (Chomsky 1981), actually resembles base-generated analyses of “filler-gap” constructions in Head-Driven Phrase Structure Grammar (see Pollard and Sag 1994; Sag et al. 2003; *cf.* Gazdar et al. 1985). A movement-free variable-binding analysis leaves open the possibilities that there need not be a silent gap in the argument position and that if something is pronounced in that position, it may be a co-referential pronominal rather than a full copy of its higher antecedent (*cf.* Alber 2008 for a related but distinct set of facts in Tyrolean German).

1.2.2.5 TOPICALIZATION

One cannot undertake a study of Palauan syntax without recognizing the syntactic and morphological features of topicalization, which is extremely widespread in Palauan. In elicitation settings, sentences employing topicalization are the absolute norm, and some speakers will even judge non-topicalized counterparts of these sentences as ungrammatical in the absence of a scenario or some more explicit context. Some examples of sentences with topicalizations (and their non-topicalized counterparts) are given below. In Palauan, one may topicalize subjects as in (1.47b), possessors of nominal predicates as in (1.48b), possessors of DP arguments as in (1.49b), and direct objects as in (1.39b) above (repeated below as (1.50b)).

- (1.47) a. Ng di meketek a usbech-ed er a dengki.
 3SG= just increase D usage-IPL.INCP P D electricity
 “Our consumption of electricity is increasing.”
- b. [A usbech-ed er a dengki]_i a di meketek *pro*_i.
 [D usage-IPL.INCP P D electricity] TOP just increase
 “Our consumption of electricity is increasing.” TOPICALIZED SUBJECT
 [*Tia Belau*, 12 October 2009]
- (1.48) a. Ng mle soa-k *pro* [el me er tia el iungs].
 3SG= AUX.PAST desire-ISGP me [L come P this L island]
 “I wanted to come to this island.” (*lit.* “It was my desire to come to this island.”)

- b. [Ngak]_i a mle soa-k *pro*_i [el me er tia el
 [me] TOP AUX.PAST desire-ISGP [L come P this L
 iungs].
 island]
 “I wanted to come to this island.” (*lit.* “Me, it was my desire to come to
 this island.”) TOPICALIZED POSSESSOR OF NOMINAL PREDICATE
 [MI 6]

- (I.49) a. Ng mle sment [a ulol-el tia el skuul].
 3SG= AUX.PAST cement [D floor-3SGP this L school]
 “This school had a cement floor.” (*lit.* “This school’s floor was cement.”)
 b. [Tia el skuul]_i a mle sment [a ulol-el *pro*_i].
 [this L school] TOP AUX.PAST cement [D floor-3SGP]
 “This school had a cement floor.” (*lit.* “This school’s floor was cement.”)
 TOPICALIZED POSSESSOR OF DP ARGUMENT
 [IK 38]

- (I.50) a. Ng omes er a rengalek a sensei.
 3SG= see.IMPF ACC D children D teacher
 “The teacher is looking at the children.”
 b. [A rengalek]_i a l-omes er tir_i a sensei.
 [D children] TOP 3SGS.IRR-see.IMPF ACC them D teacher
 “The teacher is looking at the children.” (*lit.* “The children, the teacher
 is looking at them.”) TOPICALIZED DIRECT OBJECT
 [Georgopoulos 1991b: 72, ex. 25a]

The template for topicalizations is roughly [<TOPICALIZED DP> + *a* + <REST OF CLAUSE CONTAINING RESUMPTIVE PRONOUN>]. As with all the other *A'* dependencies mentioned in §1.2.2.4, the *wh*-agreement morphology on the verb/predicate (*i.e.*, realis or irrealis mood morphology) depends on the grammatical relation of the resumptive pronoun co-referent with the topicalized DP.

Now, all syntactic research conducted on Palauan that I am familiar with, with the exception of DeWolf (1988), analyzes the *a* morpheme between the topicalized DP and the rest of the sentence along the lines of something like (I.51).

- (I.51) UNIFIED DETERMINER *a* ANALYSIS: The *a* morpheme is always a determiner. When it appears in topicalizations, it forms a DP constituent with the material to its right. If that material is a non-nominal predicate, it is nominalized so as to be able to combine with *a*, forming something like a free-relative. The topicalized DP and the DP to its right (whether it be a true nominal

predicate or a non-nominal predicate that has been subsequently nominalized) form a (null) copular sentence.

On an analysis like (I.51), topicalizations involving verbal predicates (VPs/*v*Ps, depending on the theory) are treated on par with topicalizations involving nominal predicates (NPs/*n*Ps/DPs, depending on the theory), but the verb phrase must be nominalized. This parity is suggested in (I.52) below, glossed and bracketed following the analysis in (I.51) of *a* as a determiner.

- (I.52) a. [A Juda] [a ngelek-el a laion].
 [D Judah] [D child-3SGP D lion]
 “Judah is the son of a lion.” [Chedaol Biblia, Genesis 49:9]
- b. [A Juda] [a dilangch].
 [D Judah] [D PAST.recognize (them)]
 “Judah recognized (them).” [Chedaol Biblia, Genesis 38:26]

New data suggests that an analysis of Palauan topicalizations along the lines of (I.51) cannot be correct. Instead, I propose (following the speculation in DeWolf 1988¹²) a new analysis of the *a* in topicalizations in (I.53).

¹² DeWolf (1988: 174) suggests that the morpheme *a* that appears in Palauan topicalizations may be cognate with the Tagalog morpheme *ay* which licenses pre-verbal *ang*-marked DPs, which are variously analyzed as either subjects or topics. The pre-verbal position is marked — ordinarily, Tagalog is VOS, like Palauan. Consider the Tagalog sentences in (I.i) and the corresponding Palauan sentences in (I.ii).

(I.i) TAGALOG:

- a. Bumabasa ng libro ang maestro.
 ACTOR.FOCUS.read book teacher
 “The teacher is reading a/the book.” [DeWolf 1988: 174, ex. 69a]
- b. Ang maestro ay bumabasa ng libro.
 teacher TOP ACTOR.FOCUS.read book
 “The teacher is reading a/the book.” [DeWolf 1988: 174, ex. 69b]

(I.ii) PALAUAN:

- a. Ng menguiu er a hong a sensei.
 3SG= read.IMPf ACC D book D teacher
 “The teacher is reading a/the book.” [DeWolf 1988: 174, ex. 70a]
- b. A sensei a menguiu er a hong.
 D teacher TOP read.IMPf ACC D book
 “The teacher is reading a/the book.” [DeWolf 1988: 174, ex. 70b]

c. A meknɡit el chad el ou-cheraro er kemam a
 D bad L man L VBLZ.IMPF-enemy ACC us.EXCL TOP

[ngka-kid el Haman]
 [this-EMPH L Haman]

“Our enemy, our persecutor, is this evil man Haman!” (*approx.* “The evil man who has us as his enemy is *this* (person), Haman!”)

[*Chedaol Biblia*, Esther 7:6]

d. A del-ak me a reta er ngak a [tirke el chad el
 D mother-1SGP and D ones P me TOP [those L people L
 orrenɡes a teki-ngel a Dios e oltirakl]
 hear D words-3SGP D God and obey (them)]

“My mother and brothers are those who hear the word of God and obey it.”

[*Chedaol Biblia*, Luke 8:21]

Another unexpected pattern on the analysis in (1.51) involves plural marking.¹⁴ Human plural nouns must be marked for number (whether using a plural demonstrative determiner or the plural number marker *re-*). However, predicate nominals with plural human subjects are only optionally marked for plural. If the nominal predicate (with a human plural subject) lacks plural marking, the nominal predicate is interpreted as truly predicational and the sentence is a (null) copular sentence, but if it bears number marking, it is treated as referential and the sentence is a specificational (null) copular sentence (*cf.* Mikkelsen 2005 and references therein). The relevant contrast can be seen below, between (1.55) with no plural marking and a predicational interpretation and (1.56) with plural marking and a specificational interpretation.¹⁵

(1.55) [A re-chad er a osbitar] a chad el smecher.
 [D PL-people P D hospital] TOP people L INTR-sick

“The hospital patients are sick people.”

PREDICATIONAL

(1.56) [A re-chad er a osbitar] a re-chad el smecher.
 [D PL-people P D hospital] TOP PL-people L INTR-sick

“The hospital patients are the people who are sick.”

SPECIFICATIONAL

¹⁴ I wholeheartedly thank Ruth Kramer for looking over a lot of confusing data with me to help me blast the obscurity away and find clarity in these patterns.

¹⁵ See also example (1.9) in §1.2.2.2 for a naturally-occurring sentence of the relevant type.

However, verbal predicates that are nominalized to form free relatives are obligatorily referential and must bear plural marking if their referent is human. This contrast can be seen below in (1.57).

- (1.57) a. [A **re-mo** er a osbitar] a smecher.
 [D PL-go P D hospital] TOP INTR-sick
 “The (ones who) are going to the hospital are sick.”
- b. * [A **mo** er a osbitar] a smecher.
 [D go P D hospital] TOP INTR-sick
 (“The (ones who) are going to the hospital are sick.”)

Now, on an analysis like (1.51) in which topicalizer *a* is treated as a determiner that may co-occur with a nominalized *v*P, it might be expected that DPs containing nominalized *v*P's that refer to human plurals should be required to bear plural marking as in (1.57), regardless of the position of the DP in the syntax. But this is not what we find; in predicate position, the verb need not bear plural marking even if its subject is a human plural (in which case the *v*P is predicated of the subject DP) as in (1.58), or it may optionally bear plural marking, suggesting that the *v*P has been nominalized (in which case the sentence is a specificational copular sentence) as in (1.59).

- (1.58) [Tirka el chad el meringel a bder-rir] a **mo** er a osbitar.
 [these L people L painful D head-3PLP] TOP go P D hospital
 “These people with headaches are going to the hospital.” PREDICATIONAL

- (1.59) [Tirka el chad el meringel a bder-rir] a **re-mo** er a osbitar.
 [these L people L painful D head-3PLP] TOP go P D hospital
 “These people with headaches are the (ones who) are going to the hospital.”
 SPECIFICATIONAL

The sentences in (1.54) and (1.55) are difficult to explain on the analysis in (1.51) in which the *a* that appears in topicalizations is a determiner, but it receives a natural explanation on the analysis in (1.53) in which *a* is treated as a topicalizer. Though nothing in the dissertation hinges on a particular syntactic analysis of topicalizer *a*, I suggest that it heads a Top(ic) projection in the syntax, which is located between the CP and TP projections as suggested by the position of topicalized DPs in embedded clauses; the structure is shown in Figure 1.7. Consistent with Georgopoulos's (1985, 1991b) analysis of A' dependencies in Palauan, I assume that topicalized

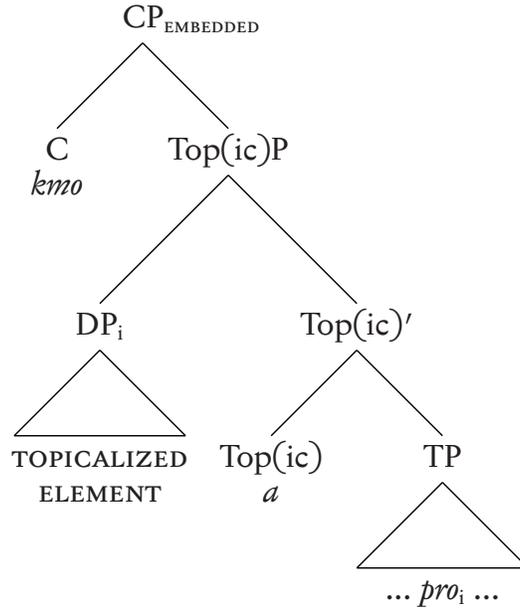


FIGURE 1.7 Topicalizer *a* as the head of a syntactic Top(ic) projection

DPs are base-generated in the specifier of Top(ic)P and co-refer with resumptive pronouns that are base-generated in lower argument positions.¹⁶

¹⁶ Put differently, I claim that Palauan is a discourse-configurational language, in the sense of É. Kiss (1995: 6), who proposes the following definition of discourse configurational topics:

“The (discourse-)semantic function ‘topic,’ serving to foreground a specific individual that something will be predicated about (not necessarily identical with the grammatical subject), is expressed through a particular structural relation (in other words, it is associated with a particular structural position).” [É. Kiss 1995: 6]

Languages from a variety of families and spoken across many different regions of the world have been claimed to be discourse-configurational (see É. Kiss 1995: 5 for an extensive list of languages with references to the original research).

One language that strikes me as having unusually similar properties to Palauan with respect to the syntax of topics is the Mayan language Tz’utujil, spoken in Guatemala. Like Palauan, Tz’utujil is underlyingly VOS, but its topics may occur preverbally in both root and embedded clauses (Dayley 1985; Aissen 1992: 44–45, 71ff., 1999). Aissen analyzes the Tz’utujil topic position as the specifier of a CP which can be selected as the complement to a second CP (Aissen 1992: 74, fn. 33; cf. Rizzi and Roberts 1989: 21–22). As far as I can tell, the analysis is structurally identical to the one I propose in Figure 1.7, except that I use the label Top(ic)P rather than CP for the XP whose specifier is in the position in which the topicalized DP is projected.

I.3 SUMMARY OF KEY RESULTS

The results of the individual investigations into Palauan syntax are organized into Chapters organized by the empirical phenomena they treat.

Chapter 2, entitled “Encoding Grammatical Relations Syntactically,” is largely concerned with clause structure, case, and grammatical relations. Through examination of a range of data, I conclude that the VOS analysis of word order is not only motivated structurally, but that a particular structural analysis also makes sense of the somewhat complex agreement patterns that seem to index DPs with particular grammatical relations (subjects, direct objects, and DP-internal possessors). The first part of the chapter focuses on subjects — specifically on the positions in which subject arguments are base-generated and/or pronounced, the mechanisms necessary to derive the patterns of subject agreement, and evidence that subjects either may (and possibly must) move to a position outside of the main predicate constituent. The phenomenon of possessor (genitive DP) ascension to subject suggests that non-nominative DPs can serve as subjects of clauses as well, leading to an analysis in which finite T can instantiate multiple Agree relations to satisfy different types of requirements, such as φ -feature valuation, Case licensing, satisfying [EPP] features, if it can be shown that such features are indeed present in the syntax.

The second part explores the syntax of direct object DPs and the morphosyntax of Accusative Case, focusing on the unusual aspectually-dependent pattern of accusative case morphology and speculating on what it can tell us about the syntax of Palauan verbal predication. I conclude that despite the morphological disparities in accusative case marking, the pattern can be analyzed as the morphological reflex of a uniform process of Accusative Case licensing via Agree with a transitive *v* head. I argue that (at least some) aspectual features are not realized in separate, dedicated functional heads in Palauan (such as Asp), but are instead bundled with transitive *v* heads. Predictions of that analysis are tested in the domain of passives, in which the aspectual distinctions are neutralized. The result is that morphosyntactic features corresponding to aspectual information can be distributed across different feature bundles in different languages, and that what correspond to “functional heads” in the lexicons of different languages might not be identical across languages, at least in terms of their featural composition. The important conclusion here is that the modern Palauan correlates of the famous Western Austronesian “voice” morphemes that appear in, *e.g.*, Tagalog and Malagasy, have been reanalyzed as prefixes/infixes that contribute information about category, aspect, voice, argument structure, and valence. In other words, what corresponds to a morphophonological “verb” is represented syntactically across multiple different heads.

Chapter 3, entitled “Psych-Predicates and Phrasal Idioms,” investigates a particular class of phrasal idioms in Palauan that describe personality traits and psy-

chological states that include DP arguments whose lexical head is *reng* “heart” or another body part noun. These phrasal idioms have a locality restriction on their subparts, and the *reng*-argument DPs are unable to participate in A’ dependencies, A-movements that disrupt the precedence/adjacency relations among the idiom chunks, or coordination. To account for the locality restriction, I formulate two versions of a possible constraint on idioms, similar to those in the literature on English VP-idioms. One constraint is structural in nature (roughly, all of the idiom chunks must be within some minimal XP at some given point of the derivation — most likely Spell Out), and the other one is defined on linearized strings constructed in the post-syntactic component of the grammar (intuitively, idiom chunks must be next to each other).

Since the structural type of constraint is already well-motivated in the literature on idioms, I explore the implications of adopting the post-syntactic constraint on idiom locality. I suggest that the post-syntactic analysis, in conjunction with a theory of category-neutral roots, predicts the occurrence of synonymous transitive and intransitive variants of idioms if idiomatic predicates are simply roots that can merge either with transitive or intransitive verbalizers (*i.e.*, instances of *v*). Furthermore, the developing system predicts that verbal or adjectival idiomatic predicates should be able to be nominalized, a prediction that is borne out in two different constructions. In the first, the $\sqrt{\text{ROOT}}$ that would have formed the idiomatic predicate is nominalized, and the associated argument DP becomes a possessor rather than a subject/direct object. In the second, the $\sqrt{\text{ROOT}}$ associated with the predicate and the $\sqrt{\text{ROOT}}$ associated with the argument form a compound nominal together, and there is no predicate–argument structure internal to the resulting DP. If an analysis in this vein is on the right track, we are left with a new type of evidence for a post-syntactic component of the grammar.

Chapter 4, entitled “From Roots to Words: Selection and Projection,” refines the idea that verbalizers are a class of functional heads of the category *v*, whose function is to transform a verb root into a full-fledged verb (where the root is either of category V or is category-neutral). The focus is on intransitive verbs and adjectives in Palauan, a large subclass of which is formed from the prefix *me-*. The primary question addressed is one of selection vs. projection: if a verb is a syntactic object constructed compositionally from a $\sqrt{\text{ROOT}}$ or V and a verbalizer *v* via the operation Merge, what is the relation between *v* and $\sqrt{\text{ROOT}}/V$? Depending on the answer to this question (selection, [extended] projection, or something else altogether), one might expect to find many more verbs in a language than are actually attested.

Through investigation of this class of *me-* predicates, I conclude that despite the fact that they are all intransitive, they do not all have a uniform (thematic) argument structure. Nevertheless, they do have a uniform unaccusative syntax, in that

the single argument DP of each predicate is base-generated in its complement position as an internal argument, rather than being introduced as an external argument in the specifier of ν P. By considering the familiar diagnostics for agentivity in passives (*by*-phrases, manner adverbials, and purpose clauses) and introducing a new Palauan-specific unaccusativity diagnostic that I call *di ngii*-predication, it is possible to distinguish between members of these subclasses and determine whether (and where) there is any overlap among them. I conclude that the differences between these morphologically similar but syntactically distinct subclasses of intransitive verbs arise both from the features of the particular instance of intransitive ν/a that merges with VP/AP/ \sqrt{P} as well as the features inherent to the V/A/ \sqrt{V} , and that these features must unify, perhaps along the lines of a theory like Grimshaw's (2005) Extended Projection. In line with the analysis of transitive verbs developed in Chapter 2, I propose that there are (at least) two instances of intransitive ν and at least one instance of a that are all spelled out as *me-*.

Chapter 5, entitled "Resultatives and Word-Internal Syntax," explores the idea that category-defining heads (n , ν , and a) can attach not only to \sqrt{P} (or VP, AP, etc.) to form predicate XPs, but may also attach to larger constituents that are already category-specified (like ν P) to change their categories. The empirical focus is on Palauan resultatives, whose syntactic properties suggest that they enter the syntax as instances of V or $\sqrt{\text{ROOT}}$ that are first verbalized as passives (via merge of passive ν with VP/ \sqrt{P}) and then subsequently stativized, via merge of an additional resultative a with the passive ν P, drawing on evidence that Palauan resultatives have a full internal eventive ν P structure that licenses *by*-phrases and manner adverbials, both of which are incompatible with statives. The conclusion is that Palauan resultative a Ps are derived syntactically rather than in the lexicon. If correct, the result aligns with Embick's (2004a) and Kratzer's (2000) analyses of English and German resultatives as being derived compositionally, rather than in the lexicon, and that morphophonological words do not necessarily correspond to syntactic XPs.

And finally, Chapter 6 integrates the results across chapters into a larger picture of Palauan verbal syntax and discusses how future research could refine it further. The conclusions reached about various elements of linguistic theory (the nature of the lexicon, the operations used to build structure in the narrow syntax, agreement, and the interface between syntax and morphology) are brought together and placed into the context of current research on the syntax of other languages.

CHAPTER 2

Encoding Grammatical Relations Syntactically

“Every system is perfectly designed to produce the results it produces.”

Frederick Winslow Taylor
(1856–1915)

Though much research has been dedicated to the nature of Palauan phrase structure, little has been said about the grammatical relations *subject* and *object*. In this chapter, I explore the syntactic and morphological characteristics of subject and object with two primary goals. The first is to augment our knowledge of the features of argument structure, Case licensing, and agreement in Palauan and cross-linguistically. The second is to lay the foundation for the argumentation and analysis of various syntactic phenomena in the later chapters, which depend heavily on a clear understanding of grammatical relations.

The chapter is split into two key sections. The first examines the nature of subjecthood in Palauan, focusing on the positions in which subject arguments are base-generated, the mechanisms underpinning subject agreement, and evidence that subjects can move to a position outside of the main predicate constituent. The second focuses on direct objecthood, centering on an exploration of the unusual pattern of accusative case morphology and speculating on what it can tell us about the syntax of Palauan verbal predication. I conclude by considering the descriptive generalizations drawn in both sections and developing two competing hypotheses about how the Palauan verb is built up morphosyntactically: one hypothesis claims that verb formation occurs in the lexicon, while the other claims that it proceeds syntactically. The investigations in the following chapters aim to uncover empirical evidence that can be used to decide whether one of the hypotheses is superior.

2.1 THE NOTION OF SUBJECT

As was mentioned in Chapter 1, the question of which DP is the subject of a sentence has received different answers in the Palauan descriptive and theoretical literature, with one camp claiming that the subject is the clause-initial DP that I analyzed as a topic in §1.2.2.5 (the SVO analysis of word order) and the other camp claiming that the subject is the clause-final DP that triggers verb agreement morphology (the VOS analysis of word order). The issue seems to be settled now (see Lemaréchal 1991; Josephs 1994, 1999: Ch. 15), largely due to our improved understanding of grammatical relations in Palauan. Again, I will not review the empirical arguments for the VOS word order analysis here (but see Waters 1980; Georgopoulos 1986, 1991b: 32–42; Josephs 1999: Ch. 15 for details). In this section, I instead sketch out a theory that aims to capture the empirical properties of subject DPs in Palauan, taking the stance that the VOS order is well-motivated enough at this point to assume it without argument.

First, I describe the morphosyntactic properties of subjects, in particular the subject agreement morphology on predicates. Next, I consider a theory in which subjects are base-generated predicate-internally (*i.e.*, the Internal Subject Hypothesis; see, *i.a.*, Kitagawa 1994 [1986]; Kuroda 1988; Koopman and Sportiche 1991; McCloskey 1997) and subsequently moves to a higher position, which I claim is the specifier of TP. Finally, I examine evidence for this proposal from raising constructions and possessor ascension.

2.1.1 THE MORPHOSYNTAX OF SUBJECT AGREEMENT

Palauan has two sets of subject agreement morphemes, which have been described as correlating with the mood of the clause, realis or irrealis. The realis subject agreement morphemes are listed below in Table 2.1.

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>ak</i>	<i>kede</i>	<i>aki</i>
2ND PERSON	<i>ke</i>	<i>kom</i>	
3RD PERSON [+HUM]	<i>ng</i>	<i>te</i>	
3RD PERSON [-HUM]	<i>ng</i>	<i>ng</i>	

TABLE 2.1 Realis Subject Agreement Morphemes

The realis subject agreement morphemes have the distribution of clitics — they are prosodically deficient¹⁷ but are written as separate words. They form a prosodic unit with the leftmost element in the TP, whether that be the verb itself as in (2.1), an auxiliary¹⁸ as in (2.2), or a preverbal modifier like *blechoel* “sometimes; always” or *kmal* “often; very” as in (2.3).

- (2.1) a. **Kom** ngmai *pro* el mo er a bli-l a Oreng.
 2PL= take.PF (them) you.PL L go P D house-3SGP D Oreng
 “You take them to Oreng’s home.” [OO 11]
- b. **Ng** merael a chais er a beluu.
 3SG= go D news P D area
 “A rumor is going around.” [Chedaol Biblia, Nehemiah 6:6]
- (2.2) a. Kemie renglekei a *kmal* chebuul e le [**ng** mla mad
 you.PL VOC children TOP very pitiful because [3SG= AUX die
 a dem-miu]].
 D father-2PLP
 “You, children, are to be pitied because your father has died.” [KC 27]
- b. **Ak** mo remuul [a beluu er a Juda el di mo
 ISG= AUX.FUT make.PF [D towns P D Judah L just become
 che/oit el diak a rechad el kiei er ngii] *pro*.
 RES.abandon L no D people L live P there] I
 “I will make the towns of Judah like a desert where no one lives.”
 [Chedaol Biblia, Jeremiah 34:22]
- (2.3) a. **Ak** blechoel el meruul a kel-el a Droteo *pro*.
 ISG= always L make.IMPF D food-3SGP D Droteo I
 “I always prepare Droteo’s food.” [Josephs 1990: 23]
- b. **Ng** uchul e [**ng** di blechoel el mo meses a eolt].
 3SG= reason then [3SG= just always L become strong D wind]
 “That’s why the wind always gets strong.” [KC 58]

¹⁷ Unlike content words (including full pronouns), they are allowed to contain no full vowels: for instance, they may have only schwa (*e.g.*, ke, kede, te) or just a syllabic nasal (*e.g.*, ng). Content words, on the other hand, must contain at least one full vowel. Kie Zuraw, p.c.

¹⁸ I assume that auxiliaries in Palauan are of category T in the case of past tense *mle* and future tense *mo*, or (outer) Asp in the case of *≈*perfect *mle* or *≈*fientive/change-of-state *mo/mlo*. I leave justification for this categorial analysis for future research, as nothing in this dissertation depends directly on a particular categorial analysis of the Palauan auxiliaries.

- c. **Kom** kmal me-saul *pro*_i [el orrenge er tia el subed
 2PL= very INTR-tired you.PL [L listen P this L announcement
 PRO_i].
 you.PL]
 “Thank you very much for your attention.” (*lit.* “You are very tired from
 listening to this announcement.”) [Tia Belau, 15 March 2010]

The irrealis subject agreement morphemes, on the other hand, behave like true prefixes (and not like clitics), and they are listed in Table 2.2. Irrealis subject agreement appears in subjunctive, imperative, negative, and conditional clauses as well as some temporal adverbials; it also appears in clauses that contain an A' resumptive pronoun that is not (or not within) a subject or predicate nominal phrase — this is the Palauan *wh*-agreement phenomenon described in Georgopoulos 1985, Chung and Georgopoulos 1988, and Georgopoulos 1991b. The irrealis subject agreement morphemes attach directly to the verb as in (2.4), and they may double on some auxiliaries as in (2.5) and modifiers as in (2.6).¹⁹

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>k-</i> , <i>ku-</i>	<i>d(e)-</i> , <i>do-</i>	<i>kim-</i> , <i>kimo-</i>
2ND PERSON		<i>m(o)-</i> , <i>cho-</i> , <i>chomo-</i>	
3RD PERSON		<i>l(e)-</i> , <i>lo-</i>	

TABLE 2.2 Irrealis Subject Agreement Morphemes

- (2.4) a. Ng chebuul [ngike el ngelek-el a chesisebangiau]_i [el
 3SG= pitiful [that L child-3SGP D cardinal honey-eater] [L
ku-/ek-ur a och-il *pro*_i er a chetebtel a
 1SGS.IRR-PAST.tie.PF-3SGO D foot-3SG it P D top-3SGP D
 kemim *pro*].
 starfruit I]
 “This baby bird is so pitiful that I’m tying its foot to the top of the starfruit

¹⁹ The facts surrounding multiple realizations of irrealis subject agreement morphology on multiple words in a clause are quite murky, despite the attention that has been paid to the phenomenon in the literature (see Josephs 1975, 1997; 1991b; Campana 2000). While irrealis subject prefixation nearly always appears to be obligatory on the main verb (but see (2.6c)), it is less regular (though still quite frequent) on auxiliaries, as perusal of just about any Palauan language text suggests. At present, I know of no explanation for the irregularity.

(tree).”²⁰

wh-AGREEMENT

[KN 4I]

- b. Me **m-otebed-ii** a tekoi me [**le-me-terob**
So 2SGS.IMP-issue.PF-3SGO D order-2SGP so.that [3PL.IRR-INTR-stop
tirke el chad el meketek er a beluu].
those L men L build.IMP ACC D city]
“Therefore you are to issue orders that those men are to stop rebuilding
the city.” (*approx.* “So issue an order so that those men who are building
the city are stopped.”)
IMPERATIVE/SUBJUNCTIVE
[*Chedaol Biblia*, Ezra 4:2I]

- (2.5) a. **M-otobed-ii** a teki-ngem me [bo
2SGS.IMP-issue-3SGO D decree-2SGP so.that [AUX.FUT
le-mok-oad *pro*].
3PL.IRR-PASS.CAU-die they]
“Issue a decree that they are to be put to death.”
IMPERATIVE/SUBJUNCTIVE
[*Chedaol Biblia*, Esther 3:9]

- b. Ng dirkak [**de-bo** **de-merek** er a
3SG= not.yet [IPL.INCS.IRR-become IPL.INCS.IRR-finished P D
subel-ed].
homework-IPL.INCP]
“We haven’t finished our homework yet.”
NEGATIVE
[Josephs 1997: 174, ex. 75a]

- c. E a **cho-bo** **m-rell-ii** tiang, e...
And D 2SGS.IRR-AUX.FUT 2SGS.IRR-do.PF-3SGO this then...
“If you do this, then...”
CONDITIONAL
[*Chedaol Biblia*, Deuteronomy 4:26]

- (2.6) a. Ng mo-cha er se el taem el **le-blechoel** el mo
3SG= become-ICP P that L time L 3SGS.IRR-always L AUX.FUT
oldingel a Fern.
visit D Fern
“It was almost time for Fern to visit.” (*approx.* “It is about to be the time
when Fern always visits.”)
TEMPORAL ADVERBIAL
[CB 20]

²⁰ The Palauan name for the bird *chesisebangiau*, which corresponds to the English “cardinal honey-eater” is of the species *Myzomela cardinalis* (Josephs 1990: 56).

- b. A rebek el babii el mla mo ungil el odoim a le-blechoel
 D all L pigs L AUX become good L food TOP 3S.IRR-always
 el omek-oad se el le-bo le-mekelekolt a beluu.
 L CAU-die that L 3SGS.IRR-become 3SGS.IRR-cold D area
 “All the pigs that are ready to eat are always killed in the winter.” (*ap-
 prox.* “All the pigs that have become good food, they always kill them
 when the area becomes cold.”) *wh*-AGREEMENT/TEMPORAL ADVERBIAL
 [CB 63]
- c. Ng mi/lekoi a Wilbur el mo er a Charlotte [er a
 3SG= PAST.speak.IMP F D Wilbur L go P D Charlotte [P D
 l-sal mechesang a Charlotte [el melabek er a
 3SGS.IRR-very busy D Charlotte [L patch.IMP F ACC D
 bli-l PRO]].
 web-3SGP she]].
 “Wilbur spoke to Charlotte while Charlotte was very busy mending her
 web.”
 TEMPORAL ADVERBIAL
 [CB 70]

The data in (2.4) — (2.6) suggests that both syntactic factors (*i.e.*, non-subject oriented *wh*-agreement) and semantic factors (*i.e.*, polarity, temporal relations of events, etc.) may condition the presence of irrealis subject agreement morphology in a clause. Before presenting an analysis of Palauan subjects and the subject agreement patterns, it is important to explore the syntax of subjects in Palauan, which is the focus of the next section.

2.1.2 THE SYNTAX OF SUBJECTS

Due to the relatively clear morphological reflexes of operations that are sensitive to grammatical relations in Palauan (*e.g.*, passive, *wh*-agreement, causativization, subject and object agreement, and so forth), it seems relatively clear that the notions *subject* and *object* play a prominent role in the clausal syntax. In this section, I will be examining three different aspects of Palauan grammar that involve subjects: expletives, raising constructions, and possessor ascension.

In light of the data presented in the following sections, I wish to consider a hypothesis about Palauan clauses, given in (2.7).

(2.7) PALAUAN SUBJECT HYPOTHESIS: All Palauan clauses must have a subject.

[*cf.* the EPP; Chomsky 1982: 9–10, 1986b: 116]

From a cross-linguistic perspective, the Subject Hypothesis in (2.7) is not very radical and certainly not new. Chomsky (1982: 9–10, 1986b: 116) proposes that a requirement like that in (2.7), together with the Projection Principle, is a fundamental principle of syntax — the Extended Projection Principle, or EPP. The data in this section provides strong support for the validity of the hypothesis in (2.7).

2.1.2.1 EXPLETIVE SUBJECTS

In §1.2.2.3, I provided data suggesting that Palauan is a *pro*-drop language, and further that pronouns that trigger agreement morphology on verbs and nouns *must* be null. I represent these null pronouns in the data as *pro*, when necessary. In this section, I consider data which, I argue, contains expletive pronominal subjects. But given the *pro*-drop properties of Palauan, these expletive pronouns, like all subject pronouns, must be null.

In English, there are two different expletive pronouns that may appear in subject position — *it* and *there*, shown in (2.8a) and (2.9a), respectively.

(2.8) a. It rained (in Spain).

b. *Spain rained.

(2.9) a. There was a monster under my bed.

b. *My bed was a monster under (it/there).

In Palauan, there is no overt DP correlate of either expletive *it* in (2.8a) or expletive *there* in (2.9a). Nevertheless, I argue that there is a null pronominal expletive subject *pro*, which triggers default 3SG subject agreement. Consider the case of zero-place weather predicates in (2.10).

(2.10) a. Ng chull *pro*.

3SG= rain EXP

“It’s raining.”

b. Ng mle mekelekolt *pro*.

3SG= AUX.PAST cold EXP

“It was cold.”

[*Chedaol Biblia*, Acts 28:2]

c. [Ng dirk mellomes *pro*] e ng sokol el mo bad.

[3SG= still light EXP] but 3SG= feel.like L become rock

“It is still light out but he feels like going to sleep.” (*lit.* “It is still light but he feels like becoming a rock.”) [CB 31]

- d. Ng mo-chu klebesei *pro*.
 3SG= become-ATC night EXP
 “It will be dark soon.” (*approx.* “It is about to become evening.”)
 [*Chedaol Biblia*, Judges 19:9]

Interestingly, all of the weather predicates in (2.10) take the 3SG subject agreement clitic *ng* even though there does not appear to be a subject in any of their clauses, assuming that weather predicates assign no θ -roles or select no DP arguments. A natural explanation for the agreement morphology is that clauses containing zero place predicates insert a (default) 3SG expletive pronoun in subject position (whenever that may be) which then conditions the appearance of the 3SG subject agreement clitic *ng*, as in other languages like Icelandic and Italian.

Stronger evidence for the existence of null pronominals comes from the variable subject agreement patterns in existential constructions. Palauan existentials are formed from the complex predicate *ngar er ngii* “exists” (*approx.* “be at there”), which inflects for past tense as *m̄la er ngii* “existed” and future tense as *mo er ngii* “will exist,” irrealis mood as *bo er ngii* “exist,” and may combine with the aspectual auxiliary *m̄la* in *m̄la ngar er ngii* \approx “have existed.” An existential takes the form [SUBJECT AGREEMENT + *ngar er ngii* + PIVOT DP + SUBJECT DP], but it is often the case that there is only one DP that acts as both the pivot DP and the subject DP. Some examples are given below in (2.11).

- (2.11) a. A irechar e [ng m̄la er ngii [a ta el chelid [el
 D earlier.times then [3SG= was P there [D one L god [L
 ngkl-el a Meluadeangel]]].
 name-3SGP D Meluadeangel]]].
 “Once upon a time, there was a god named Meluadeangel.” [CM 7]
- b. A l-sekum [te ngar er ngii [a re-mo 50 el melemalt
 D 3SGS.IRR-case [3PL= be P there [D PL-AUX.FUT 50 L innocent
 el chad [el ngar er se el beluu]]], e...
 L people [L be P that L city]]] then...
 “If there are fifty innocent people in the city...”
 [*Chedaol Biblia*, Genesis 18:24]

The pivot DPs in (2.11a) and (2.11b) are singular and plural, respectively, as indicated both by the numerals contained within the DPs, *i.e.*, *ta* “one” and 50, and the human plural marker *re-* in (2.11b). Interestingly, the subject agreement clitic preceding the form of *ngar er ngii* appears to agree with the pivot DP in each of the two sentences: 3SG *ng* appears in (2.11a) while 3PL *te* appears in (2.11b). The variant

forms of subject agreement morphology in (2.11) suggest that the pivot DP is also the subject of the clause.²¹

In this vein, there is reason to suspect that while the pivot DP may also be the subject of the clause, it need not necessarily be. In the examples below in (2.12), we see instances of the 3SG subject agreement clitic *ng*, despite the fact that the pivot DP in each example is a human plural, as indicated by the presence of the human plural marker *re-* in each of the pivot DPs.

- (2.12) a. ...**ng** di **ngar er ngii** [a re-450 el profet er a Baal] *pro*.
 ...3SG= but be P there [D PL-450 L prophets P D Baal] EXP
 “... but there are 450 prophets of Baal.” [Chedaol Biblia, I Kings 18:22]
- b. **Ng ngar er ngii** [a re-mla omerrous [el ngar er a
 3SG= be P there [D PL-AUX dream.about [L be P D
 chels-el ngii el beluu]]] *pro*.
 space.inside-3SGP it L place]]] EXP
 “There are (one)s (who) have dreamed about being in that place.” [KC 92]
- c. **Ng mla er ngii** [a re-bebil el chad [el dim/ak
 3SG= was P there [D PL-some L people [L PAST.NEG
 le-k/ikiid e le [te rirtech-ii a
 3PLS.IRR-RES.absolve because [3PL= PAST.touch.PF-3SGO D
 bedeng-el a ulek-oad chad]]]] *pro*.
 body-3SGP D RES.CAU-die person]]]] EXP
 “There were some people who were ritually unclean because they had touched a corpse.” [Chedaol Biblia, Numbers 9:6]

The sentences in (2.12) provide strong support for the existence of null expletive pronominals, as the existential verbs they contain cannot be agreeing with the pivot DP — if they were, the subject agreement clitic should be *te*, as it is in (2.11b).²²

A natural question to ask at this point is whether the subject position that I argue for contains a null expletive pronoun in the existentials in (2.12) can contain

²¹ But this is not the only possible conclusion if finite T can Agree with a lower DP without moving it to Spec TP, inserting an expletive instead. This is a reasonable claim for English existentials, as the expletive *there* is overt but agreement matches the features of the pivot rather than the expletive subject. But since the expletive pronoun in Palauan would have to be null, one natural explanation is that it is null because it is the goal of the Agree relation instantiated by finite T, just like non-expletive pronouns, which are null under the same conditions.

²² As Kie Zuraw points out to me, the situation is reminiscent of English examples like that below in (2.i).

other types of DPs, *e.g.*, full overt DPs or referential, non-expletive pronominals. It appears that the answer is yes.

One further use of the Palauan existential construction is to express possession relations. There is no Palauan verb that corresponds directly to English “have.” Instead, an existential construction with a possessive DP in pivot position expresses the relation of possession, for example in (2.13).

- (2.13) a. Ng **ngar er ngii** [a dem-miu *pro*]?
 3SG= be P there [D father-2PLP you]
 “Do you have a father?” (*lit.* “Is there your father?”)
[Chedaol Biblia, Genesis 44:19]
- b. Ng **ngar er ngii** [[a kekere el udud-ek *pro* el silber]_i [el
 3SG= be P there [[D small L money-ISGP me L silver] [L
 sebec-ek [el mo ms-ang *pro* ______i]]].
 ability-ISGP [L AUX.FUT give.PF-3SGO him <GAP>]]]
 “I have a small silver coin that I can give him.” (*lit.* “There is my small
 silver coin that I can give him.”)
[Chedaol Biblia, 1 Samuel 9:8]

In possessive existentials like those in (2.13), there is morphosyntactic evidence that the possessor DP in the larger pivot DP can (but need not) ascend to become the subject of the clause, stranding the rest of the pivot DP in its base position.

For instance, the examples below in (2.14) contain relativized non-subject DPs that lack possessors (compare *secher* “sickness” to *secherek* “my sickness” and *tia el beluu* “this village” to *tia el beluad* “this village of ours”). The syntax of the construction in (2.14) merits further study, but at present, I assume that the possessors occupy a position external to the possessed DP in these sentences (perhaps having raised from a rightward-branching specifier of the DP headed by a resumptive pronoun, combining Georgopoulos’s (1991a) analysis of possessors and (1991b) analysis of relative clauses), allowing the (external) head of the relative clause to appear without associated possessor-agreement morphology. That the relativized DPs are not subjects is indicated by the (irrealis) *wb*-agreement morphology in the relative clause (see Georgopoulos 1985, 1991b for details), which shows that *k-ngar er ngii* and *de-ngar er ngii* agree with (null) pronominal subjects corresponding to “I” and “we.”

(2.i) There’s three presents under the tree.

Sentences like (2.i) are completely grammatical for me, provided the 3SG form of *be* (*is*) is contracted with *there*.

- (2.14) a. Ng diak le-ua secher_i [el k-ngar er ngii ______i
 3SG= NEG 3SGS.IRR-like sickness [L ISGS.IRR-be P there <GAP>
pro], e chelik!
 I] and EMPH
 “It’s not like the sickness that I have!” [Posted on MySpace user
princessrasireib’s message board by MySpace user *sechei*. URL: <http://comment.myspace.com/index.cfm?fuseaction=user.viewComments&friendID=55331375>]
- b. [Tia el beluu_i [el de-ngar er ngii ______i *pro*]]_j a
 [this L village [L IPL.INCS.IRR-be P there <GAP> we.INC]] TOP
 diak [le-ua beluu er a Oreor ______j].
 NEG [3SGS.IRR-like city P D Koror <GAP>]
 “This village of ours is not like the city of Koror.” [AM 8]

This promotion of a DP-internal possessor to subject is examined in more detail below in §2.1.2.2, but it suffices to note the evidence for two DP positions in existential constructions — a subject position and a non-subject (pivot) position. Interestingly, it appears as though possessor ascension is not limited to possessors of nouns that trigger possessor agreement. Recall that some nouns require that their possessors be marked with *er*, like *klechelid* “religion” in (2.15). In (2.16), a *wh*-cleft of the pivot DP results in irrealis subject agreement morphology matching the features of the (logical) possessor, which seems to have raised to become the subject.

- (2.15) a. A klechelid er tirka el chad a diak a belk-ul.
 D religion P these L people TOP not.exist D purpose-3SGP
 “The religion of these people is worthless.” [Chedaol Biblia, Jeremiah 10:3]
- b. A king a mo ousbech a cheleblad el mengesuseu er
 D king TOP AUX.FUT need.IMPF D deceptively L lure.IMPF ACC
 tirke el mla choit-ii a klechelid er tir.
 those L AUX abandon-PF.3SGO D religion P them
 “By deceit the king will win the support of those who have already abandoned their religion.” [Chedaol Biblia, Daniel 11:32]

- (2.16) Ng ngara el klechelid a chome-ngar er ngii?
 3SG= what? L religion D 2SGS.IRR-be P there
 “What’s your religion?” (*approx.* “What religion do you have?”)
 [Josephs 1990: 123]

If the 2SG irrealis subject agreement on the existential predicate *ngar er ngii* in (2.16) is the result of possessor ascension, then it seems as though possessors that are

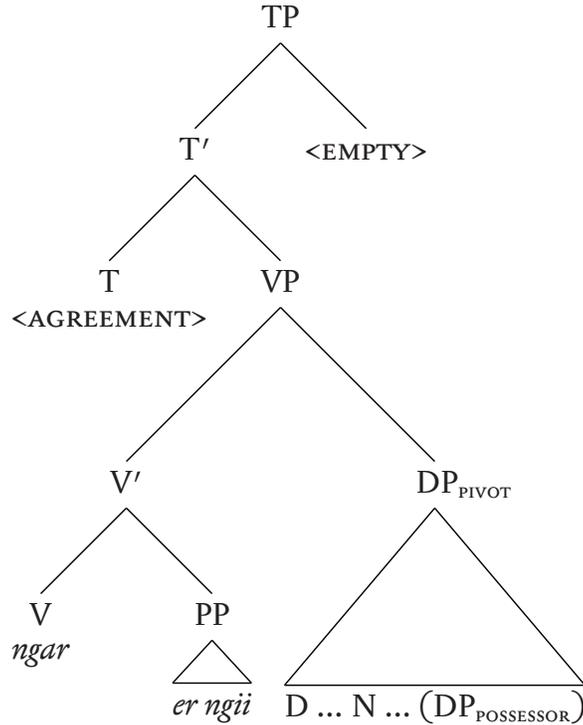


FIGURE 2.1 Proposed structure for Palauan existentials

marked with *er* are not PPs but are instead DPs, just as possessors that trigger agreement are, since PPs cannot be subjects. If this is true, then the occurrence of *er* that marks possessors might simply be an instance of a genitive case-marker rather than a true preposition.²³

I propose that the (underlying) syntax of Palauan existentials looks something like the schema in Figure 2.1. In that structure, I assume that the specifier of TP is the subject position, and the DP that occupies that position will condition subject agreement. First, if there is a possessor DP inside the pivot DP, the possessor DP can raise to the subject position, resulting in subject agreement with the possessor, *e.g.*, as in (2.14) and, evidently, (2.16). If the possessor DP strands the pivot DP in its base position, the stranded pivot DP is available to participate in A' dependencies at the exclusion of the possessor DP, which remains in the specifier of TP — this is what we see in (2.14) and (2.16). There is no problem with the binding of the trace created by possessor-raising, since A-bar dependencies are base-generated. If the possessor-DP's trace is in the specifier of the pivot DP whose head is a resumptive pronoun, the resumptive pronoun is free to co-refer with any other DP in a

²³ A similar (but much more detailed) analysis of *er* behaving as an accusative case-marker when it appears on direct objects is developed in §2.2 below.

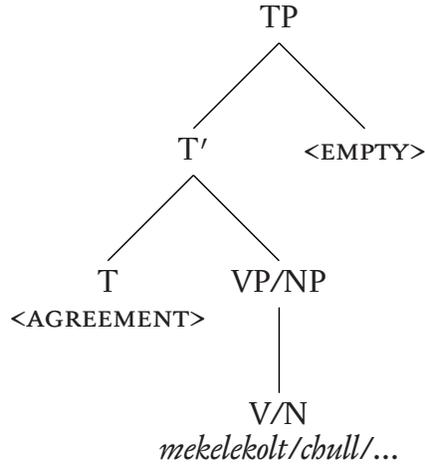


FIGURE 2.2 Proposed structure for zero-place weather predicates

higher A-bar position.²⁴ Second, the entire pivot DP can raise to the subject position, whether or not it contains a separate possessor DP, and trigger subject agreement, *e.g.*, in (2.11b) and possibly also (2.11a) and (2.13). Third, a null expletive pronoun may be inserted in the subject position, resulting in default 3SG subject agreement, *e.g.*, in (2.12).

The contrasts strongly suggest that certain Palauan clauses may contain null expletive subjects. While I argue that these are optional in Palauan existentials,²⁵ they appear to be obligatory in clauses containing zero-place weather predicates. I propose the structure in Figure 2.2 for weather predicates.

While the specifier of TP is empty in both Figure 2.1 and Figure 2.2, there are no DPs that can move to fill the specifier of TP in Figure 2.2, since zero-place weather predicates do not select any DP arguments. Consequently, the option to insert a null 3SG expletive subject in existentials becomes the only possibility in clauses containing weather predicates. The subject agreement morphology is then invariably 3SG *ng* (realis) or *l(e)*- (irrealis) because it reflects the features of the default 3SG expletive in the specifier of TP.

²⁴ A more serious question is how the pivot is Case-licensed in instances where the possessor raises to subject position. The issue is a confusing one, and it is reminiscent of the issues surrounding why pivots of *there is*-existentials in English are marked with nominative case but corresponding pivots of *es gibt*-existentials in German are marked with accusative case. A broader cross-linguistic study of existential constructions is necessary to determine why such variability manifests itself in the Case/case of pivot DPs.

²⁵ *cf.* Chung's (1998: 68–69, 183) analysis of null expletives in Chamorro existentials. Unlike Palauan existentials, Chamorro existentials invariably display 3SG subject agreement, suggesting that the insertion of a null expletive pronominal subject is obligatory, rather than just one of several options.

Put differently, zero-place weather predicates and existentials strongly suggest that the Palauan Subject Hypothesis in (2.7) has some merit. If clauses did not need subjects, we would not expect to see evidence for expletive pronominal subjects, even if that evidence is just a form of agreement morphology.

2.1.2.2 POSSESSOR ASCENSION

In this section, I explore the possessor ascension phenomenon in (2.14) in greater detail. Although possessor ascension was presented in the context of possession-existentials, it is actually far more pervasive. For instance, consider the contrast between (2.17a–b).

- (2.17) a. Ng me-kemanget [a chim-rir [a rubek-uk]].
 3PL.–HUM= PL-long [D arms-3PLP [D older.brothers-ISGP]]
 “My older brothers’ arms are long.” OR: “My older brothers are generous.”
 AGREEMENT WITH ENTIRE POSSESSED DP
- b. Te me-kemanget [a chim-rir t_i] [a
 3PL.+HUM= PL-long [D arms-3PLP] [D
 rubek-uk]_i.
 older.brothers-ISGP]
 “My older brothers’ arms are long.” OR: “My older brothers are generous.”
 AGREEMENT WITH POSSESSOR DP ONLY

If subject agreement is determined by the DP that occupies the specifier of TP, as the data in §2.1.2.1 involving expletive subjects suggests, then (2.17) appears to suggest that either the entire DP argument of *mekemanget* “long” may appear in the specifier of TP or else its possessor alone can.²⁶ The facts receive a natural explanation

²⁶ In my fieldwork, I have found that possessors within argument DPs may only become subjects if they bear a whole–part relation to the possessed noun, for whatever reason. This restriction does not seem to hold if the possessor is in a predicate nominal, *e.g.*, the possessors of the modal nominals in Table 2.3. To illustrate, compare (2.17) with (2.ii), below.

- (2.ii) a. Ng mesaul [a dem-rir [a rengalek]].
 3SG= tired [D mother-3PLP [D children]]
 “The children’s mother is tired.”
 AGREEMENT WITH ENTIRE POSSESSED DP
- b. *Te mesaul [a dem-rir t_i] [a rengalek]_i.
 3PL= tired [D mother-3PLP] [D children]
 (“The children’s mother is tired.”)
 AGREEMENT WITH POSSESSOR DP ONLY

It could very well be that additional or even different factors may play a role in determining whether or not possessors can be extracted and move to subject position. The phenomenon (with

3SG POSSESSOR FORM	MODAL INTERPRETATION	LITERAL MEANING OF NP
<i>sebech-el</i>	can/able to/may/allowed to	x's ability
<i>kir-el</i>	must/have to/should/ought to	(for) x's obligation/sake
<i>so-al</i>	want to/like to/love to	x's desire
<i>chet-il</i>	not want to/dislike to/hate to	x's distaste

TABLE 2.3 Palauan modal nominals

tion under the Internal Subject Hypothesis — either the entire DP may raise from a predicate-internal position to the specifier of TP, or just its possessor can, stranding the rest of the DP argument.

But data like that in (2.17) only tell us about subject agreement, not subject movement or subject positions. If there is any movement in (2.17), it is string vacuous. Fortunately, there is a different possessor ascension construction that is even more common than the construction in (2.17). This construction involves the small but frequently-employed class of modal nominals, introduced in §1.2.2.2 and listed in Table 2.3.²⁷ What is interesting about this class of nominals for present purposes is that it reveals facts about subject movement that possessor ascension constructions like those in (2.14) and (2.17) do not. Georgopoulos (1991a) analyzes the class of modal nominals as NP predicates, *i.e.*, NP complements to T, which must have a possessor DP and may select either a DP or CP complement. The structure Georgopoulos proposes (1991a: 226, ex. 21) is along the lines of that in Figure 2.3.

When there are two DP arguments in the NP predicate (a possessor DP and a complement DP), either of the two DPs (or neither) can move to subject position in the specifier of TP, and subject agreement matches the rightmost DP in the string (suggesting movement to a subject position).²⁸ Consider the data below in (2.18).

similar restrictions) has been reported for languages in Southeast Asia, including other Austronesian languages (see Bell 1983 for Cebuano and Oey 1990 for Malay), Kadai languages (see Gerner 2005 for Kam/Dong), Hmong-Mien/Miao-Yao languages (see Jaisser 1990 and Riddle 1999 for White Hmong), Mon-Khmer languages (see Huffman 1970 for Khmer/Cambodian and *i.a.*, Liêm 1970 for Vietnamese), Thai (see Iwasaki 2002), and probably others. See Matisoff 1986 and Clark 1996 for comparisons among Southeast Asian languages.

²⁷ Table 2.3 is adapted from Georgopoulos 1991a: 220, ex. 7.

²⁸ Georgopoulos calls the nouns in Table 2.3 *psych predicates*, to emphasize the link between her analysis and those of Stowell 1986 and Belletti and Rizzi 1988, both of which claim that internal argument DPs of psych predicates move out of the predicate phrase, either in the overt syntax (Belletti and Rizzi) or at LF (Stowell). While I think that the term *psych predicate* is a misnomer for the elements as a class (it is not clear how the interpretations of *sebechel* and *kirel* that correspond to *can* and *must*, respectively, can be construed as psychological), the terminology makes no difference. Georgopoulos's aim is to capture the intriguing subject agreement patterns that arise when *soal* and *chetil* select DP complements instead of their standard CP complements, parallel to transitive *like* and *dislike* in English. The resulting analysis is fascinating.

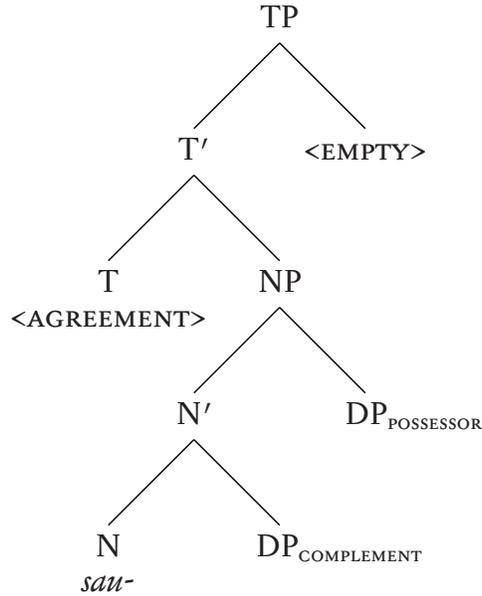


FIGURE 2.3 Georgopoulos's base structure for *soal*

In each sentence, the subject is *italicized* (including *pro*) and the subject agreement morpheme is **bolded**.

- (2.18) a. **Ng** so-rir kemam a rebuik *pro*.
 3SG= desire-3PLP us.EXC D boys EXP
 “The boys like us.” (*approx.* “It is the boys’ desire of us.”)
 [Georgopoulos 1991a: 225, ex. 20a]
- b. **Te** so-rir kemam *a rebuik*.
 3PL= desire-3PLP us.EXC D boys
 “The boys like us.” (*approx.* “The boys desire us.”)
 [Georgopoulos 1991a: 224, ex. 16b]
- c. **Aki** so-rir *t_i* a rebuik *pro_i*.
 IPL.EXC= desire-3PLP D boys we.EXC
 “The boys like us.” (*lit.* “We are the boys’ desire.”)
 [Georgopoulos 1991a: 225, ex. 18c]
- d. ***Ng** so-rir *t_i* a rebuik *kemam_i*.
 3SG= desire-3PLP D boys us.EXC
 (“The boys like us.”) [Georgopoulos 1991a: 230, ex. 22a]

In (2.18a), the 3SG subject agreement morpheme *ng* does not agree with either of the two DP arguments of *sorir*, the complement *kemam* “us” or the possessor *a rebuik*

“the boys.” However, (2.18b) shows that the possessor of the modal noun *sorir* can serve as the subject of the sentence, triggering both possessor–noun agreement (the 3PL *-rir* suffix on *sorir*) and subject–predicate agreement (the 3PL *te* clitic that precedes *sorir*). Perhaps unexpectedly, the (pronominal) complement DP *kemam* “us” may also become the subject of the sentence, as in (2.18c), where it triggers the appearance of the 1PL.EXCL subject clitic *aki* and is no longer pronounced (because of *pro*-drop; see §1.2.2.3). And the ungrammaticality of (2.18d) seems to suggest that the complement DP cannot move to the right of the possessor unless it becomes the subject — this is confirmed whenever the complement DP is non-pronominal, as in (2.19).

- (2.19) a. **Te** so-rir a Willy *a rebuik*.
 3PL= desire-3PLP D Willy D boys
 “The boys like Willy.” [Georgopoulos 1991a: 224, ex. 16b]
- b. **Ng** so-rir t_i a rebuik [*a Willy*]_i.
 3SG= desire-3PLP D boys [D Willy]
 “The boys like Willy.” [Georgopoulos 1991a: 222, ex. 12b]
- c. ***Te** so-rir t_i a rebuik [*a Willy*]_i.
 3PL= desire-3PLP D boys [D Willy]
 (“The boys like Willy.”)

(2.19a), like (2.18b), shows that the possessor DP can also serve as the subject, while (2.19b), like (2.18c), shows that the DP complement to the modal nominal can also raise to become the subject, but it has to move to the right of the possessor — Georgopoulos argues that this is movement to subject position. Unlike in (2.18c), the complement DP in (2.19b) is non-pronominal, so the movement to subject position is visible. Whenever there is visible movement of the DP complement to the modal nominal to the right of its possessor, subject agreement must match the features of the moved DP, as shown in (2.19c).

If Georgopoulos is right, and the movement of [*a Willy*] is movement to subject position, then we should see a change in subject agreement morphology. Since the DP [*a Willy*] is 3SG, it is impossible for us to know whether it occupies the subject position or if the subject position is filled with a null expletive pronoun, as in (2.18a). The situation is easily remedied by switching the base positions of the two DPs. Evidently, if the DP complement of the modal nominal is moved to the right of the possessor, it must also trigger subject agreement, as the contrast below in (2.20) indicates.

- (2.20) a. **Te** so-al t_i a Willy [a rebuik]_i.
 3PL= desire-3SGP D Willy [D boys]
 “Willy likes the boys.” [Georgopoulos 1991a: 225, ex. 18a]
- b. ***Ng** so-al t_i a Willy [a rebuik]_i.
 3SG= desire-3SGP D Willy [D boys]
 (“Willy likes the boys.”) [Georgopoulos 1991a: 230, ex. 22b]

The picture that the possessor ascension data paints fits nicely together with the zero-place weather predicates and existentials. In all of these constructions, the main clause evidently needs to have a subject, and this subject must appear in a particular syntactic configuration within the clause, which I claim is the specifier of TP. It would appear that TP need not be filled by the same DP that is licensed with structural Nominative Case, as in Icelandic. The sentences in (2.18) show that either the possessor DP or the complement DP may serve as the subject, but if we assume that the possessor DP receives structural Genitive Case by virtue of its position in the Specifier of the nominal predicate phrase (which might be a DP/nP/NP depending on the analysis), only the predicate’s complement DP needs structural Case. In a theory where Nominative Case licensing is distinct from agreement/EPP requirements (*e.g.*, Holmberg and Hróarsdóttir 2003), the data in (2.18) is consistent with an analysis in which the DP complement of *soal* receives structural Nominative Case, the possessor of *soal* receives structural Genitive Case, and either of these two DPs may serve as the subject of the clause via agreement with finite T (and possibly also raising to the specifier of TP).

2.1.2.3 RAISING-TO-SUBJECT CONSTRUCTIONS

Another argument in favor of the Palauan Subject Hypothesis in (2.7) can be made from raising predicates. Palauan has a small class of such predicates that contains at least the aspectuals *omuchel* “begin, start,” *melemolem* “continue,” and *mo merek* “become finished,” as well as the verb *oumesingd* “tend.” All of these verbs may select clausal complements, as shown below in (2.21).

- (2.21) a. **Te** **ulemuchel** el mo melai er se el bukl el beluu *pro*.
 3PL= start.PAST L go take.IMPF ACC that L hill L country they
 “They started out to invade the hill country.” [Chedaol Biblia, Numbers 14:40]
- b. **Ke** mo **melemolem** el oltirakl er tia el llach *pro*.
 2SG= AUX.FUT continue L follow.IMPF ACC this L law you
 “You will continue to observe the Law.” [Chedaol Biblia, Exodus 13:10]

- c. Ng di **m/o** **merek** el mangedecheduch a Wilbur
 3SG= just *PAST*.become finished L speak D Wilbur
 e a ngelek-el a sib a *tmoech*.
 and.then D child-3SGP D sheep TOP *INTR*.emerge
 “Wilbur finished talking and the lambs came out.” [CB 79]
- d. Te di **oumesingd** el menga a rodech me a chemadech el
 3PL= just tend L eat D fruits and D raw L
 kall *pro*.
 food they
 “They tend to eat fruits and raw food.” [CM 7]

In each of these sentences, the raising predicates are followed by clauses that begin with the linker *el*. That the matrix predicates in (2.21) are raising predicates is already suggested by the subject agreement clitics in the matrix clause, which match the features of the DPs that are agents of the predicates in the embedded clauses. Clearer evidence that the raising predicates in (2.21) do not assign thematic roles to their subjects arises when their complement clauses contain zero-place weather predicates, as in (2.22) and (2.23).

- (2.22) Me itia er a l-omechel-a [el mo mesesilkolk],
 so this.(time) P D 3SGS.IRR-begin-ICP [L become twilight]
 e...
 then...
 “As it began to get dark...” [Chedaol Biblia, 2 Kings 7:5]

- (2.23) a. Ng chull *pro*.
 3SG= rain EXP
 “It’s raining/rainy.”
- b. Ng mla omuchel el chull.
 3SG= AUX start L rain
 “It has started to rain/be rainy.”
- c. Ng oumesingd el chull er a ongeai el buil.
 3SG= tend L rain P D eighth L month
 “It tends to rain/be rainy in August.”
- d. Ng oumesingd el omuchel el chull er a ongeai el buil.
 3SG= tend L start L rain P D eighth L month
 “It tends to start to rain/be rainy in August.”

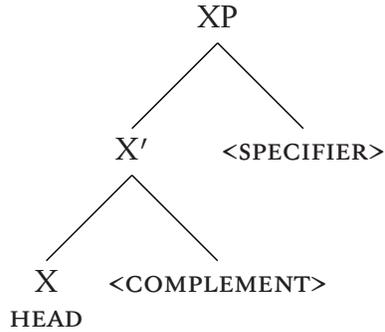


FIGURE 2.4 Phrase structure schema for all Palauan lexical categories

Assuming that the weather predicates have default 3SG expletive subjects, as I proposed above in §2.1.2.1, the absence of any other (overt) DPs in the clauses containing the raising predicates *omuchel* “start” in (2.22) and (2.23b, d) and *oumesingd* “tend” in (2.23c–d) together with the fact that they invariably bear 3SG subject agreement in (2.22) and (2.23) suggests that the matrix clauses either (i) contain their own null expletive pronominal subjects, or (ii) raise an expletive pronominal subject from an embedded clause to the subject position of the matrix clause.

I argue below that the latter strategy is the one implemented for the raising predicates in (2.21), with two types of evidence. The first involves the possible positions of subject DPs when clauses of various sizes are extraposed to the right of these DPs. The second involves the possible positions of subject DPs with respect to the PP aspectual modifier [_{PP} *er a chelsel a* + <LENGTH OF TIME>], which modifies the telic endpoint of an event and is incompatible with statives.

Above, I have assumed without argument that the head-initial, VOS nature of Palauan falls out from a phrase structure in which specifier positions of XPs are projected to the right rather than the left, as argued for other related Austronesian languages (Guilfoyle et al. 1992), such as Malagasy and Tagalog. The structure I assume is shown in Figure 2.4.²⁹ If this structure is correct, and if the subject position in a clause is the specifier of TP, then movement from the subject position of an embedded TP to the subject position of a matrix TP will often be string vacuous. As a result, word order alone is not as useful as a diagnostic for subject raising in Palauan as it is for SVO languages, like English.

Still, it can be demonstrated that in raising constructions, subjects of the raising predicates originate in the embedded clause. The evidence comes from the morphology of certain Palauan stative adjectives that denote physical properties, such

²⁹ An important possible exception is Top(ic)P, which I have explicitly assumed to project a leftward specifier. I can only speculate that the reason for this might have something to do with information structure.

as shape or size. While the citation forms of these predicates do not have prefixes, they are obligatorily prefixed with *me-* whenever their subjects are plural (Josephs 1975: 172–174; Josephs 1997: 266–267).

- (2.24) a. Tia el oluches a chetngaid.
 this L pencil TOP thin
 “This pencil is thin.” [Josephs 1975: 172, ex. 6a; Josephs 1997: 266, ex. 6a]
- b. Aika el oluches a **me**-chetngaid.
 these L pencils TOP PL-thin
 “These pencils are thin.” [Josephs 1975: 172, ex. 6b; Josephs 1997: 266, ex. 6b]
- c. *Tia el oluches a **me**-chetngaid.
 this L pencil TOP PL-thin
 (“This pencil is thin.”)
- d. *Aika el oluches a chetngaid.
 these L pencils TOP thin
 (“These pencils are thin.”)

The obligatory presence of the *me-* prefix on shape/size adjectives can be analyzed as predicate–argument agreement if the DP arguments of these adjectival predicates are base-generated AP/*a*P-internally, *i.e.*, in a structure like that of Figure 2.5 for (2.24b).³⁰

In a structure like that in Figure 2.5, predicate–argument agreement is established within the predicate XP. In the syntactic framework I assume in §1.1.2, feature sharing between the predicate *chetngaid* (*i.e.*, the A head³¹) and its argument can be established via Agree, assuming that the relevant structural relation in Palauan between the probe (*i.e.*, the head) and the goal (*i.e.*, the DP argument) can be m-command³² rather than c-command, as the possessor agreement patterns in the modal NP predicates examined in §2.1.2.2 strongly suggest, since the modal nominal predicates agree with the possessor DPs in their specifiers rather than the complement DPs (recall Figure 2.3).

³⁰ I take no official stance on whether shape/size predicates are of category V (verbs), A (adjectives), or neither (category-neutral roots). In Chapter 4, I suggest that intransitive statives formed from the prefix *me-* are adjectives, but I admittedly have no evidence for this claim. It has recently been claimed that all languages have adjectives (*i.a.*, Baker 2003; Dixon 2004), but I don’t know of concrete diagnostics for Palauan that can reliably distinguish adjectives from stative verbs.

³¹ Or perhaps the *a* head on a theory in which lexical words are derived syntactically whenever a category-defining functional head merges with a $\sqrt{\text{ROOT}}$ — this theory is examined in more detail in Chapter 3.

³² Another possibility is specifier–head agreement.

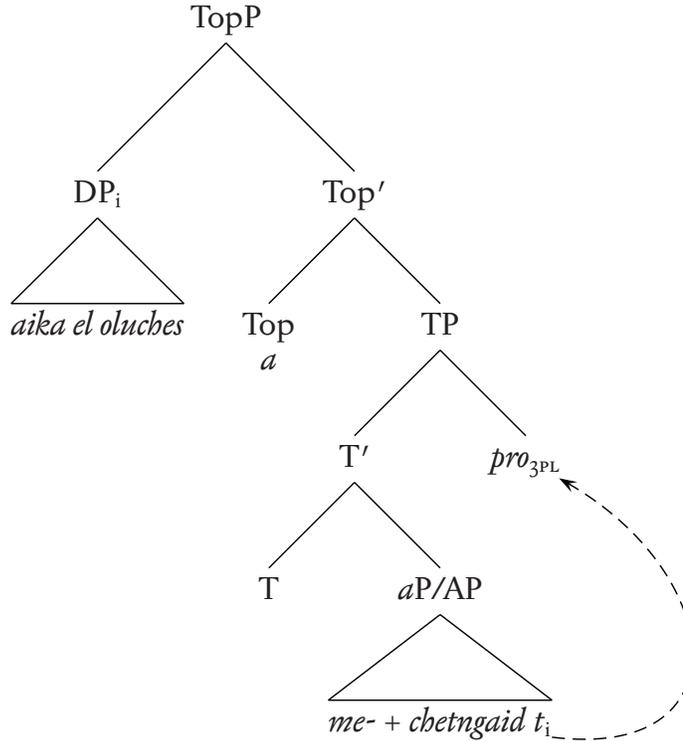


FIGURE 2.5 Configuration for predicate–argument number agreement

If this theory of agreement is on track, then the subjects of shape/size predicates must be base-generated within the predicate XP to create the conditions for a local application of the Agree operation (either via c-command or m-command, pending further analysis of the argument structure of such adjectives). If this predicate XP is within an embedded clause that is the complement of a raising predicate like those in (2.21), then we can construct an argument for raising if the subject of the embedded predicate is treated as the subject of the matrix predicate. The subject agreement morphology in (2.25a) suggests that the DP *a rengalek* “children” triggers the plural agreement prefix *me-* on the embedded predicate *klou* “big” as well as the plural subject agreement clitic *te*, which appears to the left of the matrix predicate *oumesingd* “tend.” The ungrammaticality of (2.25b) is consistent with the data in (2.22) and (2.23) in showing that the DP *a rengalek* “children” cannot be base generated in the matrix clause, which — by hypothesis — would allow the embedded predicate *klou* to surface without the plural agreement marker *me-*.³³

³³ While a control analysis would likely also allow plural *me-* to appear on shape/size adjectives, it looks as though a control analysis is unlikely to be correct, given that verbs like *oumesingd* and *omuchel* may co-occur with zero-place weather predicates like *chull* “rain” and thus most likely do not assign a θ -role to their subjects. Further research is necessary to determine whether *oumesingd*,

- (2.25) a. Te oumesingd el mo **me-klou** a rengalek.
 3PL= tend L become PL-big D children
 “Children tend to grow up.” (*lit.* “Children tend to become big.”)
- b. *Te oumesingd el mo **klou** a rengalek.
 3PL= tend L become big D children
 (“Children tend to grow up.”)

Now, even though the data in (2.25) shows that the matrix predicate *oumesingd* agrees with the subject of the embedded clause, there is no evidence that the embedded subject moves to a subject position in the matrix clause. In (2.25a), such movement would be string-vacuous. Still, there is reason to believe that movement occurs.

Consider the data below in (2.26), focusing on the position of the DP *a rengalek*, which the raising predicate appears to be agreeing with.

- (2.26) Te oumesingd a rengalek el mo **me-klou**.
 3PL= tend D children L become PL-big
 “Children tend to grow up.”

In (2.26), as in (2.25a), the matrix predicate *oumesingd* appears to agree with the sole DP in the sentence, effectively treating it as the subject. But the embedded predicate *meklou* bears plural shape/size agreement, suggesting that an Agree relation has enabled the sharing of φ -features between the DP and the embedded predicate as well. By assumption, the DP must originate in the embedded VP. What makes (2.26) interesting is that regardless of whether the DP is base-generated as a complement or a specifier of the embedded VP and regardless of whether that DP moves to become the subject of the matrix predicate, one would expect the DP to appear sentence finally because all A-positions project to the right, as in Figure 2.4. But, perhaps unexpectedly, the DP surfaces between the matrix predicate and its clausal complement.

There are (at least) two different ways to make sense of the surface position of the DP in (2.26) between the matrix predicate and the embedded clause: either (i) the DP moves to a position to the left of the embedded clause, or (ii) the DP moves to a position to the right of the embedded clause (string vacuously), and then the clausal remnant subsequently moves to the right of the DP. Although the second option is the more complex of the two, it is the one that I will advocate.

First, it’s clear that clauses can extrapose in Palauan.³⁴ Consider the following examples in (2.27), in which clausal complements of *sebechel* “one’s ability” and *soal*

omuchel, etc. are ambiguously raising/control predicates, however.

³⁴ It would be interesting to determine whether such extraposition creates islands, as the construc-

“one’s desire” extrapose to the right of their possessors (2.27a–b) and the clausal complement of *dmu* “say” extraposes to the right of its subject (2.27c).

- (2.27) a. Tia el bli-l a Wilbur a mla er ngii a tungel-el me
 this L pen-3SGP D Wilbur TOP was P there D gate-3SGP and.so
 ng mle sebec-el t_i a Wilbur [el mo tuobed]_i.
 3SG= AUX.PAST ability-3SGP D Wilbur [L go INTR.emerge]
 “Wilbur’s pen had a gate, so Wilbur could go outside.” [CB 13]
- b. A l-so-al t_i a reng-um [el me kmeed er a
 D 3SGS.IRR-desire-3SGP D heart-2SGP [L come INTR.close P D
 renguk]_i, e ng di ua chad el so-al el
 heart-1SGP], then 3SG= just like person L desire-3SGP L
 merael el mo er a chiloil el ngar er a chelemoll.
 travel L go P D rocks L be P D reef
 “When your heart wants to come close to my heart, it’s like a person who
 wants to travel to the rocks in the reef.” [KC 99]
- c. Chelechang el le-du t_i a rechad er a Siria [el kmo ‘A
 now L 3PLS.IRR-say D people P D Syria [L that ‘D
 Rubak a rubak er a bukl e diak le-rubak er a
 God TOP lord P D hills and NEG 3SGS.IRR-lord P D
 oberberek,’]_i e ak mo loi-a tia el klou el
 plains’] then ISG= AUX.FUT put.PF-3SG this L large L
 ildois er a chero-el a chim-am.
 army P D palm-3SGP D hand-2SGP
 “Now that the Syrians say that God is the lord of the hills and not the lord
 of the plains, I will give you victory over their huge army.”
 [Chedaol Biblia, 1 Kings 20:28]

The data in (2.27) indicates that the process of embedded clause extraposition must likely be posited on independent grounds. One might devise a transformation along the lines of something like (2.28) to account for the positions of the embedded clauses in (2.27), which might apply either in the narrow syntax or post-syntactically, as it seems to have no effect on semantic interpretation.

tion is not discussed in Georgopoulos’s (1991b) monograph, which seems to suggest that there are no island phenomena in Palauan. Unfortunately, I have not investigated clause extraposition extensively — there is more work to be done on what triggers it, when it is obligatory or optional, and so forth.

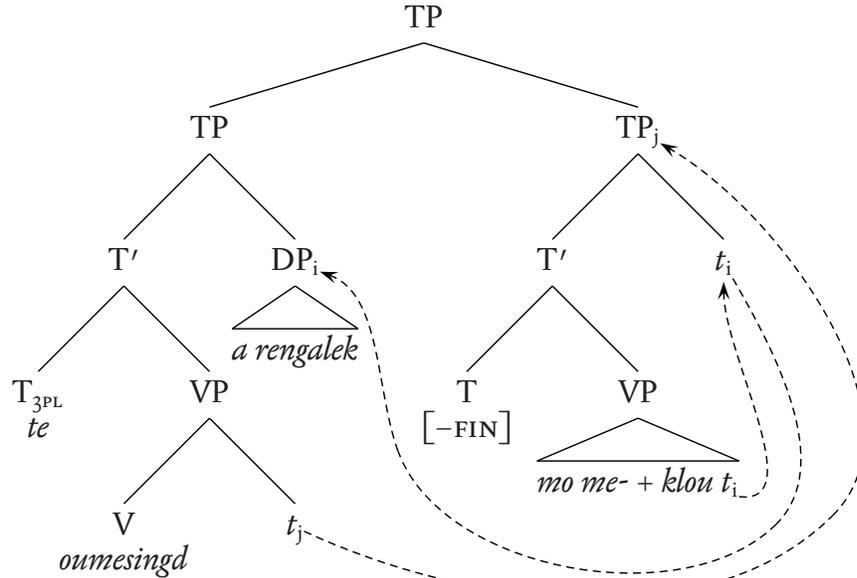


FIGURE 2.6 Analysis of the word order in (2.26)

(2.28) (OPTIONAL) EMBEDDED CLAUSE EXTRAPOSITION: Move an embedded clause to right-adjoin to the next-highest TP.³⁵

Phase theory would restrict recursive application of (2.28), allowing embedded clauses to adjoin only to the next-highest TP *within the same phase*. Assuming that C is a phase head (Chomsky 2001), the TP or TopP complement of C (including any extraposed clauses right adjoined to the TP) will be sent to the interfaces and thereby will be unavailable for subsequent applications of (2.28).

If one accepts (2.28) as part of the grammar of Palauan, then we might make some sense of the unusual (non-final) position of the subject in (2.26). If the subject of the embedded clause raises to the specifier of the matrix TP, then we can analyze the word order as being derived from three movements, as shown in (2.26'), and represented schematically in Figure 2.6.³⁶

(2.26') Te oumesingd t_j [a rengalek]_i [el mo me-klou t_i t_i]_j.
 3_{PL}= tend [D children] [L become PL-big]
 “Children tend to grow up.”

³⁵ This is just one possible option — it could be that the clause moves to right-adjoin to VP/*v*P as well. I know of no empirical evidence that favors one analysis over the other, and much hinges on the proper surface position of the subject DP.

³⁶ The linker *el* is omitted from this tree and all subsequent trees, as I assume that it does not occupy a syntactic position. See §1.2.2.2 for details.

First, the subject DP moves (string-vacuously) from its predicate-internal position to the specifier of the embedded TP. Next, the matrix TP is formed, and finite T probes for a DP in its c-command domain. The DP then raises from the specifier of the embedded TP to the specifier of the matrix TP. Finally, the embedded clause extraposes, right-adjointing to the matrix TP.

If this analysis is correct, then one would expect similar results with recursively embedded predicates. Since embedded clause extraposition seems to be optional,³⁷ clauses of various sizes are expected to be able to extrapose to the right of the subject, creating the illusion of leftward movement of the subject DP despite the fact that subject-movement is rightward. Consider the following examples.

- (2.29) a. Te oumesingd el omuchel el me [a rechad] er a ta el
 3PL= tend L start.IMPF L arrive [D people] P D one L
 klok.
 o'clock
 "People tend to start arriving at one o'clock."
- b. Te oumesingd el omuchel t_j [a rechad]_i [el me t_i er a
 3PL= tend L start.IMPF [D people] [L arrive P D
 ta el klok]_j.
 one L o'clock]
 "People tend to start arriving at one o'clock."
- c. Te oumesingd t_k [a rechad]_i [el omuchel t_j t_i [el me t_i
 3PL= tend [D people] [L start.IMPF [L arrive
 er a ta el klok]_j]_k.
 P D one L o'clock]]
 "People tend to start arriving at one o'clock."
- d. *Te oumesingd [a rechad] [el me er a ta el klok] [el
 3PL= tend [D people] [L arrive P D one L o'clock] [L
 omuchel]
 start.IMPF]
 "People tend to start arriving at one o'clock."

Because the specifier of TP is rightward-branching and embedded clause extraposition is right-adjunction, the different word orders in (2.29) can be derived via successive-cyclic A-movement. Sentence (2.29c) is of particular interest, as it serves to show that the embedded clause extraposition transformation in (2.28) does not

³⁷ Though, it could be the case that it is sometimes obligatory and sometimes optional, and I have not yet made sense of the relevant conditions.

overgenerate, *e.g.*, a word order like that in (2.29d) — this is because an extraposed clause will remain within the next highest clause, and only the larger containing clause can extrapose.

In a sentence with multiply embedded raising predicates, an application of embedded clause extraposition to a clause deeply embedded within another embedded clause is string-vacuous once the subject has raised. In raising constructions, the subject DP is in the specifier of the TP containing the highest raising predicate and will therefore never be inside an embedded clause, whether or not it extraposes. This, I propose, is the source of the word order variation in the sentences in (2.29).

There is another piece of evidence for movement of an embedded subject to a matrix subject position that involves aspectual modification. In English, there is an aspectual distinction between the modifiers *in an hour* and *for an hour* (see *i.a.*, Tenny 1987, 1994; Jackendoff 1996; 1997; Arad 1998; Krifka 1998; Torrego 1998; van Hout and Roeper 1998; Kearns 2000; Rothstein 2004). What is relevant for our purposes is that *in an hour* identifies the telic endpoint of a bounded predicate (*i.e.*, an achievement or an accomplishment) but is impossible with an unbounded predicate (*i.e.*, a process or a state) — this is shown in (2.30).

- | | | |
|-----------|--|----------------|
| (2.30) a. | They found their presents in an hour. | ACHIEVEMENT |
| b. | They drew those pictures in an hour. | ACCOMPLISHMENT |
| c. | *They wandered around in an hour. | PROCESS |
| d. | *They were happy in an hour. ³⁸ | STATE |

The adverbial [*er a chelsel a* + <LENGTH OF TIME>] is the Palauan correlate of English [*in a* + <LENGTH OF TIME>], as shown in (2.31).

- (2.31) Ke lmuut el meke-decher-ur pro er a di
 2SG= INTR.do.again L CAU.PF-build-3SGO P D just
 chels-el a ede el klebesei?
 space.inside-3PLP D three L days
 “Are you going to build it again in three days?” [Chedaol Biblia, John 2:20]

Just like English *in an hour*, Palauan *er a chelsel a ta el sikang* “in an hour” is only compatible with bounded predicates, as shown in (2.32), *cf.* English (2.30).

³⁸ (2.30d) is grammatical on the irrelevant interpretation in which they began to be happy after an hour has passed. This is a repair strategy for some unbounded predicates, discussed by Kearns (2000: 205–206).

- (2.32) a. Te mi/tik a beresengt er tir er a chels-el a ta
 3PL= PAST.find D presents P them P D space.inside-3SG D one
 el sikang.
 L hour
 “They found their presents in an hour.” ACHIEVEMENT
- b. Te li/uches aike el siasing er a chels-el a ta
 3PL= PAST.draw.PF those L pictures P D space.inside-3SG D one
 el sikang.
 L hour
 “They drew those pictures in an hour.” ACCOMPLISHMENT
- c. *Te ulemais er a chels-el a ta el
 3PL= wander.around.PAST.IMPF P D space.inside-3SG D one L
 sikang.
 hour
 (“They wandered around in an hour.”) PROCESS
- d. *Te mle ungil a reng-rir er a chels-el a ta el
 3PL= PAST good D hearts-3PLP P D space.inside-3SG D one L
 sikang.
 hour
 (“They were happy in an hour.”) STATE

As *er a chelsel a*-PPs cannot combine with states or processes, which by definition are unbounded, they cannot modify the predicate *chull* “rain,” as shown in (2.33b). The ungrammaticality of (2.33b) suggests that there is no constituent in (2.33a) (which we saw above in §2.1.2.1 in Figure 2.2 during the discussion of weather predicates) that an *er a chelsel a*-PP can modify which would result in a grammatical sentence. Yet when *chull* is embedded under the raising predicate *mo merek* “(become) finished,” addition of an *er a chelsel a*-PP is fully grammatical, as shown in (2.33c).

- (2.33) a. Ng mle chull.
 3SG= AUX.PAST rain
 “It rained/was raining.”
- b. *Ng mle chull [PP er a chels-el a ta el
 3SG= AUX.PAST rain [P D space.inside-3SGP D one L
 sikang]].
 hour]
 (“It was raining in an hour.”)

Sentence (2.34a) contains the process predicate *mengedub* “go swimming.” Sentences (2.34b–c) show us that *mengedub* is incompatible with *er a chelsel a*-PPs, just as the process predicate *omais* “wander around” in (2.32c) was. Regardless of whether the subject DP precedes the *er a chelsel a*-PP as in (2.34b) or follows it as in (2.34c), the result is ungrammatical.

However, when the clause whose predicate is *mengedub* is embedded under the raising predicate *mo merek*, the result is not only grammatical (as it was in (2.33c)), but the subject can appear on either to the left of the *er a chelsel a*-PP as in (2.34d) or to its right as in (2.34e). Although I cannot state with any certainty where the *er a chelsel a*-PP adjoins, (2.34a–c) suggests that it is in the matrix clause (perhaps right-adjoined either to VP or to TP), since it is semantically incompatible with the process predicate in the embedded clause. If so, then the appearance of the subject DP *a resechelik* “my friends” to the right of the *er a chelsel a*-PP in (2.34e), together with the 3PL subject agreement clitic in the matrix clause, strongly suggests that the DP argument of the embedded predicate *mengedub* “go swimming” has raised to become the subject of the matrix predicate *mo merek* “(become) finished.”³⁹

To sum things up, we have seen two sources of evidence that there is a class of predicates in Palauan — and possibly a very small class — that appear to behave like *seem* and other raising predicates in English in that they do not assign a θ -role to their subjects but still require (or permit) some DP to occupy that subject position. The idea that embedded clauses can extrapose to the right of a raised subject helped to make sense of the word order variation in sentences with multiply embedded raising predicates, and the fact that DPs that originate in an embedded clause may appear to the right of aspectual modifiers that are licensed by the predicate in the matrix clause point to a raising analysis.

To conclude this section, I would like to highlight the interaction between the possessor ascension phenomenon described in §2.1.2.1 and §2.1.2.2. Consider the data in (2.35).

³⁹ Although I have no explanation for why the subject may appear either immediately to the left or the right of the *er a chelsel a*-PP, the fact that the subject DP can appear to its right at all is evidence in favor of raising, since the PP cannot adjoin to any XP in the embedded clause. In Chapter 3, I explore the ramifications of a theory in which the EPP feature on finite T is optional (as it might be in Irish and other languages; Jim McCloskey, p.c.), which would mean that movement to the specifier of TP would also be optional.

- (2.35) a. Ak di melemolem el dmeu a reng-uk.
 ISG= just continue L INTR.happy D heart-ISGP
 “I will continue to be happy.” [Chedaol Biblia, Philippians 1:18]
- b. Ng di melemolem el dmeu a reng-uk.
 3SG= just continue L INTR.happy D heart-ISGP
 “I will continue to be happy.”

In sentence (2.35a), the same (null) 1SG pronominal DP appears to have the ability to trigger possessor–noun agreement in the embedded clause as well as subject–predicate agreement in the matrix clause. But as we saw in (2.17) that possessor ascension from subject DPs is optional: either the possessor or the entire possessed DP can be treated as the subject for the purposes of agreement. When possessor ascension predicates are embedded under raising predicates, the same optionality in agreement morphology manifests itself in the matrix clause, suggesting that the matrix predicate’s subject is identical to the embedded predicate’s subject — *i.e.*, raising has occurred. Since raising predicates do not select their own DP subjects, the optionality makes sense.

2.1.3 INTERIM CONCLUSIONS ABOUT SUBJECTS

In this section, we have examined evidence for the Palauan Subject Hypothesis in (2.7), repeated below.

(2.7) PALAUAN SUBJECT HYPOTHESIS: All Palauan clauses must have a subject.

Given the data that was examined in §2.1.2.1–§2.1.2.3, it would be surprising if (2.7) did not hold. If it did not, several phenomena would be unexplained:

- The presence of any subject agreement in clauses with zero-place weather predicates.
- The optional 3SG default subject agreement morphology in existential constructions that contain no 3SG DPs.
- Optional subject agreement with either a possessed DP or its possessor in predicates that allow possessor ascension.
- The flexible word order in raising constructions, as well as the placement of the aspectual *er a chesel a*-PPs.

Together, these phenomena seem to suggest that not only must a particular DP be treated as the subject of each clause for the purposes of subject agreement, but

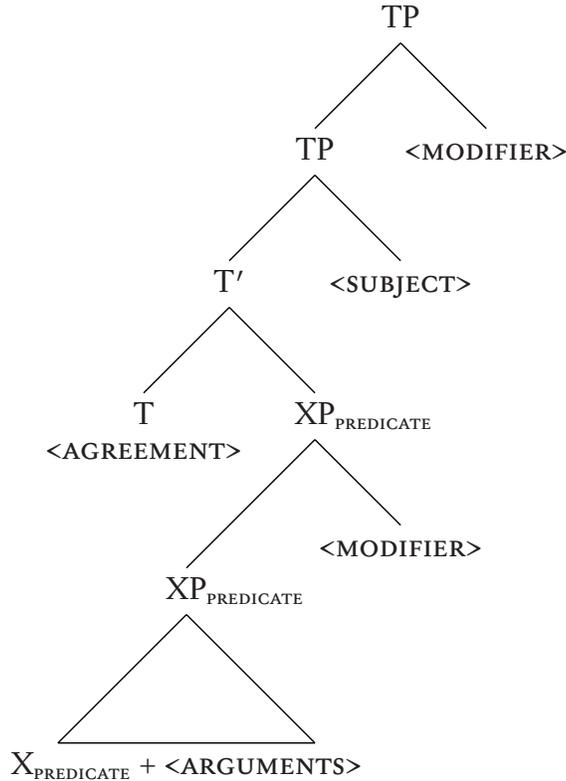


FIGURE 2.7 Palauan basic clause structure

it may also occupy a particular structural position somewhere at or near the right edge of a clause. In the preceding discussion, I have been analyzing this position as the specifier of TP, an analysis that is compatible with all of the subject-related patterns in the data we have seen so far. In a clause with a predicate XP, I propose the clausal structure in Figure 2.7.

How the specifier of TP will be filled will depend on what is inside the XP predicate. If XP is an NP/*n*P that contains a noun like *chull* “rain,” there will be no DPs merged in the XP and an expletive will be inserted in the specifier of TP. If XP is a VP/*v*P or AP/*a*P which selects a DP argument that needs to be Case-licensed, then this DP will either have to move to the specifier of TP to satisfy the subject requirement or simply be the goal of an Agree relation instantiated by finite T, with no associated subject movement if the EPP/Palauan Subject Hypothesis is optional.⁴⁰ Now, although the structure proposed in Figure 2.7 and the requirement that clauses have a subject in (2.7) help us to make some sense of the word order and agree-

⁴⁰ Although, one might argue that if the EPP were optional, then insertion of an expletive may also be optional, possibly predicting the wrong agreement patterns in various constructions.

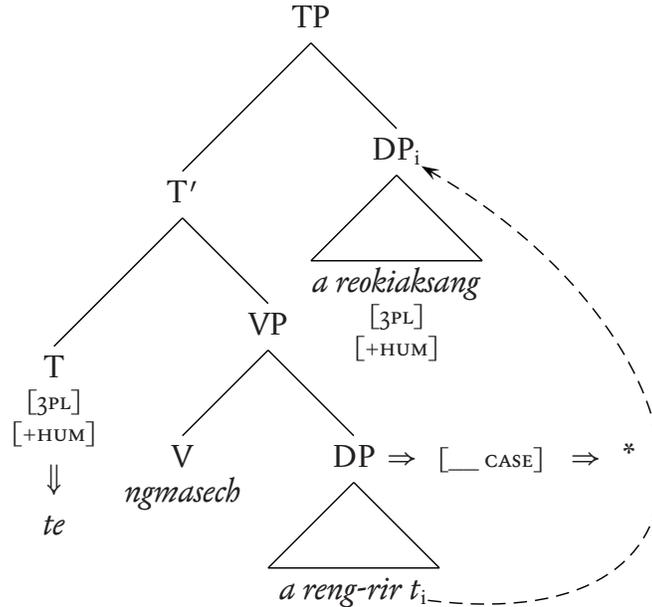


FIGURE 2.8 How the possessee gets Case-licensed in possessor ascension

ment patterns we observed in the data in §2.1.2.1–§2.1.2.3, they raise several important questions about Nominative Case licensing.

Chomsky (2000, 2001) proposes that finite T is the head that is responsible for (i) ensuring that clauses have subjects (encoded formally by an [EPP] feature), and (ii) determining subject agreement morphology (encoded formally by the Agree relation, which values any unvalued ϕ -features on T), and (iii) licensing structural Nominative Case (again, via the Agree relation with a DP). The quirk in Palauan is that in possessor ascension constructions, the possessor DP that appears in the specifier of TP triggers ϕ -feature agreement, but it presumably does not need nominative case since — by assumption — it gets genitive case when it is still in its DP-internal possessor position. The question, then, is how the stranded possessee DP gets Case-licensed. Visually, the issue is represented schematically as in Figure 2.8, for sentence (2.36).

- (2.36) *Te ngmasech a reng-rir a re-okiaksang.*
 3PL.+HUM INTR.climb D hearts-3PL.+HUMP D PL-guests
 “The guests are getting angry.” (*approx.* “The guests’ hearts are climbing.”)

Essentially, the problem is that if finite T must license structural Nominative Case on the same DP that it agrees with, then the stranded DP in possessor ascension

constructions will be left without case.⁴¹

In my view, the problem is not a serious one, given what is known about quirky case subjects in better-studied languages, such as Icelandic. The solution is that multiple instances of feature-sharing/valuing/checking can result from multiple instances of Agree. In Icelandic, the DP that finite T agrees with (*i.e.*, the DP whose φ -feature values are used to value T's uninterpretable φ -features) is usually the same DP that raises to the specifier of TP, but this is not always the case. Counterexamples are easily — and famously — found in Icelandic dative experiencer constructions. Consider the data in (2.37) below, in which the dative experiencer argument either appears in subject position (for evidence of subjecthood, see *i.a.*, Thráinsson 1979: 462–476; Zaenen et al. 1985; Sigurðsson 1989: 198–209) as in (2.37a) or in its base position, with an expletive pronoun in subject position as in (2.37b).

(2.37) ICELANDIC:

- a. Manninum **virðast** [hestarnir vera seinir].
 the.man.SG.DAT seem.PL [the.horses.PL.NOM be slow]
 “The man finds the horses slow.”

[Holmberg and Hróarsdóttir 2003: 1000, ex. 11b]

- b. Það **virðist**/***virðast** einhverjum manni [hestarnir
 EXP seems.SG/*seem.PL some man.SG.DAT [the.horses.PL.NOM
 vera seinir].
 be slow]

“A man finds the horses slow.” [Holmberg and Hróarsdóttir 2003: 1000, ex. 12]

What is interesting is that when the dative experiencer appears in matrix subject position as in (2.37a), the raising verb *virðast* “seem.PL” can agree in number with the subject of the embedded small/infinitival clause. The embedded subject gets structural Nominative Case from the matrix finite T. However, when an expletive is inserted into subject position and the dative experiencer DP is in its base position between the matrix finite T and the embedded subject, the experiencer DP blocks number agreement, but it does not block Nominative Case licensing on the embedded subject. On a trace-theory of movement, the pattern might be explained by saying that the full dative experiencer DP blocks φ -feature sharing between fi-

⁴¹ See Munro 1999 for discussion of similar concerns in Chickasaw (*cf.* Massam 1985: Ch. 4 for an analysis in the Government-and-Binding framework of Chomsky 1981, 1982), as well as Bell 1983 for a Relational Grammar analysis of a similar phenomenon in Cebuano, an Austronesian language that is relatively closely related to Palauan. For other types of possessor ascension involving other grammatical relations, see Aissen 1979, 1987 for Tzotzil, Szabolcsi 1994 for Hungarian, and many others in Payne and Barshi 1999.

nite T and the embedded subject DP, but its trace (created by A-movement; see Holmberg and Hróarsdóttir 2003: 998) does not.⁴²

What the contrast between (2.37a) and (2.37b) shows us is that the Agree relation that is established to enable the sharing of φ -features between a DP and finite T can be distinct from whatever relation is established between finite T and a (possibly different) DP to license Nominative Case. Furthermore, it appears that whether or not the [EPP] feature on finite T is satisfied by Merge (of an expletive pronoun *það*) or by Move (of a DP from within the predicate XP) will have consequences for φ -feature sharing but not for Nominative Case licensing, suggesting that satisfaction of the [EPP] feature can precede φ -feature sharing, but the examples below suggest that it does not necessarily need to — in these constructions, default 3SG agreement is always possible whether or not an expletive is inserted.⁴³ (2.38a) gives the correlate of (2.37a) but with a singular verb form, (2.38b) shows that φ -feature agreement need not be triggered by the dative experiencer, but (2.38c) shows that it can be (since the experiencer *mörgum stúdentum* “many students” presumably intervenes between finite T and the embedded subject *tölvurnar* “the computers,” but plural agreement is still possible).

(2.38) ICELANDIC:

- a. Manninum **virðist** [hestarnir vera seinir].
 the.man.SG.DAT seem.SG [the.horses.PL.NOM be slow]
 “The man finds the horses slow.”

[Holmberg and Hróarsdóttir 2003: 1000, ex. 11a]

- b. Einhverjum stúdentum **finnst/finnast** [tölvurnar
 some students.PL.DAT find.SG/find.PL [the.computers.PL.NOM
 ljótar].
 ugly]
 “Some students find the computers ugly.”

[Holmberg and Hróarsdóttir 2003: 1000, ex. 10]

- c. Það finnst/finnast mörgum stúdentum
 EXP find.SG/find.PL many students.PL.DAT
 [tölvurnar ljótar].
 [the.computers.PL.NOM ugly]
 “Many students find the computers ugly.”

[Holmberg and Hróarsdóttir 2003: 1000, ex. 13]

⁴² Although this is the standard view these days, it is not exactly clear to me how such a proposal is to be implemented in the Minimalist Program.

⁴³ This is a fact that I still do not really understand from the Icelandic literature.

The Icelandic examples in (2.37) and (2.38) strongly suggest that there are three different autonomous operations initiated by finite T, and that they are freely ordered with respect to one another. These are summarized in (2.39).

(2.39) OPERATIONS INITIATED BY FINITE T:

- a. *Nominative Case licensing*: Finite T probes its c-command domain for a DP with an unvalued [___ CASE] feature. The highest such DP (in the sense of Rizzi 1990, 2001) is selected as T's goal. The goal DP is valued for structural Nominative Case, and its feature [___ CASE] is replaced by the feature [NOM]. Any DP already bearing a syntactic Case feature (such as [DAT], [GEN], or any number of inherent cases) cannot be selected as the goal; T must probe more deeply within its c-command domain for a goal.
- b. *Satisfaction of the [EPP] feature*: T bears a feature [EPP] that requires that a DP fill its specifier position. T probes its c-command domain for any available DP to move to its specifier position. The highest DP (in the sense of Rizzi 1990, 2001) is selected as T's goal. The [EPP] feature is deleted from finite T.
- c. *Φ-feature sharing*: Finite T bears unvalued (uninterpretable) φ-features [___ φ]. In order to value them, T probes its c-command domain for a DP with valued (interpretable) φ-features. The highest DP in its c-command domain (in the sense of Rizzi 1990, 2001) assigns its values to T's φ-features.

The only available syntactic operations in the framework of Chomsky 2000, 2001, 2004 are Merge, Move, and Agree. As a result, the three operations in (2.39) are often assumed to be reflexes of a single operation: Agree. Although it is often tacitly assumed that a head that may instantiate an Agree relation may only do so once, the Icelandic data suggests otherwise. Recently, there have been proposals that allow a single head to instantiate Agree more than once — so-called cases of Multiple Agree (Hiraiwa 2001, 2005; Chomsky 2004, 2008). If we assume that the three operations proposed in (2.39) are implemented by independent Agree relations, then it is possible to construct a theory to explain the variable agreement patterns in Palauan possessor ascension constructions while ensuring that every DP is properly Case-licensed.

Before I proceed, one point must be addressed. In §1.2.2.2, I assumed that possessors were base-generated in the specifier of NP, as shown in Figure 1.6. The idea behind that move was to put the possessor and the head noun in a local relation such that possessor–noun agreement could apply in a local domain. However, as

I mentioned in §1.2.2.2, *fn.* 9, it could well be the case that possessors are either base-generated in, or move to, the specifier of DP, as has been claimed for other languages, including English (Abney 1987) and Chamorro (Chung 1998: 46–47, 196). On the analysis I propose below, the possessor DP will have to be able to extract from the DP that contains it. If it turns out that Svenonius is right about D being a phase head in addition to C and transitive *v* (Svenonius 2004), then the possessor will have to occupy an “escape hatch” position within the DP so as to be accessible to operations outside of the DP phase, to prevent a violation of the Phase Impenetrability Condition (Chomsky 2000 *et seq.*).

Chung (1998) proposes that possessors in Chamorro (which often, but not always, trigger possessor–noun agreement, like in Palauan) are either base-generated or move to the specifier of DP to satisfy a requirement similar to the requirement that the specifier of TP must be filled. On Chung’s view, whatever relation holds between T and the subject DP in its specifier has a correlate in DPs, where a similar relation holds between D and its specifier. Both relations, she argues, enable the sharing of φ -features between the head and the DP in its specifier, yielding subject–verb agreement on one hand and possessor–noun agreement on the other. In terms of the present framework, one might say that both T and D have [EPP] features that must be satisfied by having a DP in their specifier positions. The agreement morphology might be realized on N via different mechanisms: lowering (in the sense of Embick and Noyer 2001), sharing of features within an extended projection (in the sense of Grimshaw 2005), or something else.

If a similar situation holds in Palauan, then we might imagine a structure like that in Figure 2.9 for DPs that contain possessors, like the one in (2.40).⁴⁴

- (2.40) a reng-rir a re-okiaksang
 D heart-3PLP D PL-guests
 “the guests’ hearts”

Now, if possessor agreement obtains as a result of an Agree relation between D and a DP in its c-command domain, yielding a structure like that in Figure 2.9, then the

⁴⁴ I assume agreement relations are established in the syntax, but that the morphology associated with feature-sharing is realized at PF (*i.e.*, post-syntactically, *cf.* Legate 2008). Agreement morphology is usually distinct from the morphology associated with the functional heads that instantiate Agree relations (T, transitive *v*, or in this case D). One way to capture this formally is through post-syntactic adjunction of an Agr node to the relevant functional head (see *e.g.*, Marantz 1992/2000, Embick and Noyer 2007: 12–13). In this case, the possessor agreement morpheme is a suffix that will end up on the head noun, which means either that there will need to be some manipulation of morpheme ordering in the post-syntactic morphology or that feature percolation in the nominal complex will give the head N access to features on D, perhaps along the lines of Grimshaw’s (2005: Ch. 1) Extended Projection Theory.

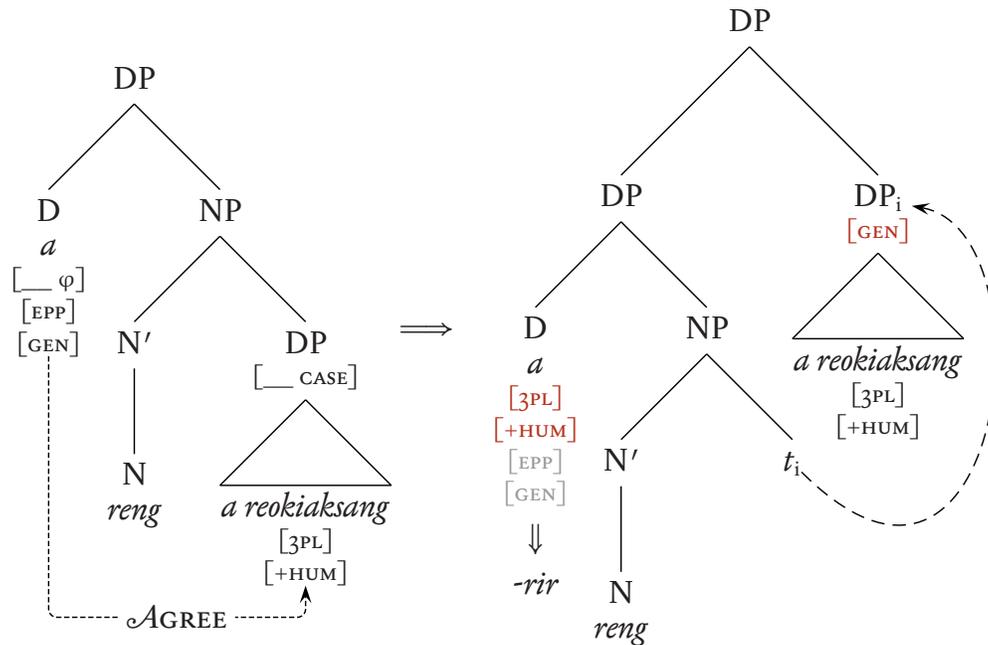


FIGURE 2.9 Possessor agreement and movement

possessed DP and its possessor can be defined as being equidistant goals for the higher finite T probe, since the possessee DP *includes* (but does not *dominate* or *c-command*) the possessor DP. This variety of analysis depends on a conflation of the notions of specifier and adjunct — in a theory of Bare Phrase Structure like that of Chomsky 2001 *et seq.*, such an account becomes possible. Consider the following definitions of *domination*, *c-command*, and *inclusion*.

(2.41) DOMINATION: α *dominates* β iff every segment of α dominates β .
 [cf. May 1985; Chomsky 1986a: 7]

(2.42) C-COMMAND: α *c-commands* β iff neither α nor β dominates the other and the first branching node that dominates α also dominates β .
 [Reinhart 1976: 32, ex. 36; cf. Reinhart 1983: 41, ex. 36 as well as May 1985: 34, ex. 9]

(2.43) INCLUSION: α *includes* β iff there is a segment of α which dominates β .

(2.44)

[cf. Chomsky 1986a: 7, ex. 11]

For instance, α has two segments in the adjunction structure in (2.44). Only the upper segment of α dominates β (the lower segment of α does not), so α does not *dominate* β . But α *includes* β because the topmost segment of α dominates β , even though not all segments of α dominate β .

Chomsky's formulation of the Agree relation obtaining between a probe and some goal in its c-command domain incorporates Rizzi's (1990, 2001) notion of Relativized Minimality. On that view, a DP α can only intervene between the probe and another DP β if α either dominates or c-commands β . But if α only *contains* β , then no dominance or c-command relations hold between α and β , and neither of them intervenes between the probe and the other. As such, it is predicted that they will be equidistant for the purposes of an Agree relation established by a functional head that is merged later in the derivation.

If it's true that the Agree relation that licenses Nominative case can be distinct from the Agree relation that enables feature sharing and satisfaction of the [EPP] feature on the probe, as the Icelandic facts suggest is the case, then the variability in subject agreement morphology seen in possessor ascension constructions can be explained. As the possessor DP already has (structural) Genitive Case, licensed by the Agree relation between it and the D in Figure 2.9, it no longer needs to be (and, presumably, cannot be) licensed with Nominative Case as well. This leaves only the possessee DP with an unvalued [___ CASE] feature, which can be checked by finite T in one of two different ways.

First, it might be the case that finite T establishes a single Agree relation with the possessee DP, which (i) enables φ -feature sharing between T and the DP, (ii) licenses the DP with Nominative Case, and (iii) moves the DP to the specifier of TP to satisfy the [EPP] feature on T. This is the derivation illustrated in Figure 2.10.

Second, finite T might establish an Agree relation with the possessor DP (which, recall, is equidistant from the possessee DP for the purposes of Agree since it is in the possessee DP's specifier position). This Agree relation will enable φ -feature sharing between T and the possessor DP and move the possessor DP to the specifier of TP, but it will not license Nominative Case. After movement of the possessor to the specifier of TP (*i.e.*, possessor ascension to subject), T can still license Nominative Case on the possessee through a second Agree relation, which holds between finite T and the stranded possessee. This is the derivation illustrated in Figure 2.11.

As long as the possessor DP moves to a position in which it is considered to be equidistant from the possessee DP for the purposes of Agree, such as in Figure 2.9, then the variation in subject agreement can be explained by either of the two DPs being selected when finite T probes for a goal to satisfy its [EPP] feature. If this analysis is on the right track, [EPP]/ φ -feature agreement are dissociated from licensing of Nominative Case in Palauan in a manner that appears to be very similar to Icelandic. In a sense, Palauan possessor ascension can be thought of as a quirky sub-

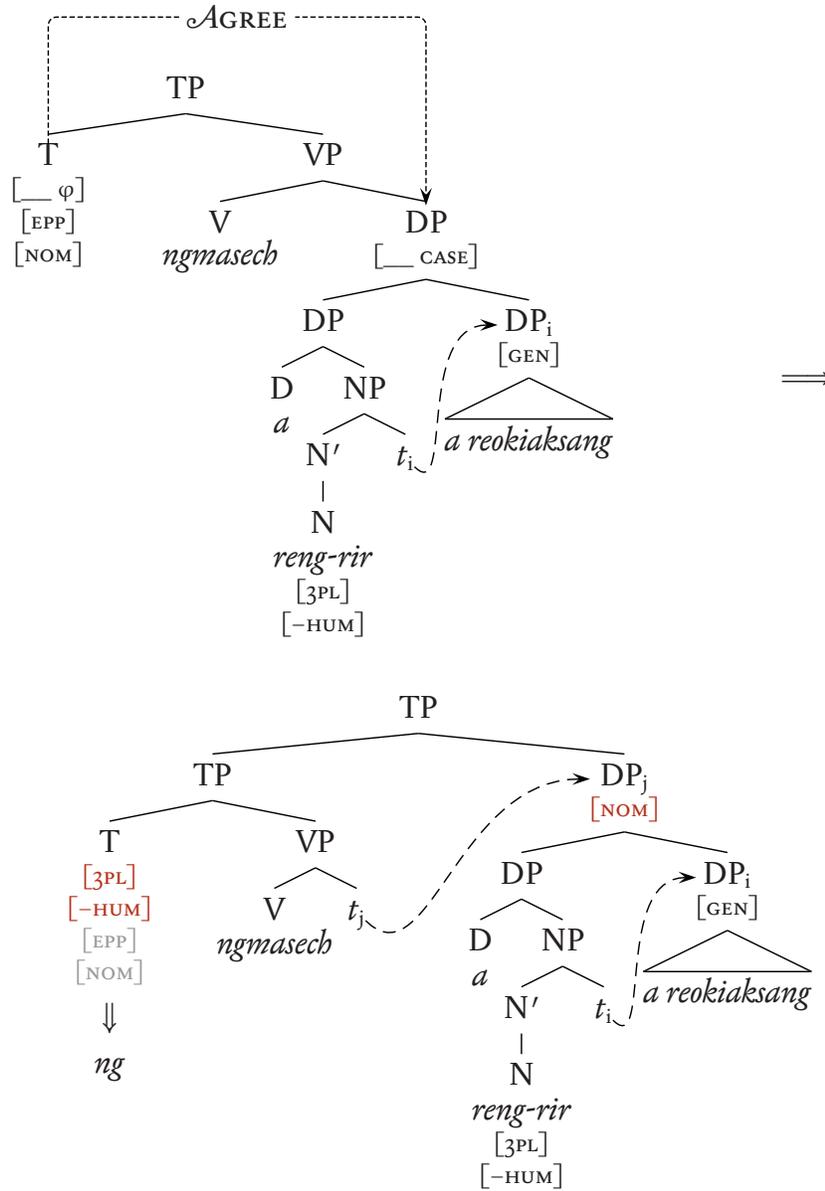


FIGURE 2.10 No possessor ascension: possessee becomes subject of the clause

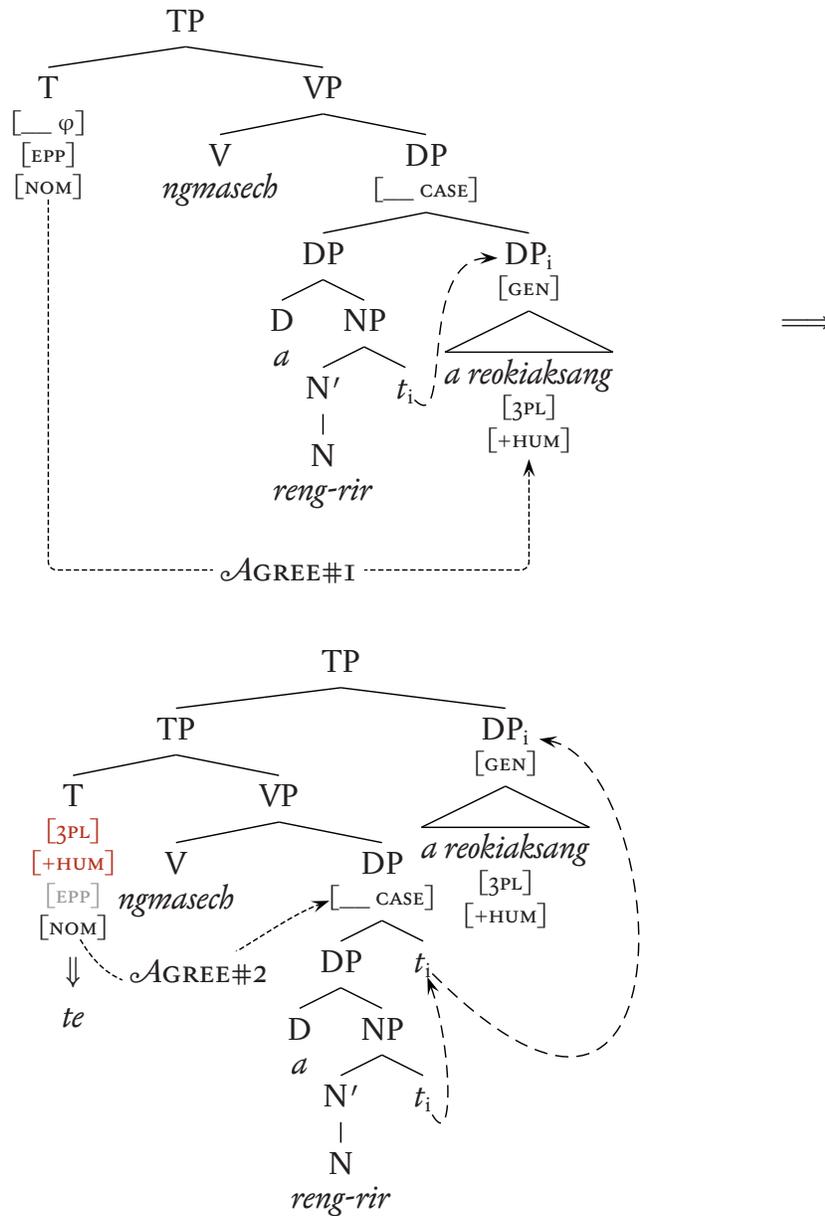


FIGURE 2.II Possessor ascension: possessor becomes subject of the clause

ject construction — the differences lie in the case of the subject (structural Genitive rather than inherent Dative) and the structural configuration of the two relevant DPs (there is a c-command relation that holds between them in Icelandic, but not in Palauan).

To sum things up, I have argued in this section that the notion of *subject* has grammatical consequences in Palauan. The analysis I have constructed of the apparent requirement for Palauan clauses to have subjects is in line with most Minimalist interpretations of subjecthood. The subject position is analyzed as the specifier position of TP, and it is filled due to a requirement that an [EPP] feature on T be satisfied. Subject agreement morphology is a reflection of a syntactic Agree relation that holds between T and the DP in its specifier position, and structural Nominative Case is licensed by finite T. The peculiarity of the possessor ascension construction becomes less peculiar when languages with quirky subjects are taken into account, such as Icelandic.

One noteworthy point is that in Palauan, unlike in Icelandic, subject agreement morphology can be taken as a diagnostic for subjecthood. For whatever reason, the sharing of φ -features between a DP and T is a reflex of the Agree relation that satisfies the [EPP] feature on T and is not associated with the Agree relation that licenses Nominative Case. In Icelandic, we saw in (2.38) that φ -feature sharing is distinct from both [EPP]-satisfaction and Case-licensing. Palauan DPs bear no morphological case marking (with the exception of certain Accusative Case-licensed DPs, as will be shown in the next section), but the fact that subject agreement morphology appears to be a true reflex of subjecthood can be viewed as a useful structural diagnostic for subject position.

2.2 LICENSING INTERNAL ARGUMENTS

Now that it has been established that subject agreement morphology can serve as a diagnostic for the grammatical relation *subject*, the question of whether similar diagnostics can identify the grammatical relation *direct object* are examined in this section. One peculiarity that was noticed about subject agreement was that its morphological reflex depends on the mood of the clause; similarly, we see an aspectual split in agreement morphology associated with direct objects — only perfective verbs display object agreement. Imperfective verbs do not license agreement morphology but instead license the direct object using a differential-object-marker *er*, homophonous with the preposition *er*. The aspectual split thus correlates with a difference in whether Accusative Case is realized morphologically using a head-marking or a dependent-marking pattern of case morphology (see Nichols 1986). The section is laid out as follows.

In §2.2.1 I describe the aspectual properties of transitive verbs, including their morphological differences and the differences in how their direct object DPs are marked. Next, the basics of an analysis of direct object DP licensing is presented in §2.2.2. Given the heavy reliance on aspectual features, I devote §2.2.3 to fleshing out an analysis of the syntactic composition of aspect/aktionsart features in the verbal complex, concluding that there are different “flavors” of transitive *v* that are specified for different aspect features. In §2.2.4, I explore the phenomenon of differential object marking that characterizes direct objects of imperfective verbs, arguing that the object marker *er* is a case-marker, as it does not share the syntactic behavior of the true preposition *er*, as shown in a number of different constructions. §2.2.5.1 then aims to draw some motivation for the Agree relation, examining data involving left-conjunct agreement. The morphological analysis is constructed in §2.2.5.2, which links up nicely with the syntactic analysis developed in §2.2.2. Finally §2.2.6 concludes.

2.2.1 AN ASPECTUAL ALTERNATION

In Palauan, the relationship between the aspectual interpretation of verbs and the realization of their internal arguments is closely interconnected. In Table 2.4, we see that transitive imperfective and perfective verbs in Palauan that are formed from the same $\sqrt{\text{ROOT}}$ are morphologically distinct. Imperfective verbs are formed when the verbalizer prefixes *meN-* or *oN-* attach to roots, while the *-m-*, *-u-*, and *-o-* infixes form perfective verbs from roots.⁴⁵ When these verbs are transitive, their direct objects are realized differently.

The direct objects of transitive imperfective verbs may either surface with the accusative case marker *er* — which is homophonous with the preposition *er* — as shown in (2.45a), or with no case marking whatsoever, as shown in (2.45b).

- (2.45) a. Ng mo menga er a bobai pro.
 3SG= AUX.FUT eat.IMPF ACC D papaya he
 “He will be eating the papaya/a (particular) papaya.”
- b. Ng mo menga a bobai pro.
 3SG= AUX.FUT eat.IMPF D papaya he
 “He will be eating (some) papaya/some papayas/the papayas.”

⁴⁵ The *meN-/oN-* prefixes are Palauan’s reflexes of pan-Austronesian (or at least pan-Malayo-Polynesian) *maN-*, with a change of **n > l*, which explains the appearance of [l] instead of [n]. The set of infix allomorphs represent Palauan’s instantiation of pan-Austronesian/Malayo-Polynesian *-um-*.

PALAUAN ROOT	ENGLISH GLOSS	TRANSITIVE PERFECTIVE ([3PL, -HUM] D.O.)	TRANSITIVE IMPERFECTIVE
√temotem	“clear”	tomotem	melemotem
√dasech	“carve”	dmasech	melasech
√seseb	“burn”	suesebe	melesebe
√lechet	“bandage”	lmechet	melechet
√nguked	“fine”	ngmuked	meluked
√kiis	“unlock”	kmiis	mengiis
√chaus	“put lime on”	chemaus	mengaus
√boes	“shoot”	moes	omoes
√mdalem	“aim at”	mdalem	omdalem

TABLE 2.4 Palauan transitive verb morphology

The *er* vs. \emptyset alternation can be characterized as a differential object marking phenomenon (Bossong 1985; Aissen 2003; de Swart 2007), in which individuated DPs (either singular specific DPs or human DPs) appear preceded by the case-marker *er*, while non-individuated DPs do not (see Josephs 1975; Woolford 2000). The specificity/number contrast is indicated in the English translations of the sentences in (2.45). This specificity contrast is neutralized when the direct object is human, in which case the direct object must be overtly case-marked with *er*, as (2.46) shows.⁴⁶

⁴⁶ Number manifests itself morphologically on DPs in a number of ways: on demonstrative determiners, with different sets of numerals that are compatible with different classes of nouns (perhaps a sort of limited classifier system parallel to those of some East Asian languages), and with the plural prefix *re-*, as in (2.46b). The prefix *re-* may only attach to human nouns, and optionally to some common household animal nouns. It is incompatible with inanimate nouns.

Mandarin Chinese (Sino-Tibetan; genetically unrelated to Palauan) is another language in which plural nouns may display additional morphology if they are [+HUM], but not if they are [-HUM] (see Li and Thompson 1981: 40–41; data below in (2.iii) is from Jesse Saba Kirchner, p.c.).

- (2.iii) a. *tóngzhì* “comrade(s)”
tóngzhì-men “comrades”
b. *mǎ* “horse(s)”
? *mǎ-men* “horses”
c. *shítou* “stone(s)”
* *shítou-men* “stones”

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

- (2.46) a. Ng mo omes er a tolechoi *pro*.
 3SG= AUX.FUT watch.IMPF ACC D baby he
 “He will watch a (particular) baby/some baby/the baby.”
- b. Ng mo omes er a retolechoi *pro*.
 3SG= AUX.FUT watch.IMPF ACC D babies he
 “He will watch (the/some) babies.”

Direct objects of transitive perfective verbs, on the other hand, never exhibit case marking. Instead, direct object DPs trigger object agreement morphology on the verb, realized as the set of suffixes shown in Table 2.5.⁴⁷ The perfective correlates of (2.45) and (2.46) are illustrated below in (2.47) and (2.48), respectively.

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>-ak</i>	<i>-id</i>	<i>-emam</i>
2ND PERSON	<i>-au</i>	<i>-emiu</i>	
3RD PERSON [+HUM]	<i>-ii</i>	<i>-(e)terir</i>	
3RD PERSON [-HUM]	<i>-ii</i>	∅	

TABLE 2.5 (Perfective) Object Agreement Morphemes

- (2.47) a. Ng mo kol-ii a bobai *pro*.
 3SG= AUX.FUT eat.PF-3SGO D papaya he
 “He is going to eat (up) a (particular) papaya/some papaya/the papaya.”
- b. Ng mo kmang a bobai *pro*.
 3SG= AUX.FUT eat.PF D papayas he
 “He is going to eat (up) (some/the) papayas.”
- (2.48) a. Ng mo mes-ang a tolechoi *pro*.
 3SG= AUX.FUT see.PF-3SGO D baby he
 “He will see a (particular) baby/some baby/the baby.”
- b. Ng mo mes-terir a retolechoi *pro*.
 3SG= AUX.FUT see.PF-3PL.+HUMO babies he
 “He will see (the/some) babies.”

⁴⁷ While this set of suffixes is compatible with the vast majority of Palauan perfective verbs, a relatively large class of irregular verbs show some variability in the form of their object agreement suffixes, typically in the 3rd person. An example is the [3SG] suffix *-ang* in *mesang* “see” in (2.48).

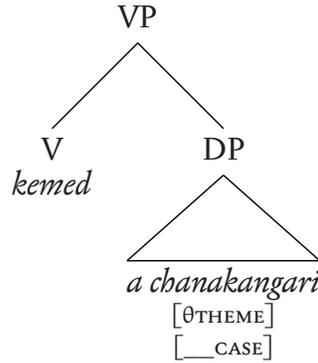


FIGURE 2.12 Internal argument of V

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

2.2.2 DIRECT OBJECTS IN PALAUAN

Upon inspection of the Palauan differential object marking and object agreement facts above, it may be observed that these evoke similarity with other Palauan morphosyntactic phenomena in two different areas. First, a variety of DPs are introduced by the preposition/marker *er* in Palauan, including the possessors of a subclass of Palauan nouns and many locative and temporal adjunct adverbials. Second, Palauan is a fairly agreement-rich language, where — in addition to the object agreement pattern discussed above — subjects trigger pre-verbal agreement clitics and possessors trigger agreement suffixes on another sub-class of nouns. Direct object DPs seem to fall somewhere in between these two phenomena, sometimes being marked with the preposition *er* and other times triggering object agreement morphology on the verb. In this section, I lay out the basis of an analysis of this variable behavior which is essentially Minimalist.

Under the syntactic assumptions laid out within the Minimalist framework proposed by Chomsky (2000, 2001, 2004, 2008), transitive verb stems merge with their theme arguments to form a VP as in (2.49), which is represented schematically in Figure 2.12.

- (2.49) a. $\left[\begin{array}{l} \left[\text{VP } \textit{kemed} \left[\begin{array}{l} \left[\text{DP } \textit{a chanakangari} \right] \right] \right] \\ \left[\text{sew.up} \left[\begin{array}{l} \text{D } \textit{button.holes} \right] \right] \end{array} \right] \end{array} \right]$
 ≈ “sew up the button holes”

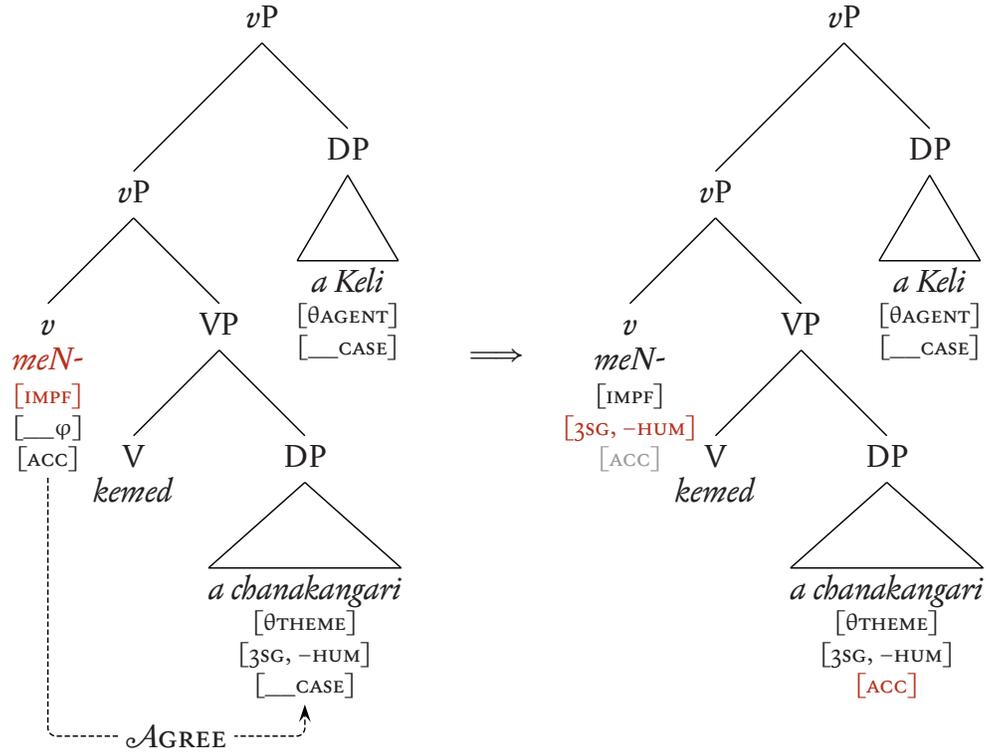


FIGURE 2.13 Aspect-bundled-*v* analysis: imperfective *v* (here: *meN-*)

I propose here that the primary distinction between transitive and intransitive verbs (and even between different aspectual varieties of transitive verbs) is encoded syntactically via the selection of an appropriate *v* head (cf. Johnson 1991; Kratzer 1996) to merge with VP. For instance, passive, unergative, and unaccusative *v* do not have [ACC] features to license accusative Case via Agree, whereas transitive *v* does. If transitive *v* merges with VP, then the theme DP is grammaticized as a direct object and can be Case-licensed by transitive *v*. Furthermore, transitive *v* (as well as unergative *v*) differs from the class of intransitive *vs* in requiring that an external argument DP merge with it as well (i.e., transitive *v* has an extra selectional restriction for a constituent of category D). The *v*P constructed in (2.50) represents an imperfective predicate, while (2.51) shows the corresponding perfective predicate.

- (2.50) $\left[\begin{array}{l} \text{vP } \text{meN-} \\ \text{VBLZ} \end{array} \left[\begin{array}{l} \text{VP } \text{kemed } \text{a chanakangari} \\ \text{D button.holes} \end{array} \right] \right] \left[\begin{array}{l} \text{DP } \text{a Keli} \\ \text{D Keli} \end{array} \right]$
 ≈ “Kelly sewing up the button holes”

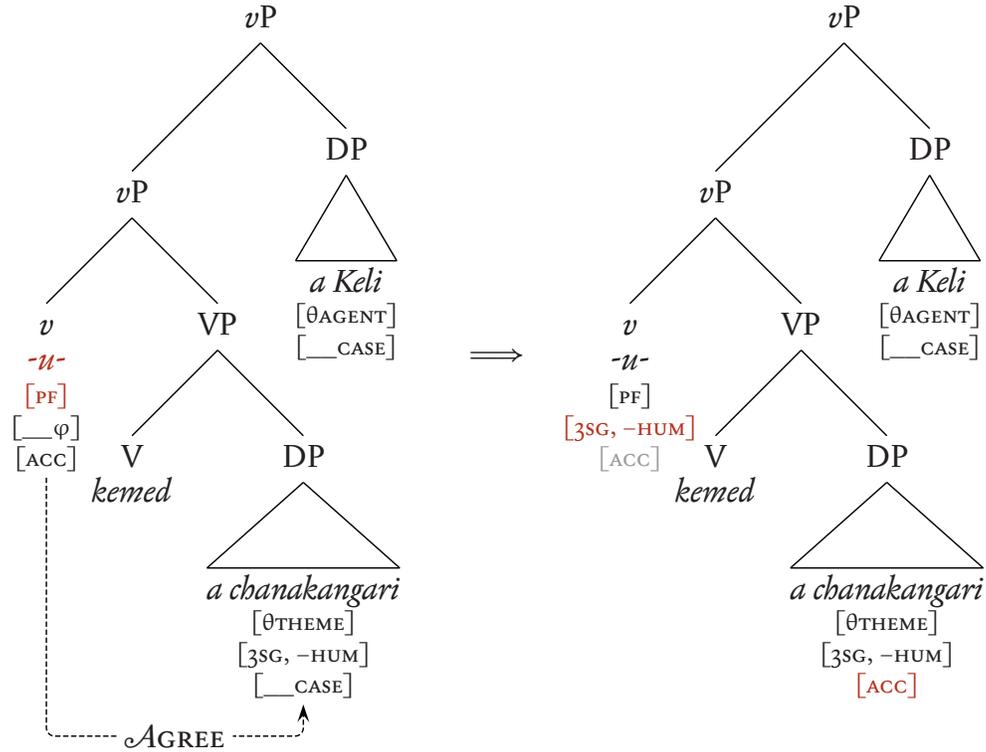


FIGURE 2.14 Aspect-bundled-*v* analysis: perfective *v* (here: *-u-*)

- (2.5I) $\left[\begin{array}{l} \left[\begin{array}{l} vP \text{ } -u- \\ \left[\begin{array}{l} VP \text{ } kemed \text{ } a \text{ } chanakangari \end{array} \right] \end{array} \right] \left[\begin{array}{l} DP \text{ } a \text{ } Keli \end{array} \right] \\ \left[\begin{array}{l} VBLZ \left[\begin{array}{l} sew.up \text{ } D \text{ } button.holes \end{array} \right] \left[\begin{array}{l} D \text{ } Keli \end{array} \right] \end{array} \right] \end{array} \right]$
 ≈ “Kelly sewed up the button holes”

By bundling aspect features with *v*, the only difference between imperfective *v*Ps and perfective *v*Ps is the choice of which transitive *v* head is extracted from the lexicon into the numeration. As both of the transitive *v* heads enter into an Agree relation with the direct object in the VP, the φ -features of the internal argument DP are shared with the transitive *v*; either the same Agree relation or a second Agree relation Case-licenses the direct object DP with structural Accusative Case.

While this analysis immediately appears attractive for characterizing the distinctions between imperfective and perfective predications, a potential problem arises quickly: that of the accusative case marker *er*, which is homophonous with the preposition *er*.⁴⁸ The problem is that if the correct analysis of the accusative case marker is as an element of category P, then it must merge in the derivation at a

⁴⁸ That the case-marker for direct objects is homophonous with the language’s only preposition is probably not noteworthy. Palauan has an extremely limited set of function words that serve multiple purposes.

point at which it is impossible to tell whether it will be licensed. The accusative case marker *er* appears only on direct objects of imperfective verbs, and even then, only on DPs that are either specified as [+HUM] or as [SG, +SPEC]. In the Minimalist theory of syntax assumed here, this amounts to a Look Ahead problem.

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

A more satisfying solution to the present problem might be reached if one assumes uniformity in the argument structures of imperfective and perfective *v*Ps, as in Figure 2.13 and Figure 2.14: direct objects of both imperfective and perfective verbs would then be treated as DPs, with *er* being treated not as a preposition but as a case-marker inserted post-syntactically (after Spell Out) in line with much recent work on the morphosyntax of case (see, e.g., Embick 1997; McFadden 2004; Legate 2008). The question is whether such a solution has any merit — is there any reason to treat the accusative case marker *er* differently from any of its other uses as a preposition?

I argue below that there is indeed reason to treat accusative *er* as distinct from prepositional *er*. The differential object marking alternation that characterizes the distribution of *er* on direct object DPs in transitive imperfective predicates does not manifest itself when *er* is used as a preposition — the phenomenon is isolated to the instance of *er* that marks direct object DPs. I will set this issue aside for a moment, however, as it will first be useful to motivate the uniform structural analysis of imperfective and perfective *v*P structure in Figure 2.13 and Figure 2.14.

2.2.3 TRANSITIVITY AND INNER ASPECT (AKTIONSART)

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

1994), Krifka (1992), and Travis (1992).

The core of these proposals centers around the idea that there is some intermediate projection between VP and *v*P that checks Case on direct objects of transitive telic predicates, with various names for this projection. The idea is that if the direct object directly figures in the calculation of the telicity of a predicate, then a functional head carrying aspectual information (we might call it Asp) stands in some relation with the direct object DP. Depending on the analysis, the direct object must raise to the specifier of this head, or else the head may license structural Case in an Agree relation with the direct object DP. In this section, I develop this type of alternate analysis of Palauan's *v*P-internal syntax, showing why the syntax of passives provides evidence against its tenability for Palauan. The passive data instead motivates only the analysis constructed in Figure 2.13 and Figure 2.14 for (2.50) and (2.51).

One advantage of an approach to the syntax of aspect that involves an AspP functional projection is that the DP complements of atelic verbs cannot receive case from Asp — structural Accusative Case-licensing is tied directly to telicity. These DP complements to V can then be licensed in two ways. First, they may incorporate into the verb (syntactically⁴⁹ or semantically⁵⁰) if they are (roughly) non-quantized (*i.a.*, Krifka 1992), being treated as property-denoting modifiers rather than true arguments. Otherwise, they must be licensed for case via some other means. Consider the pair of sentences in (2.52), below.

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

Neither of the events described in (2.52) have yet taken place; the sentences describe events that will occur in the future. Nonetheless, (2.52a) describes an atelic event that has no definitive endpoint — there is no point at which the event can naturally be described as complete. Instead, the agent, *Johann*, must make a conscious decision to stop mowing lawns, at which point the event is terminated. However, the event in (2.52b) is a telic event that has a natural endpoint. The event will be terminated as soon as all of the grass in *our lawn* has been completely mowed. In other words, only the direct object in (2.52b) (and not in (2.52a)) acts as an incremental theme (see Dowty 1991; Hay et al. 1999; Rothstein 2001).

This contrast is expressed morphologically in Palauan and indicates the difference between what have so far been called perfective and imperfective verbs. The Palauan analogues of (2.52) are given below in (2.53).

⁴⁹ See Massam 2001, 2009 for a convincing analysis of NP-incorporation in Niuean.

⁵⁰ Perhaps along the lines of Farkas and de Swart 2003 or Chung and Ladusaw 2003.

- (2.53) a. A Johann a mo melaml a chudel er a elecha el sils.
 D Johann TOP AUX.FUT cut.IMPf D grass P D now L day
 “Johann will mow lawns today.”
- b. A Johann a mo ngoml-ii a chedel-ed pro
 D Johann TOP AUX.FUT VBLZ.cut.PF-3SGO D grass-IPL.INCLP us.INCL
 er a elecha el sils.
 P D now L day
 “Johann will mow our lawn today.”

An AspP-driven analysis of the contrast between the *v*P-internal syntax of (2.53a) and the *v*P-internal syntax of (2.53b) might look something like Figure 2.15 and Figure 2.16, respectively. For ease of reference, let’s say that the more articulated *v*P structures in Figure 2.15 and Figure 2.16 represent the “AspP analysis,” while the less articulated *v*P structures in Figure 2.13 and Figure 2.14 represent the “aspect-bundled *v* analysis.”

On the AspP analysis, the aspectual and Case-licensing features of the verb are distributed between the functional heads *v* and Asp. Aspectual interpretation is introduced by Asp: [ATELIC] in Figure 2.15 and [TELIC] in Figure 2.16. However, the direct object DP’s uninterpretable [__CASE] feature is valued by transitive *v* in Figure 2.15 but by telic Asp in Figure 2.16. While the AspP analysis provides an intuitive means for characterizing the morphological reflexes of the aspectual difference between imperfective verbs like that in (2.53a) and their perfective counterparts like that in (2.53b), the analysis raises several questions.

One potentially attractive consequence of the AspP analysis is that it provides a syntactic reflex of the morphological difference between the two types of accusative case morphology. If syntactic Accusative Case is licensed via Agree, then the fact that two distinct heads may license Accusative Case might provide some rationale for the fact that direct objects of imperfective verbs are marked with the accusative case marker *er*, while direct objects of perfective verbs trigger object agreement morphology on the verb. However, the dissociation of AspP from VP and *v*P might not be necessary. It’s worth asking whether there is any empirical reason to conceptualize aspect as the interpretation of a syntactically realized functional head Asp, rather than as simply a feature (or bundle of features) introduced by the verb itself (V) or a functional *v* head.

Some preliminary evidence that might help decide the question comes from the morphology of imperfective verbs in Palauan. Root-initial consonants in imperfective verbs regularly undergo nasal substitution. An example is when the root $\sqrt{\text{CHAT}}$ “smoke” becomes *mengat* “smoke (impf.),” while its corresponding passive form is *mechat* “be smoked.” Flora (1974: 76–80) posits a syntactic feature

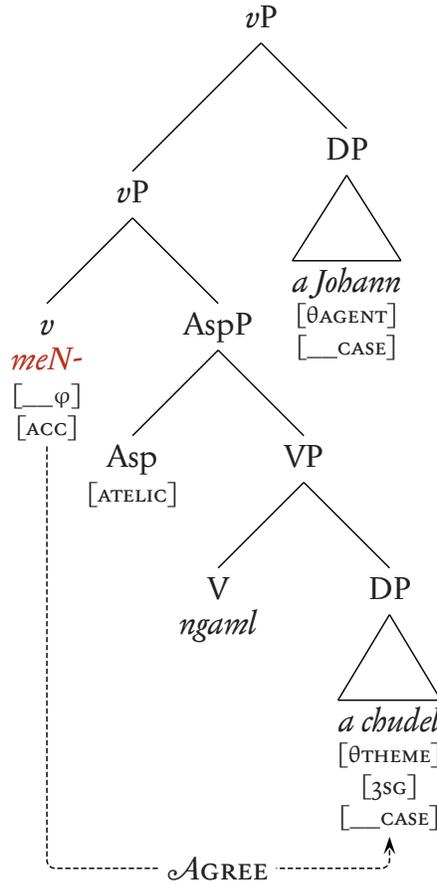


FIGURE 2.15 AspP analysis: atelic Asp

[±IMP] on particular roots in the lexicon, which is positively specified for imperfective verbs but negatively specified for passive and perfective verbs. The [+IMP] is then what is responsible for the nasal substitution. Josephs (1975: 136–141; see also Wilson 1972: 120–128) argues that nasal substitution is the reflex of an imperfective morpheme distinct from the “verb marker,” or rather the verbalizer prefix that I have analyzed as (imperfective) transitive *v*. That is, Josephs treats the verb marker as *me-*, rather than *meN-*. It might be tempting to think of the phonological exponent of an atelic/imperfective Asp morpheme as a placeless nasal (*N-*) that attaches to the $\sqrt{\text{ROOT}}$ and coalesces with the initial consonant: atelic/imperfective Asp could then be argued to introduce this morpheme into the syntax. Potential evidence for some version of this analysis comes from the interaction between nasal substitution and reduplication.

The way in which nasal substitution interacts with reduplication is of immediate relevance to the status of imperfective verb morphology in Palauan, indicating that

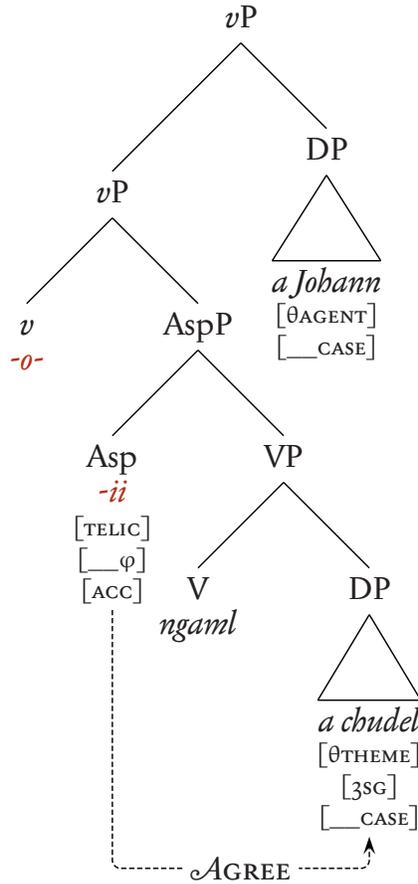


FIGURE 2.16 AspP analysis: telic Asp

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

What is relevant is that *CVX* reduplication can feed *Ce-* reduplication, but only *CVX* reduplication can feed nasal substitution. Roots that have undergone *Ce-*

reduplication do not undergo nasal substitution: instead, a homorganic nasal is prefixed. This contrast is illustrated below. In (2.54), the root $\sqrt{\text{KES}}$ “scrape” undergoes only CVX reduplication, and the leftmost consonant of the reduplicant undergoes nasal substitution. In (2.55), however, the same root first undergoes CVX reduplication, followed by *Ce-* reduplication. In this case, nasal substitution is blocked.

(2.54) $meN^- + CVX + \sqrt{\text{kes}} \rightarrow menges-kes$

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

What the nasal substitution (or, prefixation) patterns in (2.54) and (2.55) strongly suggest is that nasal substitution is triggered root-externally, *i.e.*, by a prefix, rather than occurring in a suppletive root form that begins with a nasal. If the nasal substitution is triggered by a prefix that contributes aspectual information, the analysis of the imperfective morpheme *N-* occupying atelic/imperfective Asp would be capable of generating the patterns (see Finer 1986 for an analysis of the patterns). After all, nasal substitution occurs only in imperfective verbs. The question is whether the imperfective morpheme is an autonomous prefix or part of the verbalizer morpheme, *i.e.*, *meN-* or *oN-*.

The primary advantage of the AspP analysis is that there is an additional functional atelic/imperfective Asp head available that can plausibly serve as the locus of imperfective morphology, as well as a telic/perfective Asp head which can trigger the object agreement morphology associated with transitive perfective verbs. Still, the dissociation of aspectual features from *v* eliminates any rational syntactic basis for the distinction between imperfective and perfective verbalizer morphology. In other words, if the imperfective morpheme is simply a prefix *N-* and perfective object agreement morphology is simply suffixation, why are imperfective verbs formed from verbalizer prefixes that would have to be analyzed as *me-* and *o-*, while perfective verbs are formed from verbalizer infixes such as *-m-*, *-u-*, and *-o-*?

A solution might be found in the domain of passives. Some verbs have imperfective and perfective variants with different meanings, *e.g.*, *omes* “watch (impf.)” vs. *mes* “see (pf.)” In addition to translating differently into English, they are compatible with different scenarios. For example, the imperfective variant *omes* can also mean “babysit,” while the perfective form *mes* cannot. Consider the differences between the logical scenarios described by (2.56) and the anomalous scenarios described by (2.57).

- (2.56) a. IMPERFECTIVE COMPATIBLE WITH “GOOD BEHAVIOR” SCENARIO:
 Ng sebec-ek [el **omes** er a ngalek [e le ng
 3SG= ability-ISGP [L see.IMPF ACC D child [because 3SG=
 mle ungil a blekerdel-el er tia el m/o merek
 AUX.PAST good D behavior-3SGP P this L PAST.become finished
 el taem]].
 L time]]
 “I can watch/babysit the child because he behaved well last time.”
- b. PERFECTIVE COMPATIBLE WITH “YELLOW SHIRT” SCENARIO:
 Ng sebec-ek [el **mes-ang** a ngalek [e le ng
 3SG= ability-ISGP [L see.PF-3SGO D child [because 3SG=
 oubail er a bibrurek el cheleched-al a bail]].
 wear.IMPF ACC D yellow L torso-3SGP D clothing]]
 “I can see the child because he’s wearing a yellow shirt.”
- (2.57) a. # IMPERFECTIVE INCOMPATIBLE WITH “YELLOW SHIRT” SCENARIO:
 Ng sebec-ek [el **omes** er a ngalek [e le ng
 3SG= ability-ISGP [L see.IMPF ACC D child [because 3SG=
 oubail er a bibrurek el cheleched-al a bail]].
 wear.IMPF ACC D yellow L torso-3SGP D clothing]]
 (“I can watch/babysit the child because he’s wearing a yellow shirt.”)
- b. # PERFECTIVE INCOMPATIBLE WITH “GOOD BEHAVIOR” SCENARIO:
 Ng sebec-ek [el **mes-ang** a ngalek [e le ng
 3SG= ability-ISGP [L see.PF-3SGO D child [because 3SG=
 mle ungil a blekerdel-el er tia el m/o merek
 AUX.PAST good D behavior-3SGP P this L PAST.become finished
 el taem]].
 L time]]
 (“I can see the child because he behaved well last time.”)

For fairly straightforward reasons, Palauan speakers find it odd that a child’s wearing a yellow shirt is necessary for somebody to be able to watch/babysit him or her, and similarly that a child’s good behavior is a prerequisite for his or her visibility.

Interestingly, this aspectual alternation between the imperfective and perfective forms of transitive verbs like *omes* is neutralized in passives, as shown in ((2.58)).

(2.58) PASSIVE COMPATIBLE WITH BOTH SCENARIOS:

- a. Ng sebec-el a ngalek [el o-bes [e le ng mle
 3SG= ability-3SGP D child [L PASS-see [because 3SG= AUX.PAST
 ungil a blekerdel-el er tia el m/o merek el taem]].
 good D behavior-3SGP P this L PAST.become finished L time]]
 “The child may be watched/babysat because he behaved well last time.”
- b. Ng sebec-el a ngalek [el o-bes [e le ng oubail
 3SG= ability-3SGP D child [L PASS-see [because 3SG= wear.IMPF
 er a bibrurek el cheched-al a bail]].
 ACC D yellow L torso-3SGP D clothing]]
 “The child is able to be seen because he is wearing a yellow shirt.”

The fact that the passive verb *obes* “(be) seen” is compatible with both scenarios in (2.58) suggests that the aspect is unspecified on *obes*. If AspP were included in the verbal complex between VP and transitive *v*P, then we should expect it to be able to appear between VP and passive *v*P. If that were the case, we would predict aspectually-specified passive forms, leaving the neutralization of aspect in passive *obes* in (2.58) unexplained.

On the other hand, if aspectual information is introduced by *v* as in the aspect-bundled-*v* analysis, rather than by Asp as in the AspP analysis, then there is no need to stipulate that AspP cannot appear in a passive *v*P. If aspect features are bundled with different instances of transitive *v*, then because these transitive *v* heads are in complementary distribution with the passive *v* head(s), it is possible that aspectual information is unspecified on passive verbs if passive *v* does not also bear aspect features. Furthermore, the aspect-bundled-*v* analysis allows the aspectually-driven differences in accusative case morphology to fall out simply from which *v* head merges with the VP. In this way, aspect features on imperfective and perfective *v* play a direct role in the way internal argument DPs are Case-licensed.

For all of these reasons, it seems preferable to adopt the aspect-bundled-*v* analysis proposed in §2.2.2. This conclusion should not be construed as a claim that AspP or an inventory of functional Asp heads has no place in Universal Grammar; in fact, very elegant analyses have been devised for phenomena in other languages that motivate the inclusion of AspP in an articulated *v*P structure (*e.g.*, Travis 2005a: 80–84 for Malagasy).

One final note is in order. A consequence of the aspect-bundled-*v* analysis is that there is no notion of an “imperfective morpheme” independent from the “verb marker” (*cf.* Wilson 1972; Josephs 1975). The so-called imperfective morpheme is treated as part of the imperfective verbalizer morpheme *meN-*, in accordance with the analyses of Capell (1949) and DeWolf (1988). From a comparative or historical

standpoint, this analysis is probably more accurate when one considers the types of prefixes and infixes that form verbs in other Philippine languages. In Indonesian, *meN-* can form either intransitive or transitive verbs (Sneddon 1996). In Chamorro, *man-* indicates that the subject of a non-stative/inchoative is plural, whereas *-um-* (cf. the perfective infix *-m-* in Palauan) is used if the subject is singular/dual (Topping 1973: 84, 226; Sandy Chung, p.c.). In Tagalog, both *maN-* and *-um-* can form transitive and intransitive actor focus verbs (Schachter and Otanes 1972: 290, 292–293).⁵¹ If the present analysis is correct, then the verbal prefix/infix system of Palauan is poised to more closely resemble those of its linguistic neighbors.

2.2.4 DIFFERENTIAL OBJECT MARKING

Now that the analysis in §2.2.2 has been motivated, I will address the status of the accusative case marker *er* found on direct objects of imperfective verbs. As we saw above in (2.45) and (2.46), the presence or absence of accusative *er* depends on the values of animacy, number, and specificity features on the direct object DP. What I show in this section is that the use of *er* as an accusative case marker is distinct from its usage as a preposition, and I argue that it should not be analyzed in the syntax as the morphological realization of a P head.⁵²

The differential object marking alternation described in §2.2.1 is a phenomenon unique to direct objects. Subjects, possessors, obliques, and adjuncts do not participate in similar alternations involving *er*: they are either uniformly marked with *er* or uniformly not marked with *er*. To start, I will demonstrate that animacy, number, and specificity are indeed the three features that govern the accusative case alternation. To this end, much use will be made of the set of demonstrative determiners, which have distinct forms for use with human/non-human DPs as well as singular/plural DPs. They can thus transparently indicate the animacy and number features of particular DPs. Furthermore, when the NPI *ngii di* “any” occurs in a DP within the scope of a downward-entailing operator (such as within a question; see Ladusaw 1979; for an overview, see Giannakidou to appear and references therein), the DP receives a non-specific interpretation, which we can use to probe the specificity restriction on the accusative case marker *er*.

Both the human direct object *ngke el chad* “that person” in (2.59) and the singular, specific direct object *se el hong* “that book” in (2.60) must be marked with *er*.

⁵¹ Ileana Paul informs me that a similar aspectual alternation can be found in Malagasy when different voice affixes are used to form verbs, but nobody has really talked about it yet (to her knowledge, and to mine). I think it merits some consideration, given the Palauan pattern.

⁵² Note the homophony between Palauan’s only preposition, *er*, and the accusative case marker *er*. I don’t think that too much should be made of this homophony: it is not uncommon crosslinguistically for languages to utilize/reanalyze prepositional morphemes as accusative case markers.

(2.59) A Steven a olengeseu **er ngke el chad**.
 D Steven TOP help.IMPF ACC that L person
 “Steven is helping that person.”

(2.60) A Sally a menguiu **er se el hong**.
 D Sally TOP read.IMPF ACC that L book
 “Sally is reading that book.”

However, a non-human direct object is not marked with *er* if it is either plural or non-specific. For example, neither the plural direct object *aike el bong* “those books” in (2.61) or the non-specific indefinite *a ngii di el bong* “any book” in (2.62) is marked with *er*.

(2.61) A Sally a menguiu **aike el hong**.
 D Sally TOP read.IMPF those L books
 “Sally is reading those books.”

(2.62) Ke *mi*/enguiu **a ngii di el hong** er a elecha el sils?
 2SG= PAST.read.IMPF D any L book P D now L day
 “Did you read any (a single) book today?”

Nevertheless, humanness trumps all, and plural and/or non-specific direct objects must be marked with *er* if they are human, as (2.63) and (2.64).

(2.63) A Steven a olengeseu **er tirke el chad**.
 D Steven TOP help.IMPF ACC those L people
 “Steven is helping those people.”

(2.64) Ke ullengeseu **er a ngii di el chad** er a elecha el sils?
 2SG= help.PAST.IMPF ACC D any L person P D now L day
 “Did you help anybody today?”

I summarize the distribution of the overt accusative case marker *er* on direct objects of various types in Table 2.6.

Table 2.6 is quite reminiscent of the lattice structure that Aissen (2003: 459, fig. 4) proposes to analyze patterns of differential object marking cross-linguistically. Analyses of patterns in such languages (found in many language families) typically rely on some combination of animacy (or humanness) and specificity (or definiteness) hierarchies to determine whether or not a particular direct object DP receives overt or null case morphology. I argue that Palauan is another such language, and

	HUMAN D.O.		NON-HUMAN D.O.	
	SINGULAR	PLURAL	SINGULAR	PLURAL
SPECIFIC D.O.	<i>er</i>	<i>er</i>	<i>er</i>	∅
NON-SPECIFIC D.O.	<i>er</i>	<i>er</i>	∅	∅

TABLE 2.6 Distribution of the accusative case marker *er*

that the *er* that is the morphological reflex of accusative case is just that: a case marker, and not a preposition.

DPs in other positions do not exhibit a similar alternation. For instance, subjects are never marked with *er*. Examples (2.65) and (2.66) show that human and non-human subjects, respectively, are not marked with *er*, regardless of whether they are singular (specific or non-specific) or plural.

- (2.65) a. Ng songerenger **ngke el chad**.
3SG= hungry that L person
‘‘That person is hungry.’’
- b. Te songerenger **tirke el chad**.
3PL.+HUM= hungry those L people
‘‘Those people are hungry.’’
- c. Ng songerenger **a ngii di el chad?**
3SG hungry D any L person
‘‘Is anyone hungry?’’
- (2.66) a. Ng kedorem **se el bad**.
3SG sharp that L stone
‘‘That stone is sharp.’’
- b. Ng kedorem **aike el bad**.
3PL.-HUM= sharp those L stones
‘‘Those stones are sharp.’’
- c. Ng kedorem **a ngii di el bad?**
3SG= sharp D any L stone
‘‘Is there a sharp stone? (*lit.* ‘‘Is any stone sharp?’’)

It seems safe to conclude, then, that subjects are simply DPs.

I turn now to possessor DPs. As we saw in Chapter 1, §1.2.2.2, there are two patterns by which possession is expressed in Palauan. Under both patterns, the possessor follows the possessed noun. The first pattern involves possessor agreement, realized morphologically on the possessed noun. The possessor itself is not

marked morphologically (with *er* or otherwise), regardless of whether it is individuated. This is shown in (2.67) and (2.68).

- (2.67) a. A Melii a melemed a tebel-el **ngke el chad.**
 D Melii TOP wipe.off.IMPF D tables-3SGP that L person
 “Melii is wiping off that person’s tables.”
- b. A Melii a melemed a tebel-ir **tirke el chad.**
 D Melii TOP wipe.off.IMPF D tables-3PL.+HUMP those L people
 “Melii is wiping off those people’s tables.”
- c. Ng melemed a tebel-el **a ngii di el chad** a Melii?
 3SG= wipe.off.IMPF D tables-3SGP D any L person D Melii
 “Is Melii wiping off anyone’s tables?”
- (2.68) a. A Droteo a manged a rechel-el **se el kerrekar.**
 D Droteo TOP cut.off.IMPF D branches-3SGP that L tree
 “Droteo is cutting off that tree’s branches.”
- b. A Droteo a manged a rechel-ir **aike el kerrekar.**
 D Droteo TOP cut.off.IMPF D branches-3PL.-HUMP those L trees
 “Droteo is cutting off those trees’ branches.”
- c. Ng mo manged a rechel-el **a ngii di el kerrekar** a
 3SG= AUX.FUT cut.off.IMPF D branches-3SGP D any L tree D
 Droteo?
 Droteo
 “Is Droteo going to cut off branches from a tree?” (*lit.* “Is Droteo going to cut off any tree’s branches?”)

Possessors that trigger possessor agreement morphology on the nouns they possess may thus also be analyzed as DPs. Under the second pattern of possession, possessors are introduced by *er*, while the possessed noun is not inflected for possessor agreement. Even despite the fact that *er* is involved, individuation once again plays no decisive role; under this pattern of possession, possessors are always introduced with *er* regardless of the values of their animacy, number, and specificity features.

- (2.69) a. Ak mo omekedong a katuu **er ngke el chad.**
 ISG= AUX.FUT call.IMPF D cats P that LNK person
 “I will call that person’s cats.”

- b. Ak mo omekedong a katuu er tirke el chad.
 ISG= AUX.FUT call.IMPF D cats P those LNK people
 “I will call those people’s cats.”
- c. Ke mo omekedong a katuu er a ngii di el chad?
 2SG= AUX.FUT call.IMPF D cats P D any L person
 “Are you going to call anyone’s cats?”

- (2.70) a. Ng so-al a redil a chazi er se el kuabang.
 3SG= desire-3SGP D woman D taste P that L guava
 “The woman likes the taste of that guava.” (*lit.* “The taste of that guava is the woman’s desire.”)
- b. Ng so-al a redil a chazi er aike el kuabang.
 3SG= desire-3SGP D woman D taste P those L guavas
 “The woman likes the taste of those guavas.”
- c. Ng so-al a redil a chazi er a ngii di el kuabang?
 3SGP desire-3SGP D woman D taste P D any L guava
 “Does the woman like the taste of guava?” (*lit.* “Is the taste of any guava the woman’s desire?”)

It appears to be the case that when possessors are introduced by *er*, their featural composition plays no role in determining whether *er* will co-vary with a null form.

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

- (2.71) a. A Gigi a ngil-uu a kall el mo er a del-al.
 D Gigi TOP PAST.bring.PF-3SGO D food L go P D mother-3SGP
 “Gigi brought the food to her mother.”
- b. A Gigi a ngil-uu a kall el mo er a reokiak.
 D Gigi TOP PAST.bring.PF-3SGO D food L go P D guests
 “Gigi brought the food to the guests.”
- c. Ng ngil-uu a kall a Gigi el mo er a ngii di el
 3SG= PAST.bring.PF-3SGO D food D Gigi L go P D any L
 chad?
 person
 “Did Gigi bring the food to anyone?”

- (2.72) a. A Ioseb a ulemekall er a mli-l el mo er a bli-k.
 D Joseph TOP drive.PAST ACC D car-3SGP L go P D house-ISGP
 “Joseph drove his car to my house.”
- b. A Ioseb a ulemekall er a mli-l el mo er aike el stoang.
 D Joseph TOP drive.PAST ACC D car-3SGP L go P those L stores
 “Joseph drove his car to those stores.”
- c. Ng ulemekall er a mli-l a Ioseb el mo er a ngii di el
 3SG= drive.PAST ACC D car-3SGP D Joseph L go P D any L
 beluu?
 place
 “Did Joseph drive his car anywhere?” (*lit.* “Did Joseph drive his car to any place?”)

The data in (2.71) and (2.72) strongly suggests that recipient/goal arguments are encased in PPs as well. There is no empirical basis for analyzing *er* in the expression *el mo er* as anything other than a preposition.

Many non-human adjunct DPs (*e.g.*, locative and temporal adverbials) are also introduced by the preposition *er*. The pair of sentences in (2.73), below, demonstrates that plurality of the DP in the adjunct phrase does not determine whether *er* is licensed — *er* co-occurs with both singular and plural DPs.

- (2.73) a. Ak ulemechar er tia el siats er a Merilang.
 ISG= buy.PAST ACC this L shirt P D Manila
 “I bought this shirt in Manila.”
- b. Ak ulemechar er tia el siats er a iungs er a Marialas.
 ISG= buy.PAST ACC this L shirt P D islands P D Marianas
 “I bought this shirt in the Mariana Islands.”

Although there is no data to indicate how human and non-specific DP adjuncts behave, the fact that the [3PL, +SPEC] adjunct in (2.73b) is introduced with *er* — just as its singular counterpart is in (2.73a) — provides preliminary evidence that the differential object marking pattern described in Table 2.6 does not extend to *er*'s introduction of locative adverbials. It seems safe to conclude (tentatively) that these are PPs as well.

What all of these examples illustrate, then, is that there is a feature-driven alternation between *er* and \emptyset on the direct object DPs in sentences (2.59) through (2.64) that does not occur when *er* introduces other types of DPs. The values of the animacy, number, and specificity features on the direct object DP condition whether *er* appears. This state of affairs makes the analysis in which accusative *er* is treated as a

preposition (in the narrow syntax) highly unattractive. Recall the quasi-“solution” proposed at the end of §2.2.2 in which any combination of functional and lexical heads could form a numeration, and then only the numerations containing both imperfective transitive v and P_{er} would converge. Even this approach cannot explain — at least in any sort of satisfying way — the restrictions on the co-occurrence of er with only human and singular, specific DPs. In §2.2.5.2, I propose an alternate analysis in which er is inserted post-syntactically at PF (*cf.* McFadden 2004: Ch. 2, who imports many of Schütze’s (1997) insights into the Distributed Morphology framework).

2.2.5 DP-LICENSING AND MORPHOLOGICAL CASE

2.2.5.1 THE ROLE OF AGREE IN THE (NARROW) SYNTAX

The morphological analysis of er (and object agreement morphology) that I propose in §2.2.5.2 crucially depends on the Agree relation between transitive v and the DP it licenses, so it is worthwhile to motivate this relation, if possible. The theory of Agree that I assume is essentially Chomsky’s (2000, 2001, 2004; 2008). Agree is a relation instantiated by a phase head or a head that bears an [EPP] feature. This head is called the *probe* P , whose domain $D(P)$ is its c-command domain (Chomsky 2000: 122). The Agree relation is established with the closest “active” DP (in the Relativized Minimality sense of Rizzi 1990, 2001), which is then identified as the goal G . The uninterpretable (or, unvalued) Case feature on G is what renders it active (Chomsky 2000: 127).

In the present case, the aspect feature of the transitive v head can be shared with the DP it licenses, while ϕ -features of the DP are shared with v . While I postpone discussion of the details regarding which features must be shared (and why) until §2.2.5.2, I now will motivate the proposed Agree relation with evidence from coordinated direct objects. Now, coordinated DPs provide an interesting testing ground for this theory of Agree. Binding asymmetries such as those in (2.74) suggest an asymmetric analysis of coordination. The left conjunct DP is able to bind a pronoun in the right conjunct DP, but the reverse is impossible.

- (2.74) a. [_{DP} Every student]_i and [_{DP} his_i/_j advisor] attended the charity benefit.
 b. [_{DP} His_{*i}/_j advisor] and [_{DP} every student]_i attended the charity benefit.

If binding is contingent upon c-command, then a symmetric analysis of coordination leaves the asymmetry in (2.74) mysterious. In part to address concerns of this sort, Munn (1993) and Zoerner (1995) advocate an asymmetric structure for coor-

dination, &P.⁵³ The coordinator & heads a functional projection with one DP in its complement position and another DP either adjoined to &P (as Munn argues) or in the specifier position of &P (as Zoerner argues). In the context of bare phrase structure advanced by Chomsky (2000, 2001), the distinction between specifiers and adjuncts is reduced to the selectional properties of the head of the projection.

Coordinated DPs in Palauan take the form [DP *me* DP], where *me* is a conjunction. Finessing the issue of whether the higher DP is in an adjunct or specifier position, I give a schematic representation of &P in Figure 2.17. What is immediately relevant is that, assuming the configuration in Figure 2.17, the left conjunct DP is syntactically more prominent than the right conjunct DP due to the asymmetric c-command relation established between the two DPs. If the asymmetric analysis of DP-coordination is correct for Palauan, then there are at least two possible patterns of agreement that we might expect if Agree is established between a transitive *v* probe and the coordinated DP goal, described in (2.75) and (2.76).⁵⁴

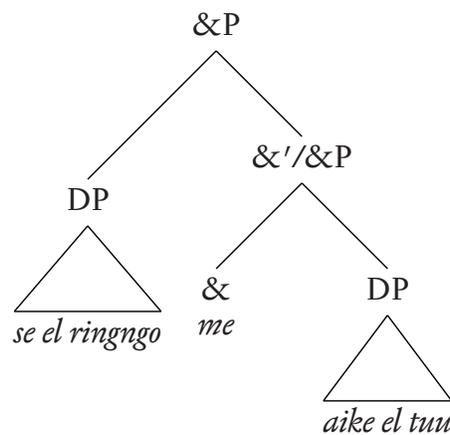


FIGURE 2.17 The Munn/Zoerner view of &P

- (2.75) The & head represents a function that — in some way — combines the φ -features of the two DPs, yielding a new set of features that are salient to the Agree relation. *E.g.*, coordination of two [SG] DPs could yield a [PL] &P that is accessible to Agree.

⁵³ See Wagner 2005 for additional prosodic evidence that &P might be asymmetrical, at least in some languages.

⁵⁴ See also Corbett 1979, 1983, 1988 for extensive work on resolution rules for coordinate structures in Slavic.

- (2.76) The & head leaves the φ -features of the DPs intact: only the features of the highest DP are salient to the Agree relation. *E.g.*, coordination of two [SG] DPs would, for Agree, be treated as if only the higher DP were present.

The situation in (2.75) would also be compatible with a symmetric analysis of DP-coordination. However, the situation in (2.76) would be difficult to formalize using a symmetric analysis, but it is certainly compatible with an asymmetric analysis like that proposed in Figure 2.17.

I will now demonstrate that, in Palauan, when an Agree relation is established between a transitive *v* head and a coordinated DP in direct object position, the coordinated DP triggers the same morphology that the left conjunct DP would trigger if it occurred alone in the same syntactic position (complement of V). This is the case with direct objects of both perfective and imperfective verbs, as (2.78) and (2.77) indicate, respectively.

- (2.77) a. Ak *mi/engang* **er** *se el ringngo* me aike el tuu.
 ISG= PAST.eat.IMPF ACC that L apple and those L bananas
 “I was eating that apple and those bananas.”
- b. Ak *mi/engang* **aike el tuu** me *se el ringngo*.
 ISG= PAST.eat.IMPF those L bananas and that L apple
 “I was eating those bananas and that apple.”
- c. *Ak *mi/engang* **se el ringngo** me aike el tuu.
 ISG= PAST.eat.IMPF that L apple and those L bananas
 “I was eating that apple and those bananas.”
- d. *Ak *mi/engang* **er aike el tuu** me *se el ringngo*.
 ISG= PAST.eat.IMPF ACC those L bananas and that L apple
 “I was eating those bananas and that apple.”
- (2.78) a. Ak *mo* **kol-ii** *se el ringngo* me aike el tuu.
 ISG= AUX.FUT eat.PF-3SGO that L apple and those L bananas
 “I am going to eat (up) that apple and those bananas.”
- b. Ak *mo* **kmang aike el tuu** me *se el ringngo*.
 ISG= AUX.FUT eat.PF those L bananas and that L apple
 “I am going to eat (up) those bananas and that apple.”

The contrast between the obligatory presence of the accusative case marker *er* in (2.77a) and its obligatory exclusion in (2.77b) strongly suggests that the feature values of the left conjunct DP are the ones that condition whether *er* will appear. Furthermore, the lack of *er* on the right conjunct DP in (2.77b) suggests further

that it is not true that the feature values of each DP conjunct determine its own morphological case marking. If this were the case, *er* should mark the right conjunct DP in (2.77b) and (2.77d), since it is singular and specific (assuming demonstrative DPs are specific).

The agreement morphology on the perfective verbs in (2.78) further supports the situation described in (2.76), rather than (2.75), supporting the notion that an asymmetric analysis of Palauan DP-coordination is correct. Perfective verb forms agree with the φ -features of the left conjunct DP, not some combination of the φ -features of both DPs. The data in (2.77) and (2.78), then, at best provide some evidence for an asymmetric analysis of DP-coordination in Palauan and an Agree-based system of DP-licensing, and at worst are merely consistent with such an analysis (as opposed to a symmetric analysis of coordination).

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

2.2.5.2 A DM ACCOUNT OF DIRECT OBJECT MORPHOLOGY

The primary goal of this section is to construct an account of the divergent morphological realizations of direct objects of imperfective and perfective verbs in Palauan. It was argued that both imperfective and perfective verbs uniformly subcategorize for DPs that are licensed by two aspectual “flavors” of transitive *v*, rather than, *e.g.*, by an Asp head. And despite its homophony with the preposition *er*, the *er* that marks direct objects of imperfective verbs displays properties associated with a differential object marking accusative morpheme, perhaps similar to the infamous “personal *a*” in Spanish.

In Spanish, human, specific direct objects are typically marked for accusative case with *a*, which is homophonous with the preposition *a*. Compare the following examples in (2.79).

(2.79) SPANISH:

- a. En el mercado vi ***(a)** los vecinos.
 at the market saw.ISG PERS.A the neighbors
 “At the market (I) saw the neighbors.”
- b. En el escritorio vi ***(a)** los papeles.
 on the desk saw.ISG PERS.A the papers
 “On the desk (I) saw the papers.”

[Zagona 2002: 13, ex. 15]

The morpheme *a* is also used to mark indirect objects, and its presence does not depend on animacy, as it does when it marks accusatives, as (2.80) shows.

(2.80) SPANISH:

- a. Le mandé un paquete a José.
 CLITIC.DAT sent.ISG a package to José
 “I sent a package to José.”
- b. Le mandé el formulario al departamento.
 CLITIC.DAT sent.ISG the form to.the department
 “I sent the form to the department.” [cf. Zagona 2002: 14]

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

(2.81) SPANISH:

- a. Juan la encontró a Maria borracha.
 Juan CLITIC.ACC found.3SG PERS.A Maria drunk
 “Juan found Maria drunk.”
- b. *Juan le habló a Maria borracha.
 Juan CLITIC.DAT found.3SG to Maria drunk
 “Juan spoke to Maria drunk.”

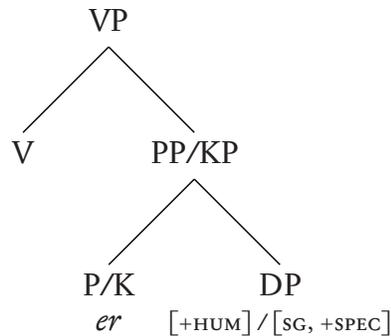
McFadden (2004: 74) takes the contrast in (2.81) as evidence that the *a* in sentences like (2.81a) is simply a case marker inserted on the direct object DP in the morphology after Spell-Out, while the *a* in sentences like (2.81b) is the morphophonological exponent of a syntactically realized P morpheme in the syntax. Such an analysis accounts for the uniform presence of *a* on both human and non-human indirect objects as in (2.80), while leaving room for an analysis of its variability in marking only human direct objects as in (2.79).

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

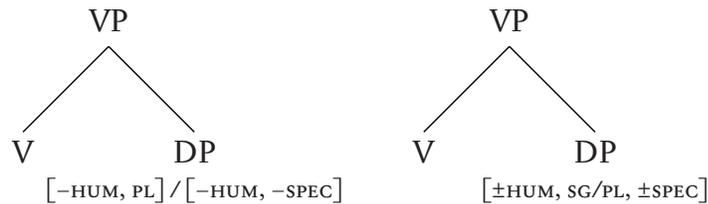
Consider the other option, in which the case marker *er* is treated as the realization of a syntactic P (or perhaps a K[ase]; see, among others, Bittner and Hale 1996a, 1996b) node. On this analysis, one might argue that DPs that bear the fea-

tures [+HUM] and/or [SG, +SPEC] must be encased in a PP/KP in the syntax only if the *v* (merged later) is imperfective. Verbs would then need to select either PP/KP or DP complements depending on both the features of the verb and the features of its complement, as shown in (2.82a–b).

(2.82) a. IMPERFECTIVE VERBS WITH [+HUM] / [SG, +SPEC] DIRECT OBJECTS:



b. IMPERFECTIVE VERBS WITH OTHER TYPES OF DIRECT OBJECTS:



The first problem with this syntacticized analysis of the Palauan differential object marking pattern is that it is unclear why features like animacy, number, and specificity should play a role in determining whether or not a given DP must be realized as the object of a preposition. These features clearly interact to condition the distribution of *er* in Table 2.6, but they arguably have very different provenances. Humanness/animacy has been characterized as an inherent semantic feature of nominals (see, *e.g.*, Comrie 1989, Dahl 2008). In other words, animacy feature values for nouns are perceivable from the lexical semantics of the nouns: humans are by definition [+HUM], stones are [-ANIM], etc. Specificity features, on the other hand, are determined by the discourse, and as such cannot be construed as purely syntactic or semantic. Put differently, semantically identical nominals with the same φ -feature values may still differ in specificity on the basis of how they are used in the preceding discourse (if at all). And finally, grammatical number features have typically been analyzed as syntactic φ -features (see Bejar 2003 and references

therein), which may be introduced into the syntax by a functional head like Num.⁵⁵ It would appear difficult to devise a satisfactory analysis of when (and whether) a P/K morpheme⁵⁶ must be merged on the basis of some interaction of features as diverse as these.

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

A major (and more concrete) drawback of either version of the *er*-as-P/K analysis stems from the fact that there is no reason to assume that the V (or $\sqrt{\text{ROOT}}$) contains any information regarding aspect, which it should contain if it is to select the correct category of complement (PP/KP vs. bare DP). If it did, then there would need to be two parallel listings of verb roots that are specified as [IMPF] or [PF] in the lexicon (or the list of feature bundles that is assumed to replace the lexicon in Distributed Morphology). Such an analysis would brand these roots as verbs, forcing there to be yet another listing of roots that would eventually become nouns in the syntax. Under the analysis constructed in §2.2.2, aspect features are not introduced until a particular transitive *v* merges, completely circumventing the issue. Roots are simply roots, and they can combine uniformly with DP complements as long as those DPs are later licensed by imperfective *v*, perfective *v* or finite T. And recall that there is no aspectual alternation in passives, a fact that would be difficult to explain if aspectual features were inherent to roots rather than introduced by a higher functional head.

The analysis I propose assumes McFadden’s (2004) principle regarding the position of morphological case in the grammar, given in (2.83).

(2.83) Morphological case is determined after Spell-out on the PF branch and thus is not present in the narrow syntax or on the LF branch. [McFadden 2004: 39]

By adopting this principle, it is possible to assume a uniform syntax for transitive *v*Ps, corresponding essentially to the *v*Ps in Figure 2.13 on page 89 and Figure 2.14 on page 90. As the variation in realization of theme DPs in direct object position is — on this analysis — purely morphological, there is no need to invoke syntactic stipulations to explain the discrepancy between the case morphology on direct ob-

⁵⁵ For present purposes, I remain agnostic with regard to the manner in which ϕ -features are introduced into the syntax of DPs. The only crucial assumption for my analysis is that they are present by the time a given DP is fully formed.

⁵⁶ Here, I use the term “morpheme” in the Distributed Morphology sense of a bundle of features that occupies a terminal node in the syntax.

jects of imperfective verbs and the corresponding direct objects of perfective verbs, if (2.83) is adopted.

Instead, there is a short series of Palauan-specific Spell-Out rules that govern the morphological forms of verbs and their associated direct objects. In formulating these Spell-Out rules, I make the (relatively uncontroversial) assumption that the Agree relation between a direct object DP and the functional head that licenses it enables sharing of features in both directions (see Chomsky 2000). The functional head becomes specified for [$__\varphi$] features, essentially copying the values of the φ -features on the DP it licenses via Agree. Furthermore, the DP is valued for an uninterpretable Case feature, [$__\text{CASE}$].

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

For direct objects of transitive verbs in Palauan, it might be useful to conflate the features [ACC] and [(IM)PF]. It is just by virtue of the fact that both imperfective *v* and perfective *v* introduce external arguments that they may also license syntactic Case on a lower DP (Kratzer 1996, following Perlmutter 1978; Burzio 1986). The actual features that are shared between the licensing head and the DP that is licensed is completely immaterial as far as the narrow syntax is concerned. If one construes uninterpretable features as simple indicators of which feature values a syntactic head (or its projection) must copy from somewhere else via Agree, then it makes no difference whether a direct object DP's Case feature [$__\text{CASE}$] is specified as [ACC] or, *e.g.*, [PF].

For instance, McFadden adopts the features [+T] and [+*v*] to replace [NOM] and [ACC], respectively, to drive the point home that a DP's being licensed with syntactic Nominative/Accusative Case does not entail that it will be marked with the language's morphological nominative/accusative case at PF. This is the idea that I aim to push one step further: if a DP can inherit some feature from transitive *v* to check its [$__\text{CASE}$], there is no reason that this feature needs to be the category feature — it may just as well be an aspectual feature like [IMPF] or [PF]. As McFadden (2004: Ch. 2) emphasizes, syntactic Case is really just DP-licensing. As long as the direct object DP does not end up with an unvalued [$__\text{CASE}$] feature at Spell Out when it is sent to LF and PF, the derivation still has the chance to converge successfully.

This scenario leaves us well-positioned to explain the actual morphology underlying the transitive perfective/imperfective alternation. The two sets of Spell-Out rules required to capture the morphology of transitive verbs in Palauan are given in (2.84) and (2.85). (2.84) gives the set of (two) Spell-Out rules necessary for the appropriate morphological realization of direct object DPs, while (2.85) gives the set of (seven) Spell-Out rules for verbs, *i.e.*, the roots that occupy V.⁵⁷ The label of the syntactic node above the root is irrelevant for present purposes — all that matters is that this is the node that will be spelled out as the verb stem.

(2.84) SPELL OUT RULES FOR DP

- a. $\emptyset \rightarrow er / \text{ ______ } DP_{[IMPF, +HUM]}$
- b. $\emptyset \rightarrow er / \text{ ______ } DP_{[IMPF, SG, +SPEC]}$

(2.85) SPELL OUT RULES FOR V (ROOT)

- a. $\emptyset \rightarrow -ak / V_{[PF, 1SG]} \text{ ______ }$
- b. $\emptyset \rightarrow -au / V_{[PF, 2SG]} \text{ ______ }$
- c. $\emptyset \rightarrow -ii / V_{[PF, 3SG]} \text{ ______ }$
- d. $\emptyset \rightarrow -id / V_{[PF, IPL, INCL]} \text{ ______ }$
- e. $\emptyset \rightarrow -emam / V_{[PF, IPL, EXCL]} \text{ ______ }$
- f. $\emptyset \rightarrow -emiu / V_{[PF, 2PL]} \text{ ______ }$
- g. $\emptyset \rightarrow -terir / V_{[PF, 3PL, +HUM]} \text{ ______ }$

Two points are worth mentioning.

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

⁵⁷ V could also easily be called $\sqrt{\text{ROOT}}$ if one adopts the category-neutral root theory of Marantz 1997 *et seq.*

Second, the Spell Out rules in (2.84) and (2.85) do not comprise an exhaustive list describing the morphological realization of every DP or verb (with any combination of feature values) sent to PF. One attractive aspect of the morphological analysis given above is that it only requires morphological rules to insert case markers or agreement suffixes if they are actually instantiated morphologically. In other words, there is neither a need for nodes in the syntax (Distributed Morphology’s “morphemes”) nor for rules in the morphology to explain when DPs do *not* get case marking (the set of [–HUM, PL] and [–HUM, –SPEC] DPs) or do *not* trigger agreement (just the set of [–HUM, –SPEC] DPs). Subject DPs, adverbial DPs, indirect object DPs, etc. do not need separate morphological rules to characterize their morphological shape, as they do not alternate between *er*-marked forms and \emptyset -marked forms. If they are marked by *er*, then this *er* can be analyzed as the morphological exponent of a syntactic P head rather than as a piece of dissociated case morphology inserted by one of the rules in (2.84).

Another welcome consequence of the Distributed Morphology analysis of DP case morphology in (2.84) is that it ties in seamlessly with the theory of Palauan A-bar extraction advanced by Georgopoulos (1991b; see also Georgopoulos 1985). She argues that there are no true A-bar gaps in Palauan, and that apparent gaps are instead better analyzed as resumptive pronouns. If Georgopoulos’s analysis is correct (and I know of no empirical evidence against it), then the analysis that I advance in (2.84) does not need to be modified to account for the morphological shape of A-bar resumptive pronouns bound in a direct object position. For the most part, they are null whenever they trigger agreement (whether it be subject agreement, possessor agreement, or perfective object agreement) and overt otherwise.⁵⁸ Object agreement and insertion of *er* proceed as normal, according to the Spell Out rules in (2.84) and (2.85).

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

⁵⁸ Though the parallel does not hold 100% of the time. Cases in which pronouns can be null in the absence of agreement include all [3PL, –HUM] direct objects (of either imperfective or perfective verbs) and pronominal theme arguments of some double object verbs — like *msang* “give” — which agree with the goal/recipient instead of the theme.

2.2.6 INTERIM CONCLUSIONS ABOUT DIRECT OBJECTS

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

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

The careful balance between the amount (and distribution) of featural information introduced in the verbal complex and its reflexes in the morphology leaves it possible to explain the various syntactic and morphological properties of theme DPs in, I think, a very satisfying way. If the analysis is correct, then the idea that featural information contained in a morphophonological verb (*i.e.*, a word) may be distributed over more than one syntactic terminal node (*e.g.*, V and *v*) that combine later in the morphology/phonology, an idea that is explored further in the following chapters.

CHAPTER 3

Psych-Predicates and Phrasal Idioms

“Everything I did in my life that was worthwhile, I caught hell for.”

Earl Warren (1891–1974)

At this point, the groundwork of a theory of Palauan clause structure has been established. We have seen evidence that Palauan clauses can be analyzed as TPs, where the T head selects an XP predicate as its complement, and the specifier of (finite) TP may (and possibly must) contain a DP that is treated as its subject. The data is compatible with an analysis of argument licensing built using the Minimalist syntactic framework (Chomsky 2000, 2001, 2004, 2008), where finite T is the locus of structural Nominative Case licensing and subject agreement, and transitive *v* is the locus of structural Accusative Case licensing and object agreement. We have seen that subject agreement morphology identifies the DP that occupies the specifier of TP and object agreement identifies the direct object of a (perfective) transitive predicate — both must be the most prominent DP in the domain of their probes, in the sense of Rizzi 1990, 2001. The differential object marker *er* also appears to identify direct objects of (imperfective) transitive verbs. Such morphological indicators that particular DPs bear some grammatical relation can be treated as diagnostics for argument structure and figure prominently in the analyses of various predicate-types and syntactic constructions examined in the following chapters.

The focus of this particular chapter is on the internal structure of the XP predicate selected by T, *i.e.*, the minimal phrase that contains the predicate itself, its arguments, and its modifiers before functional information about tense and mood is introduced higher in the clause. There are two primary goals, one descriptive and one theoretical.

On the descriptive side, I examine the properties of a particular class of predicates in Palauan that have been noted in the descriptive literature but whose syntax has not yet been analyzed. This class of predicates consists of phrasal idioms that are formed from predicates that take a DP argument referring to a body part that is inalienably possessed — usually, but certainly not exclusively, the body part is *reng* “heart.” Several examples are given below in (3.I).

- (3.I) a. Ng [klou a ched-engal _____ el] chad *pro*.
 3SG= [big D liver-3SGP <GAP> L] man he
 “He’s a brave man.” (*lit.* “He’s a man whose liver is big.”)
 [Josephs 1990: 34]
- b. ...ng milekoi a debar [el kmal mereched a nger-el
 ...3SG= PAST.speak D duck [L very fast D mouth-3SGP
 _____].
 <GAP>]
 “...said the duck, who was quite a gossip.” (*lit.* “...said the duck, whose mouth was very quick”)
 [CB 22]
- c. A le-mechell a ngalek e [ng ralmetaoch a
 D 3SGS.IRR-be.born D child then [3SG= river/channel D
 reng-ul *pro*].
 heart-3SGP he]
 “When a child is born (in this month), he has a carefree attitude.”
 (*approx.* “When a child is born, his heart is a channel — *i.e.*, unobstructed.”)
 [RE 61]
- d. L-ak bechi-titerir a re-mekngit el chad me
 3SGS.IMP-NEG let.PF-3PLO D PL-evil L people so.that
 l-o-sebek-ii [a reng-um *pro*] *pro*.
 3PLS.IRR-CAU-fly.PF-3SGO [D heart-2SGP you] they
 “Don’t let evil people worry you.” (*approx.* “Don’t let the evil people make your heart fly.”)
 [Chedaol Biblia, Proverbs 24:19]

This type of idiomatic predicate is common to the languages of Southeast Asia and has been investigated in other languages both closely related to Palauan (*e.g.*, Malay, see Oey 1990) and completely unrelated to Palauan (*e.g.*, Vietnamese, see Liêm 1970). The literature describing similar classes of predicates in other languages refers to them with various names, including *psycho-collocations* or *ψ-collocations* (Matisoff 1986), *stative-verb-body-part constructions* (Clark 1996: 535), *proprioceptive-state expressions* (Iwasaki 2002), and *zoom-on-possessee constructions* (Gerner 2005).

As the relevant class of predicates in Palauan is not restricted to psychological or stative predicates, and it is not the case that the possessor is necessarily “salient” in any way that can be formalized⁵⁹ easily or explicitly, I adhere to Matisoff’s (1986: 9) second convention and call this class of predicates in Palauan ψ -expressions, using the ψ - prefix also to describe subtypes of ψ -expressions and component parts of ψ -expressions. This label is intended to highlight the similarities between the Palauan construction and similar psychological predicate constructions in other languages spoken throughout Southeast Asia, while remaining unbiased about the Palauan construction’s potential syntactic, semantic, and aspectual properties. In other words, the terms ψ -expression, ψ -idiom, ψ -predicate, and ψ -argument are intended to be pre-theoretical. The theoretical goal is to show how an understanding of Palauan ψ -expressions can in turn inform us about the relations between Palauan morphology and syntax. The chapter proceeds as follows.

§3.1 introduces the class of Palauan ψ -expressions and discusses some parameters by which we can isolate the relevant subclasses to investigate. §3.1.1 introduces the class of idiomatic ψ -expressions and develops two different possible accounts of the locality restriction on the subparts of ψ -idioms, a structural account in (3.11) and a string-based (post-syntactic) account in (3.12). As the data in the upcoming sections suggests a potentially tantalizing analysis based on incorporation, §3.1.2 shows that an analysis of that variety fails to explain the patterns of object agreement and accusative case morphology in transitive ψ -idioms.

§3.2 serves as the descriptive basis of the chapter, in which the syntax of ψ -expressions is investigated, probing the limits of the locality restriction on the subparts of ψ -idioms. §3.2.1 demonstrates that ψ -arguments of idiomatic ψ -predicates cannot participate in A’ dependencies without sacrificing the idiomatic interpretation. Next, §3.2.2 shows that while A-movement of the ψ -argument is licit in principle, the idiomatic interpretation of the ψ -predicate disappears if A-movement creates a locality violation between the ψ -predicate and ψ -argument. §3.2.3 suggests that the structural account of the locality restriction proposed in (3.11) faces a problem when coordination of ψ -arguments is taken into account, suggesting that there might be some merit to the post-syntactic account of locality in (3.12).

§3.3 explores the implications of adopting the post-syntactic analysis of the locality restriction on ψ -idiom chunks. §3.3.1 shows that many ψ -idioms have synonymous transitive and intransitive variants, which is predicted on an analysis in which the idiomatic elements are simply roots that can merge either with transitive or intransitive verbalizers (*i.e.*, instances of v). Next, we move into the domain of nominalizations in §3.3.2, showing that verbal/adjectival ψ -idioms can form nominal ψ -idioms with two different structures. In the first structure, the $\sqrt{\text{ROOT}}$ that

⁵⁹ cf. Kam (Dong), a Kadai language spoken in China, in which the possessor occupies a preverbal position, separated from the postverbal possessee; see Gerner 2005.

would have formed the ψ -predicate is nominalized, and the ψ -argument DP then merges as a possessor rather than as a subject/direct object. In the second structure, the $\sqrt{\text{ROOT}}$ that would have been the head of the ψ -argument DP instead forms a compound nominal with the $\sqrt{\text{ROOT}}$ that would have been the head of the ψ -predicate, and there is no predicate–argument structure internal to the resulting DP. Finally, §3.4 concludes.

3.1 A TYPOLOGY OF PALAUAN ψ -EXPRESSIONS

In contrast to what has been reported for ψ -expressions in some other languages in Southeast Asia (*e.g.*, Malay; see Oey 1990: 144), use of Palauan ψ -expressions is quite widespread and employed in essentially all registers of speech and writing. In many cases, the use of a ψ -expression is the only available mechanism available to express a particular concept, and in many of the remaining cases where a monolexemic alternative is available, the ψ -expression often seems to be preferred. The class of Palauan ψ -expressions is surprisingly large and relatively heterogeneous, but there are several different parameters we can use to classify them. To make the following discussion more precise, I assume that a ψ -expression like *ngmasech a reng-ul* “be/get angry” (*lit.* “heart climb”) has three parts: the ψ -predicate (*e.g.*, *ngmasech* “climb”), the ψ -argument (*e.g.*, *a reng* “one’s heart”), and the possessor of the ψ -argument (*e.g.*, a full DP or null pronominal D that triggers possessor agreement morphology on the ψ -argument). One possible set of parameters according to which ψ -expressions could be characterized is given in (3.2).

- (3.2) a. Ψ -PREDICATE CATEGORY: Whether the syntactic category of the ψ -predicate is adjectival, verbal, or nominal.
- b. Ψ -ARGUMENT HEAD: Which body part noun is selected as the head of the ψ -argument, *e.g.*, *reng* “heart,” *bedul* “head,” *chad* “liver,” *ngor* “mouth,” *mad* “eyes/face,” *chim* “hands/arms,” etc.⁶⁰
- c. ARGUMENT STRUCTURE: Whether the ψ -argument is an obligatory or optional argument (there is a correlation with idiomaticity here).
- d. INTERPRETATION: Whether the ψ -expression involves a metaphorical relationship or a literal relationship between the ψ -predicate and the ψ -argument, *i.e.*, whether the ψ -expression is a phrasal idiom.

⁶⁰ The word *te* “manner” (borrowed from the Japanese *te* “hand”) may also function as a ψ -argument, albeit rarely. See Table 3.1 for some examples, and see McVeigh 1996: 33ff. for some discussion of similar predicates in Japanese.

IDIOMATIC Ψ-EXPRESSION	MEANING	LITERAL MEANING OF ψ-PREDICATE
<i>beat a rengul</i>	easygoing; lazy; chill	(heart) easy
<i>blosech a rengul</i>	suspicious	(heart) broken open
<i>diak a rengul</i>	inconsiderate; careless	not have (heart)
<i>dmolech a rengul</i>	wise; prudent	(heart) deep
<i>kedidai a rengul</i>	stubborn; arrogant	(heart) high
<i>kemanget a chimal</i>	generous	(arms) long
<i>klou a chedengal</i>	brave	(liver) big
<i>klou a rengul</i>	patient; confident	(heart) big
<i>mechas a rengul</i>	astonished; surprised	(heart) charred
<i>mechitechut a rengul</i>	discouraged	(heart) weak
<i>medengelii a rengul</i>	self-confident; self-assured	know (one's heart)
<i>mekngit a medal</i>	distressed	(face) bad
<i>mekngit a rengul</i>	sad; mean	(heart) bad
<i>melai er a rengul</i>	persuade	obtain (sb.'s heart)
<i>melaok a ngerel</i>	eloquent	(mouth) slick
<i>melaok a rengul</i>	adulterous; acquisitive	(heart) slick
<i>melecherecher er a rengul</i>	be stubborn	harden (one's heart)
<i>mellomes a rengul/adelul</i>	smart; intelligent	(heart/head) light
<i>mengurs er a rengul</i>	attract	pull or drag (sb.'s heart)
<i>meoud a te</i>	dimwitted	(manner) slow
<i>mereched a ngerel</i>	gossipy	(mouth) quick
<i>mereched a te</i>	clever; shrewd	(manner) quick
<i>milkolck a rengul</i>	stupid	(heart) dark
<i>mimomkl a rengul</i>	broad-minded	(heart) loosened
<i>moalech a rengul</i>	disappointed	(heart) withered
<i>ngar er a bab a rengul</i>	conceited	(heart) be on top
<i>ngar er a eou a rengul</i>	humble; respectful	(heart) be on bottom
<i>ngmasech a rengul</i>	angry	(heart) climb
<i>oba a rengul</i>	independent	carry (one's heart)
<i>olsarech er a rengul</i>	hold in one's emotions	press down (one's heart)
<i>seitak a rengul</i>	having very high standards	(heart) luxurious
<i>suebek a rengul</i>	worried	(heart) fly
<i>ta a rengrir</i>	agree	(hearts) are one
<i>teloadel a rengul</i>	indecisive	(heart) split
<i>titmekl a rengul</i>	timid	(heart) shrunken
<i>ungil a rengul</i>	glad; kind	(heart) good

TABLE 3.1 A selection of idiomatic ψ-expressions

	SINGULAR	PLURAL	
		INCLUSIVE	EXCLUSIVE
1ST PERSON	<i>renguk</i>	<i>rengud</i>	<i>rengmam</i>
2ND PERSON	<i>rengum</i>	<i>rengmiu</i>	
3RD PERSON [+HUM]	<i>rengul</i>	<i>rengrir</i>	
3RD PERSON [-HUM]	<i>rengul</i>	<i>rengul</i>	

TABLE 3.2 Forms of *reng* inflected for possessor agreement

To give an impression of the range of concepts that are codified using idiomatic ψ -expressions, or ψ -idioms, a selection taken from Josephs's (1990) *New Palaman-English Dictionary* is presented in Table 3.1.

The sentences in (3.1) above already illustrated the possible range of categories that the ψ -predicate can be and give a selection of different types of ψ -arguments. In (3.1a–b), the ψ -predicates are adjectives: *klou* “large” and *mereched* “fast.” In (3.1c), the ψ -predicate is a noun *ralmetaoch* “river that functions as a channel.” And in (3.1d), the ψ -predicate is a causativized verb *olsebek* “make fly (*i.e.*, throw).” (3.1) also illustrates a handful of different types of ψ -arguments, including *cbad* “liver,” *ngor* “mouth,” and *reng* “heart,” which is by far the most commonly used ψ -argument used in ψ -expressions. In fact, Josephs (1990: 289–291) provides an extensive list of over 150 ψ -expressions that include *reng* “heart” as the head N of their ψ -argument DP. The majority of the ψ -expressions cited in this chapter contain *reng*, whose forms inflected for possessor agreement are listed in Table 3.2.

The ψ -argument is optional only in a relative minority of ψ -expressions whose ψ -predicates describe personality traits or mental states that have no independent meaning outside of the ψ -expression. In a sense, then, the optionality of the ψ -argument seems to depend on whether the argument induces a metaphoric extension of the ψ -predicate. To illustrate the distinction, compare (3.3) with (3.4) below. In (3.3a), the ψ -argument *a rengrir* “their hearts” must be present to get the idiomatic meaning of the ψ -expression *kesib a rengul* “be angry.” If there is no ψ -argument following the ψ -predicate, as in (3.3b), only the literal interpretation “sweat” is possible. By contrast, the ψ -argument in the ψ -expression *ngemokel (a rengul)* “be greedy” is optional. The ψ -predicate *ngemokel* already has the meaning “greedy” without the ψ -argument; there is no metaphoric extension of the meaning of the predicate to accommodate the ψ -argument.

- (3.3) a. Ng **kesib a reng-rir** e le a re-me-klou el chad
 3PL.-HUM= sweat D heart-3PLP because D PL-PL-large L people
 a di melekoi.
 TOP just speak
 “They are angry because the adults are all talk (and no action).” (*lit.* “Their hearts are sweating because...”)
 [Tia Belau, 6 April 2009]
- b. Ke mo **kesib** e mo meringel el oureor el
 2SG= AUX.FUT sweat (and AUX.FUT hard L work L
 omek-dubech a dellomel.
 CAU-grow D plants)
 “You will (have to) sweat and work hard to make the plants grow.”
 [Chedaol Biblia, Genesis 3:19]
- (3.4) a. Ng **ngemokel a reng-ul**.
 3SG= greedy D heart-3SGP
 “He is greedy.”
 [Chedaol Biblia, 1 Corinthians 5:11]
- b. Te ko er a **ngemokel** el bilis el diak leturk
 3PL.+HUM= like P D greedy L dogs L NEG 3PLS.IRR-satiated
 a nglemekel-el.
 D desire-3PL.-HUMP
 “They are like greedy dogs that never get enough.”
 [Chedaol Biblia, Isaiah 56:11]

For the time being, I will not be concerned with predicates like *ngemokel a rengul* “be greedy” in (3.4) and instead will focus solely on those like *kesib a rengul* “be angry” in (3.3), whose ψ -arguments are obligatory and create a phrasal, idiomatic ψ -expression with the ψ -predicate. I call the idiomatic ψ -expressions of the type in (3.3a) ψ -idioms to differentiate them from non-idiomatic ψ -expressions, like that in (3.4a).

3.1.1 Ψ -IDIOMS: THE CONTEXT

It is well-known that so-called English VP-idioms like *kick the bucket* and *pull strings* differ as to whether DPs contained within them can be passivized, relativized, modified, pronominalized, and so forth (see *i.a.*, Chafe 1968; Fraser 1970; Swinney and Cutler 1979; Chomsky 1981; Koopman and Sportiche 1991; Nunberg et al. 1994; O’Grady 1998; Richards 2001; Harley 2002; McGinnis 2002; Everaert 2010). For instance, note the contrasts in (3.5) and (3.6).

- (3.5) a. He **pulled** some **strings**. VP PHRASAL IDIOM
 b. **Strings** were **pulled**. PASSIVE
 c. He **pulled** some convenient **strings**. ARGUMENT MODIFICATION
 d. “Amazes me how the old **strings** still **pull**.” MIDDLE
 [E. Annie Proulx, *The Shipping News*, p. 31]
 e. [**strings** [that he hasn’t **pulled** yet]] ARGUMENT RELATIVE
 f. Pull strings? No, he hasn’t **pulled them** yet. PRONOMINALIZATION
 g. **Which strings** did he have to **pull**? *wh*-MOVEMENT
- (3.6) a. He **kicked the bucket**. VP PHRASAL IDIOM
 b. ***The bucket** was **kicked**. PASSIVE
 c. *He **kicked the horrible bucket**. ARGUMENT MODIFICATION
 d. ***[the bucket** [that he hasn’t **kicked** yet]] ARGUMENT RELATIVE
 e. *Kick the bucket? No, he hasn’t **kicked it** yet. PRONOMINALIZATION
 f. ***Which bucket** did he have to **kick**? *wh*-MOVEMENT

Over the last fifty years, idioms have influenced much syntactic argumentation, but discrepancies in the syntactic behavior of superficially similar idioms, like *pull strings* in (3.5) and *kick the bucket* in (3.6), have themselves proven difficult to analyze. A common feature of many proposals is that idioms must satisfy some locality requirement that constrains the relations between their parts, often formalized in structural terms, perhaps in a manner similar to that in (3.7).

- (3.7) IDIOM LOCALITY CONDITION: If X is the minimal constituent containing all the idiomatic material, the head of X is part of the idiom.

[Koopman and Sportiche 1991: 224, ex. 10]

It could be conceivable that the different restrictions on which syntactic operations are permitted to alter the structure associated with component parts of the phrasal idiom might arise from differences in when particular idioms must satisfy a locality constraint like that in (3.7). For instance, one can imagine an analysis in the Government-and-Binding framework (Chomsky 1981, 1982) in which *pull strings* must only satisfy locality at D-structure, while *kick the bucket* must satisfy locality both at D-structure and at S-structure. Or in Relational Grammar (Perlmutter 1980, 1983; Perlmutter and Rosen 1984; Perlmutter and Joseph 1990; Blake 1990), the idiomatic interpretation of *pull strings* might be assigned on the initial stratum, but the idiomatic interpretation of *kick the bucket* might be assigned on the final stratum.

The class of Palauan idiomatic ψ -expressions seems to share a common schema: [ψ -PREDICATE] + ψ -ARGUMENT + POSSESSOR. If the argument of an idiomatic ψ -predicate is not a ψ -argument, only the literal interpretation of the predicate is available. In (3.8) through (3.10) below, the (a) examples illustrate the literal meanings of the predicates, while the (b) examples show how they combine with ψ -arguments to form phrasal idioms.

- (3.8) a. Ak **suebek** el mo cheroid e olengull.
 ISG= INTR.fly L go far and rest
 “I would fly away and find rest.” [Chedaol Biblia, Psalms 55:6]
- b. Ng kmal **suebek a reng-uk** el dikea le-sebech-ek el
 3SG= very INTR.fly D heart-ISGP L no.longer 3SG.IRR-ability-ISGP L
 mangedecheduch.
 speak.IMPF
 “I am so worried that I cannot speak.” (*lit.* “My heart is flying so much that I cannot speak any longer.”) [Chedaol Biblia, Psalms 77:4]
- (3.9) a. Ng **klou** el beluu el diak a dibus er ngii.
 3SG= large L country L not.exist D lacking P there
 “It is a big country; it has everything a person could want.”
 [Chedaol Biblia, Judges 18:10]
- b. A **klou a reng-ul** a kuk ungil er a mesisiich el chad.
 D big D heart-3SGP TOP by contrast good P D strong L person
 “It is better to be patient than powerful.” (*lit.* “(One) whose heart is big is better than a strong person.”) [Chedaol Biblia, Proverbs 16:32]
- (3.10) a. Ak **ngmasech** el mo er a chetebt-el a eabed.
 ISG= INTR.climb L go P D tops-3PLP D clouds
 “I will climb to the tops of the clouds.” [Chedaol Biblia, Isaiah 14:14]
- b. A Rubak a diak di le-mereched el **ngmasech a reng-ul**.
 D Lord TOP false just 3SG.IRR-fast L INTR.climb D heart-3SGP
 “The Lord does not easily become angry.” (*lit.* “As for the Lord, his heart does not climb fast.”) [Chedaol Biblia, Nahum 1:3]

While the possessor of the ψ -argument is relatively free to participate in syntactic operations that will separate it (hierarchically and/or linearly) from the ψ -predicate and the possessed ψ -argument DP — *e.g.*, the topicalization of the possessor *a Rubak* “the Lord” in (3.10b) — we will see that the ψ -argument DP itself is more restricted in terms of its position in the syntax. In descriptive terms, the

ψ -argument must always immediately follow the ψ -predicate, while the possessor of the ψ -argument may be manipulated freely by whatever syntactic operations are able to target it. The question is how to formalize this constraint on locality between the ψ -predicate and its ψ -argument and determine at what point of the derivation it must apply. Two types of locality constraints are considered.

The first locality constraint is defined structurally in (3.11) and is similar in spirit to Koopman and Sportiche's Idiom Locality Condition in (3.7). The second is a fairly radical type of locality constraint that does not apply to structure, but to the linearized string of morphophonological material (*i.e.*, after Spell Out and Linearization; this constraint is defined in (3.12).

- (3.11) STRUCTURAL LOCALITY CONSTRAINT ON Ψ -IDIOMS: The head $N/\sqrt{\text{ROOT}}$ of the ψ -argument DP must be dominated by the maximal projection of the head $(V, A, N, \sqrt{\text{ROOT}})$ of the ψ -predicate at some given point in the derivation.
- (3.12) STRING LOCALITY CONSTRAINT ON Ψ -IDIOMS: The morphological exponent of an idiomatic ψ -predicate's head $(V, A, N, \sqrt{\text{ROOT}})$ must *minimally precede* the exponent of the head $N/\sqrt{\text{ROOT}}$ of the ψ -argument in the linearized string of morphemes (*i.e.*, in the post-syntactic grammar).
- (3.13) (RELATIVIZED) MINIMAL PRECEDENCE: Once lexical material⁶¹ has been inserted and linearized in the post-syntactic grammar, X *minimally precedes* Y iff X precedes Y in the linearized string and there is no Z such that
- (i) Z is the exponent of a morpheme of the same type⁶² as the morpheme whose exponent is X , and
 - (ii) Z intervenes between X and Y in the linearized string.

The choice between (3.11) and (3.12) is not an arbitrary one, as will be shown in the following sections. Each of the two constraints on locality comes with its own implications for other aspects of the grammar. For instance, even though the structural constraint in (3.11) aligns more closely with other analyses of the locality conditions on phrasal idioms in other languages, adopting the constraint in (3.11) forces us to assume that movement of subject DPs to the specifier of TP is optional, given the behavior of ψ -idioms embedded under raising predicates in §3.2.2. And while the

⁶¹ *I.e.*, the Vocabulary Items of Distributed Morphology, or perhaps the words constructed by the post-syntactic lexicon in Anderson's (1992) theory of A-Morphous Morphology.

⁶² One way of formalizing the notion of *same type* is by referring to the syntactic category labels of the morphemes that are being spelled out morphologically. Depending on the theory, the class of structural types might include elements like, *e.g.*, $D, v, \sqrt{\text{ROOT}}, T$, etc.

post-syntactic string locality constraint in (3.12) is more radical in nature, it makes particular predictions about the semantic relations between phrasal ψ -idioms of different categories that do not necessarily have the same structural configurations as canonical “predicate–argument” ψ -idioms, such as nominalizations and compound nominals, as is shown in §3.3.2.

Given what is known about the composition of phrasal idioms cross-linguistically, the string locality constraint in (3.12) is somewhat unconventional, as it refers to the linear order of pronounced morphemes rather than hierarchical syntactic structure. However, the relation it depends on, *(Relativized) Minimal Precedence* in (3.13), bears a striking resemblance to a structural condition that has received vast amounts of cross-linguistic empirical support — Rizzi’s *Relativized Minimality Condition* (Rizzi 1990, 2001), given in (3.14).

- (3.14) RELATIVIZED MINIMALITY CONDITION: Y is in a Minimal Configuration with X iff there is no Z such that
- (i) Z is of the same structural type as X, and
 - (ii) Z intervenes between X and Y. [Rizzi 2001: 90, ex. 4]

In some sense, *(Relativized) Minimal Precedence* is simply a subtype of Rizzi’s *Relativized Minimality* that has been applied to a new domain, the string of morphophonological material that is the output of whatever linearization algorithm converts the hierarchical structure produced by the narrow syntax into a string (possibly something along the lines of what has been proposed for English by Fox and Pesetsky 2005, among others). The key difference between the condition I have proposed in (3.13) and Rizzi’s *Relativized Minimality Condition* in (3.14) is the notion of what it means to “intervene.” As Rizzi’s *Relativized Minimality Condition* is generally adopted to describe relations between elements in hierarchical syntactic structure, the notion of “intervention” is usually formalized as some version of c-command (Reinhart 1976: 32, ex. 36; cf. Reinhart 1983: 41, ex. 36 and much subsequent work) like (2.42) in Chapter 2. For *Minimal Precedence*, the notion of c-command is irrelevant, as the condition holds after hierarchical structure has been converted into a linear string; as a consequence, the relevant notion of “intervention” is one of precedence rather than c-command.

If it turns out that the structural locality constraint in (3.11) must be rejected in favor of the string locality constraint in (3.12), then we have further evidence that constraints on the locality of component parts of a phrasal idiom can apply not only at different stages of the derivation in the narrow syntax, but also in the post-syntactic component of the grammar. If the analysis is correct, then we also have evidence that Rizzi’s *Relativized Minimality Condition* can be adapted and expanded to constrain precedence relations among morphophonological exponents

of syntactic material in the post-syntactic component, possibly along the lines of the condition in (3.13). It is the goal of the following sections to examine the behavior of ψ -idioms to weigh the pros and cons of adopting either of the two locality constraints in (3.11) and (3.12).

3.1.2 ACCUSATIVE ψ -ARGUMENTS AND (NON-)INCORPORATION

The data examined in the following sections yields a pattern showing that in A' dependencies and structures that result from applications of A-movement, a ψ -argument cannot appear in any position that does not immediately follow its selecting ψ -predicate, but the possessor of a ψ -argument can appear in nearly any position in which it can be licensed syntactically. It is quite natural to wonder whether an analysis involving either incorporation (in the sense of Baker 1988) or pseudo-incorporation (in the sense of Massam 2001, 2009) of the ψ -argument into the ψ -predicate might explain the cases of apparently obligatory possessor ascension in the A' dependency constructions in §3.2.1 and the raising constructions in 3.2.2. Before going through the key data, some of which is quite subtle, I think that it's worthwhile to take a moment to argue against an analysis of this sort to eliminate potential confusion as the chapter progresses. Importantly, the phenomenon of Palauan possessor ascension was analyzed in Chapter 2 as extraction of the possessor from the specifier of a DP to satisfy an [EPP] feature on finite T, moving the possessor to the specifier of TP. But possessor ascension might also be the result of optional incorporation of the ψ -argument into the predicate, which could leave the possessor as the only true DP argument of the compound predicate. For much of the data in §3.2.1–3.2.2, this analysis might work. But once we move beyond intransitive ψ -expressions, the morphosyntactic realizations of ψ -arguments with structural Accusative Case seriously undermine the plausibility of an incorporation analysis, since incorporation is assumed to absorb the Case-licensing requirements of the incorporee (Baker 1988 *et seq.*).

It is fairly straightforward to see why the very tight syntactic relationship between a ψ -predicate and a ψ -argument cannot always be assumed to establish via (pseudo-)incorporation. First of all, we have seen that when the ψ -argument immediately follows the ψ -predicate, the subject agreement does not necessarily match the features of the possessor, for instance in (3.3a), repeated below.

- b. Tia a me-kngit el ngar er a med-al a Rubak e mo
 this TOP INTR-bad L be P D eyes-3SGP D Lord and AUX.FUT
o-ngesech-ii a **reng-ul**.
 CAU-climb.PF-3SGO D heart-3SGP
 “This is evil in the Lord’s sight, and it will make him angry.” (*lit.* “...and
 will make his heart climb.”) [Chedaol Biblia, Deuteronomy 4:25]

In (3.1c) and (3.15), the ψ -predicates are transitive verbs in their perfective forms and correspondingly agree with their direct objects. In (3.15b) we can’t be sure whether the verb *ongesechii* “make climb” agrees with the entire ψ -argument or just its possessor since both are 3SG, but in (3.1c) and (3.15a), the verbs *osebekii* “make fly” and *kilungii* “made big” clearly agree with the full ψ -argument DPs and not simply their possessors.

In fact, object agreement with the possessor of a direct object ψ -argument is fully ungrammatical. Note how (3.1c) and (3.15a) contrast with (3.16a–b) below.

- (3.16) a. *L-ak bechi-titerir a re-mekngit el chad me
 3SGS.IMP-NEG let.PF-3PLO D PL-evil L people so.that
l-o-sebek-au [a **reng-um** *pro*] *pro*.
 3SGS.IRR-CAU-fly.PF-2SGO [D heart-2SGP you] they
 (“Don’t let evil people worry you.”)
- b. *A di **k-ki/u-ngak** a **reng-uk** el telkib el
 D just ISGS.IRR-PAST.enlarge.PF-ISGO D heart-ISGP L little.bit L
 meketeket e...
 spend.time then...
 (“Whenever I was just patient and waited for a little while, then...”)

I suggest that one way to analyze the apparently obligatory object agreement with the full ψ -argument is to think of it as a direct consequence of the analysis of possessor ascension as being driven exclusively by an [EPP] feature on finite T. Specifically, possessor ascension turns possessors into *subjects*, by agreeing with them and raising them to the specifier of TP. That is, finite T is directly responsible for the structural separation of the possessor DP and the possessee DP it originates in. As there is no [EPP] feature on transitive *v* (or, perhaps, any head at all between T and the direct object), there is nothing to drive a similar extraction of the possessor from a direct object DP. The possessor remains inside the larger possessee DP it is base-generated in, perhaps licensed with structural Genitive Case by moving to the specifier of DP along the lines of Figure 2.9 on page 80.

On Baker’s (1988) analysis of incorporation, arguments of a predicate can be

licensed either by Case or by incorporation. If the ψ -argument were incorporated, it would not need Case, and its possessor should just as easily be able to be licensed with Accusative Case as with Nominative Case, contrary to fact. Regardless of the analysis, the data in (3.1c) and (3.15a) contrasts with (3.16a–b) in a way that strongly suggests that no part of the ψ -argument incorporates into the predicate. If this were the case, we might expect possessor ascension to create both subjects and direct objects — if not because of the EPP, then because it would be the only remaining DP in the c-command domain of transitive v . If object agreement on perfective verbs is the morphological reflex of structural Accusative Case, as was proposed in §2.2.2 and §2.2.5.2, and object agreement indexes the features of the entire ψ -argument DP and not simply its possessor, then it would appear that the entire ψ -argument is just that — a core argument of the predicate. The point is that this DP is licensed by Case and not by incorporation.

The facts are confirmed in sentences containing imperfective forms of transitive ψ -predicates. As we saw in §2.2, structural Accusative Case is registered morphologically with a case marker *er* on the dependent (direct object) DP, but only if the DP is either human or both singular and specific. In (3.17) below, we can see that it is the features of the entire ψ -argument DP (and not its possessor) that determine whether structural Accusative Case is realized as *er* or \emptyset .

- (3.17) a. A David a **mi/subed** a **reng-rir** a reched-al
 D David TOP PAST.inform.IMPF D hearts-3PL.+HUMP D men-3SGP
 el kmo ng kmal diak le-kir-ir el oldechelakl
 L C 3SG= very NEG 3SGS.IRR-obligation-3PLP L fight.IMPF
 er a Saul.
 ACC D Saul
 “David convinced his men that they should not attack Saul.”
[Chedaol Biblia, 1 Samuel 24:7]
- b. Rechedam me a rechedil, l-ak **m-ole-ngasech**
 father and D mothers, 3SGS.IRR-NEG 2PLS.IRR-CAU-climb.IMPF
 a **reng-rir** a rengelek-iu.
 D hearts-3PL.+HUMP D children-2PLP
 “Parents, do not treat your children in such a way as to make them an-
 gry.”
[Chedaol Biblia, Ephesians 6:4]

In both sentences in (3.17), the absence of the accusative case marker *er* after the ψ -predicates suggests that the ψ -argument DPs themselves, and not their possessors, are being treated as direct objects of the predicates. If the ψ -arguments were incorporated into the predicates and the possessors in (3.17) ascended to become

direct objects, we should expect to find an overt accusative case marker *er* in both sentences. In (3.17), the possessors of the ψ -arguments are *a rechedal* “his men” and *a rengelekiu* “your children,” respectively, which (as human direct objects) should be marked with the overt case marker *er*, but they are not. If the ψ -arguments themselves are direct objects, then the absence of *er* is expected in both sentences. Interestingly, when the ψ -argument is singular, it is regularly (and obligatorily) marked with *er* when it occupies direct object position, *e.g.*, in (3.18).

- (3.18) a. ...ng mi/lekoi a Charlotte el ko er a **melisiich** er
 ...3SG= PAST.speak D Charlotte L like P D strengthen.IMPF ACC
 a **reng-ul** a Wilbur.
 D heart-3SGP D Wilbur
 “...said Charlotte, to sort of give Wilbur courage.” (*approx.* “...to strengthen Wilbur’s heart.”) [CB 81]
- b. *...ng mi/lekoi a Charlotte el ko er a **melisiich** a
 ...3SG= PAST.speak D Charlotte L like P D strengthen.IMPF D
reng-ul a Wilbur.
 heart-3SGP D Wilbur
 (“...said Charlotte, to sort of give Wilbur courage.”)

In short, Palauan possessor ascension seems to only be able to promote possessors to become subjects and not direct objects. An analysis in which possessor ascension is the result of (optional) incorporation of material from within the ψ -argument DP bears the burden of explaining why the incorporation can only occur if the promoted possessor DP later becomes a subject. In the syntactic framework I assume, this is a standard Look Ahead problem; *i.e.*, the application of incorporation would only yield a grammatical configuration if an external argument DP is not later introduced by transitive *v*. The analysis that I proposed in Chapter 2, in which possessor ascension to subject is driven by the [EPP] feature on finite T, does not face this problem. It also has independent empirical support from biclausal raising-to-subject constructions and can be extended to cover cases of possessor ascension which probably do not involve incorporation, such as in existentials. In short, possessor ascension is not a consequence of incorporation, and assuming incorporation makes the wrong predictions for case-marking and agreement patterns in (3.1c) through (3.18).

3.2 THE SYNTAX OF ψ -IDIOMS

3.2.1 A' DEPENDENCIES AND ψ -IDIOMS

Recall that in §1.2.2.4, I summarized Georgopoulos's (1985, 1991b) extensive and persuasive arguments that Palauan A' dependencies are not created by movement. Instead, Georgopoulos proposes an analysis in which the displaced element is base-generated in an A' position and binds a resumptive pronoun in an A position. In Palauan, topicalization (as well as other A' processes like clefting, relativization, etc.) generally can target either a possessor DP embedded within the larger possessed DP, as in (3.19), or the full DP containing the embedded possessor DP, as in (3.20) (see Capell 1949; Josephs 1975; Georgopoulos 1985, 1991b for details).

(3.19) a. TOPICALIZATION OF POSSESSOR:

El le [a rechad]_i a diak l-sal mellomes [a
 Because [D people] TOP NEG 3PLS.IRR-very light [D
 reng-rir ______i] el ua a recharm.
 heart-3PLP <GAP>] L like D animals
 "Because humans aren't as smart as animals." [CB 88]

b. *wh*-QUESTION (CLEFT) OF POSSESSOR:

Ng **techa**_i [a l-onguiu [a buk er **ngii**_i] tirke el
 3SG= who? [D 3PLS.IRR-read.IMPF [D book P him/her] those L
 ngalek]?
 children]
 "Whose book are those kids reading?" (*lit.* "Who_i are those kids reading
 ______i's book.") [Georgopoulos 1991b: 71, ex. 21b]

c. RELATIVIZED POSSESSOR (RESTRICTIVE):

Ng mo osisiu a omerel-lel el mo er [**tirke el rokui**]_i el
 3SG= AUX.FUT same D action-3SGP L go P [those L all] L
 kau a mo soiseb el mo melai a belu-rir
 you TOP AUX.FUT INTR.enter L AUX.FUT take.IMPF D land-3PLP
 ______i.
 <GAP>
 "He will do the same to everyone else whose land you invade."
 [*Chedaol Biblia*, Deuteronomy 3:21]

(3.20) a. TOPICALIZATION OF POSSESSED DP:

[A omerkol-ir *pro*]_i a b/ok el debull ______i.
 [D throat-3PLP them] TOP RES.open L graves

“Their words are full of deadly deceit.” (*lit.* “Their throats are exhumed graves.”) [Chedaol Biblia, Romans 3:13]

b. *wh*-QUESTION (CLEFT) OF POSSESSED DP:

Ng [techa el chelid er tir]_i [a sebech-el ______i el
 3SG= [who? L gods P them] [D ability-3PLP <GAP> L
 du-lii a kir-el a ngar er a med-ad el sils?
 tell.PF-3SGO D business-3SGP D be P D face-IPL.INCP L days

“Which of their gods can predict the future?” [Chedaol Biblia, Isaiah 43:9]

c. RELATIVIZED POSSESSED DP (NON-RESTRICTIVE):

Ak mo ngoi-titerir el mes-terir [a recherro-ir
 ISG= AUX.FUT take.PF-3PLO L give.PF-3PLO [D enemies-3PLP
pro]_i, el tirke el so-rir el omek-oad er tir
 them], L those L desire-3PLP L CAU-die.IMPF ACC them
 ______i.
 <GAP>

“I will hand them over to their enemies, who want to kill them.”

[Chedaol Biblia, Jeremiah 34:20]

The data in (3.20) and (3.19) illustrates the general availability of nearly any DP to participate in an A'-dependency. In each of the sentences in (3.20), the entire possessed DP is targeted, while in (3.19), only the possessor is targeted.

Now, an interesting restriction surfaces when the possessed DP serves as the ψ -argument of an idiomatic ψ -predicate. In such cases, A' dependencies may target *only* the possessor located inside the ψ -argument DP; they may not involve the entire ψ -argument DP. There are at least two ways to view this restriction. If we assume the structural locality constraint in (3.11), then the ban on entire ψ -arguments participating in A' dependencies might fall out from Georgopoulos's analysis of A' dependencies as base-generated variable-binding configurations (Georgopoulos 1985, 1991b). If Georgopoulos is right, there is no ψ -argument in the relevant position following the ψ -predicate, but rather a resumptive pronoun bound by the ψ -argument. And if we assume the string locality constraint in (3.12), the ban against ψ -arguments in A' dependencies derives from the displacement of the ψ -argument to a position in which it does not immediately follow the ψ -predicate — it makes no difference if the displacement results via base-generation or movement.

First consider (3.21) and (3.22), which involve topicalization.

- (3.21) a. TOPICALIZATION OF POSSESSOR OF ψ -ARGUMENT:
 [A Peter]_i a m/o **suebek** [a **reng-ul** _____]_i.
 [D Peter] TOP PAST.become INTR.fly [D heart-3SGP <GAP>]
 “Peter became worried.”
 (*approx.* “As for Peter, his heart started flying.”) [KN 26]
- b. TOPICALIZATION OF ENTIRE ψ -ARGUMENT:
 * [A **reng-ul** [a Peter]]_i a m/o **suebek** ______i
 [D heart-3SGP [D Peter]] TOP PAST.become INTR.fly <GAP>
 (“Peter became worried.”)
 (*approx.* “As for Peter’s heart, it started flying.”)
- (3.22) a. TOPICALIZATION OF POSSESSOR OF ψ -ARGUMENT:
 [A re-ungil el chad]_i a **ungil** [a **reng-rir** _____] ... er
 [D PL-good L people] TOP good [D heart-3PLP <GAP>] ... P
 se el l-es-eterir a re-mekngit el o-bals.
 that.(time) L 3PLS.IRR-see.PF-3PLO D PL-bad L INTR-punish
 “Good people are glad ... when they see the wicked punished.”
 (*approx.* “As for good people, their hearts are good when they see the
 bad (one)s punished.”) [Chedaol Biblia, Job 22:19]
- b. TOPICALIZATION OF ENTIRE ψ -ARGUMENT:
 * [A **reng-rir** [a re-ungil el chad]]_i a **ungil** ______i ... er
 [D heart-3PLP [D PL-good L people]] TOP good <GAP> ... P
 se el l-es-eterir a re-mekngit el o-bals.
 that.(time) L 3PLS.IRR-see.PF-3PLO D PL-bad L INTR-punish
 (“Good people are glad ... when they see the wicked punished.”)
 (*approx.* “As for good people’s hearts, they are good when they see the
 bad (one)s punished.”)

In (3.21a) and (3.22a), the ability of possessors to participate in A' dependencies is once again exploited, and the possessors of the ψ -argument DPs are topicalized, like the possessor topicalization we saw above in (3.19a). However, unlike the topicalized possessed DP in (3.20a), the ψ -argument DPs in (3.21b) and (3.22b) yield ungrammaticality on the idiomatic interpretations of the ψ -predicates *suebek* and *ungil*, respectively. That is, (3.21b) is only grammatical on the irrelevant literal interpretation that asserts that a physical heart is actually flying (not that somebody is worrying), and (3.22b) can likewise only mean that physical hearts are good (not that people are glad). Note the relative positioning of the ψ -predicates (*suebek* and *ungil*) and the ψ -arguments (*rengul* and *rengrir*); in the grammatical (a) sentences,

the ψ -predicate appears right before the ψ -argument, while in the ungrammatical (b) sentences, the topicalization operation forces the ψ -argument to be pronounced much earlier, before the ψ -predicate.

Similar patterns emerge when other A' dependencies are taken into consideration. For instance, consider the clefts in (3.23) through (3.25).

(3.23) a. CLEFT OF POSSESSOR OF ψ -ARGUMENT:

Ng del-ak_i [el me-chas [a reng-ul ______i] er a
 3SG= mother-ISGP [L PASS-blacken [D heart-3SGP <GAP>] P D
 teng er ngak].
 grades P me]

“It’s my mother who is astonished at my grades.”

(*approx.* “It’s my mother whose heart is charred by my grades.”)

b. CLEFT OF ENTIRE ψ -ARGUMENT:

*Ng [reng-ul [a del-ak _____]_i] [el me-chas ______i er
 3SG= [heart-3SGP [D mother-ISGP _____]] [L PASS-blacken <GAP> P
 a teng er ngak].
 D grades P me]

“It’s my mother who is astonished at my grades.”

(*approx.* “It’s my mother’s heart that is charred by my grades.”)

(3.24) a. *wh*-QUESTION (CLEFT) OF POSSESSOR OF ψ -ARGUMENT:

Ng ko el techa_i [a mellomes [a reng-ul ______i] [el
 3SG= like L who? [D light [D heart-3SGP <GAP>] [L
 sebec-el el mechur a eabed, e okellakl me
 ability-3SGP L count.PF D clouds and hold.at.angle.PF so
 ng ruebet a chull]?
 3SG= INTR.fall D rain]

“Who is wise enough to count the clouds and tilt them over to pour out the rain?”

(*approx.* “The (one who)se heart is light for his/her ability to count the clouds and hold them at an angle so that the rain falls is like who?”)

[*Chedaol Biblia*, Job 38:37]

b. *wh*-QUESTION (CLEFT) OF ENTIRE ψ -ARGUMENT:

*Ng ko el [reng-ul [techa]]_i [a mellomes _____]_i [el
 3SG= like L [heart-3SGP [who?]] [D light <GAP>] [L
 sebech-el el mechur a eabed, e okellakl me
 ability-3SGP L count.PF D clouds and hold.at.angle.PF so
 ng ruebet a chull]?
 3SG= INTR.fall D rain]

(“Who is wise enough to count the clouds and tilt them over to pour out the rain?”)

(*approx.* “The (one that) is light for his/her ability to count the clouds and hold them at an angle so that the rain falls is like whose heart?”)

(3.25) a. (FREE RELATIVE BASED ON) CLEFT OF POSSESSOR OF ψ -ARGUMENT:

Ng techa a mo o-diu-r a reng-uk, a
 3SG= who? D become CAU-happy.PF-3SGO D heart-ISGP, D
 l-ak le-kemiu_i [el bla k-temall
 3SGS.IRR-NEG 3SGS.IRR-you.PL [L IRR.AUX ISGS.IRR-injure.PF
 [a reng-miu _____]_i]].
 [D hearts-2PLP <GAP>]]

“Who would be left to cheer me up? Only the very persons I had made sad.”

(*approx.* “It is who that is the (one who) will make my heart happy? The (ones who) are not you, who I have injured ’s hearts.”)

[*Chedaol Biblia*, 2 Corinthians 2:2]

b. (FREE RELATIVE BASED ON) CLEFT OF ENTIRE ψ -ARGUMENT:

*Ng techa a mo o-diu-r a reng-uk, a
 3SG= who? D become CAU-happy.PF-3SGO D heart-ISGP, D
 l-ak [le-reng-miu *pro*]_i [el bla
 3SGS.IRR-NEG [3SGS.IRR-hearts-2PLP you.PL] [L IRR.AUX
 k-temall _____]_i].
 ISGS.IRR-injure.PF <GAP>]]

(“Who would be left to cheer me up? Only the very persons I had made sad.”)

(*approx.* “It is who that is the (one who) will make my heart happy? The (ones who)se hearts are not yours, who I have injured.”)

The exact same pattern emerges with the clefts in (3.23) through (3.25) as we saw

above with topicalizations. The cleft construction forces the clefted nominal into main predicate position, and since Palauan is VOS (or, more precisely, Predicate-(Object)-Subject; see Waters 1980 and Georgopoulos 1986), any clefting of the ψ -argument will cause it to appear in a position to the left of the ψ -argument, which will be left in the relative clause component of the cleft construction. When the clefted nominal is the possessor of the ψ -argument as in the (a) sentences, the relative positioning of the ψ -predicate and the ψ -argument is not disrupted, linearly or hierarchically. The sentences are thus grammatical on the idiomatic reading of the ψ -expressions: *mechas* in (3.23a) means “astonished” and not “charred,” *mellomes* in (3.24a) means “wise” and not “light,” and *temall* in (3.25a) means “make sad” and not “injure.” However, if the entire ψ -argument is clefted as in the (b) sentences, it must appear earlier in the sentence, and it is pronounced before the ψ -predicate. Again, the data in (3.19) and (3.20) reveals that both options should be possible, but in the case of ψ -expressions that are phrasal idioms they just aren’t — the only possible option is to cleft the possessor. In the grammatical (a) sentences, the (head of the) ψ -predicate minimally precedes the (head of the) ψ -argument based on the definition in (3.13), and the ψ -argument seems to occupy a position within the larger ψ -predicate XP. In the ungrammatical (b) sentences, the ψ -predicate does not precede the ψ -argument at all, and if Georgopoulos is right, a resumptive pronoun appears in the position that should be occupied by the ψ -argument.

Relative clause formation reveals a similar pattern. Possessors of ψ -arguments can be freely relativized, but relativizing the full ψ -argument DPs completely destroys the idiomatic reading of the ψ -expression.

(3.26) a. RELATIVIZED POSSESSOR OF ψ -ARGUMENT (NON-RESTRICTIVE):

E ng mla er ngii [a chebuul el chad_i [el kiliei er ngii
and 3SG= was P there [D poor L man [L PAST.live P it
el beluu ______i]]_j [el kmal mle **mellomes** [a
L town <GAP>]] [L so.much AUX.PAST light [D
reng-ul ______j] me ng mle sebec-el el
heart-3SGP <GAP>] so.that 3SG= AUX.PAST ability-3SGP L
o-sebel-ii a beluu], e ng di dim/ak
CAU-survive.PF-3SGO D town], but 3SG= just PAST.not.exist
a l-lotk-ii ngii el chebuul el chad.
D 3PLS.IRR-think.about.PF-3SGO him L poor L man
“Someone lived there who was poor, but so clever that he could have
saved the town. But no one thought about him.”
(*approx.* “And there was a poor man who lived in that village whose
heart was so light that it was his ability to make the town survive, but

there wasn't a(nyone who) thought about him.”)

[*Chedaol Biblia*, Ecclesiastes 9:15]

b. RELATIVIZED ENTIRE ψ -ARGUMENT (NON-RESTRICTIVE):

*E ng mla er ngii [a **reng-ul** [a chebuul el chad; [el
 and 3SG= was P there [D heart-3SGP [D poor L man [L
 kiliei er ngii el beluu _____i]]]j [el kmal mle
 PAST.live P it L town <GAP>]]] [L so.much AUX.PAST
mellomes _____j me ng mle sebec-el el
 light <GAP> so.that 3SG= AUX.PAST ability-3SGP L
 o-sebel-ii a beluu].
 CAU-survive.PF-3SGO D town].

(“Someone lived there who was poor, but so clever that he could have saved the town.”)

(*approx.* “And there was a poor man who lived in that village whose heart was so light that it was his ability to make the town survive.”)

(3.27) a. RELATIVIZED POSSESSOR OF ψ -ARGUMENT (RESTRICTIVE):

A president a **ngilai** a **reng-rir** a [rechad er a
 D president TOP PAST.obtain.PF D heart-3PLP D [people P D
Olbiil er a Kelulau]i [el mle **kedidai** a **reng-rir**
 House P D Whispers] [L AUX.PAST high D heart-3PLP
 _____i].
 <GAP>]

“The president persuaded the senators that were being stubborn.”

(*lit.* “The president obtained the hearts of the senators that had high hearts.”)

b. RELATIVIZED ENTIRE ψ -ARGUMENT (NON-RESTRICTIVE):

*A president a **ngilai** a [reng-rir [a rechad er a
 D president TOP PAST.obtain.PF D [heart-3PLP [D people P D
Olbiil er a Kelulau]]]i [el mle **kedidai** _____i].
 House P D Whispers]]] [L AUX.PAST high <GAP>]

(“The president persuaded the senators that were being stubborn.”)

(*lit.* “The president obtained the senators’ hearts that were high.”)

The ungrammaticality of the sentence in (3.26b) can be explained in the same terms as the bad topicalizations and clefts in the (b) sentences in (3.21) through (3.25): relativization of the ψ -argument creates a gap or resumptive pronoun in the relative

clause in the position that must be occupied by a ψ -argument to satisfy one of the two locality constraints in (3.11) and (3.12).

The contrast between the sentences in (3.27), on the other hand, illustrates a new fact. These sentences contain two ψ -idioms. The first is transitive, and the ψ -argument *a rengrir a rechad er a Olbiil er a Kelulau* “the hearts of the senators” is treated grammatically as the direct object of the perfective verb *ngilai* “obtain,” which is the first of the two ψ -predicates in the sentence. In (3.27a), the possessor of the ψ -argument, *a rechad er a Olbiil er a Kelulau* “the senators” is relativized, and the relative clause contains a second ψ -predicate *kedidai* “high” with its own ψ -argument *a rengrir* “their hearts.” Since the A' gap in the relative clause is in the position of the possessor of the ψ -argument, the ψ -predicate minimally precedes the ψ -argument (which occupies a position within the ψ -predicate XP), and the sentence is grammatical.

In (3.27b), by contrast, the entire ψ -argument, *a rengrir a rechad er a Olbiil er a Kelulau* “the senators’ hearts” is relativized. Nothing in the word order changes between (3.27a) and (3.27b) — the only difference is that the A' gap in the relative clause is in subject position, where a ψ -argument should be located in order for the idiomatic interpretation to be available. In morphophonological terms, *a rengrir* has simply been omitted from the relative clause. As a result, the sentence becomes ambiguous on two different irrelevant interpretations (neither of which corresponds to that of the idiomatic ψ -expression): one in which the physical hearts of the senators are high and another in which the senators themselves are high. On neither interpretation can the second ψ -predicate *kedidai* “high” take on its idiomatic meaning “stubborn” because of the position of the gap in the relative clause.

At this point, there are several issues that merit some consideration. The general pattern that emerges from the data in this section is that phrasal idioms that include a ψ -predicate with a ψ -argument appear to require some sort of adjacency between them. Possessor DPs from inside a ψ -argument may be displaced, but the entire ψ -argument DP may not. Given the two locality constraints proposed above, *i.e.*, the structural locality constraint in (3.11) and the string locality constraint in (3.12), we have two different ways to understand this generalization about ψ -idioms and A' dependencies.

Recall that on Georgopoulos’s analysis, this displacement is not the result of movement, as A' dependencies are base-generated. Instead, what might, in various frameworks, be called the “base position,” “ θ position,” or “tail of an A' chain” is occupied by a resumptive pronoun that is bound by a full DP merged in some higher A' position in the structure. If Georgopoulos’s analysis is correct, then in the ungrammatical (b) sentences in (3.21) through (3.27), the ψ -predicates that should be interpreted idiomatically are never in a local relation with a true ψ -argument

at any stage of the derivation — only a resumptive pronoun (null or overt) that is co-indexed with a ψ -argument DP.

It would thus seem that Georgopoulos's analysis of A' dependencies as resumption delivers a tailor-made analysis of the differences in grammaticality between the (a) and (b) sentences in (3.21) through (3.27) that does not depart from most standard analyses of locality constraints between idiomatic predicates and their other subcomponents, perhaps along the lines of (3.7) or (3.11). If the idiomatic predicate's maximal projection must contain the rest of the subcomponent parts of the idiom at deep structure or initial merge, we might be able to make sense of the patterns in (3.21) through (3.27), and there would be no need to posit an additional string-adjacency constraint that holds after linearization like (3.12), which is based on (Relativized) Minimal Precedence as defined in (3.13).

Nonetheless, we will see in the next section that a structural-based analysis faces additional challenges and forces us to adopt particular assumptions about subject movement which may or may not stand up to empirical scrutiny.

3.2.2 POSSESSOR ASCENSION, RAISING, AND ψ -IDIOMS

In the theory of subjecthood in Palauan that was developed in Chapter 2, §2.1, some of the primary elements of argumentation were based on data that suggested that Palauan clauses have subjects. I analyzed subjects as DPs that occupy the specifier of TP, and these TPs are the source of φ -feature sharing if T is finite. As we saw in Chapter 2, [PREDICATE + ARGUMENT] combinations that allow possessor ascension generally do not require it — the option for the possessor to remain within the possessed DP has, thus far, always been a possibility. Φ -feature sharing, which by hypothesis is triggered by whichever DP is in the specifier of finite T, can be triggered by either the possessor or the entire possessed DP. Up to this point, movement of subjects to the specifier of TP was assumed to apply to any DP that also triggers subject agreement morphology. In this section, however, it will be shown that in order to adopt the structural locality condition on ψ -idioms in (3.11) rather than the string locality condition in (3.12), this theory of subject movement must be relaxed in order to account for the patterns in the data below. In other words, assuming the structural locality constraint in (3.11) seems to entail assuming that subject movement is optional and long-distance agreement can occur, whereas assuming the string locality constraint in (3.12) allows us to retain the notion that subject movement is obligatory, and that some version of the EPP holds, as in (2.7).

In ψ -idioms, which involved possessed DP ψ -arguments, subject agreement morphology can be triggered by entire ψ -argument DPs, taking the form *ng* as in (3.28). *Ng* appears when the subject is either a non-human plural or when it is singular (human or non-human). Thus, all ψ -arguments (which are uniformly non-

human) should trigger the *ng* morpheme as the subject marker whether they are singular or plural. However, in (3.29), subject agreement clearly targets the possessors of the ψ -argument DPs, whose head nouns bear matching possessor agreement morphology. That the possessors in (3.28), by contrast, do not ascend to subject position is suggested by the fact that the possessor agreement does *not* match the subject agreement in (3.28).

(3.28) SUBJECT AGREEMENT WITH ENTIRE ψ -ARGUMENT:

- a. Ng ko er a m/o telkib el suebek [a
 3PL.-HUM= like P D PAST.become little.bit L INTR.fly [D
 reng-mam [pro]].
 hearts-IPL.EXCP [we.EXC]
 “We sort of became a little bit worried.” (*lit.* “Our hearts are as if they
 have become a little bit flying.”) [EI 25]
- b. A bo-cha le-meched [a reng-um [pro] e
 D IRR.become-ICP 3SGS.IRR-shallow [D heart-2SGP [you] then
 ke melim a bodes er a bng-al a kerrekar.
 2SG= drink.IMPF D nectar P D flowers-3PL.-HUMP D trees.
 “Whenever you get thirsty, you drink nectar from the flowers in the
 trees.” (*lit.* “When your heart starts to become shallow, then you drink
 nectar from the trees’ flowers.”) [KC 50]

(3.29) SUBJECT AGREEMENT WITH POSSESSOR OF ψ -ARGUMENT:

- a. Te kmal mekngit a reng-rir pro.
 3PL.+HUM= very bad D hearts-3PL.+HUMP they
 “They are really upset.” (*approx.* “They are very bad-hearted.”)
 [Roureor Belau, 22 May 2002]
- b. Tia a rul-lak pro me ak kmal mo suebek a
 this TOP make.PF-ISGO me so.that ISG= very become INTR.fly D
 reng-uk pro er a Fern.
 heart-ISGP I P D Fern
 “This is making me very worried about Fern.” (*approx.* “This is making
 me so that I am becoming very flying-hearted.”) [CB 69]

In this section, I confront four different types of data in which the possessor of a ψ -argument *must* extract from the possessed DP to become the subject of the clause. In such instances, treating the entire ψ -argument as the subject leads to ungrammaticality. The pattern that emerges is consistent with the string locality

constraint proposed in (3.12), which says that the head of the ψ -predicate must minimally precede the head N of the ψ -argument. Note that this constraint is satisfied in both (3.28) and (3.29), as movement to the specifier of TP is string-vacuous. If we adopted the structural locality constraint in (3.11) and assumed that it held at the point of Spell Out, for example, then (3.28) could not involve movement of the whole ψ -argument DP to subject, which would mean that subject movement was optional (and agreement was more complicated).⁶³

What this situation suggests is that any A-movement that disrupts locality both on structures and on strings results in ungrammaticality of the sentence (on the idiomatic interpretation). The four types of movement that enable us to test this claim include:

- i. movement of the subject to the right, past an optional PP argument,
- ii. raising-to-subject from a position within an embedded clause past an *er a chelsel a*-PP aspectual modifier which can only be licensed by the matrix raising predicate,
- iii. raising-to-subject from a position within an embedded clause with subsequent extraposition of the embedded clause, and
- iv. raising-to-object.

Each of the movement types reveals that even though treating the ψ -argument DP as the matrix subject should be permissible as it is in (3.28), this is possible only if movement to subject position leaves the ψ -argument subject in a position that immediately follows the ψ -predicate (and the output of any other transformations does not disrupt this adjacency).

3.2.2.1 OPTIONAL PP ARGUMENTS

If the ψ -predicate allows an optional PP argument, the possessor of the ψ -argument can appear on either side of the PP, as in (3.30). I know of no evidence to support any particular view of where the optional PP argument appears in the surface syntax, but the fact that the possessor does not form a constituent with the rest of the possessed DP in (3.30b) suggests that it has raised to a higher position outside of

⁶³ When movement to subject position is not string-vacuous (or whenever a subsequent movement operation that targets subjects is not string-vacuous), only the possessor DP that is embedded within the larger ψ -argument can be the subject, as movement of the entire ψ -argument to subject position would disrupt both structural and string locality between the head of the ψ -predicate and the head of the ψ -argument.

the possessed DP. There are at least two different analyses possible. The first is uniform subject movement to Spec TP with multiple attachment possibilities for the PP argument. The second is optional subject movement to Spec TP and either a uniform attachment site or multiple attachment possibilities for the PP argument. The structural locality constraint in (3.11) is compatible only with the latter analysis, while the string locality constraint in (3.12) is compatible with either analysis.

(3.30) POSSESSOR OF ψ -ARGUMENT CAN PRECEDE OR FOLLOW A PP IN THE SAME CLAUSE:

- a. Ng *li/uut* *el mo* **kesib** *a reng-ul* t_i [a Rubak]_i
 3SG= PAST.again L become sweaty D heart-3SGP [D Lord]
 [PP er a rechad er a Israel]
 [P D people P D Israel]
 “On another occasion the Lord was angry with Israel.”
[Chedaol Biblia, 2 Samuel 24:1]
- b. Te [r-ua techa]_j [tirke [el mle **kesib** *a reng-ul* t_i
 3PL= PL-like who [those [L AUX.PAST sweaty D heart-3SGP
 [PP er tir_j] [a Dios]_i el 40 el rak]]_i?
 [P them] [D God] L 40 L years]]
 “With whom was God angry for forty years?” [Chedaol Biblia, Hebrews 3:17]

The entire ψ -argument should in principle also be able to serve as the subject of the clause, as in (3.28), so one might wonder whether it also has the option of either preceding or following an optional PP argument. As it turns out, it must precede the PP, as shown in (3.31).

(3.31) Ψ -ARGUMENT MUST PRECEDE A PP IN THE SAME CLAUSE:

- a. Ng *m/o* **kesib** t_i [a **reng-ul** [a Oskar]]_i [PP er a
 3SG= PAST.become sweaty [D heart-3SGP [D Oskar]]_i [P D
 del-al]].
 mother-3SGP]
 “Oskar got angry with his mother.” (*lit.* “Oskar’s heart became sweaty with his mother.”)
- b. *Ng *m/o* **kesib** t_i [PP er a del-al] [a
 3SG= PAST.become sweaty [P D mother-3SGP] [D
reng-ul [a Oskar]]_i.
 heart-3SGP [D Oskar]]
 (“Oskar got angry with his mother.”)

Note that it is only in the ungrammatical example (3.31b) that the ψ -argument *a rengul* does not immediately follow the ψ -predicate *kesib*. The string locality constraint proposed in (3.12) predicts the pattern in (3.30) and (3.31), as any disruption of minimal precedence between the head of the ψ -predicate and the head of its ψ -argument should lead to ungrammaticality. The structural locality constraint, on the other hand, forces us to assume that no movement of the subject DP to Spec TP has occurred in (3.31a).

A further prediction is made by both analyses. If a ψ -idiom that selects an optional PP argument is embedded under a raising predicate, the possessor must appear to the right of the PP argument if it governs subject agreement, as it must raise to the (rightward) specifier of the matrix TP. This prediction is evidently borne out, as indicated by the contrast between (3.32a) and (3.32b).

(3.32) a. POSSESSOR ASCENSION AND SUBSEQUENT RAISING PAST PP:

Te oumesingd el suebek [a reng-rir t_i] [PP er a
 3PL.+HUM= tend L INTR.fly [D hearts-3PLP] [P D
 rengelek-ir] [a rechedil]_i.
 children-3PLP] [D mothers]
 “Mothers tend to worry about their children.”

b. NO POSSESSOR ASCENSION:

*Ng/*Te oumesingd el suebek [a reng-rir a rechedil]
 3PL.±HUM= tend L INTR.fly [D hearts-3PLP D mothers]
 [PP er a rengelek-ir].
 [P D children-3PLP]
 (“Mothers tend to worry about their children.”)

c. SUBJECT AGREEMENT MISMATCH:

*Ng oumesingd el suebek [a reng-rir t_i] [PP er a
 3PL.-HUM= tend L INTR.fly [D hearts-3PLP] [P D
 rengelek-ir] [a rechedil]_i.
 children-3PLP] [D mothers]
 (“Mothers tend to worry about their children.”)

The ungrammaticality of (3.32b–c), when compared with the grammaticality of (3.32a), can be understood if long-distance agreement is impossible, though this would not be predicted by Phase Theory (Chomsky 2000, 2001), as there are presumably no phase boundaries in (3.32) if the complements to raising verbs are non-finite TPs. But what the contrast seems to suggest is that the matrix subject position must be filled, and possessor ascension is the only way to satisfy this require-

ment without violating either the structural or string locality constraints in (3.II) and (3.12). If that is correct, then the conclusion is consistent with the analysis of possessor ascension in Chapter 2.

3.2.2.2 RAISING-TO-SUBJECT AND ASPECTUAL MODIFICATION

In Chapter 2, §2.1.2.3, we saw examples of biclausal sentences in which the aspectual PP modifier [*er a chelsel a* + <LENGTH OF TIME>] (cf. English *in an hour*) could be licensed only by the matrix predicate. This is clear from the fact that *er a chelsel a*-PPs target the telic endpoints of accomplishment and achievement predicates but are incompatible with stative and process predicates — if the embedded predicate is a stative or process predicate, and the matrix predicate is bounded, then the *er a chelsel a*-PP must be licensed by the matrix predicate, and presumably occupies a position outside of the embedded clause. The relevant data from §2.1.2.3 is repeated below.

- (2.34) a. Te *mi/engedub* a **resecheli-k**.
 3PL= *PAST.go.swimming* D friends-ISGP
 “My friends went swimming.”
- b. *Te *mi/engedub* a **resecheli-k** [_{PP} *er a chels-el*
 3PL= *PAST.go.swimming* D friends-ISGP [P D space.inside-3SGP
 a ta el sikang]].
 D one L hour]
 (“My friends went swimming in an hour.”)
- c. *Te *mi/engedub* [_{PP} *er a chels-el* a ta el
 3PL= *PAST.go.swimming* [P D space.inside-3SGP D one L
 sikang]] a **resecheli-k**.
 hour] D friends-ISGP
 (“My friends went swimming in an hour.”)
- d. Te *m/o* merek el *mengedub* a **resecheli-k** [_{PP} *er*
 3PL= *PAST.become finished* L *go.swimming* D friends-ISGP [P
 a *chels-el* a ta el sikang]].
 D space.inside-3SGP D one L hour]
 “My friends finished swimming in an hour.”

- e. Te m/o merek el mengedub [PP er a
 3PL= PAST.become finished L go.swimming [P D
 chels-el a ta el sikang] a resecheli-k.
 space.inside-3SGP D one L hour] D friends-1SGP
 “My friends finished swimming in an hour.”

Even though *er a chelsel a*-PPs cannot be used to diagnose the exact position of the subject, we can use them to diagnose movement out of embedded clauses if they cannot be licensed anywhere within the embedded clause. With this diagnostic, it can be shown that only possessors of embedded ψ -arguments can move rightward past an *er a chelsel a*-PP to become the subject of a matrix raising predicate, if the idiomatic interpretation of the ψ -expression is to be maintained. First, consider the stative predicate *meched* “shallow” in (3.33a). When it combines with a ψ -argument headed by the N *reng*, it forms an idiomatic ψ -expression meaning “thirsty,” as shown in (3.33b).

- (3.33) a. A Omoachel el Nail a mo meched.
 D River L Nile TOP AUX.FUT shallow
 “The water will be low in the Nile.” [Chedaol Biblia, Isaiah 19:5]
- b. Te kmal mle songerenger e meched a reng-rir.
 3PL= very AUX.PAST hungry and shallow D hearts-3PLP
 “They were very hungry and thirsty.” (*lit.* “They were very hungry and their hearts were very shallow.”) [BR 15]

The predicate *meched* never licenses *er a chelsel a*-PPs, regardless of whether it is interpreted literally or idiomatically, as it is stative on both readings. As we saw in (2.32d) in §2.1.2.3, *er a chelsel a*-PPs cannot combine with durative stative predicates, as these are inherently atelic.⁶⁴

- (3.34) a. *Ng mle meched a omoachel [PP er a chels-el a
 3SG= AUX.PAST shallow D river [P D space.inside-3SGP D
 bebil el sandei].
 few L weeks]
 (“The river was shallow in a few weeks.”)

⁶⁴ It’s worthwhile to note that the examples in (3.34) are unambiguously interpreted as true durative statives, unlike their English translations, which can be coerced into denoting telic changes of state. In Palauan, the change of state interpretation requires a different auxiliary verb *mo* “become.” Compare (3.i) to (3.34).

(3.37) POSSESSOR ASCENSION AND RAISING PAST *er a chelsel a*-PP:

- a. Te m/o merek el **meched** a **reng-rir** t_i
 3SG.+HUM= PAST.become finished L shallow D hearts-3PLP
 [_{PP} er a chels-el a bebil el sikang] [a remerael]_i.
 [P D space.inside-3SGP D few L hours] [D travelers]
 “The travelers stopped being thirsty in a few hours.” (*approx.* “The travelers finished being shallow-hearted in a few hours.”)
- b. *Ng m/o merek el **meched** a **reng-rir** t_i
 3SG.-HUM= PAST.become finished L shallow D hearts-3PLP
 [_{PP} er a chels-el a bebil el sikang] [a remerael]_i.
 [P D space.inside-3SGP D few L hours] [D travelers]
 (“The travelers stopped being thirsty in a few hours.”)

It would appear that right-adjunction of an *er a chelsel a*-PP in the matrix clause creates a problem for subject raising if the subject is a ψ -argument DP. In such a case, possessor ascension is mandatory so as to preserve locality between the ψ -predicate and the ψ -argument (*i.e.*, the idiom chunks) either at Spell Out if we assume the structural locality constraint or post-linearization if we assume the string locality constraint.

3.2.2.3 RAISING-TO-SUBJECT AND CLAUSE EXTRAPOSITION

Recall that if the subject has raised out of an embedded clause to the specifier of a higher (finite) TP, the embedded clause can extrapose to the right of the subject DP. We can tell that the subject originates in the embedded clause if the embedded predicate is a shape/size adjective, as this class of adjectives displays number agreement with plural subjects, via prefixation of plural *me-*. The relevant data is repeated below in (2.25a) and (2.26). On the clause extraposition analysis I propose in (2.28) in Chapter 2, the subject first moves (string-vacuously) to the rightward-branching specifier of the matrix TP, as shown in (2.25a), repeated below, and the embedded clause subsequently extraposes to the right of the extracted subject, as shown in (2.26).

- (2.25a) Te oumesingd [el mo me-klou/*Ø-klou t_i] [a **rengalek**]_i .
 3PL= tend [L become PL-big/*SG-big] [D children]
 “Children tend to grow up.” (*lit.* “Children tend to become big.”)

- (2.26) Te oumesingd t_j [a **rengalek**] $_i$ [el mo me-klou/*Ø-klou t_i] $_j$.
 3PL= tend [D children] [L become PL-big/*SG-big]
 “Children tend to grow up.”

What is immediately relevant about this optional clause extraposition in raising-to-subject constructions is that if the raised subject is a ψ -argument, then clause extraposition can create a configuration in which the ψ -argument does not follow its ψ -predicate. Given the patterns above, it might be expected that clause extraposition in these cases results in ungrammaticality whenever the ψ -expression is idiomatic, which turns out to be exactly what we find.

The predicate *moalech* “wither(ed)” in (3.38a) can form a ψ -expression meaning “disappointed” as shown in (3.38b).

- (3.38) a. Ak **moalech** el ua chudel.
 ISG= wither L like grass
 “I wither like grass.” [Chedaol Biblia, Psalms 102:11]
- b. E ng di ngike el chad el oumera er ngii a diak bo
 But that L person L believe P it TOP NEG AUX.FUT.IRR
le-moalech a **reng-ul**.
 3SGS.IRR-withered D heart-3SGP
 “But those who have faith in that one will never be disappointed.” (*ap-prox.* “But that person who believes in it will not be withered-hearted.”)
 [Chedaol Biblia, Romans 9:33]

If a clause containing *moalech* is embedded under a raising predicate like *melemolem* “continue,” the subject of the embedded clause containing *moalech* can raise to become the subject of the matrix clause, triggering subject agreement morphology on the matrix raising predicate as shown in (3.39a–b). If the subject is clause-final, it makes no difference whether it is the entire ψ -argument or just the possessor of the ψ -argument that is raised, as indicated in (3.39b) by the acceptability of both [3PL –HUM] *ng* and [3PL +HUM] *te* as possible forms of subject agreement morphology. Put differently, possessor ascension is optional in (3.39b).

- (3.39) STRING-VACUOUS RAISING (WITH OPTIONAL POSSESSOR ASCENSION):
- a. Ng mi/lemolem el **moalech** a ll-el a
 3PL.–HUM= PAST.continue L wither D leaves-3PL.–HUM P D
 kebui.
 betel,pepper
 “The betel pepper leaves continued to wither.”

The contrast in grammaticality that we find between (3.39b) with no extraposition and (3.41b) with extraposition can be explained by the two locality restrictions on ψ -idioms in (3.11) and (3.12). Whenever extraposition disrupts the locality between the ψ -predicate and its ψ -argument, the sentence is ungrammatical on the idiomatic reading.

3.2.2.4 RAISING-TO-OBJECT

Certain verbs like *ousbech* “need; expect,” *meruul* “cause; make,” and *omdasu* “think; consider; expect” can select either non-finite or finite clauses as complements, as shown in (3.43) and (3.42), respectively.

(3.42) NON-FINITE CLAUSE COMPLEMENT:

A Rehina a **ulemdasu er ngii** [el kmal klou el dil t_i
 D Rehina TOP think.PAST ACC herself [L very big L girl
 [e le ng mle oubail er a dores]].
 [because 3SG= AUX.PAST wear ACC D dress]].
 “Rehina thought herself to be a big girl because she was wearing a dress.”
 [KK 2]

(3.43) FINITE CLAUSE COMPLEMENT:

A Juda er se er a l-es-ang, e ng **ulemdasu**
 D Judah P that.(time) P D 3SGS.IRR-see.PF-3SG then 3SG= think.PAST
 [el kmo ng oteruul el redil *pro* [e le ng
 [L C 3SG= prostitute L woman she [because 3SG=
 di/kedek-ii a med-al]].
 PAST.cover.PF-3SGO D face-3SGP]]
 “When Judah saw her, he thought that she was a prostitute, because she had
 her face covered.” [Chedaol Biblia, Genesis 38:15]

Whenever these verbs are followed by a finite embedded clause, the subject of the embedded clause triggers agreement on the embedded predicate. But when the embedded clause is non-finite, what would have been the subject of the embedded clause appears immediately after the matrix predicate and receives structural Accusative Case. On the movement analysis, this word order and case pattern results from moving the highest argument DP from the embedded non-finite subject position to become the direct object in the matrix ν P, getting structural Accusative Case in a position outside of the embedded clause.⁶⁵

⁶⁵ In the Minimalist syntactic framework I am assuming currently, the traditional raising-to-object

On this analysis, the sole argument of an embedded intransitive predicate needs to move leftward to become the direct object of the matrix predicate. But if this DP is a ψ -argument, we find that only its possessor can occupy the position of direct object in the matrix clause, as in (3.44). If the entire ψ -argument raises to object position, the result is ungrammatical, as shown in (3.44b).

(3.44) RAISING-TO-OBJECT CAN ONLY TARGET POSSESSOR OF ψ -ARGUMENT:

- a. A Rubak a *rirel-lii* [a Farao]_i [el mo
 D Lord TOP PAST.make-3SGO [D pharao] [L become
me-decherecher a **reng-ul** *t_i*].
 INTR-hard D heart-3SGP]
 “The Lord made the king stubborn.” [Chedaol Biblia, Exodus 14:8]
- b. *A Rubak a *rirel-lii* [a **reng-ul** [a Farao]]_i [el
 D Lord TOP PAST.make-3SGO [D heart-3SGP [D pharao]]_i [L
 mo **me-decherecher** *t_i*].
 become INTR-hard]
 (“The Lord made the king stubborn.”)

This apparent restriction has nothing to do with the embedded predicate *medecherecher*, as its (complete) argument DP can participate in a raising-to-object construction if it is not a ψ -argument. Note the contrast between (3.44) and (3.45), below.

- (3.45) Ng sebec-em el ngosu-ir a Dios el merek-ii a
 3SG possibility-2SGP L help.PF-3SGO D God L stretch-3SGO D
 eanged e rul-lii *pro_i* [el kuk mo
 sky and make.PF-3SGO it [L rather become
me-decherecher *t_i* er a b/tanget el deel]?
 INTR-hard P D RES.polish L steel]
 “Can you help God stretch out the sky and make it as hard as polished metal?” [Chedaol Biblia, Job 37:18]

analysis poses a problem for the Extension Condition, as structure must continually be built upward. The raising-to-object construction has consequently been reanalyzed as an exceptional-case-marking (ECM) construction. On this analysis, the ECM verb crucially selects a non-finite TP complement (and not a CP complement), and transitive *v* licenses the subject of the non-finite TP with structural Accusative Case). However, this analysis depends on SVO word order — since the derived objects of Palauan ECM verbs appear between the ECM verb and the complement clause, rather than in a (rightward-branching) subject position at the end of the complement clause, it appears that actual movement has extracted the subject DP out of the embedded clause, making an ECM analysis for the Palauan cases rather dubious, and in a very interesting way.

Once again, the ungrammaticality of (3.44b) appears to be attributable to locality. Instances in which displacement of a ψ -argument crashes the derivation are thus not limited to A' dependencies, but can also be found in constructions involving A-movement. While it's possible to construct an analysis of the locality restrictions based on either the structural constraint in (3.11) or the string constraint in (3.12), the choice between them has implications for the theory of grammatical subjects developed in Chapter 2 — only the string locality constraint in (3.12) is compatible with a theory in which movement of the subject DP to the specifier of TP is obligatory.⁶⁶

The picture emerges is that A-movement is generally permitted, and if we assume that it applies uniformly/obligatorily, the availability of the idiomatic reading correlates with the instances in which string locality is not disrupted. As is clear from the table, the structural locality constraint in (3.11) depends on the assumption that structural locality is not actually disrupted when subject movement/raising-to-subject is string-vacuous; *i.e.*, if the EPP is optional. The results are summarized in Table 3.3.

TYPE OF A-MOVEMENT OF ψ -ARGUMENT	EX. #	DISRUPTS STRUCTURAL LOCALITY?	DISRUPTS STRING LOCALITY?	IDIOMATIC READING BLOCKED?
Subject movement: (string-vacuous)	(3.28)	Yes	No	No
...past a PP argument	(3.31)	Yes	Yes	Yes
Raising-to-subject: (string-vacuous)	(3.39)	Yes	No	No
...past an <i>er a chbelsel a</i> -PP	(3.35)	Yes	Yes	Yes
...with subsequent clause extraposition	(3.41)	Yes	Yes	Yes
Raising-to-object	(3.44)	Yes	Yes	Yes

TABLE 3.3 A-movement targeting ψ -arguments

3.2.3 Ψ -IDIOMS AND COORDINATION

Data involving coordination in clauses containing ψ -idioms also appears to be compatible with both types of locality constraints in (3.11) and (3.12). Nonetheless, the

⁶⁶ It would be worthwhile to see whether whatever drives the movement to object position can target the possessor for movement of a DP and license Accusative Case on the remnant possessee DP, a result that might be predicted but which I doubt is borne out. This must be checked.

choice of analysis for the locality restriction on idiom chunks has implications for the analysis of coordination. For instance, the possessor of a ψ -argument may be a conjoined DP as in (3.46a), but it is impossible to conjoin two ψ -argument DPs in the complement to a ψ -predicate, as indicated in (3.46b).

(3.46) Ψ -ARGUMENTS CANNOT BE COORDINATED, BUT THEIR POSSESSORS CAN:

- a. Me ng mla er a bli-l a ongdibel el mesaod a tekoi
 So 3SG= was P D house-3SGP D meeting L explain D issues
 e melasem el **meledaes** [a reng-rir [a rechad er a
 and try L clarify.IMPf [D hearts-3PLP [D people P D
 Judea me a rechad er a Gris]].
 Judea and D people P D Greece]]
 “He held discussions in the synagogue ..., trying to convince both Jews
 and Greeks.” [Chedaol Biblia, Acts 18:4]
- b. *Ng milledaes [[a reng-rir a rechad er a Judea]
 3SG= PAST.clarify.IMPf [[D hearts-3PLP D people P D Judea]
 me [a reng-rir a rechad er a Gris]].
 and [D hearts-3PLP D people P D Greece]]
 (“He convinced the Jews and the Greeks.”)

Note that there is no general problem with coordinating DPs in direct object position. For instance, consider (3.47).

(3.47) ORDINARY DP ARGUMENTS CAN BE COORDINATED:

- A remerreder a ulemekedong er [[a reprim] me [a rechad
 D leaders TOP PAST.call.for.IMPf ACC [[D priests] and [D people
 er a olai]].
 P D magic]]
 “The people called the priests and the magicians.” [Chedaol Biblia, 1 Samuel 6:2]

On an analysis based on the structural locality constraint in (3.11), it seems to me that the contrast in (3.46) would be unexpected. All of the subcomponents of the ψ -idiom *meledaes er a rengul* “explain (to sb.)” (*lit.* “clarify (sb.)’s heart”) are arguably within the VP (and possibly even within the $\sqrt{\text{ROOT}}$ phrase, if we assume category-neutral root theory) in both (3.46a) and (3.46b).

The conjoined DP in possessor position in (3.46a) poses no problem, since the head of the ψ -predicate and the head of the ψ -argument are in a local relation, regardless of whether locality is defined on structures or on strings. But the conjoined

DP is a direct object in (3.46b) rather than just a possessor, and I know of no evidence for movement of the conjoined DP constituent out of its base-position (*i.e.*, complement to V). Unless some sort of movement can be motivated, one would have to stipulate that the complement of a ψ -predicate cannot be filled with a conjoined DP containing two ψ -arguments, even though structural locality seems to be satisfied. This is apparently a point in favor of the string locality constraint on ψ -idioms proposed in (3.12).

An analysis based on the string locality constraint might capture the pattern in (3.46) by imposing locality as a bi-conditional constraint on ψ -predicates and ψ -arguments. Not only must the head of a ψ -predicate minimally precede the head of a ψ -argument as defined in (3.13), but the head of a ψ -argument must also *be minimally preceded by* the head of a ψ -predicate. On such a view, they must appear in pairs. When one looks beyond Palauan at other languages in Southeast Asian with idiomatic ψ -expressions, this seems to be the case; *cf.* Vietnamese (Liêm 1970), for example.

Predictably, it is possible to conjoin an idiomatic ψ -predicate XP with a non-idiomatic predicate XP as long as the locality restriction on idiom chunks is satisfied within the ψ -predicate XP, as shown in (3.48). Possessor ascension to subject is once again obligatory in such cases: the subject must be understood to be the possessor of the ψ -argument in the ψ -predicate XP and the subject of the non-idiomatic predicate XP (*i.e.*, derived by across-the-board movement).

- (3.48) a. Ng [omes er a ngelek-el *pro* t_i] e [kmal **mekngit** a
 3SG [see.IMPF ACC D child-3SGP he] and [very bad D
reng-ul t_i] *pro*_i.
 heart-3SGP] he
 “He is looking his daughter and is very sad.” [CB 6]
- b. Ng [ti/uchakl er a rael t_i [el mo omes er a laion el
 3SG= [PAST.detour P D road [L go see.IMPF ACC D lion L
 l-ułek-od-ir]], e [mlo **mechas** a
 3SGS.IRR-PAST.CAU-die-3SGO]] and [PAST.become INTR-char D
reng-ul t_i er a le-betik a betok el bee el ketitech
 heart-3SGP P D 3SGS.IRR-find D many L bees L crowded
 er ngii] *pro*.
 P there] he
 “He left the road to look at the lion he had killed, and he was surprised
 to find a swarm of bees.” [Chedaol Biblia, Judges 14:8]

In sum, it appears that coordination offers some support for the string-based locality constraint in (3.12) over the structurally-defined locality constraint in (3.11). In the next section, I consider the implications of adopting this perhaps unconventional type of analysis of the locality restriction on idiom chunks.

3.3 IMPLICATIONS OF THE POST-SYNTACTIC ANALYSIS

If raising-to-subject and raising-to-object constructions really do involve movement and not variable-binding relations, as the data seems to suggest, then the result is that a given syntactic configuration (whether base-generated or derived by movement) is ungrammatical if an idiomatic ψ -predicate does not appear in a position that immediately precedes the ψ -argument. And furthermore, if ψ -argument DPs are core DP arguments of their predicates (as the object agreement and accusative case-marking data in §3.1.2 seems to indicate), then appealing to a phrase structural analysis of the locality constraint on ψ -idioms along the lines of something like Koopman and Sportiche's (1991) Idiom Locality Condition in (3.7) or the structural locality constraint on ψ -idioms, both repeated below, would require subject movement to Spec TP to be optional rather than obligatory.

(3.7) IDIOM LOCALITY CONDITION: If X is the minimal constituent containing all the idiomatic material, the head of X is part of the idiom.

[Koopman and Sportiche 1991: 224, ex. 10]

(3.11) STRUCTURAL LOCALITY CONSTRAINT ON Ψ -IDIOMS: The head $N/\sqrt{\text{ROOT}}$ of the ψ -argument DP must be dominated by the maximal projection of the head $(V, A, N, \sqrt{\text{ROOT}})$ of the ψ -predicate at some given point in the derivation.

If subject movement to Spec TP is obligatory, then a constraint formulated like that in (3.7) or (3.11) would make the wrong predictions about Palauan ψ -idioms in raising constructions. This is because it would be perfectly grammatical for a ψ -argument subject to move to a rightward-branching specifier of TP whenever that movement was string-vacuous, even if it is long-distance raising to the specifier of a higher TP. But if that movement (or any subsequent transformation) were to disrupt the linear adjacency between the ψ -predicate and the ψ -argument, the result would be ungrammatical. But maybe the sort of structural locality restriction on the idiom chunks in a ψ -idiom must hold at a particular stage of the derivation, as suggested in (3.11). In that case, different theories of A-movement make different predictions about the raising data, assuming that (3.11) must hold at different stages in the derivation.

First, if we were to claim that the locality requirement must (or can) be satisfied at initial merge, a copy-theory and a trace-theory of A-movement would both make the wrong predictions for the raising data. On both theories, the locality condition would be satisfied immediately, at the point of initial merge of the ψ -argument. As a consequence, the ψ -argument should subsequently be able to move freely (whether or not this movement was string-vacuous), but this is not what we find in §3.2.2. Thus, the adjacency requirement probably cannot be satisfied at initial merge, as both the copy-theory and trace-theory of movement would wrongly predict that every single sentence in §3.2.2 should be grammatical, contrary to fact.

Next, if we were to claim that the locality requirement must (or can) be satisfied at the point of Spell Out, then a copy-theory of movement would fail for the same reasons as above, whereas a trace-theory of movement might correctly predict the ungrammaticality of a subset of the examples in §3.2.2. But only by accident. If we constructed a proposal in which the trace of a ψ -argument is not sufficient to satisfy the structural locality condition, then it would be possible to restrict subsequent movements of a ψ -argument beyond initial merge. But this restriction would be too strong: with a proposal like this, we would falsely predict that raising of a ψ -argument to the specifier of TP (and particularly to the specifier of a TP outside of its immediate clause) should always be ungrammatical, as this would leave a movement trace in its base position. But as we saw in §3.2.2, such movements are grammatical whenever they are string-vacuous.

An alternative lies in assuming that the appropriate stage of the derivation at which to apply the relevant locality restriction on idiom chunks is after a linearization algorithm has applied. Recall that the String Locality Constraint on Ψ -Idioms I proposed in (3.12), repeated below, restricts the order of linearized strings rather than the form of hierarchical structure.

- (3.12) STRING LOCALITY CONSTRAINT ON Ψ -IDIOMS: The morphological exponent of an idiomatic ψ -predicate's head (V, A, N, $\sqrt{\text{ROOT}}$) must *minimally precede* the exponent of the head N/ $\sqrt{\text{ROOT}}$ of the ψ -argument in the linearized string of morphemes (*i.e.*, in the post-syntactic grammar).
- (3.13) (RELATIVIZED) MINIMAL PRECEDENCE: Once lexical material has been inserted and linearized in the post-syntactic grammar, X *minimally precedes* Y iff X precedes Y in the linearized string and there is no Z such that
- (i) Z is the exponent of a morpheme of the same type as the morpheme whose exponent is X, and
 - (ii) Z intervenes between X and Y in the linearized string.

Adopting the post-syntactic locality constraint in (3.12) free us to assume either a copy-theory or a trace-theory of movement, as well as either optional or obligatory movement of subjects to Spec TP. After initial merge, the syntax operates as usual, treating idiomatic ψ -predicates and their ψ -arguments no differently from ordinary predicates and arguments. After Spell Out, syntactic structure is linearized when lexical material is inserted, perhaps along the lines of Embick and Noyer’s (2001) Late Linearization Hypothesis, given in (3.49) (*contra* Kayne 1994; *cf.* Sproat 1985).

(3.49) THE LATE LINEARIZATION HYPOTHESIS: The elements of a phrase marker are linearized at Vocabulary Insertion. [Embick and Noyer 2001: 562, ex. 8]

The result of linearization is a string of morphemes. The linearization algorithm might specify whether heads, complements, and specifiers branch to the left or to the right, which instance(s) of a moved element should be pronounced, and so on. The resulting linearized string could be the domain of application of the String Locality Constraint. To illustrate the process, let’s go through the derivation of sentence (3.39b), repeated below.

(3.39b) Ng/Te mi/lemolem el **moalech** a **reng-rir** a
 3PL.±HUM= PAST.continue L wither D hearts-3PL.+HUMP D
 del-rir.
 mothers-3PL.+HUMP
 “Their mothers continued to be disappointed.”

In (3.39b), either the ψ -argument or just its possessor may be treated as the subject of the matrix clause — hence the optionality between *ng* and *te* as subject agreement markers. I will proceed along the route where the entire ψ -argument raises to become the subject of the matrix clause, with the associated subject agreement clitic *ng* appearing clause-initially. If we adopt the Late Linearization Hypothesis, then late lexical insertion is presupposed. I follow this assumption in the discussion below, but as far as I can tell, the String Locality Constraint is compatible with a morphological framework in which lexical material is inserted earlier — even at initial merge (as is assumed in Chomsky 2000, 2001, *et seq.*) — as long as linearization occurs after Spell Out, *i.e.*, after the crucial movements discussed here.

For (3.39b), the input to Spell Out might look something like Figure 3.1. While I have included lexical material in the phrase structure in grey, this is purely for expository clarity. After Spell Out, I assume that the phrase structure in Figure 3.1 is modified with the addition of two types of dissociated morpheme. First, agreement in Palauan is always realized morphophonologically as the exponent of a morpheme distinct from the morpheme that has acquired the φ -features from the DP

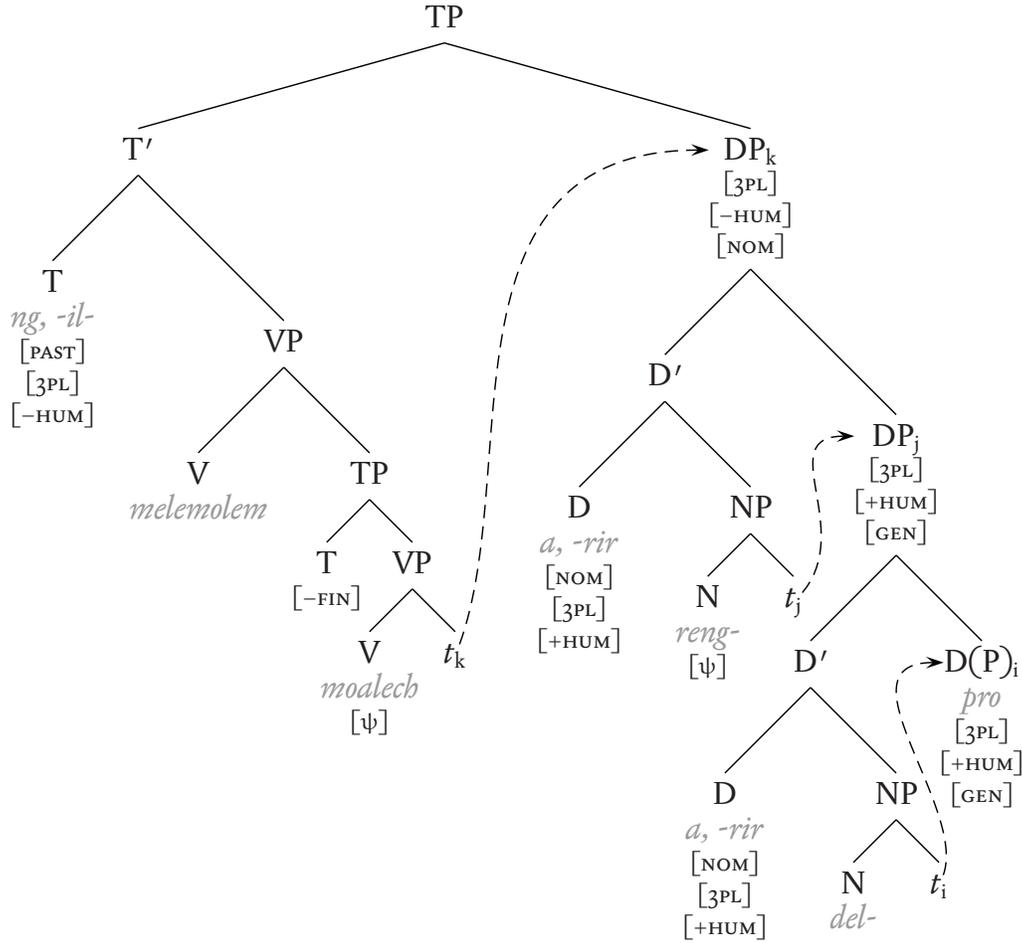


FIGURE 3.1 Input to Spell Out (assuming late insertion of lexical material)

it has agreed with, such as D, T or *v*. To capture this, a dissociated Agr morpheme may be inserted post-syntactically, adjoined to D, T, or *v* (see Marantz 2000 [1992]; Embick and Noyer 2007: 12–13). This is the stance I take below. Second, I assumed in 1.2.2.2 that the linker morpheme *el* has no syntactic realization but may perhaps be analyzed either as an inflectional morpheme on a theory in which morphophonological material is inserted along with syntactic heads at initial merge or as the exponent of a dissociated morpheme inserted post-syntactically. I will take the latter view below, left adjoining a morpheme L to the embedded TP, which will be spelled out as *el*. The structure at this point should look like Figure 3.2.

Next, I assume that affixes can be lowered to adjoin to the heads of their complements,⁶⁷ following Embick and Noyer (2001). In the current structure, the past

⁶⁷ As is the case for tense morphemes on verbs in English, such as *-ed* [PAST] and *-s* [PRES, 3SG].

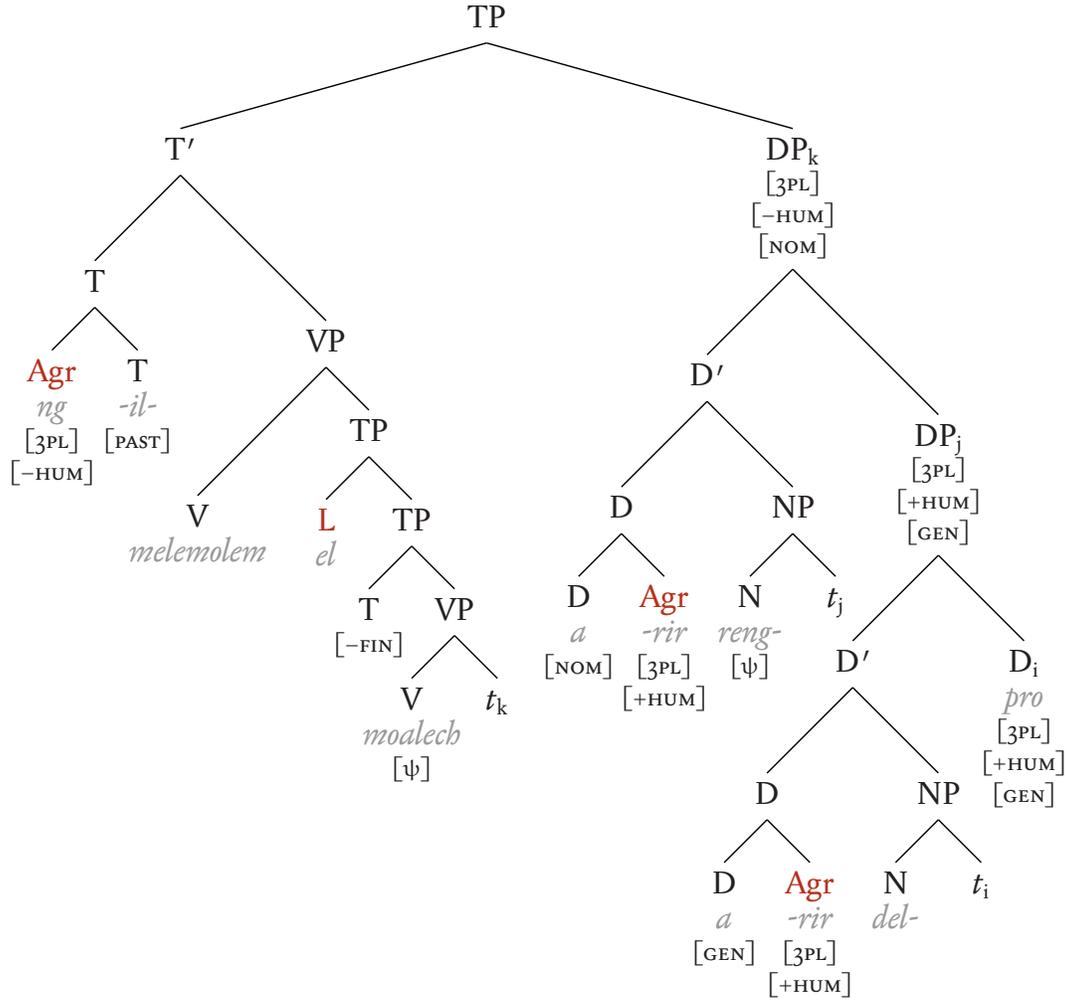


FIGURE 3.2 Insertion of dissociated morphemes

tense infix *-il-* lowers to adjoin to the V head, and the possessor agreement morphemes lower to adjoin to their respective N heads. The operation might look something like (3.50).

(3.50) LOWERING OF X^0 TO Y^0 :

$$[_{XP} X^0 \dots [_{YP} \dots Y^0 \dots]] \rightarrow [_{XP} \dots [_{YP} \dots [_{Y^0} Y^0 + X^0] \dots]]$$

[Embick and Noyer 2001: 561, ex. 6]

On the present assumptions, lexical material has not been inserted at this point of the derivation. Given that only tense and agreement nodes appear to lower in Palauan, and these are the same types of morphemes that lower in other languages,

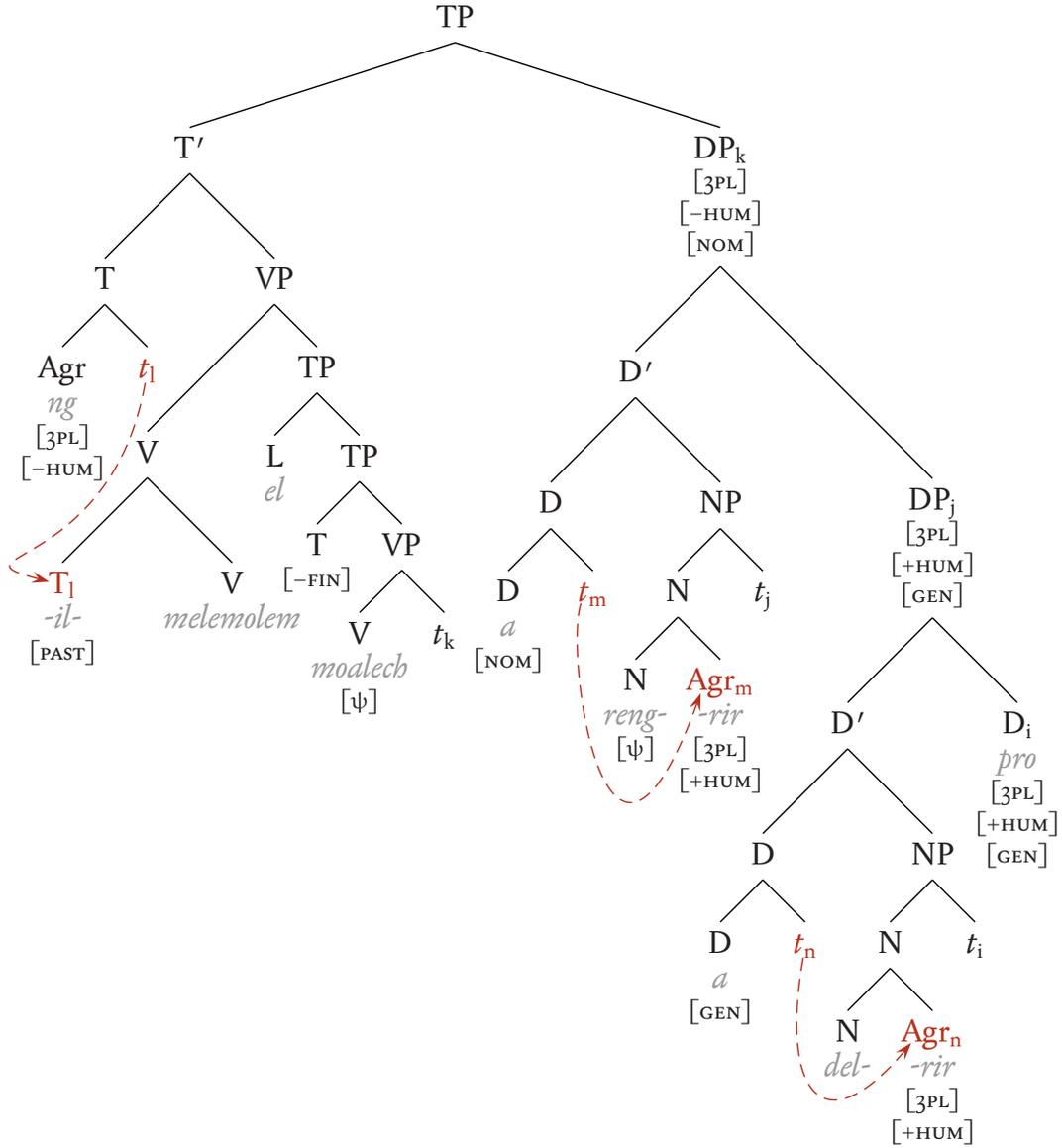


FIGURE 3.3 Lowering of tense and agreement morphemes

such as English, I will leave the task of motivating these lowering operations aside.⁶⁸ For now, the resulting structure is represented schematically in Figure 3.3.

Once the tree in Figure 3.3 is linearized, the result might be something like the linearized string in Figure 3.4, but perhaps with the addition of prosodic phrase

⁶⁸ The lowering operation is not crucial to the analysis. The same effects might be achieved using Grimshaw's notion of Extended Projection, which allows feature sharing among heads that form a single extended projection (see Grimshaw 2005: Ch. 1 for details).

Agr	T	V	L	V	D	N	Agr	D	N	Agr	D
ng	-il-	melemolem	el	moalech	a	reng-	-rir	a	del-	-rir	pro
				[ψ]		[ψ]					

FIGURE 3.4 Linearized string (lexical head theory)

boundaries, which I have omitted (see *i.a.*, Nespor and Vogel 1986; Selkirk 1986; Hayes 1989; Truckenbrodt 1999). I assume that in the linearized string of morphemes, the features according to which the morphemes are spelled out morphophonologically are still present and visible to the derivation (including category features) — there is simply no hierarchical syntactic structure. Since category labels are, themselves, simply features, it seems quite natural to me that they should continue to be present after Vocabulary Insertion and Linearization. Vocabulary Insertion adds morphophonological content to morphemes (bundles of morphosyntactic features) and Linearization imposes an ordering relation among Vocabulary Items — neither process deletes the morphosyntactic features.

So, it is a string like that in Figure 3.4 to which the String Locality Constraint in (3.12) must apply. The relevant parts of the string are the ψ -predicate *moalech* “wither(ed)” and (the head N of) its ψ -argument *reng* “heart.” In a morphological theory where lexical items are specified for their category features in the lexicon before they enter the syntax, the labels of *moalech* and *reng* are V and N, respectively. On a theory assuming category-neutrality of roots, the same morphemes have no category, but are category-defined by the functional heads *n*, *v*, and *a* (see, *e.g.*, Marantz 1997, 2001, 2007; Arad 2003, 2005; Borer 2005a, 2005b; Embick and Noyer 2007; Embick and Marantz 2008). Depending on the theory assumed, the String Locality Constraint needs to be specified further to pick out the right *type* of morpheme that may not intervene between two other morphemes of the same type.

If category feature labels of the linearized lexical items like N(oun), V(erb), and A(djective) are still present in the linearized string, then the String Locality Constraint, as formulated in (3.12), may define *type* as a “member of the class of lexical categories: {N, V, A}.” But if nouns, verb, and adjectives are (or at least can be) derived syntactically from category-neutral roots which merge with category-defining functional heads, then *type* might be defined as “category-neutral.” On such a theory, a $\sqrt{\text{ROOT}}$ *x* might be said to *minimally precede* another $\sqrt{\text{ROOT}}$ *y* if there is no third $\sqrt{\text{ROOT}}$ intervening between them in the string, as defined by (3.13). With a theory of this sort, the input to the linearization algorithm might look more like that in Figure 3.5, and the linearized string would then be represented as

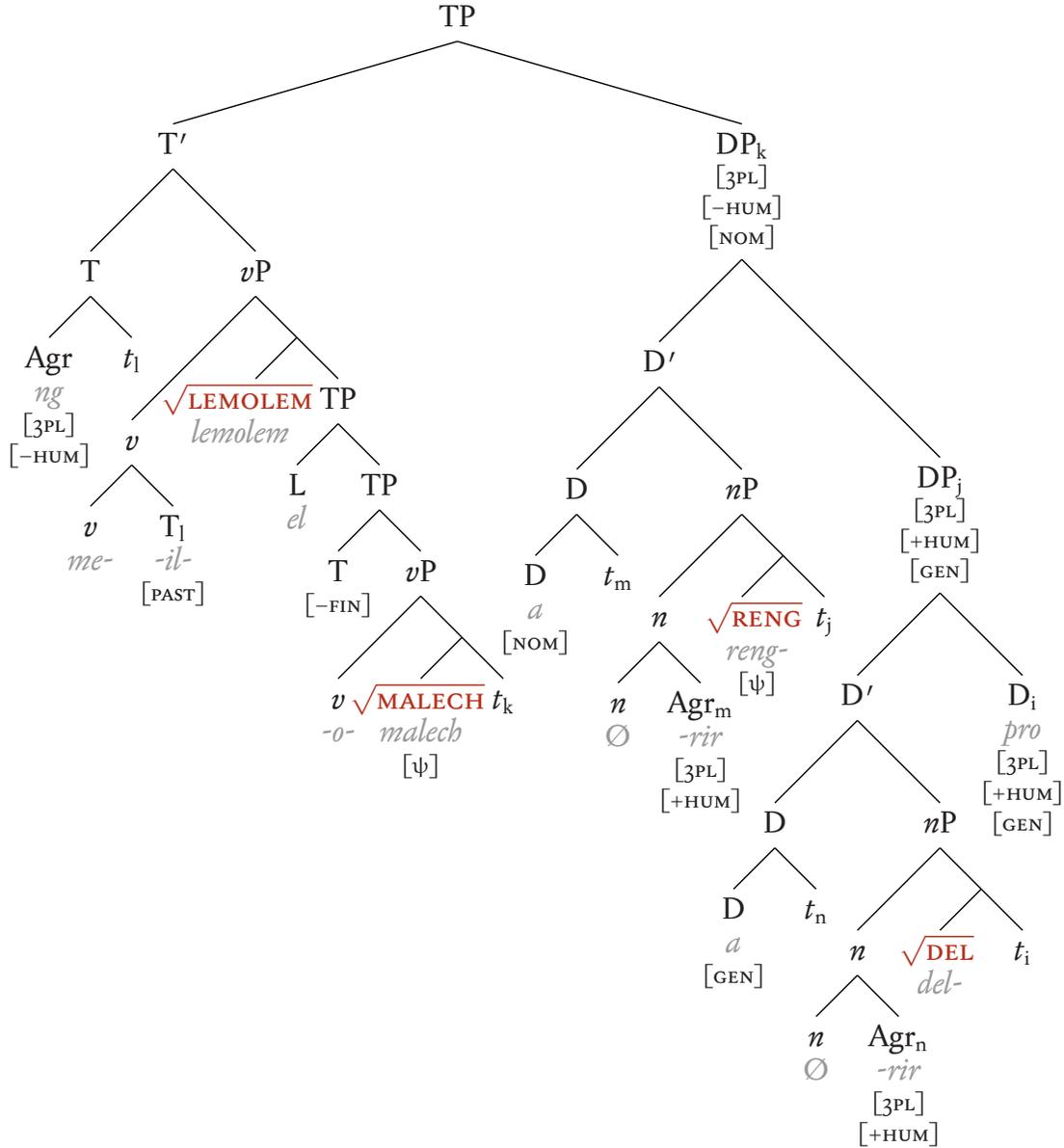


FIGURE 3.5 Input to linearization algorithm (category-neutral root theory)

in Figure 3.6.⁶⁹

On the category-neutral root analysis, the Ψ -Idiom Locality Restriction is satis-

⁶⁹ Because the lowering operation adjoins Agr morphemes to the category-defining heads v and n , Agr morphemes that are suffixes appear on the wrong side of the $\sqrt{\text{ROOT}}$. This issue can be avoided by formulating an appropriate type of linearization algorithm or appealing to some other operation that is capable of reordering morphemes, e.g., Local Dislocation (Embick and Noyer 2001).

Agr	<i>v</i>	T		L	<i>v</i>		D	<i>n</i>	Agr		D	<i>n</i>	Agr		D
ng	me-	-il-	lemolem	el	-o-	malech	a	∅	-rir	reng-	a	∅	-rir	del-	pro
						[ψ]				[ψ]					

FIGURE 3.6 Linearized string (category-neutral root theory)

fied whenever no $\sqrt{\text{ROOT}}$ intervenes between the ψ -predicate's $\sqrt{\text{ROOT}}$ and the ψ -argument's $\sqrt{\text{ROOT}}$ (annotated in both Figure 3.5 and Figure 3.6 with [ψ]). It should make no difference which *v* merges with the ψ -predicate's $\sqrt{\text{ROOT}}$ to form a verb (resulting in transitive, passive, unaccusative, or stative ψ -expressions), or even if the $\sqrt{\text{ROOT}}$ merges with other category-defining heads, like *n* or *a*.

In the next section, I explore predictions made by a theory in which nouns, verbs, and adjectives are derived syntactically from category-neutral roots, drawing on evidence from the morphophonological and morphosyntactic properties of the idiom chunks in idiomatic ψ -expressions. Data illustrating transitivity alternations, nominalizations, and compounds suggests that the locality restriction on Palauan ψ -idiom chunks can be understood as resulting from local combinations of two roots, rather than as a purely selectional relation between a predicate and argument, as the data in §3.2 might appear to suggest. The result is that a predicate–argument structure is one way to create the necessary local configuration between the idiom chunks, but it is not the only way to achieve the relevant locality between them.

3.3.1 TRANSITIVITY ALTERNATIONS

Richards (2001: 184) and Harley (2002: 41) provide examples of pairs of English idioms that seem to receive the same interpretations despite containing different verbs, such as those in (3.51) and (3.52).⁷⁰

- (3.51) a. Alice **gives hell** to anyone who uses her training wheels.
 b. Oscar will **give the boot** to any employee that shows up late.
 c. The Count **gives the creeps** to everyone. [Harley 2002: 41, ex. 19b–d]
- (3.52) a. I **caught/got hell** from Alice.
 b. Peter **got the boot**.
 c. Geez, you **get the creeps** just looking at him. [Harley 2002: 41, ex. 20b–d]

⁷⁰ cf. Larson 1988: 341.

Based on examples like (3.51) and (3.52), Richards and Harley argue for an analysis in which *get* is essentially treated as an unaccusative variant of *give*. In other words, *get* and *give* are members of a transitivity alternation and are related derivationally, just as transitive *break* and unaccusative *break* are.

In Palauan, there are a number of transitivity alternations involving ψ -idioms, except that they are much more obviously related morphologically than are English *get* and *give*. For instance, consider (3.53) and (3.54) below.

- (3.53) a. L-ak bo me-dakt er a recherrou-iu; di
 3SGS.IRR-NEG AUX.FUT.IRR INTR-afraid P D enemies-2PLP just
 blechoel el **me-sisiich** a **reng-miu**.
 always L INTR-strong D hearts-2PLP
 “Don’t be afraid of your enemies; always be courageous.” (*approx.* “...al-
 ways be strong-hearted.”) [Chedaol Biblia, Philippians 1:28]
- b. A Elilai a kmal mi/llasem el **melisiich** er a **reng-ul**.
 D Elilai TOP very PAST.try L strengthen.IMPF ACC D heart-3SG
 “Elilai was really trying to be courageous.” (*approx.* “...trying to streng-
 then his heart.”) [EI 27]
- (3.54) a. Ng mo **me-tirem** a **reng-um** er a Ekipten, el di ua
 3SG= AUX.FUT INTR-chip D heart-2SGP P D Egypt L just like
 se er a **le-me-tirem** a **reng-um** er a Asiria.
 that.time P D 3SG.IRR-INTR-chip D heart-2SGP P D Assyria
 “You will be disappointed by Egypt, just as you were by Assyria.” (*ap-
 prox.* “Your heart will be chipped by Egypt, just like the time when it was
 chipped by Assyria.”) [Chedaol Biblia, Jeremiah 2:36]
- b. Kau ng blak a **reng-um** el **merirem** er a **reng-uk** el
 you 3SG= intent D heart-2SGP L chip.IMPF ACC D heart-1SGP L
 ua a omoachel el mo medirt er a blsech-el a kleald?
 like D river L become dry P D time-3SGP D heat
 “Do you intend to disappoint me like a stream that goes dry in the sum-
 mer?” (*approx.* “...to chip my heart like...”) [Chedaol Biblia, Jeremiah 15:18]

All four sentences in (3.53) and (3.54) contain ψ -idioms, but while the (a) sentences are intransitive, with the ψ -arguments serving as subjects, the (b) sentences are transitive, with the ψ -arguments serving as direct objects marked with the accusative case marker *er* (as they are singular and specific; see §2.2). Furthermore, the ψ -predicate *mesisiich* “strong” in (3.53a) is adjectival, while that in (3.54) is a verbal

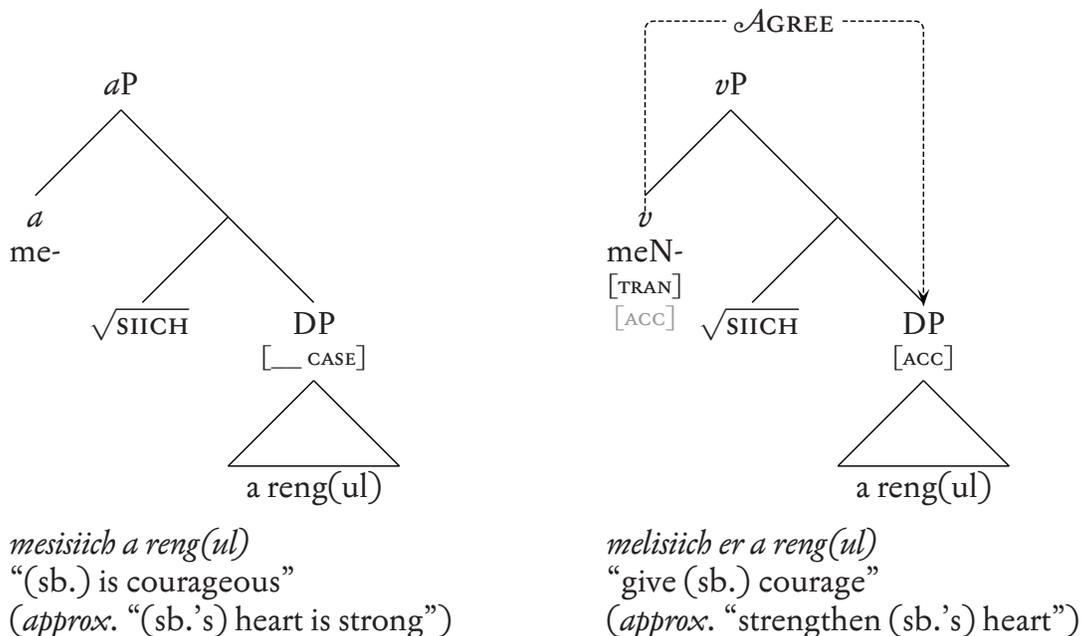


FIGURE 3.7 Transitive and intransitive predicates formed from $\sqrt{\text{SIICH}}$

passive (the differences between classes of intransitive predicates are explored in more detail in Chapter 4). But the transitive variants of both are verbs.

In the syntactic framework I adopt in Chapter 1 and elaborate in Chapter 2, the external argument of a transitive verb is introduced by a transitive v head, which also licenses the internal argument with structural Accusative Case. Given alternations between transitive and intransitive variants of ψ -idioms with what appear to be similar structures like those in (3.53) and (3.54), it is natural to wonder whether a ψ -predicate and its ψ -argument form a constituent before a transitive v merges. Following Richards’s (2001) and Harley’s (2002) analysis of English transitivity alternations in idiomatic expressions, I propose that the answer to this question is yes, and it is possible to construct a theory in which Palauan verbs are formed from category-neutral roots that merge with DP arguments before it is established whether they will be transitive or intransitive. That is, (3.53a–b) each contain an identical constituent formed from just the root $\sqrt{\text{SIICH}}$ “strong” and a DP argument, and likewise for (3.54a–b) with the root $\sqrt{\text{TIREM}}$ “chip.” The structures are given in Figure 3.7 and Figure 3.8.

In Figure 3.7, the intransitive variant *mesisiich a rengul* is formed when the constituent containing the $\sqrt{\text{ROOT}}$ and its argument DP merges with an adjectivalizer head a (spelled out as *me-*), forming an intransitive adjectival ψ -idiom. If that same constituent merges with a transitive v (spelled out as *meN-*), the result is a transitive verbal ψ -idiom. In such a case, the ψ -argument DP is then licensed as a direct object of a transitive verbal predicate, rather than as a subject of an intransitive adjectival

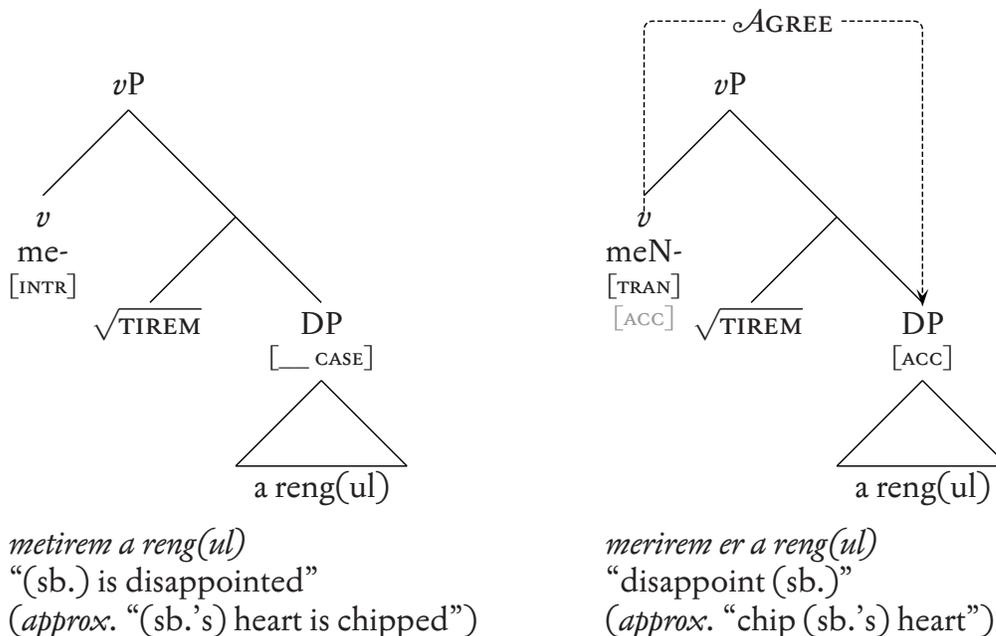


FIGURE 3.8 Transitive and intransitive verbs formed from $\sqrt{\text{TIREM}}$

predicate.⁷¹

The analysis of Palauan predicate structure, along with the String Locality Constraint on Ψ -Idioms, makes certain predictions. One of which is that it should not matter which category-defining head merges with a constituent containing a $\sqrt{\text{ROOT}}$ + DP combination that can form a ψ -expression — we should expect to find classes of nominal, adjectival, and verbal ψ -expressions. That there are both adjectival and verbal variants of ψ -expressions is probably not surprising either from a cross-linguistic perspective (ψ -expressions with similar adjectival and verbal forms are found in other languages in Southeast Asia, both related and unrelated to Palauan) or from a semantic perspective (adjectives and verbs are the prototypical categories used to describe psychological states and personality traits). But there is also what appears to be a reasonably productive class of nominal ψ -expressions, which are examined in the following section.

⁷¹ Here, I am conflating the Distributed Morphology notion of verbalizer v (in the sense of Marantz 1997 and subsequent work) with the Minimalist notion of Voice v (in the sense of Kratzer 1996). It remains to be seen whether empirical evidence can decide whether these should be bundled together as I have in Figures 3.7 and 3.8 or whether they should remain separate. The choice between these two analyses is not immediately crucial here; what is important is that the $\sqrt{\text{ROOT}}$ forms a constituent with the DP argument before it is determined whether the predicate XP is transitive or intransitive.

NOMINAL Ψ-EXPRESSION	MEANING	cf. NON-NOMINAL
<i>belengel a rengul</i>	astonishment; amazement	<i>omal er a rengul</i>
<i>blakerreng</i>	diligence; eagerness	<i>blak a rengul</i>
<i>bleoterreng</i>	nonchalance; unfaithfulness	<i>beot a rengul</i>
<i>bletengel a rengul</i>	nonchalance; unfaithfulness	<i>beot a rengul</i>
<i>bltikerreng</i>	love; affection	<i>betik a rengul</i>
<i>bltkil a rengul</i>	love; affection	<i>betik a rengul</i>
<i>chaserreng</i>	surprise; shock	<i>mechas a rengul</i>
<i>chederreng</i>	thirst	<i>meched a rengul</i>
<i>chedil a rengul</i>	thirst	<i>meched a rengul</i>
<i>cheluachederreng</i>	meanness	<i>mechuached a rengul</i>
<i>dechal a rengul</i>	perseverance; ambition	<i>meduch a rengul</i>
<i>deuil a rengul</i>	happiness; joy	<i>dmeu a rengul</i>
<i>deurreng</i>	happiness; joy	<i>dmeu a rengul</i>
<i>ducherreng</i>	perseverance; ambition	<i>meduch a rengul</i>
<i>kldidaierreng</i>	stubbornness; conceit; arrogance	<i>kedidai a rengul</i>
<i>klengarionerreng</i>	humility	<i>ngar er a eou a rengul</i>
<i>klourreng</i>	patience	<i>klou a rengul</i>
<i>klngitterreng</i>	sorrow	<i>mekngit a rengul</i>
<i>klsbengel a rengul</i>	anger	<i>kesib a rengul</i>
<i>kl Siberreng</i>	anger	<i>kesib a rengul</i>
<i>klungiaolerreng</i>	goodness; good feeling	<i>ungil a rengul</i>
<i>klungiolel a rengul</i>	goodness; good feeling	<i>ungil a rengul</i>
<i>kngtil a rengul</i>	sorrow	<i>mekngit a rengul</i>
<i>llemesel a rengul</i>	intelligence; wisdom	<i>mellomes a rengul</i>
<i>llomeserreng</i>	intelligence; wisdom	<i>mellomes a rengul</i>
<i>melareng</i>	charming; engaging; attractive	<i>melai a rengul</i>
<i>ngasecherreng</i>	anger	<i>ngmasech a rengul</i>
<i>ngelbesel a rengul</i>	acquisitiveness; sexual desire	<i>nguibes a rengul</i>
<i>ngesechel a rengul</i>	anger	<i>ngmasech a rengul</i>
<i>ngibeserreng</i>	acquisitiveness; sexual desire	<i>nguibes a rengul</i>
<i>rraurreng</i>	confusion; puzzlement	<i>rrau a rengul</i>
<i>saikerreng</i>	laziness	<i>mesaik a rengul</i>
<i>sebekreng</i>	worry; anxiety	<i>suebek a rengul</i>
<i>seserreng</i>	industriousness; diligence	<i>meses a rengul</i>
<i>sikel a rengul</i>	laziness	<i>mesaik a rengul</i>

TABLE 3.4 A selection of nominal ψ -idioms

- (3.56) a. Ngii a rol-el el mo chemolt aike el rokui el mekreos
 he TOP way-3SGP L AUX.FUT appear those L all L precious
 el tekoi el l-odengei a Dios er a llemes-el a
 L things L 3SGS.IRR-know D God P D brightness-3SGP D
reng-ul.
 heart-3SGP
 “He is the key that opens all the hidden treasures of God’s wisdom and
 knowledge.” [Chedaol Biblia, Colossians 2:3]
- b. Ngii el llomes-er-reng el k-umerk er ngii a
 it L brightness-L-heart L ISGS.IRR-proclaim.IMPF ACC it TOP
llomes-er-reng er a Dios el mle berrot-el.
 brightness-L-heart P D God L AUX.PAST RES.hide-RES
 “The wisdom I proclaim is God’s secret wisdom.”
 [Chedaol Biblia, I Corinthians 2:7]
- (3.57) a. A nge/bes-el a reng-ul a urrol-ii el mo
 D NMLZ.drool-3SGP D heart-3SGP TOP lead.PAST.PF-3SGO L go
 mk-idekel-ii
 CAU.PF-dirty-3SGO
 “Her lust led her to defile herself.” (*approx.* “Her heart’s drooling led her
 to make herself dirty.”) [Chedaol Biblia, Ezekiel 23:7]
- b. Ak mo toreb-engii a ngibes-er-reng er kau.
 ISG= AUX.FUT stop.PF-3SGO D drool-L-heart P you
 “I will put a stop to your lust.” (*lit.* “I will stop your heart-drool.”)
 [Chedaol Biblia, Ezekiel 23:27]

The (a) sentences in (3.55) through (3.57) are quite reminiscent of the sentences with verbal and adjectival ψ -expressions that we have seen elsewhere in this chapter, the primary difference being that the ψ -expression is a derived nominal rather than a verb or adjective. The resulting structures, *a klungiolel a rengul* “(one)’s heart’s goodness” in (3.55a), *a llemesel a rengul* “(one)’s heart’s brightness” in (3.56a), and *a ngebesel a rengul* “(one)’s heart’s drool” in (3.57a) are related to the phrasal idioms *ungil a rengul* “(one)’s heart is good” (*i.e.*, glad), *mellomes a rengul* “(one)’s heart is bright” (*i.e.*, intelligent), and *nguibes a rengul* “(one)’s heart is drooling” (*i.e.*, lustful) in a fairly transparent way. However, the (b) sentences in (3.55) through (3.57) contain what look to be compound forms of the phrasal idioms. Descriptively, the noun *reng* “heart” appears to form a compound word with the predicate, which can be nominalized. For the sake of discussion, I will refer to the types of nominal

ψ -expressions shown in the (a) sentences as nominalizations and those in the (b) sentences as compound-nominals.

The choice between the nominalization strategy and the compounding strategy is relatively free, but I have made a few observations about the distributions of the two types. First, abstract nominals typically do not require possessors, and the possessor-less variants in Palauan are constructed using the compounding strategy. That is to say, it is perfectly grammatical to talk about “worry” (*sebekreng*, cf. *suebek a rengul* “(one)’s heart is flying”), “patience” (*klourreng*, cf. *klou a rengul* “(one)’s heart is big”), or “pride/stubbornness” (*kldidairreng*, cf. *kedidai a rengul* “(one)’s heart is high”) in general terms, without them characterizing a particular entity. Representative examples can be found below in (3.58).

- (3.58) a. A **sebek-reng** a mek-bered-ii a reng-ul a chad.
 D fly-heart TOP CAU-heavy.PF-3SGP D heart-3SGP D person
 “Worry can rob you of happiness.” (*lit.* “Heart-flight makes a person’s heart heavy.”)
 [*Chedaol Biblia*, Proverbs 12:25]
- b. A **k/lou-r-reng** a kuk ungil er a **k/didai-er-reng**.
 D NMLZ.big-L-heart TOP more good P D NMLZ.high-L-heart
 “Patience is better than pride.” (*lit.* “Heart-largeness is better than heart-height.”)
 [*Chedaol Biblia*, Ecclesiastes 7:8]

This contrasts starkly with non-nominal ψ -idioms, which have ψ -arguments that are inalienably possessed, such as *reng* “heart.” It appears that if the noun *reng* is part of a compound-nominal, however, a possessor of the entire compound-nominal is just optional, not obligatory.

Second, it seems to me that when the noun describes a property or event associated with a particular entity (*i.e.*, what would be the possessor of the ψ -argument in a verbal or adjective ψ -expression) rather than simply an abstract concept, there is a preference for the nominalization strategy. But there are enough naturally-occurring example sentences (from various sources) using the compounding strategy to suggest that it is also a viable option in these types of situations, and native speakers of Palauan also produce them in elicitation settings. For instance, *ungilreng* “goodness” in (3.55b), *llomeserreng* “intelligence” in (3.56b), and *ngibeserreng* “lust” in (3.57b) all have possessors marked with *er*.

Now, two different theories have gradually been developing in this chapter. The first theory is concerned with explaining the (morpho-)syntactic distributions of the subparts of idiomatic ψ -expressions. The second theory is concerned with the internal morphological structure of words. The shapes of nominalized and compound-nominal ψ -expressions like those in (3.55) through (3.58) inform both of these theories in an interesting way, when compared with their non-nominal

counterparts. To see why, let us first consider the structures of ψ -nominalizations and then turn to ψ -compound-nominals.

There are at least three primary differences between the ψ -nominalizations in (3.55a), (3.56a), and (3.57a) and their non-nominal counterparts. First, they often (but do not always) contain nominalizing morphology like *kl-* or *-el*.⁷² Second, they are inflected for possessor agreement with their ψ -arguments, suggesting that the ψ -argument DP itself is treated syntactically as a possessor (with another possessor of its own).⁷³ And third, they are preceded by the determiner *a*, suggesting that they are nouns that are heads of a larger extended nominal projection (in the sense of Grimshaw 2005: Ch. 1). Together, the morphosyntactic facts suggest a phrase structure like that in Figure 3.9 for *a ngelbesel a rengul* “(one)’s lust.”⁷⁴

As far as the ψ -compound-nominals are concerned, the structure is far less clear. Given the morphological variability of ψ -compound-nominals, it would appear that they are formed from two lexical roots that contain some form of the linker *el* in between. The [l] in *el* often assimilates to the *a* following [r], and the linker is sometimes reduced to simply *-l-* or *-r-*, *i.e.*, the schwa is deleted (see Ntelitheos 2010 for an analysis of a superficially similar type of compound in Malagasy).

Depending on the theory of morphology adopted, such compounds could be formed in the lexicon, but given the theory of ψ -idioms developed thus far, I propose that we pursue a syntactic approach. Recently, Harley (2008) has imported Baker’s (1988) analysis of noun incorporation into the framework of Distributed Morphology, proposing that compounding can be analyzed syntactically as incorporation of an *nP* (which contains a category-neutral $\sqrt{\text{ROOT}}$ and a nominalizer *n*) into a new $\sqrt{\text{ROOT}}$. *nP*-incorporation creates a compound noun like *truck-driver*, *drug-pusher*, *car-chasing (dog)*, etc.⁷⁵ Harley (2008: 135) proposes a structure like that in Figure 3.10 for *drug-pusher*, assuming an adjunction theory of head movement (for instance, see Matushansky 2006 for a particularly relevant recent analysis of head movement that is well-suited to Harley’s theory of compounding-as-incorporation).⁷⁶

⁷² See Josephs 1990: 120–127 for numerous examples of *kl-* nominals and Josephs 1997: Ch. 8 for a more general discussion of Palauan complex nominals.

⁷³ That the *-el* suffix in ψ -nominalizations is a possessor agreement morpheme and not simply an instance of the linker *el* is clear from the stress shift and resulting vowel reductions that apply in the stem that *-el* attaches to, as well as its allomorphy, *e.g.*, *-al* in *a dech-al a rengul* and *-il* in *a deuil a rengul*, *a kngtil a rengul*, and so forth. Furthermore, even though the linker *el* and the possessor agreement suffix *-el* are spelled alike, the linker is pronounced with schwa whereas the possessor agreement suffix is pronounced with [ɛ].

⁷⁴ Compare this structure, which incorporates aspects of the theory of category-neutral roots, with that in Figure 2.9 on page 80, which assumes that all terminal syntactic nodes are category-specific.

⁷⁵ *cf.* Roeper and Siegel 1978 for a lexical analysis.

⁷⁶ Compare Figure 3.10 to Harley 2008: 136, ex. 7.

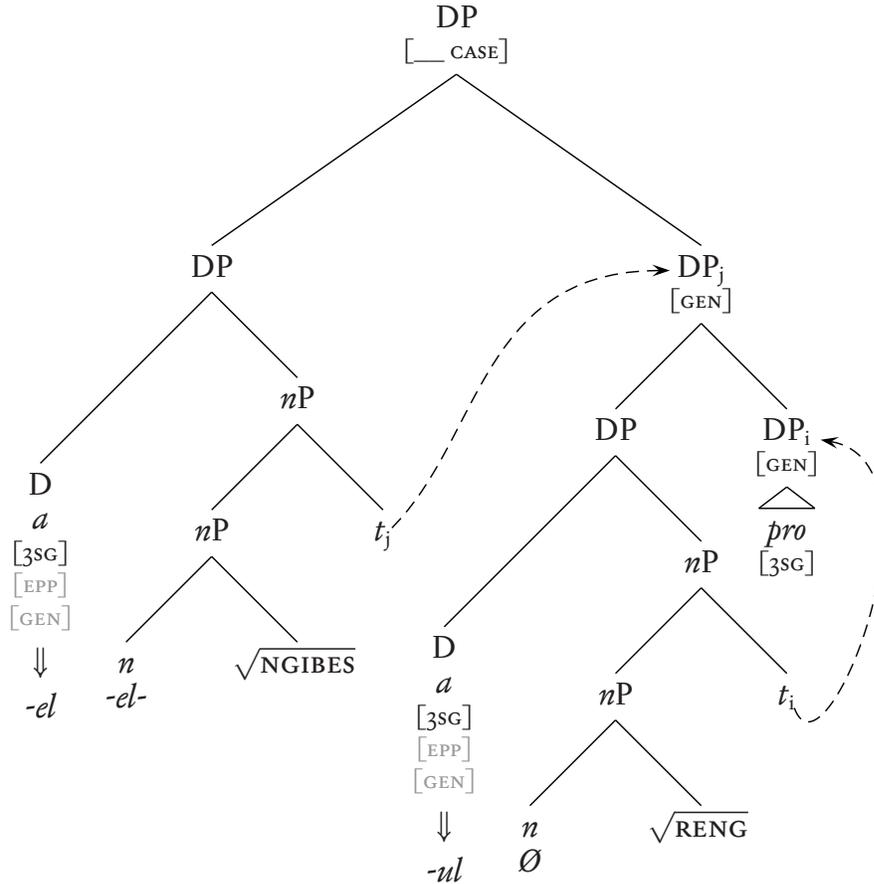


FIGURE 3.9 Phrase structure for ψ -nominalizations (here: *a ngebesel a rengul*)

The intuition behind Harley’s analysis is that compounds are syntactic constituents that are formed whenever a $\sqrt{\text{ROOT}}$ merges with a noun (in this theory, “nouns” are *nP*s) before it merges with a category-defining head (e.g., *n*, *a*, or *v*). Maintaining this intuition, an alternate analysis of *drug-pusher* might look like that in Figure 3.11, which requires no head movement.⁷⁷

This is the sort of analysis I would like to propose for Palauan ψ -compound-nominals. Rather than merging with a full DP argument, a ψ -predicate $\sqrt{\text{ROOT}}$ merges with a ψ -argument *nP*, such as $\sqrt{\text{RENG}}$ “heart” or $\sqrt{\text{NGOR}}$ “mouth.” The ψ -argument *nP* forms a compound with the ψ -predicate $\sqrt{\text{ROOT}}$ once the resulting

⁷⁷ Harley proposes head movement in order to preserve the spirit of Baker’s (1988) analysis of noun–incorporation (Harley 2008: 133). However, as Harley’s analysis of English compounds dictates that the incorporated element cannot be a DP (see also Lieber 1992: 12), it seems to me that no head-movement is necessary, as there is no evidence that the incorporated noun (*nP* in Harley’s terms) is extracted from any larger constituent.

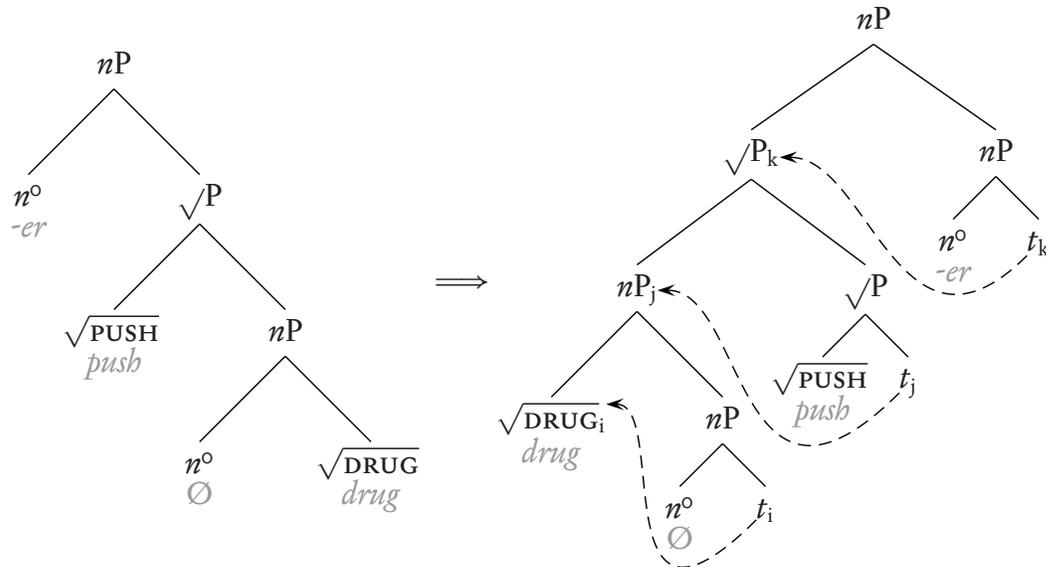


FIGURE 3.10 Derivation of *drug-pusher* on Harley's (2008) analysis

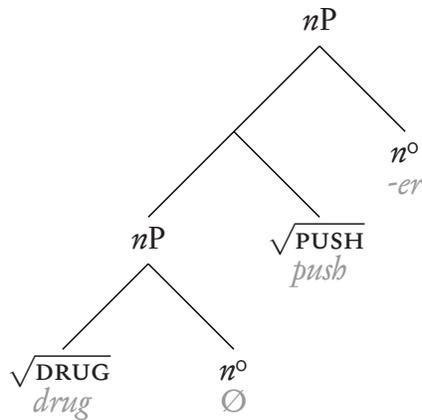


FIGURE 3.11 Alternate analysis of *drug-pusher* with no head movement

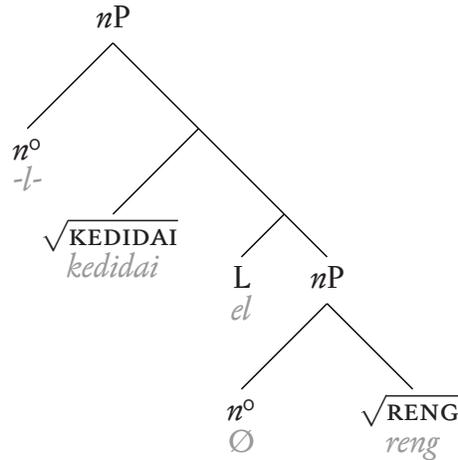


FIGURE 3.12 Phrase structure for ψ -compound-nominals (here: *kldidaierreng*)

subtree merges with a nominalizer n , such as $kl(e)$ - in *klengariouerreng* “humility” (cf. *ngar er a eou a rengul* “(one)’s heart is on the bottom”) or $-(e)l$ - in *kldidaierreng* “stubbornness” (cf. *kedidai a rengul* “(one)’s heart is high”). The fact that many of the ψ -compound-nominals in Table 3.4 contain what appear to be mutated forms of the linker suggests that the nP does not saturate an argument position the semantics of its sister \sqrt{ROOT} , but perhaps modifies it or restricts it (e.g., along the lines of proposals by van Geenhoven 1998; Chung and Ladusaw 2003; Farkas and de Swart 2003). The proposed structure for *kldidaierreng* and ψ -compound-nominals more generally is illustrated schematically in Figure 3.12.

The fact that *reng* cannot inflect for possessor agreement whenever it appears in a ψ -compound-nominal, as we saw in the (b) sentences in (3.55) through (3.57), provides additional support for the view that it does not form a DP before it merges with the ψ -predicate root. Possessors in DPs containing ψ -compound-nominals are obligatorily marked with *er*, even if either \sqrt{ROOT} in the compound (or both) have possessor agreement morphological paradigms, e.g., the various forms of *reng* in Table 3.2. When *reng* is in a ψ -compound-nominal, it *cannot* have a possessor despite its being an inalienably possessed noun (Josephs 1990: 289), as shown in (3.59b–c) and (3.60b–c).

- (3.59) a. Me ng so-ak el nguú tia el techall el
 and.so 3SG= desire-ISGP L take.PF.3SGO this L opportunity L
 l-ochot-ii a deu-il a reng-ud.
 3SGS.IRR-show.PF-3SGO D joy-3PL.-HUMP D hearts-IPL.INCP
 “I want to take this opportunity to show our gratitude.” [CB 54–55]

- b. A Dios a mi/s-kak a deu-r-reng me a cherchur.
 D God TOP PAST.bring.PF-ISGO D joy-L-heart and D laughter
 “God has brought me joy and laughter.” [Chedaol Biblia, Genesis 21:6]
- c. *... a deu(il)-r-reng-ul
 ... D joy(3SGP)-L-heart-3SGP
 (“his/her joy”)
- (3.60) a. A de/lebeakl le-bo er a ngsech-el a reng-rir,
 D NMLZ.curse 3SGS.IRR-become P D climb-3SGP D hearts-3PLP
 e le ng kmal kdekudel.
 because 3SG= very awe-inspiring
 “A curse be on their anger, because it is so fierce.” (approx. “(May) a
 curse be on their hearts’ climb(ing), because...”)
 [Chedaol Biblia, Genesis 49:7]
- b. E ak mo omtok er kemiu el ob-a a
 then ISG= AUX.FUT oppose.IMPF ACC you.PL L carry.PF-3SGO D
 ngasech-er-reng.
 climb-LNK-heart
 “Then in my anger I will turn on you.” (approx. “Then I will oppose you
 with anger.”) [Chedaol Biblia, Leviticus 26:28]
- c. *... a ngasech(el)-r-reng-ul
 ... D climb(3SGP)-L-heart-3SGP
 (“his/her anger”)

If the structure proposed in Figure 3.12 is correct, then it serves as evidence for a particular subtype of phrasal idiom that requires a local ordering relation between category-neutral roots, rather than a relationship that is restricted to combinations of predicates and particular argument DPs or to particular hierarchical structural configurations between idiom chunks. Ψ -idioms can be listed in the Encyclopedia as $\sqrt{\text{ROOT}}\text{-}\sqrt{\text{ROOT}}$ sequences.

3.4 CONCLUSIONS

The data involving transitivity alternations in §3.3.1 and nominalizations in §3.3.2 provide further evidence for the analysis of Palauan ψ -expressions that I developed

k. You're bringin' on the **heartbreak**.

[Def Leppard, "Bringin' On The Heartbreak"]

l. Go away, **Heartbreaker**.

[Led Zeppelin, "Heartbreaker"]

But the difference between expressions like English "break one's heart" and Palauan ψ -idioms is that the English variety does not appear to be subject to any sort of locality or ordering restriction like the Ψ -Idiom Locality Restriction — in other words, English "break one's heart" is more metaphorical than idiomatic (Lakoff and Johnson 1980). In some sense, then, the properties of Palauan ψ -idioms lie somewhere between those of idioms that can be manipulated by a variety of operations, like English *pull strings* in (3.5), and those of more rigid idioms, like English *kick the bucket* in (3.6). Fraser's (1970) research on English idioms concludes they can be classified hierarchically by which syntactic or morphological operations/manipulations they permit, given in (3.62).

(3.62) THE FRASER HIERARCHY OF IDIOMS (UPDATED)⁷⁹

Level 6 (Unrestricted): All operations are permitted.

Level 5 (Category Changes⁸⁰): Any operation that changes the syntactic categories of elements within the idiomatic unit is permitted.

Ex.: *We hated it whenever they cracked the whip over us.* \Rightarrow *We hated every crack of the whip over us.*

Level 4 (Extraction): Any operation that extracts a subpart from the idiomatic unit to a position outside of the unit is permitted.

Exx.: *I thought his critique bit the nail (right) on the head.* \Rightarrow *I thought the nail was bit (right) on the head (with his critique).*, *I wouldn't touch it with a ten-foot pole.* \Rightarrow *There is no ten-foot pole that I would touch it with.*, *We poked fun at the situation.* \Rightarrow *How much fun did you poke at the situation?*

Level 3 (Permutation): Any operation that changes the order of elements within the idiomatic unit is permitted.

Exx.: *Every cosmetics company claims to be able to turn back the clock.* \Rightarrow *Every cosmetics company claims to be able to turn the clock back.*, *You can't teach new tricks to an old dog.* \Rightarrow *You can't teach an old dog new tricks.*

Level 2 (Insertion): Any operation that inserts additional material in a position inside of the idiomatic unit is permitted.

Exx.: *People are always fishing for {compliments, the solution, an answer, ...}.*, *They*

⁷⁹ cf. Fraser 1970: 36–42 for the original formulation and further discussion of each level.

⁸⁰ Fraser (1970: 38–39) refers to Level 5 Idioms as the class that allows "reconstitution."

gave {me, the politicians, every single one of my neighbors across the street, President Obama ...} hell.

Level 1 (Adjunction/Morphological Changes⁸¹): Any operation that adjoins words or changes the morphological form of elements within the idiomatic unit is permitted.

Exx.: *Quite unexpectedly, the children turned over a new leaf.* ⇒ *The children's turning over a new leaf was quite unexpected.*, *We burned the candle at both ends.* ⇒ *We burned the candle together at both ends.*

Level 0 (Completely Frozen): No operations whatsoever may apply to the idiomatic unit.

The Fraser Hierarchy aims to capture a generalization about English phrasal idioms, which states that if a particular idiom permits operations at level n , then the same idiom will also permit operations at every level $< n$. For example, if a particular idiom allows permutations (level 3), then it should also allow insertions (level 2) and adjunctions/morphological changes (level 1). Furthermore, the idiom will not permit operations at any level $> n$. So a level 3 idiom will not allow extraction (level 4) or category changes (level 5).

The robustness of the Fraser Hierarchy allows us to make some sense of the variation in the behavior of English idioms. Still, it seems unlikely to hold cross-linguistically, given the behavior of Palauan ψ -idioms. For instance, we know that the truly idiomatic ψ -expressions do not allow inversion of the ψ -predicate and the ψ -argument (level 3), nor can any element that contains a $\sqrt{\text{ROOT}}$ intervene between the two (level 2). As far as extraction is concerned, it was shown that while possessors of ψ -argument DPs can freely extract (level 4), entire ψ -argument DPs can only do so if the movement does not disrupt linear adjacency between the two roots that form the basis of the ψ -idiom. Still, we have observed that components of ψ -idioms allow morphological changes (level 5) and even category changes (level 1), as shown in §3.3.2.

The data is compatible with the category-neutral root theory (and, in turn, syntactic theories of word formation), but does not necessarily argue against a lexicalist theory. Of course, one could posit multiple lexical entries for each morphological form of a given ψ -expression (just as one might posit distinct singular and plural forms of each noun in a lexicon), but such a theory would fail to capture the regularities among different morphological forms of the same idiomatic ψ -expressions. Beyond the sorts of transitivity and category alternations, other sorts of morphology can combine with a $\sqrt{\text{ROOT}}$ to form a word, including irrealis subject agree-

⁸¹ Fraser (1970: 38–39) refers to Level 1 Idioms as the class that allows only “adjunction,” as he views the relevant morphological changes as adjunction processes.

ment prefixes on imperatives, as in (3.63), and aspectual suffixes, as in (3.64).

- (3.63) a. M-ollach, e m-osmechokl, e
 2SGS.IMP-advise.IMP and 2SGS.IMP-correct.IMP and
 m-olisiich a reng-rir a ruumerang.
 2SGS.IMP-strengthen.IMP D hearts-3PLP D believers
 “Convince, reproach, and encourage the believers.” (*lit.* “...strengthen
 the believers’ hearts.”) [*Chedaol Biblia*, 2 Timothy 4:3]
- b. L-ak le-sebek a reng-um e ng kmal diak a
 3SGS.IMP-NEG 3SGS.IRR-fly D heart-2SGP and 3SG= very not.exist D
 rol-em e bo mad.
 way-3SGP then AUX.FUT.IRR die
 “Don’t worry; there’s really no way you’re going to die.” (*approx.* “May
 your heart not fly...”) [CB 8I]
- c. Ng kuk obero ad er a chelechol er a rriil, me
 3PL.-HUM= more heavy P D sands P D sandy.beach and.so
 l-ak le-me-chas a reng-miu er a tekoi el
 3SGS.IMP-NEG 3SGS.IRR-PASS-char D hearts-2PLP P D words L
 kulekoi.
 ISGS.IRR.speak.IMP
 “They would weigh more than the sands of the sea, so my wild words
 should not surprise you.” (*approx.* “...that your heart not be charred by
 the words that I speak.”) [*Chedaol Biblia*, Job 6:3]
- (3.64) a. A re-sib a oumisk e kmal ngosech-a a reng-rir
 D PL-sheep TOP make.click and a.lot INTR.climb-ICP D hearts-3PLP
 me te lmuut el ongeng-ii.
 and 3PL= happen.again L stare.at.PF-3SGO
 “The sheep clucked in disapproval and were starting to get very angry,
 and they stared at it again.” [CB 43]
- b. Ng dirkak le-bo el eru el buil el k-chad
 3SG= not.yet 3SGS.IRR-AUX.FUT L two L months L ISGS.IRR-person
 e turek-a a reng-uk er a kle-chad.
 and crash-ICP D heart-ISGP P D NMLZ-life
 “I’m not even 2 months old yet and I’m getting tired of being alive.”
 (*approx.* “...and my heart is starting to crash because of life.”) [CB 2I]

- c. A re-bek el charm a ko er a kmal **ungi-a** a **reng-rir** me
 D PL-all L animals TOP like P D very good-ICP D hearts-3PLP and
 te ko er a di mle che//laod.
 3PL= like P D just AUX.PAST RES.comfort
 “All the animals were starting to be really glad and they were somewhat
 comforted.” (*approx.* “All the animals were starting to have somewhat
 good hearts...”)

[CB 100]

In the next chapter, the inventory of transitive *v* heads proposed in Chapter 2 is augmented to include intransitive *v* heads. The theory of category-neutral roots developed here in Chapter 3 provides a way for us to view the syntactic behavior of the class of Palauan intransitive verbs in a way that allows us to make sense of their non-uniform syntactic behavior. Assuming that *v* is not just⁸² a voice morpheme (*cf.* Johnson 1991; Kratzer 1996; Chomsky 2000 *et seq.*) but is primarily responsible for giving category-neutral syntactic elements the lexical category “verb” (or changing the category of a category-defined syntactic constituent to the category “verb”). The goal is to show that what appear to be superficially similar intransitive verbs are formed from roots that have different inherent argument structures and event structures.

⁸² I do, in fact, assume that certain *v* heads may bear voice features like [ACTIVE] or [PASSIVE], but I do not assume that it is the primary function of *v* morphemes (as a class) to encode voice features. Certain *v* morphemes, *e.g.*, unaccusative *v*, do not bear any voice features on the theory I develop in Chapter 4.

CHAPTER 4

From Roots to Words: Selection and Projection

“Il n’y a qu’une seule beauté,
celle de la vérité qui se révèle.”

Auguste Rodin (1840–1917)

This chapter refines the idea that verbalizers are a class of functional heads of the category v , whose function is to transform a verb root into a full-fledged verb (where the root is either of category V or is category-neutral), focusing on data involving intransitive verbs in Palauan. The primary question addressed is one of selection vs. projection: if a verb is a syntactic object constructed compositionally from a $\sqrt{\text{ROOT}}$ or V and a verbalizer v via the operation Merge, one might expect to find many more verbs in a language than are actually attested. For instance, if the lexicon of a language \mathcal{L} contains a set of roots with the cardinality \mathbb{R} and a set of verbalizer morphemes with the cardinality \mathbb{W} , then it should be possible to derive $\mathbb{R} \times \mathbb{W}$ verbs in \mathcal{L} . And if verbalizer (and other category-defining) morphemes can combine with syntactic constituents that have already been assigned a category, then the number of possible verbs in \mathcal{L} is, in principle, limitless.

But this is not what we find in natural language. In English, for example, it has been claimed that certain transitive verbs cannot be passivized, such as *lack*; compare (4.1) and (4.2).

(4.1) Deborah lacked a pleasing personality. [Postal 2004: 265, ex. 87a]

(4.2) *A pleasing personality was lacked by Deborah. [Postal 2004: 265, ex. 87b]

In category-neutral root theory, the transitive verb *lack* is constructed syntactically from a transitive v and a root $\sqrt{\text{LACK}}$. If passive verbs are not derived from active verbs but can be constructed independently and freely from the same roots when

they merge with a passive *v* (as I argue in this chapter), then the ungrammaticality of a sentence like (4.2) might be seen as surprising. One could argue that there is some semantic property of the state of LACK-ing that is incompatible with passive *v*. Looking at some other languages, *e.g.*, French and Italian, it appears that verbs with meanings similar to English *lack* also lack passive variants, suggesting that a semantic approach might be appropriate. For instance, consider the Italian examples in (4.3) and the French examples in (4.4).

(4.3) ITALIAN:

- a. Ai bambini non manca energia.
 to the kids not lacks energy
 “The kids don’t lack energy.” [Perlmutter 1984: 293, ex. 4d]
- b. *Energia non è mancato dagli bambini.
 energy not is lacked by the kids
 (“Energy is not lacked by the kids.”) [Pesetsky 1995: 51, ex. 149b]

(4.4) FRENCH:

- a. L’argent a manqué à nos parents.
 money has lacked to our parents
 “Our parents have lacked money.” [cf. Legendre 1989: 753, ex. 2a]
- b. *L’argent a été manqué par nos parents.
 money has been lacked by our parents
 (“Money has been lacked by our parents.”) [Géraldine Legendre, p.c.]

While the argument structures of Italian *mancare* and French *manquer* are different from English *lack*,⁸³ the fact that none of these verbs have passive forms is striking.

Still, there is reason to doubt that the (un)acceptability of a passive form of a transitive verb depends solely on the semantics of the verb. For instance, Hoekstra cites examples of two synonymous verbs in Dutch, *opvallen* and *treffen*, only one of which may be passivized; note the contrasts in (4.5) below. Perlmutter and Postal (1984: 115) and Pesetsky (1995: 52) list similar such pairs of synonymous verbs in English, an example of which is given below in (4.6).

⁸³ The former are unaccusative verbs that take dative experiencers (see *i.a.*, Belletti 1988: 16 for Italian *mancare* and Legendre 1989: 761–762 for French *manquer*) while the latter is a transitive stative verb with an experiencer subject.

(4.5) DUTCH:

- a. Die fout is mij opgevallen.
that mistake is me struck
“That mistake struck me.” [cf. Hoekstra 1984: 185, ex. 123a]
- b. *Ik ben/werd door die fout opgevallen.
I am by that mistake struck
(“I am struck by that mistake.”)
[cf. Hoekstra 1984: 185, ex. 123b; Pesetsky 1995: 52, ex. 151b]
- c. Die fout heeft mij getroffen.
that mistake has me struck
“That mistake struck me.” [cf. Hoekstra 1984: 186, ex. 124a]
- d. Ik ben/werd door die fout getroffen.
I am by that mistake struck
“I am struck by that mistake.”
[cf. Hoekstra 1984: 186, ex. 124b; Pesetsky 1995: 52, ex. 152a]

- (4.6) a. The correct generalization eluded Pāṇini.
b. *Pāṇini was eluded by the correct generalization.
c. Pāṇini missed the correct generalization.
d. The correct generalization was missed by Pāṇini.

[Pesetsky 1995: 52, ex. 154a–d]

Alternations like those in (4.5) and (4.6) strongly suggest that a purely lexical semantic explanation will not suffice to delimit the class of transitive verbs that may have passive forms. Furthermore, one need not look too far to find passive forms of English verbs which (some have claimed) cannot be passivized. For instance, consider the passive forms of *lack* and *elude* below in (4.7) and (4.8).

- (4.7) a. In this form the axiom affirms a certain syntactical property of the system *S*; an important property, but one which is **lacked by most comprehensive systems**, including that of *P.M.* [Quine 1936: 500]
b. Both Replagal and Genzyme’s drug, Fabrazyme, consist of an enzyme that is **lacked by patients with Fabry disease**. [“Drug Concern’s Shares Fall After a Disappointing Trial,” *The New York Times*, 28 November 2002.]
c. The Core Fighter was a type of escape system, and **was lacked by all mass-produced suits**.

[URL: http://en.wikipedia.org/wiki/Project_V; retrieved 13 May 2010.]

- d. On the basis of that information, she could then infer whether each trait **was possessed or lacked by the target.** [Leyens et al. 1997: 514]
- e. In plants, a second domain ... retained the legumain-like inhibitory properties, which **were lacked by the papain-like inhibitory domain.** [Martinez et al. 2007: 2918]
- (4.8) a. While the new catch phrase uses simpler and more accessible English, it still **is eluded by that ‘oomph’ that is required of a brand.**
[“Please re-brand the Botswana brand,” *Mmegi Online*, 27 April 2010]
- b. **“Trap Is Eluded By Castro Force”** [Headline in *Toledo Blade*, 11 April 1958]
- c. After he **is eluded by Spider-Man** once again, the Hobgoblin causes Os-corp to explode. [URL: [http://en.wikipedia.org/wiki/The_Hobgoblin_\(Spider-Man\)](http://en.wikipedia.org/wiki/The_Hobgoblin_(Spider-Man)); retrieved 17 May 2010.]
- d. This precaution **was eluded by the vigilance of and despatch of Downing.** [Hume 1825: 762]
- e. The mitotic arrest induced by mutations in CTF13 **is eluded by mutations in these genes.** [Waters et al. 1998: 1182]

In each example in (4.7) and (4.8), the passive forms of *lack* and *elude* are followed with a *by*-phrase expressing what would have been the experiencer subject of the transitive forms of *lack* and *elude*. It appears, then, that the ban on passive forms of verbs such as *lack* and *elude* is not absolute; for certain speakers (and possibly in certain situations), passive forms are perfectly acceptable. If this is true, then it is natural to wonder what those conditions are and how they interact with the formal mechanisms underlying passivization. Similarly for unaccusative verbs: why don't all transitive verbs alternate with an intransitive unaccusative alternant where the DP complement of the verb is grammaticized as a subject rather than a direct object? In terms of the theory under consideration here, another way of asking this question might be: how are particular instances of V or $\sqrt{\text{ROOT}}$ (or their projections) restricted from merging with verbalizer morphemes of the “wrong” type, if they are restricted at all?

In this chapter, these questions are investigated for a particular class of intransitive predicates in Palauan that are all formed from the prefix *me-*. I will argue that this class of predicates, despite being intransitive, do not all have uniform (thematic) argument structures but that they do have a uniform syntax, shown in Figure 4.1. On this analysis, these verbs are all syntactically unaccusative, in that the single argument DP of each predicate is base-generated in its complement position as an internal argument, rather than being introduced as an external argument in the specifier of *v*P. The differences between these morphologically similar but syn-

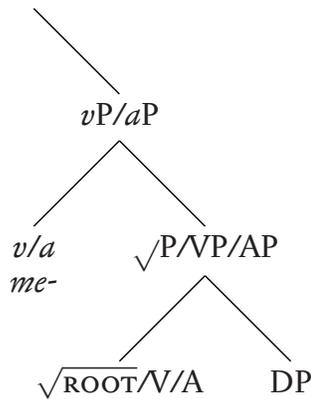


FIGURE 4.1 Uniform argument structure for intransitive *me-* predicates

tactically distinct subclasses of intransitive verbs arise both from the features of the particular instance of intransitive *v/a* that merges with VP/AP/ \sqrt{P} as well as the features inherent to the V/A/ \sqrt{V} . In line with the analysis of transitive verbs developed in §2.2, I propose that there are (at least) two instances of intransitive *v* and at least one instance of *a* that are all spelled out as *me-*, given in (4.9).

(4.9) SOME INTRANSITIVE FUNCTIONAL HEADS CORRESPONDING TO *me-*:

- a. *Passive v*: Forms passive verbs which license either implicit (null) or oblique (PP) external arguments, which may license agent-oriented adverbials and purpose infinitival modifiers if they are agents.
- b. *Unaccusative v*: Forms unaccusative verbs with no implicit (or overt) external arguments. Can appear in the *di ngii*-predication construction.
- c. *Stative a*: Forms property-denoting stative adjectives, which neither license implicit or oblique external arguments nor appear in the *di ngii*-predication construction.

The chapter is laid out as follows. In §4.1, I frame the investigation by introducing the class of intransitive *me-* predicates and summarizing some of the conclusions about them reached the descriptive and theoretical literature. In §4.2, I present evidence for a class of passive *me-* verbs, drawing on evidence from oblique (external) arguments in PPs (*cf.* English passive *by*-phrase PPs) and modifiers licensed by implicit agents, *e.g.*, adverbials like *carefully* and *eagerly* and purpose infinitival modifiers like [*PRO to please the guests*] or [*PRO to collect the insurance money*]. In §4.3, a diagnostic for (anticausative) unaccusative verbs is introduced, which I call *di ngii*-predication. It is shown that *di ngii*-predication is incompatible with the modifiers that diagnose implicit arguments, suggesting that implicit arguments are

only licensed in Palauan passive *v*Ps and not unaccusative *v*Ps, reflecting the familiar distinctions between passives and unaccusatives in other better-studied languages. §4.4 briefly considers the class of adjectives also formed from the prefix *me-*, showing that they pattern with neither passive *me-* verbs nor with unaccusative *me-* verbs, as they do not pass the tests for implicit arguments and cannot appear in the *di ngii*-predication construction.

In §4.5, I lay the foundation for the analysis of the three subtypes of *me-* predicates like those of von Stechow 1995, Kratzer 1996, and Alexiadou and Anagnostopoulou 2004, in which the behavior of each subtype is traceable to the syntactic configurations the predicates may appear in. §4.6 discusses the predictions the analysis makes about transitivity alternations (*cf.* Dowty 1979; Chierchia 2004 [1989]; Levin and Rappaport Hovav 1995: Ch. 3; Pesetsky 1995; Reinhart 2000; Alexiadou 2010) like those briefly explored in §3.3.1 and explores the implications of the analysis for the theory of how verbs (and lexical categories more general) project layers of functional structure above them.

4.1 A HISTORY OF PALAUAN *me-* INTRANSITIVES

Many Palauan transitive verbs have a corresponding intransitive *basic form* (Josephs 1997: 211–220).⁸⁴ In such alternations, the direct object of the transitive variant, *e.g.*, in (4.10), becomes subject of the basic variant, *e.g.*, in (4.11).

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

(4.11) A blai er a Ngerchemai a **me-seseb** el me er a eou.
 D building P D Ngerchemai TOP INTR-burn L come P D space.below
 “Building in Ngerchemai burns down.” [Headline in *Roureor Belau*, 22 May 2002]

The English translations I have provided in (4.10) and (4.11) suggest that the pair of verbs *meleseb* and *meseseb* might be alternants in a causative–inchoative alternation, similar to English *sb. broke sthg.* (transitive) vs. *sthg. broke* (intransitive). But unlike *break* and *break*, the two verbs in (4.10) and (4.11) are morphologically distinct; the transitive alternant is formed from the prefix *meN-* while the intransitive alternant is formed from the prefix *me-*. It’s natural to wonder whether the alternation

⁸⁴ This is also known as the *ergative form* in Josephs 1975: 131–136, 1990: xxx–xxx1 and the *processive form* in Josephs 1999: 28–29.

(Imperfective) Transitive Prefix	Basic Form Prefix
<i>meN-</i>	<i>me-</i>
<i>oN-</i>	<i>o-</i>
<i>omek-</i>	<i>muk-</i>
<i>ol-</i>	<i>mo-</i>
<i>ou-</i>	<i>mo</i> ⁻⁸⁵

TABLE 4.1 Some transitive prefixes and their corresponding basic form prefixes

between *meleseb* and *meseseb* might not also be analyzed as a voice alternation with morphologically distinct active and passive forms.

This question has continually puzzled Palauan researchers over the past few decades. In the Palauan literature, basic forms like *meseseb* in (4.11) have been analyzed variably as ergative (unaccusative) verbs (Wilson 1972; Josephs 1975, 1990), passives (Waters 1980; Georgopoulos 1986, 1991b), and even as a sort of hybrid between unaccusatives and passives (Flora 1974; Lemaréchal 1991; Gibson 1993; Josephs 1997, 1999). From the point of view of morphology, basic forms are formed with different prefixes from their corresponding transitive counterparts but with the same roots — *e.g.*, $\sqrt{\text{SESEB}}$ “burn” in (4.10) and (4.11). Some pairs consisting of a transitive prefix and its corresponding basic form prefix are shown in Table 4.1.

In §4.2–4.4, which together form the empirical basis of the chapter, it will be shown that the syntactic status of basic forms formed from *me-* (*i.e.*, whether they should be properly analyzed as passives, unaccusatives, or something else altogether) is much more transparent if the lexical semantics of roots (either the head V or $\sqrt{\text{ROOT}}$, depending on the theory) are taken into account. Various syntactic and semantic irregularities among members of the class of intransitive *me-* predicates suggest that they do not constitute a syntactically homogeneous class of verbs, despite the fact that they are all formed from what appears to be the same prefix. I cite evidence for a (minimally) three-way distinction between passive *me-* verbs, unaccusative *me-* verbs, and stative *me-* adjectives, showing that syntactic diagnostics can distinguish the three subclasses, hopefully demonstrating that, in a sense, the conclusions about *me-* predicates drawn by all of the previous researchers were correct, just not for every member of the class.

⁸⁵ Transitive verbs in *ou-* appear to be relatively idiosyncratic (indeed, many verbs in *ou-* are formed from roots borrowed from Japanese and English), and basic forms of transitive *ou-* verbs are not universally accepted among Palauan speakers. Those who accept them seem to prefer the *mo-* prefix for the basic form, though I have elicited data in which both transitive and basic forms are formed using the *ou-* prefix.

4.2 EVIDENCE FOR A SUBCLASS OF PASSIVE *me-* VERBS

Since the publication of Josephs's (1975) groundbreaking Palauan Reference Grammar, the status of the passive in Palauan has been a matter of some debate (see also Wilson 1972). Two different constructions have alternately been called a "passive" in the Palauan literature.

In the first construction, represented in (4.12), the internal argument, which is co-referent with a resumptive pronoun in its base position, obligatorily occupies a pre-verbal topic position while the external argument (often null *pro*) remains in a post-verbal position and triggers subject agreement. In addition to being analyzed as a passive (Wilson 1972: 144–148; Josephs 1975: 141–143, 400–407), this construction has also been called object topicalization (Waters 1980; Georgopoulos 1986, 1991b), and "pre-passive" (Gibson 1993).

- (4.12) a. [A tech-el a charm]_i a le-bo **longa** er
 [D flesh-3SGP D animal] TOP 3SG.IRR-AUX.FUT 3SG.IRR.eat.IMPF ACC
 ngii_i a rubak.
 it D old.man
 "The meat will be eaten by the old man." (*lit.* "The meat, the old man will eat it.")
- b. [A telkib er a kerrekar]_i a **k-ultaut** er ngii_i.
 [D some P D wood] TOP 1SGS.IRR-PAST.ignite.IMPF ACC it
 "Some of the wood I burned up." [*Chedaol Biblia*, Isaiah 44:19]

In the second construction, represented in (4.13), the internal argument occupies a post-verbal position and triggers subject agreement, and the external argument may optionally be included in an oblique PP headed by the preposition *er*. If the subject is topicalized, as in (4.13a–b), the verb remains in its realis form, indicating that the A' dependency created by topicalization has targeted a subject (see Georgopoulos 1985, 1991b for details).

- (4.13) a. A tech-el a charm a kir-el mo **me-dul** er
 D flesh-3SGP D animal TOP obligation-3SGP AUX.FUT INTR-roast P
 a ngau e **me-kang** el obengk-el a diak a omkukel el
 D fire and INTR-eat L companion-3SGP D none D yeast L
 bluang me a mechuached el dellomel.
 bread and D bitter L plants
 "The meat is to be roasted and eaten with bitter herbs and with bread made without yeast." [*Chedaol Biblia*, Exodus 12:8]

- b. A telkib er a kerrekar a mla mo-taut.
 D some P D wood TOP AUX INTR-ignite
 “Some of the wood has been burned up.”

Following the conclusions of Waters 1980 and nearly all subsequent work, including Josephs’s more recent work (see Josephs 1994, 1997, 1999), I treat the construction in (4.12) as an object topicalization which retains its valence and set it aside. I focus instead on verbs like those in (4.13), which have reduced valence and can be treated as truly intransitive.

The question at issue is how we can tell that the construction in (4.13), which includes the *me-* verbs *medul* “roasted” (*cf. melul* “roast,” Josephs 1990: 170) and *mekang* “eaten” (*cf. mengang* “eat,” Josephs 1990: 171) is a passive construction. On such an analysis, the *me-* prefix could be analyzed as a passive morpheme (*cf. Baker et al. 1989*) which does not license structural Accusative Case or introduce an external argument DP, but may license oblique or implicit arguments. Note that *a techel a charm* “the meat” in (4.13a) and *a telkib er a kerrekar* “some of the wood” in (4.13b) have been promoted to subject; each triggers (null) subject-oriented *wh*-agreement on the verbs. There are no agent arguments expressed overtly in (4.13), but if these sentences contain passive verbs (and not unaccusatives) then there should be a covert, implicit agent argument present in the syntax.

The issues surrounding the diagnosis of the presence of implicit arguments have by now been explored in English and many other languages, and it is the presence of implicit arguments that has traditionally been seen to distinguish passives from unaccusatives (see, *i.a.*, Roberts 1986; Roeper 1987). Generally, the standard differences between the two types of intransitive verb have been shown to include the following.

- Passives can express an agent overtly in an oblique PP, while unaccusatives cannot.
- Implicit agents of passives can license agent-oriented adverbials, which are incompatible with unaccusatives.
- Implicit agents of passives can bind a null PRO in the subject position of purpose infinitival clause modifiers, which are incompatible with unaccusatives.

I run through the three tests below, one by one, showing that in Palauan, some members of the (morphological) class of *me-* predicates pass each test more clearly than others do.

4.2.1 THE ELUSIVE *by*-PHRASE

Indo-European passives optionally allow an “internalized” external argument to be expressed overtly in an oblique argument PP — the so-called “*by*-phrase,” as in (4.14). The DP in an oblique argument PP corresponds to whatever would have been the subject of the corresponding transitive. It is often an agent, as in (4.14a), but it need not be; for instance, it can also be a causer as in (4.14b) or an instrument as in (4.14c).

- (4.14) a. The national anthem was sung (**by the students**).
b. The door was opened (**by a freak gust of wind**).
c. My finger was accidentally sliced open (**by a sharp knife**).

Various researchers who have investigated the Palauan passive (*i.e.*, the type of verb appearing in (4.13)) have reported mixed judgments for oblique argument PPs (*er*-phrases, which are the Palauan correlates of English *by*-phrases). Josephs (1975: 134–135) reports that some speakers find them “awkward.” DeWolf (1979: 101) says that the agent is “not usually indicated,” which he follows up in a later study with a stronger claim, namely that the specification of an agent argument in an *er*-phrase is “disallowed” (1988: 171). Gibson (1993: Ch. 5), on the other hand, reports no problems eliciting *er*-phrases “beyond a preference to omit them.” In my own fieldwork, I initially had some trouble eliciting *er*-phrases due to the tendency for Palauan speakers to avoid passives in neutral contexts altogether⁸⁶, but I eventually found that the relative (un)acceptability of an oblique *er*-phrase depends largely on the verb.⁸⁷

Some examples of *er*-phrases containing DPs with various thematic relations to the event denoted by the VP are given in (4.15). Like English *by*-phrases, the

⁸⁶ Palauan speakers found it odd that I was trying to elicit *er*-phrases in root, monoclausal passives when I could express the same sentence using a synonymous and much less marked active transitive structure. Once I began eliciting passives in periphrastic causative sentences, in which there is an identity requirement between a causee DP in the matrix clause and the subject in the embedded clause, it became much easier to elicit *er*-phrases.

⁸⁷ It has been suggested to me (Sandy Chung, p.c.) that one possible source of the variability among speakers in terms of their acceptance of *er*-phrases might be interference from English, a possibility that is also mentioned by Josephs (1999: 29). That is, *er*-phrases might have only come into the language recently as a result of the increasing trend for Palauans to become bilingual during U.S. administration of Palau as a U.N. Trust Territory. We may find that *er*-phrases will become increasingly accepted as English becomes more widely spoken in Palau, but *er*-phrases were already attested as early as the 1940s (Capell 1949), and Palau only became a U.N. Trust Territory in 1944, shortly after World War II. It seems likely to me that *er*-phrases existed in Palauan before English became widely spoken in Palau.

er-phrase can contain agents (4.15a–b), causers (4.15c), instruments (4.15d), and anything else that could serve as subject of the transitive variant.

- (4.15) a. A “*Belau er Kid*” a mo me-chitakl (**er a rengalek er a**
 D Palau P IPL.INCL TOP AUX.FUT INTR-sing (P D children P D
skuul).
 school)
 “*Belau er Kid*⁸⁸ will be sung (by the students).”
- b. Aike [el mlok-oad er a **tebelik el charm**] a dimlak
 those [L PAST.PASS.CAU-die P D wild L animals] TOP NEG.PAST
 kulab el eko omes-kau.
 ISGS.IRR.PAST.carry L go bring.PF-2SGO
 “Those that were killed by wild animals, I didn’t take them to you.”
 [Chedaol Biblia, Genesis 31:39]
- c. Ng mo ua kerrekar el mla me-dul **er a ngau a**
 3PL.–HUM= AUX.FUT like trees L AUX INTR-burn P D fire D
 rechel-el, me a bng-al a m-o-sebek
 branches-3PL.–HUMP and D flowers-3PL.–HUMP TOP PASS-CAU-fly
er a eolt el mo cheroid.
 P D wind L go away
 “They will be like trees whose branches are burned by fire, whose blos-
 soms are blown away by the wind.” [Chedaol Biblia, Job 15:30]
- d. Ng rul-leterir el mo meruul er a bleob el okesi-ul
 3SG= make.PF-3PLO L go make.IMPF ACC D idol L image-3SGP
 ngike el kot el charm el *mil*-temall **er a saider e** ngdi
 that L first L beast L PAST.INTR-wound P D sword then but
 ng *si*obel.
 3SG= PAST.survive
 “The beast told them to build an image in honor of the beast that had
 been wounded by the sword and yet lived.” [Chedaol Biblia, Revelations 13:14]

(4.15) demonstrates that oblique *er*-phrases can be licensed in clauses with intransitive *me*- verbs, both in elicited contexts as in (4.15a) and naturally occurring contexts like those in (4.15b–d). Co-occurrence with *er*-phrases suggests that (at least some) *me*- verbs are passives rather than unaccusatives, which are thought not to permit oblique or implicit arguments.

⁸⁸ *Belau er Kid* is the name of the Palauan national anthem.

4.2.2 LICENSING AGENT-ORIENTED ADVERBIALS

Agent-oriented adverbials are licensed by syntactic presence of an agent, whether overt or implicit. The conclusion that passives can license implicit agents is based largely on evidence from agent-oriented modifiers that appear even in the absence of an overt agent DP. The logic is that if passives license agents, and agents license agent-oriented adverbials, then the co-occurrence of a passive form and an agent-oriented adverbial diagnoses the syntactic presence of an agent, even if no agent DP is pronounced. Note the contrast in (4.16).

- (4.16) a. I sold the book voluntarily.
 b. The book was sold voluntarily. [Roberts 1986: 70, ex. 4a]
 c. *The book sold voluntarily. [Roberts 1986: 70, ex. 4b]

In (4.16a), the presence of the overt agent *I* licenses the presence of the adverbial *voluntarily*. The fact that it is also licit in (4.16b), which contains a passive verb, suggests the presence of an implicit agent. In sentence (4.16c), which contains an unaccusative verb, modification by the adverbial *voluntarily* is ungrammatical.

The test would appear to be a clear diagnostic for differences in behavior between the class of passives and the class of unaccusatives. And since licensing of agent-oriented adverbials depends on a given thematic relation (agentivity), we should be able to use such adverbials in different languages to diagnose the presence of implicit agents. But in Palauan, the results are somewhat mixed. In some cases, agent-oriented adverbials are perfectly acceptable, as in (4.17).

- (4.17) a. A Belau er Kid a (blak a reng-rir el) mo me-chitakl.
 D Palau P IPL.INC TOP (eager D hearts-3PLP L) AUX.FUT INTR-sing
 “Our Palau will be sung (eagerly).”
 b. A siasing a (dachelbai el) mil-chesbereber.
 D picture TOP (skillful L) PAST.INTR-paint
 “The picture was painted (skillfully).”
 c. A blai a (kerekikl el) m/uke-dechor.
 D house TOP (careful L) PAST.PASS.CAU-upright
 “The house was built (carefully).”

(4.17) contains examples of *me-* verbs that fall into the semantic class of creation verbs, like *mehitakl* “be sung” and *mehesbereber* “be painted.” Presumably, the events expressed by verbs of creation require an initiator (typically an agent).⁸⁹

⁸⁹ See Ramchand 2008: 24 for discussion of the role of initiation and initiators in event semantics.

Even in their intransitive forms, agent-oriented adverbials are very readily accepted with these verbs, suggesting the syntactic presence of implicit agents in (4.17a–c).

Other intransitive *me-* verbs like *meseseb* “burn/be burned” and *obok* “open/be opened” do not require agents, but may express them optionally in oblique *er-*phrase PPs. In the absence of *er-*phrases, agent-oriented adverbials are only sometimes accepted — certainly not always. However, speakers who accept *er-*phrases with these verbs almost always permit agent-oriented adverbials as well. Consider the data in (4.18).

- (4.18) a. A blai a (?blak a reng-ul el) mil-seseb (er a
 D house TOP (?eager D heart-3SGP L) PAST.INTR-burn (P D
 rubak).
 old.man)
 “The house (was) (?eagerly) burned down (by the old man).”
- b. A chesimer a (?kerekikl el) ule-bok (er a sensei).
 D door TOP (?careful L) PAST.INTR-open (P D teacher)
 “The door (was) (?carefully) opened (by the teacher).”

Some sense might be made of the pattern in (4.18) if we consider the differences between unaccusative/passive pairs like *open/be opened*, as in (4.19).

- (4.19) a. The door (*carefully) opened (*by the guy carrying the heavy file cabinet).
 UNACCUSATIVE
- b. The door was (carefully) opened (by the guy carrying the heavy file cabinet).
 PASSIVE WITH OBLIQUE OR IMPLICIT AGENT
- c. The door was (*carefully) opened by a freak gust of wind.
 PASSIVE WITH OBLIQUE CAUSER

In (4.19a), the unaccusative *open* does not license an external argument (implicit or oblique), and so agent-oriented adverbials like *carefully* cannot be licensed either. In (4.19b), the passive *be opened* permits an implicit or oblique agent, and the adverb *carefully* can thus appear without restriction. However, the passive *be opened* in (4.19c) licenses an oblique causer argument rather than an oblique agent, and this causer argument fails to license the adverb *carefully*.⁹⁰

⁹⁰ This is unsurprising, given that passive is a voice, which affects DPs with particular grammatical relations. It does not operate on thematic roles, such as agent or causer. It is worth emphasizing that although agent-oriented adverbials (and purpose infinitival clause modifiers) are frequently used to diagnose differences between passives and unaccusatives, they cannot sufficiently diagnose all passives; (4.19c) provides direct evidence that this is the case. While it may be true that no un-

To account for the variability in the judgments of (4.18a–b), I would like to suggest that since events of BURN-ing or OPEN-ing can happen spontaneously and do not require initiators (unlike events of creation, such as SING-ing or PAINT-ing), intransitive *me-* verbs expressing such events are ambiguous between passive and unaccusative interpretations. That is, if an implicit or oblique agent or causer is syntactically present either in an *er-*phrase or via inference due to the presence of licensed agent-oriented adverbials, then a verb like *meseseb* in (4.18a) can be interpreted like English “be burned” (*i.e.*, as a passive) rather than like English “burn” (*i.e.*, as an unaccusative), and similarly for *obok* (*i.e.*, “be opened” rather than “open”).

In the next section, it will be shown that the distribution of purpose infinitival clause modifiers patterns exactly the same way as the distribution of agent-oriented adverbials, seemingly confirming the ambiguity.

4.2.3 CONTROL INTO PURPOSE INFINITIVAL CLAUSE MODIFIERS

Another type of evidence for implicit arguments comes from the licensing of null PRO subjects of purpose infinitival clause modifiers (see Jespersen 1940; Faraci 1974; Williams 1980; Bach 1982; Kirkpatrick 1982; Jones 1985, 1991; Roberts 1986; Roeper 1987). Examples from English are given below in (4.16).

- (4.20) a. I sold the book [PRO to make money].
 b. The book was sold [PRO to make money]. [Roberts 1986: 70, ex. 5a]
 c. The book was sold (by Amazon.com) [PRO to make money].
 d. *The book sold [PRO to make money]. [Roberts 1986: 70, ex. 5b]

The null PRO in a purpose infinitival clause must be bound by an initiator (who is ordinarily volitional, but at the very least acts deliberately) of the event modified by the purpose clause (*i.e.*, an agent or causer). The initiator can either be an overt DP subject of a transitive verb as in (4.20a), a null implicit argument of a passive verb as in (4.20b), or an oblique argument of a passive verb as in (4.20c). Since intransitive unaccusative verbs do not license overt or implicit initiator arguments, there is no initiator to bind PRO in the purpose clause, so purpose clauses are incompatible with unaccusatives. Consequently, if a purpose clause is acceptable, the verb may be analyzed as a passive and not as an unaccusative, but if a purpose clause is unacceptable, it is possible that the verb might be analyzed either as a passive or as an unaccusative (*i.e.*, the purpose clause might be ruled out for other reasons).

accusative can license an implicit agent, it is also certainly not the case that every passive can, since not all implicit arguments need be agentive; see, *e.g.*, (4.7), (4.8), and (4.14b–c).

Interestingly, the variability in judgments of agent-oriented adverbials in §4.2.2 manifests itself again when the distribution of purpose clauses is considered. That is, when they co-occur with intransitive *me-* verbs whose lexical semantics require that the event have an initiator (like *mechitakl* “be sung,” *mechesbereber* “be painted,” or *mlukedechor* “be built” in (4.21)), purpose infinitivals are generally accepted.

- (4.21) a. A Belau er Kid a mo me-chitakl (**el oldeu**
 D Palau P IPL.INC TOP AUX.FUT INTR-sing (L make.happy.IMPF
er a reokiaksang PRO).
 ACC the guests ARB)
 “Our Palau will be sung (to please the guests).”
- b. A siasing a mil-chesbereber (**el omekord er a rum PRO**).
 D picture TOP PAST.INTR-paint (L decorate.IMPF ACC D room ARB)
 “The picture was painted (to decorate the room).”
- c. A blai a m/uke-dechor (**el olengeseu er a telungalek**
 D blai TOP PAST.PASS.CAU-upright (L help.IMPF ACC D family
er ngak PRO).
 P me ARB)
 “The house was built (to help my family).”

Even in the absence of an overt initiator, the purpose clauses *el oldeu er a reokiaksang* “to please the guests” in (4.21a), *el omekord er a rum* “to decorate the room” in (4.21b), and *el olengeseu er a telungalek er ngak* “to help my family” in (4.21c) are fully acceptable to nearly all speakers.

But in sentences containing passives of verbs with optional agents, like *meseseb* “burn/be burned” in (4.22a) and *obok* “open/be opened” in (4.22b), purpose infinitivals are not always acceptable. In the presence of an oblique agent, however, purpose clauses are much more readily accepted.

- (4.22) a. A blai a mil-seseb (er a rubak) (**?el ngmai a udoud**
 D house TOP PAST.INTR-burn (P D old.man) (?L get the money
el insurance PRO).
 L insurance he)
 “The house (was) burned down (by the old man) (?to collect the insurance money).”

- b. A chesimer a ule-bok (er a ta er a resensei) (?el
 D door TOP PAST.INTR-open (P D one P D teachers) (?L
 mengelekolt er a klas).
 cool.down.IMPF ACC D classroom)
 “The door (was) opened (by one of the teachers) (?to cool down the
 classroom).”

Why should the acceptability of purpose clauses depend on the verb that describes the event modified by the purpose clause? And furthermore, why does the variability in acceptability of purpose clauses align so closely with the variability in acceptability of agent-oriented adverbial?. Again, I propose that this variability is due to the lexical semantics of the verbs involved.

Verbs whose lexical semantics require a volitional or deliberate initiator but only select theme complements, like *sing*, *paint*, or *build*, can be transitive whenever the external argument DP (*i.e.*, the subject) is linked to the initiator thematic role. When such verbs are intransitive, however, their initiators must be implicit or oblique arguments, and the theme DP is promoted to subject. Since unaccusatives do not license implicit or oblique arguments, these verbs cannot be interpreted as unaccusatives; they can freely form passives, however. The same is true in English — note that similar contrasts can be observed even in English despite the fact that unaccusatives and passives are morphologically distinct, *e.g.*, in (4.23) through (4.25).

- (4.23) a. Aretha Franklin **sang** *My Country 'Tis of Thee* at Barack Obama's 2009 presidential inauguration ceremony.
 b. *My Country 'Tis of Thee* **was sung** at Barack Obama's 2009 presidential inauguration ceremony (by Aretha Franklin).
 c. **My Country 'Tis of Thee* **sang** at Barack Obama's 2009 presidential inauguration ceremony (by Aretha Franklin).
- (4.24) a. Vincent Van Gogh **painted** *Starry Night* in 1889.
 b. *Starry Night* **was painted** (by Vincent Van Gogh) in 1889.
 c. **Starry Night* **painted** (by Vincent Van Gogh) in 1889.
- (4.25) a. We **built** this city on rock and roll. [“We Built This City,” *Starship*]
 b. This city **was built** on secrets. [“Detroit was Built on Secrets,” *Search the City*]
 c. *This city **built** on secrets/on rock and roll.

Verbs whose lexical semantics allow (but do not require) volitional or deliberate initiators and select theme complements, like *burn* or *open*, have at least three options — they may be transitive, passive, or unaccusative. If this lexical semantic account is on the right track, then the variability in judgments of agent-oriented adverbials and purpose infinitival clause modifiers might stem from a general lack of uniformity of interpretation. That is, in the absence of a context, some Palauan speakers might naturally interpret intransitive *me-* verbs formed from a $V/\sqrt{\text{ROOT}}$ meaning “burn” or “open” as either preferentially passive or preferentially unaccusative. The corresponding English verbs *burn* and *open* also permit all three options (transitive, passive, and unaccusative), as shown in (4.26) and (4.27).

- (4.26) a. The Great Chicago Fire **burned** buildings across a span of 34 city blocks.
 b. Buildings across a span of 34 city blocks **were burned** (in/by the Great Chicago Fire).
 c. Buildings across a span of 34 city blocks **burned** (in/*by the Great Chicago Fire).
- (4.27) a. The establishment of the Schengen Area **opened** many European countries’ borders.
 b. Many European countries’ borders **were opened** (with/by the establishment of the Schengen Area).
 c. Many European countries’ borders **opened** (with/*by the establishment of the Schengen Area).

The pattern emerging thus far is that a semantically delimited subclass of verbs appears to be compatible with a passive interpretation but not an unaccusative interpretation, arguing that at least some intransitive Palauan verbs formed from *me-* should receive a passive analysis. Other intransitive *me-* verbs are much less clearly passives. In the following section, I examine several of the verbs with variable behavior more closely and introduce a new Palauan diagnostic that can be used to distinguish unaccusatives from passives.

4.3 A DIAGNOSTIC FOR UNACCUSATIVE *me-* VERBS

As we saw above in §4.2, there are Palauan *me-* verbs that seem to pattern like passives in other languages with respect to their co-occurrence with oblique/implicit arguments, agent-oriented adverbials, and purpose infinitival clause modifiers. But other *me-* verbs resist co-occurring with all of these; speakers differ widely in their judgments of how acceptable they are. To explain this variability, I proposed that

such verbs are ambiguous between passive and unaccusative interpretations in neutral contexts. In this section, I present a diagnostic that I call *di ngii*-predication that can help us to distinguish passives from unaccusatives more reliably. The *di ngii*-predication diagnostic effectively serves to diagnose the absence of implicit initiator arguments (*i.e.*, agents or causers). As a result, passive verbs cannot appear in *di ngii*-predications, as shown in (4.28), while unaccusatives like *mad* “die” are perfectly acceptable in *di ngii*-predications, as in (4.29).

(4.28) a. A beches el bli-mam a **m/ukedechor** (er a dem-ak).
 D new L house-IPL.EXCP TOP PAST.INTR.build (P D father-ISGP)
 “Our new house was built (by my father).”

b. *Ng **di mle ngii** [a beches el bli-mam [el
 3SG= only AUX.PAST itself [D new L house-IPL.EXCP [L
 m/ukedechor]].
 PAST.INTR.build]]
 (“Our new house (was) built on its own.”)

(4.29) a. A ngikel er a omoachel a **m/ad** (*er a chad er a chei).
 D fish P D river TOP PAST.die (*P D man P D sea)
 “The fish in the river died (*by the fisherman).”

[cf. *Cbedaol Biblia*, Exodus 7:21]

b. Ng **di mle ngii** [a ngikel er a omoachel [el
 3PL.-HUM= only AUX.PAST themselves [D fish P D river [L
 m/ad]].
 PAST.die]]
 “The fish in the river died (on their own).”

In (4.28), the verb *mukedechor* “be built” is a creation verb and requires an oblique or implicit initiator. Since *di ngii*-predication in intransitives is incompatible with oblique and implicit initiators, (4.28b) is ungrammatical. In (4.29), on the other hand, the verb *mad* “die” is incompatible with initiators, as shown in (4.29a). As such, it is free to appear in a *di ngii*-predication, as shown in (4.29b).

4.3.1 PALAUAN *di ngii*-PREDICATION

The Palauan *di ngii*-predication diagnostic essentially asserts that there is no external argument that initiates the event denoted by the predicate. *Di ngii*-predication is closely related to similar *on its own*-type diagnostics in other languages, like the English *by itself/on its own* diagnostic (Delancey 1984; Levin and Rappaport Ho-

vav 1995) in (4.30), the Italian *da sé* diagnostic (Chierchia 2004 [1989]) in (4.31), the German *von selbst/von allein* diagnostic (Härtl 2003, Schäfer 2008) in (4.32), the (Modern) Greek *apo mono tu* diagnostic (Alexiadou and Anagnostopoulou 2004), the Ukrainian *sam po sobi* diagnostic (Lavine 2010) in (4.34), and probably many others.

(4.30) ENGLISH:

- a. The door opened **by itself**. [Levin and Rappaport Hovav 1995: 88, ex. 17b]
- b. *The door was opened **by itself**. [Cortés Rodríguez 2008: 267, ex. 45]

(4.31) ITALIAN:

- a. La barca è affondata **da sé**.
the boat is sunk by itself
“The boat sank by itself.” [Chierchia 2004: 43, ex. 42b]
- b. *La barca è stata affondata **da sé**.
the boat is been sunk by itself
 (“The boat was sunk by itself.”) [Chierchia 2004: 43, ex. 42c]

(4.32) GERMAN:

- a. Der Teller zerbrach **von selbst**.
the plate broke by itself
“The plate broke by itself.” [Härtl 2003: 895, ex. 26a]
- b. *Der Teller wurde **von selbst** zerbrochen.
the plate became by itself broken
 (“The plate was broken by itself.”) [Härtl 2003: 895, ex. 26b]

(4.33) (MODERN) GREEK:

- a. To pani skistike **apo mono tu**.
the cloth tore by itself
“The cloth tore by itself.” [Alexiadou and Anagnostopoulou 2004: 123, ex. 14c]
- b. *To vivlio diavastike **apo mono tu**.
the book read.PASS by itself
 (“The book was read by itself.”)
[Alexiadou and Anagnostopoulou 2004: 122, ex. 14a]

(4.34) UKRAINIAN:

- a. Vaza rozbyla-sja sama po sobi.
 vase.NOM.FEM broke.FEM.SG-REFL by-self.NOM.FEM
 “The vase broke by itself.” [Lavine 2010: 110, ex. 23]
- b. *Vazu bulo rozbyto samu po sobi.
 vase.ACC.FEM was broken.PASS by-self.ACC.FEM
 (“The vase was broken by itself.”) [Lavine 2010: 110, ex. 22]

In the (a) sentences in (4.30) through (4.34), there is no external causer or agent that initiates the event, and each *on its own*-type modifier describes the subject of an unaccusative verb. In the (b) sentences, there is presumably an implicit agent or causer that initiates each event, rendering *on its own*-type modification ungrammatical.

Palauan *di ngii*-predication works similarly. Consider the example in (4.35).

- (4.35) Ng di mle ngii [a butiliang [el ule-beu]].
 3SG= only AUX.PAST itself [D bottle [L PAST.INTR-break]]
 “The bottle broke on its own.”

Applying this diagnostic to Palauan verbs with precision is complicated by two factors. The first is that passive and unaccusative verbs are morphologically identical (if the analysis that is gradually unfolding is on the right track); I address this issue in §4.3.2. The second is that some *on its own*-type modifiers are ambiguous between a *without external help* interpretation, as in (4.36), and an *alone* interpretation, as in (4.37). Indeed, some sentences are compatible with both interpretations, as in (4.38).

- (4.36) Half of my plants require fertilizer to bloom, and the other half bloom **by themselves**.

MEANS: *Nothing causes my plants to bloom.* WITHOUT EXTERNAL HELP
 CANNOT MEAN: *The other half of my plants don't bloom.* ALONE

- (4.37) The student arrived early **by herself**.

MEANS: *No one else arrived early.* ALONE
 CANNOT MEAN: *Nothing caused the early arrival.* WITHOUT EXTERNAL HELP
 [Deal 2009: 294, ex. 15]

- (4.38) The wizard disappeared **by himself**.

MEANS: *Nothing caused the wizard to disappear.* WITHOUT EXTERNAL HELP
 MEANS: *Nothing else disappeared.* ALONE
 [Deal 2009: 294, ex. 17b]

The reading that concerns us is that in (4.36), where *by itself* indicates that there is no external causer distinct from the theme. Fortunately, the *without external help* and *alone* interpretations of English *on its own/by itself* are expressed by different constructions in Palauan. The *without external help* interpretation is expressed with the *di ngii*-predication construction, as we saw above in (4.35). A *di ngii*-predication is formed by merging a reflexive pronoun as the main predicate and modifying it with *di* “just/only,” with a co-referring subject DP modified by a relative clause (which contains the information about the event that the subject participates in).⁹¹ Some naturally-occurring examples are given below in (4.39).

(4.39) *WITHOUT EXTERNAL HELP* INTERPRETATION:

- a. A sensei a menguiu me a lechub e ng **di ngii** [a ngalek
 D teacher TOP read.IMP or 3SG= only himself [D child
 [el lmuut el chuieu-ii a kot el paragraph]].
 [L happen.again L read.PF-3SGO D first L paragraph]]
 “The teacher reads, or the child reads the first paragraph again **on his own.**” [CK 27]
- b. [Ngii el siseball]_i a **di mle ngii** ______i [el me-ngai
 [it L entrance] TOP only AUX.PAST itself <GAP> [L INTR-remove
 a chesmer-el].
 D door-3SGP]
 “The gate opened for them **by itself.**” [Chedaol Biblia, Acts 12:10]
- c. Ng diak a ulaoch er a Chedaol el Llechukl el sebec-el
 3SG= not.exist D prophecy P D Holy L Scriptures L ability-3SGP
 a chad_i [el **di ngii** ______i [el smaod]].
 D person [L only himself [L VBLZ.explain.PF]].
 “No one can explain **by himself or herself** a prophecy in the Scriptures.” [Chedaol Biblia, 2 Peter 1:20]

In order to get the *alone* interpretation, there are two alternatives. The first is to adjoin the modifier *tang* “alone” to the reflexive pronoun predicate in a *di ngii*-predication, as in (4.40a). The second involves clefting the (logical) subject and modifying it with *di* “only” — there is no reflexive pronoun involved. But rather

⁹¹ *Di ngii*-predication seems to share some of the properties of clefts, but I am hesitant to definitively classify the *di ngii*-predication construction as a cleft for two reasons. First, Georgopoulos’s extensive research on Palauan clefts (1991b) does not mention the construction, and second, there is a full DP in subject position which heads the relative clause, rather than an expletive subject. I have not investigated the syntactic properties of *di ngii*-predication thoroughly enough to ascertain whether it is derived by the same process that forms clefts. This task must be left aside for the time being.

than inserting an expletive in the subject position of the cleft, a headless relative is formed from what would have been the relative clause in the cleft and inserted into subject position. An example is in (4.40b).

- (4.40) a. Ng di mle ngii el tang [a ngelek-ek [el
 3SG= only AUX.PAST himself L alone [D child-ISGP [L
 chiliis]].
 PAST.run.away]]
 “My child ran away by himself.”
 (*lit.* “My child who ran away was only himself, alone.”)
- b. Ng di mle ngelek-ek [a chiliis].
 3SG= only AUX.PAST child-ISGP [D PAST.run.away]
 “My child ran away by himself.”
 (*lit.* “The (one who) ran away was only my child.”)

Some naturally occurring examples are given in (4.41) below.

(4.41) ALONE INTERPRETATION:

- a. Ng ngera a uchul me ng di mle kau el tang
 3SG= what? D reason so.that 3SG= only AUX.PAST yourself L alone
 [el me er tiang]?
 [L come P here]
 “Why did you come here all by yourself?” [Chedaol Biblia, I Samuel 21:1]
- b. Ng di mle ngii el tang [el mo ngmasech er a rois
 3SG= only AUX.PAST itself L alone [L go INTR.climb P D mountain
 el mo meluluuch]. Me se er a bo-cha
 L go pray]. And that.time P D IRR.AUX.FUT-ICP
 le-kebesengei, e a Jesus a di mle ngii el tang.
 3SG.IRR-evening then D Jesus TOP only AUX.PAST himself L alone.
 “He went up a hill by himself to pray. When evening came, Jesus was
 there alone.” [Chedaol Biblia, Matthew 14:23]
- c. Ng di tirke el silobel [a kmal di ule-briid] me
 3SG= only those L PAST.survive [D very just INTR.PAST-scatter] and
 te chiliis el di chad me a bedeng-el.
 3PL= PAST.run.off L only person and D body-3SGP.
 “The survivors scattered, each man running off by himself.”
 [Chedaol Biblia, I Samuel 11:11]

What is important for our purposes is that the Palauan *di ngii*-predication construction in (4.35) and (4.39) unambiguously expresses the *without external help* interpretation of *on its own*-type modifiers.

4.3.2 DISTINGUISHING UNACCUSATIVES FROM PASSIVES

If *di ngii*-predication has the same effect as the inclusion of *on its own*-type modifiers in the various languages cited in (4.30) through (4.34), then we would expect it to be incompatible with passives. But as was mentioned above, there is a problem with identification. If passives and other intransitive verbs (including unaccusatives) can all be formed from the prefix *me-*, then we need multiple diagnostics that can distinguish them in order to compare the results. Combining *di ngii*-predication with the diagnostics for passives in §4.2 gives us a way to do this.

Di ngii-predication does not apply uniformly to sentences containing *me-* verbs. For example, if *di ngii*-predication is applied to (4.II), repeated below, the result is acceptable, as shown in (4.42).

(4.II) A blai er a Ngerchemai a **me-seseb** el me er a eou.
 D building P D Ngerchemai TOP INTR-burn L come P D space.below
 “Building in Ngerchemai burns down.” [Headline in *Roureur Belau*, 22 May 2002]

(4.42) Ng **di mle ngii** [a blai er a Ngerchemai [el
 3SG= only AUX.PAST itself [D building P D Ngerchemai [L
mil-seseb el me er a eou]].
 INTR.PAST-burn L come P D space.below]]
 “The building in Ngerchemai burned down by itself.”

The fact that *meseseb* can appear in the relative clause of a *di ngii*-predication in (4.42) suggests that *meseseb* patterns like an unaccusative, rather than a passive. This result is initially quite surprising, considering that we saw in §4.2.2–4.2.3 that *meseseb* also patterns like a passive whenever it co-occurs with an oblique argument in an agentive *er*-phrase; *i.e.*, agent-oriented adverbials are licensed, and the oblique argument can bind PRO in a purpose infinitival clause modifier. This is all summarized below in (4.43).

- (4.43) A blai er a Ngerchemai a (kerekikl el) **mil-seseb** el me
 D building P D Ngerchemai TOP (carefully L) INTR.PAST-burn L come
 er a eou er a rekelebus (el melai a techei PRO).
 P D space.below P D prisoners (L take.IMPF D revenge they)
 “The building in Ngerchemai was (carefully) burned down by the prisoners
 (to take revenge).”

But *di ngii*-predication is incompatible with external initiator arguments (implicit or overt), which include agents and causers. As such, it is expected that *di ngii*-predication will block the presence of *er*-phrases, agent-oriented adverbials, and purpose infinitival clause modifiers. Each of these predictions is borne out in (4.44) through (4.46).

- (4.44) *DI NGII*-PREDICATION BLOCKS *ER*-PHRASES:
 Ng di mle ngii [a blai er a Ngerchemai [el
 3SG= only AUX.PAST itself [D house P D Ngerchemai [L
mil-seseb el me er a eou (***er a rekelebus**)]].
 INTR.PAST-burn L come P D space.below (***P D prisoners**)]]
 “The building in Ngerchemai burned down **on its own (*by the prison-**
ers).”

- (4.45) *DI NGII*-PREDICATION BLOCKS AGENT-ORIENTED ADVERBIALS:
 Ng di mle ngii [a blai er a Ngerchemai [el (***kerekikl el**)
 3SG= only AUX.PAST itself [D house P D Ngerchemai [L (***carefully L**)
mil-seseb el me er a eou]].
 INTR.PAST-burn L come P D space.below]]
 “The building in Ngerchemai (***carefully**) burned down **on its own.**”

- (4.46) *DI NGII*-PREDICATION BLOCKS CONTROL INTO PURPOSE INFINITIVALS:
 Ng di mle ngii [a blai er a Ngerchemai [el
 3SG= only AUX.PAST itself [D house P D Ngerchemai [L
mil-seseb el me er a eou (***el melai a techei**
 INTR.PAST-burn L come P D space.below (***L take.IMPF D revenge**
PRO)]].
 ARB)]]
 “The building in Ngerchemai burned down **on its own (*to take revenge).**”

What the sentences in (4.44) through (4.46) show us is that *di ngii*-predication is incompatible with anything that must be licensed by implicit or oblique agents of

passives. It would appear, then, that the diagnostics for implicit agents in passives and the *di ngii*-predication diagnostic allow us to distinguish between *me*- verbs that should be analyzed as passives (*i.e.*, if they have implicit arguments, they must be passives and not unaccusatives) or non-passives (*i.e.*, if they cannot have implicit arguments, they cannot be passives).⁹²

The explanation that was considered in §4.2 for the variable behavior of certain *me*- verbs, like *meseseb* “be burned/burn,” was that they may sometimes be interpreted as passives (≈ “the building was burned down”) and other times as unaccusatives (≈ “the building burned down”). Since the tests for implicit agents are incompatible with *di ngii*-predication, it appears that the variability only manifests itself across different sentences containing the same verb. That is, even if it is possible for a verb like *meseseb* to be either passive or unaccusative in principle, it can only be one or the other in a particular sentence or context.

4.3.3 TESTING A PREDICTION

If *di ngii*-predication reliably identifies unaccusatives and is incompatible with external agents and causers, then a testable prediction is made. *Di ngii*-predication should be impossible with *me*- verbs that require agents, such as creation predicates (*i.e.*, the same verbs that invariably license agent-oriented adverbials and purpose infinitival clause modifiers). This is indeed what we find in (4.47) and (4.48). The verbs *mengesbereber* “paint” and *omekedechor* “build” are creation verbs that require agents. Their transitive use is given in the (a) sentences, corresponding passives are shown in the (b) sentences, and their incompatibility with *di ngii*-predication is shown in the (c) sentences.

- (4.47) a. A sensei a mi/ngesbereber er a siasing.
 D teacher TOP PAST.paint.IMPf ACC D picture.
 “The teacher was painting a picture.”

TRANSITIVE

⁹² Like most diagnostics, these will not pick out the entire class of passives or unaccusatives. Since the diagnostics for implicit arguments depend on the implicit argument being agentive/volitional/deliberate/etc., and since implicit arguments in passives can have a variety of different thematic roles, some passives will not be able to license agent-oriented adverbials or purpose infinitivals. Similarly, just because a verb cannot license an implicit argument does not mean that it must be treated as unaccusative; as we will see in §4.4, stative *me*- adjectives cannot appear in *di ngii*-predications either, even though they do not license implicit arguments. This aspectual restriction is probably a result of the semantics of stative eventualities, discussed further in Chapter 5. It is entirely possible that there are additional restrictions on *di ngii*-predication that prevent it from picking out the entire class of unaccusative verbs.

- b. A *siasing* a ***mil-chesbereber*** (er a *sensei*).
 D picture TOP INTR.PAST-paint (P D teacher)
 “The picture was painted (by the teacher).” IMPLICIT AGENT OPTIONAL
- c. *Ng ***di mle ngii*** [a *siasing* [el ***mil-chesbereber***]].
 3SG= only AUX.PAST itself [D picture [L INTR.PAST-paint]]
 (“The picture (was) painted on its own.”) IMPLICIT AGENT BAD
- (4.48) a. A *dem-ak* a *omeke-dechor* er a *beches el*
 D father-ISGP TOP CAU-upright.IMPF ACC D new L
bli-mam.
house-IPL.EXCP.
 “My father is building our new house.” TRANSITIVE
- b. A *beches el bli-mam* a ***m/uke-dechor*** (er a
 D new L house-IPL.EXCP TOP PAST.PASS.CAU-upright (P D
dem-ak).
father-ISGP)
 “Our new house has been built (by my father).”
 IMPLICIT AGENT OPTIONAL
- c. *Ng ***di mle ngii*** [a *beches el bli-mam* [el
 3SG= only AUX.PAST itself [D new L house-IPL.EXCP [L
m/uke-dechor]].
PAST.PASS.CAU-upright]]
 (“Our new house (was) built on its own.”) IMPLICIT AGENT BAD

The pattern in (4.47) and (4.48) suggests that some *me-* verbs (*e.g.*, verbs of creation) are interpreted unambiguously as passives. This result aligns with their increased compatibility with agent-oriented adverbials and purpose infinitivals even in the absence of an overt agent.

4.4 NOTES ON STATIVE *me-* ADJECTIVES

To complicate the situation even further, there is an additional class of stative *me-* predicates that do not pattern with either passives or unaccusatives. Many (but certainly not all) Palauan stative predicates are formed with the *me-* prefix. Like nearly all of the unaccusative and passive verbs formed from *me-*, a significant number of these stative *me-* predicates also alternate with transitive (causative) forms (*e.g.*, *mesisiich* “strong; healthy” vs. *melisiich* “strengthen”). Some examples are provided below in (4.49) through (4.52).

- (4.49) Ak kot el **me-saul** el lmuut el me er a blai el me
 ISG= too L INTR-tired L happen.again L come P D house L come
 melai a ralm.
 get D water
 “I’m too tired to come back to the house to get the water.” [UR 1]
- (4.50) Te omengur el mo **me-dinges**.
 3PL= dine L become INTR-satisfied
 “They eat until they are full.” [KM 4]
- (4.51) A bli-rir a **me-sisiich**.
 D house(hold)-3PLP TOP INTR-healthy
 “Their family is healthy.” [BL 1]
- (4.52) Me a rechad er a bli-l me a beluu a ko er a kmal
 so D people P D house-3SGP and D village TOP sort of very
 m/o me-chas a reng-rir, e le ngika el buik a
 PAST.become INTR-charred D heart-3PLP because this L boy TOP
 kmal **me-sisiich** el diak a **me-ringel** er ngii.
 very INTR-healthy L not.exist D INTR-painful P there
 “His family and the villagers were quite surprised at the boy’s sudden good
 health and quick recovery.” [NB 3]

Unlike passives (but like unaccusatives), *me-* statives do not allow external arguments to be expressed in oblique *er-* phrases, they do not license agent-oriented adverbials, and they do not permit control into purpose infinitivals.

- (4.53) a. Ng (*blak a reng-ul) **me-sisiich** (*er a toktang) (*el
 3SG= (*eager D heart-3SGP) INTR-healthy (*by the doctor) (*L
 mo merael er a Merilang PRO).
 AUX.FUT travel P D Manila he)
 “He is (*eagerly) healthy (*by the doctor) (*to travel to Manila).”
- b. Ak (*kerekikl el) **me-saul** (*er a resecheli-k) (*el mo
 ISG= (*carefully L) INTR-tired (*P D friends-1SGP) (*L go
 mechiuaiu PRO).
 sleep I)
 “I am (*carefully) tired (*by my friends) (*to go to sleep).”

It appears that *me-* statives pass none of the tests for implicit agents. This result is entirely unsurprising, since stative eventualities are always incompatible with agents.

But perhaps unexpectedly, *me-* statives cannot appear in *di ngii*-predications either, even though they do not license implicit arguments. Consider the sentences in (4.54) below.

- (4.54) a. *Ak di ngak [*pro* [el mle **me-saul**]].
 ISG= only myself [I [L AUX.PAST INTR-tired]]
 (“I am tired on my own.”)
- b. *Ng di ngii [a chim-ak [el mle **me-ringel**]].
 3SG= only itself [D hand-ISGP [L AUX.PAST INTR-painful]]
 (“My hand hurts on its own.”)
- c. *Te di tir [a rengalek [el mle **me-si-siich**]].
 3PL= only themselves [D children [L AUX.PAST INTR-RED-strong]]
 (“The children are healthy on their own.”)

However, the addition of the verb *mɔ* “become” transforms the stative predicate into a change-of-state achievement predicate (see Chapter 5, §5.2.2 for further details), which is compatible with *di ngii*-predication.

- (4.55) a. Ak di ngak [*pro* [el **m/o** **me-saul**]].
 ISG= only myself [I [L PAST.become INTR-tired]]
 “I was getting tired on my own.”
- b. Ng di ngii [a chim-ak [el **m/o** **me-ringel**]].
 3SG= only itself [D hand-ISGP [L PAST.become INTR-painful]]
 “My hand started hurting on its own.”
- c. Te di tir [a rengalek [el **m/o**
 3PL= only themselves [D children [L PAST.become
me-si-siich]].
 INTR-RED-strong]]
 “The children were becoming strong on their own.”

Evidently, statives fail the *di ngii*-predication test, just as they fail the tests for implicit agents. On this basis, I propose that they are distinct from both passives and unaccusatives and should be analyzed as a separate class.

The diagnostics for implicit agents and the *di ngii*-predication diagnostic thus serve to pick out three types of intransitive predicates that can be formed from the prefix *me-*. The next question is how can we account for the syntactic variation

across the class of *me-* predicates. In the following section, I lay out the particulars of the analysis.

4.5 ANALYSIS

The data in this chapter probably poses the biggest challenge to the VERBALIZER + $V/\sqrt{\text{ROOT}}$ hypothesis, given that *me-* seems to form verbs and adjectives with very different syntactic and semantic properties, while other verbalizers apparently form verbs that are very similar syntactically and semantically, especially with regard to argument structure. An analysis in which all verbs are listed in the lexicon with verbalizer morphology already attached obviously circumvents this problem since everything is stipulated lexically. But I find an analysis of that sort somewhat uninteresting, as it provides no principled explanation for the correlations between aspect/argument structure and syntactic behavior. I believe that there is syntactic evidence for two homophonous intransitive verbalizer *vs* and an adjectivalizer *a*, each with different syntactic features. Furthermore, semantic classes of roots seem to only permit certain types of verbalizers and not others (see Embick 2004b and Kallulli 2007 for further elaboration), such as the class of creation verbs being incompatible with unaccusative *v*.

The evidence for the three subclasses of intransitive *me-* predicates is summarized in Table 4.2. The analysis that I propose follows the spirit of those of von Stechow 1995, Kratzer 1996, and Alexiadou and Anagnostopoulou 2004, in which the differences in the behavior of subclasses of predicates result from the syntactic configurations in which they surface. Specifically, I propose an articulated model of the verbal complex in which unaccusative verbs, as well as passives and statives, may project a functional *v/a* layer on top of a lexical VP or a $\sqrt{\text{P}}$ projected from a category-neutral lexical root, which aligns with the conclusions reached in Chapters 2 and 3.

PREDICATE TYPE	IMPLICIT/OBLIQUE ARGUMENTS	AGENT-ORIENTED MODIFIERS	<i>Di ngii-</i> PREDICATION
Passive verbs	Permitted	Licensed*	Unacceptable
Unaccusative verbs	Not permitted	Not licensed	Acceptable
Stative adjectives	Not permitted	Not licensed	Unacceptable

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

TABLE 4.2 Typology of Palauan intransitive *me-* predicates

On this analysis, *me-* predicates are not listed in the lexicon with the *me-* prefix attached; rather, the *me-* prefix is the exponent of a distinct functional head.

Instead, the lexical entries consist of a stem that is either category-neutral or of category V/A, like $\sqrt{\text{SAUL}}$ “tired,” $\sqrt{\text{SESEB}}$ “burn,” or $\sqrt{\text{CHESBEREBER}}$ “paint.” Each of these lexical items may only select a single internal argument DP as its complement. In the syntax, the VP/ v P formed from the V/ $\sqrt{\text{ROOT}}$ and its complement DP merges with a v or a head, which is the locus for the *me-* morphology seen in the inventory of Palauan intransitive *me-* predicates (following recent work in Distributed Morphology). The two instances of intransitive v and one instance of a that host the *me-* prefix were listed in (4.9), which is repeated below. When each of these v/a functional heads merges with a VP/AP/ \sqrt{P} , the resulting structures are quite similar, as shown in Figure 4.2 through Figure 4.4.⁹³

(4.9) SOME INTRANSITIVE FUNCTIONAL HEADS CORRESPONDING TO *me-*:

- a. *Passive v*: Forms passive verbs which license either implicit (null) or oblique (PP) external arguments, which may license agent-oriented adverbials and purpose infinitival modifiers if they are agents.
- b. *Unaccusative v*: Forms unaccusative verbs with no implicit (or overt) external arguments. Can appear in the *di ngii*-predication construction.
- c. *Stative a*: Forms property-denoting stative adjectives, which neither license implicit or oblique external arguments nor appear in the *di ngii*-predication construction.

On this analysis, the three subclasses of *me-* predicates are constructed from prefixes and roots in what are essentially different flavors of a basically unaccusative syntax, where the DP argument of the root is projected as an internal argument.⁹⁴

The [PASSIVE] feature on $v_{[\text{PASSIVE}]}$ is what permits implicit or oblique arguments to be licensed in the syntax of v P, and oblique arguments (in *er*-phrase PPs) right-adjoin to the passive v P. Consequently, if the implicit or oblique argument is an agent, agent-oriented adverbials and the presence of PRO in a purpose infinitival clause adjunct can be licensed by the agent argument. The presence of $v_{[\text{UNACCUSATIVE}]}$

⁹³ It is still an open question whether statives in Palauan should be classified as verbs, adjectives, or both. As I mentioned in footnote 30 on page 63, recent research has suggested that the adjective category is universal (Baker 2003; Dixon 2004), and presumably the predicates that have been called stative verbs in the Palauan literature (*e.g.*, Josephs 1990) are the likely candidates for classification as adjectives. Despite the lack of evidence, I adopt the label *a* here, recognizing that it is essentially a notational variant of a stative verbalizer v until evidence for a distinction between the two can be uncovered.

⁹⁴ Note that on this analysis, the DP complement to V/ $\sqrt{\text{ROOT}}$ must be accessible for further movement. On an analysis in which the content of V is actually just a category-neutral $\sqrt{\text{ROOT}}$, and if it turns out that merger of a category-defining head creates a Spell Out domain (consisting of the complement of the $\sqrt{\text{ROOT}}$ along the lines of Marantz 2007; cf. Arad 2003), then this DP must necessarily be introduced higher in the structure. I cannot explore the ramifications of that move here.

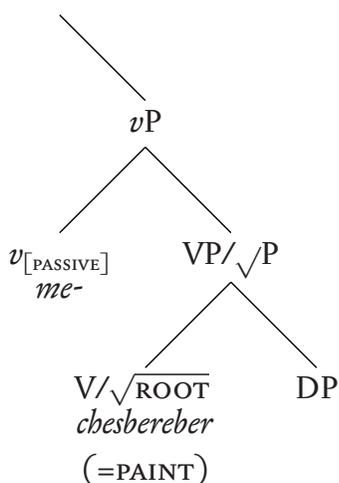


FIGURE 4.2 Passive argument structure

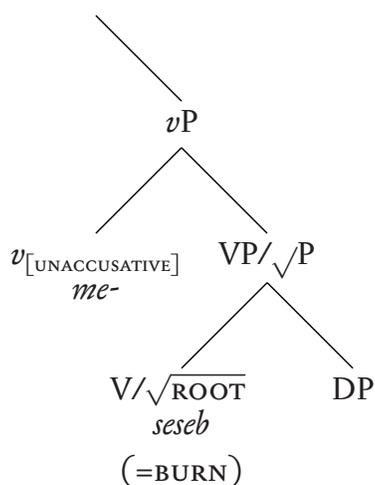


FIGURE 4.3 Unaccusative argument structure

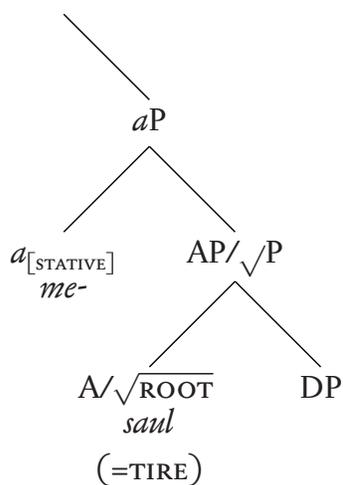


FIGURE 4.4 Stative argument structure

fails to license an oblique or implicit argument in the syntax, and as a result, agent-oriented adverbials and purpose infinitivals cannot be licensed. Since the *di ngii*-predication diagnostic seems to depend on there being no initiator argument in the syntax (overt or implicit), verbs formed from unaccusative v can appear in *di ngii*-predications as long as they satisfy whatever other requirements are imposed by *di ngii*-predication. Adjectives that are formed from $a_{[STATIVE]}$ denote stative eventualities (see, *i.a.*, Kearns 2000), and are thus distinct from passive and unaccusative verbs aspectually.

This proposal leaves room for the variability in judgments of the acceptabil-

ity of agent-oriented adverbials and purpose infinitival modifiers with verbs that have particular lexical semantics. This is because some verb roots can merge with more than one *v* or *a* head — $\sqrt{\text{SESEB}}$ “burn” is the example we have been considering thus far. If passive *v* and unaccusative *v* can both merge with the same $V/\sqrt{\text{ROOT}}$ (e.g., $\sqrt{\text{SESEB}}$), then two homophonous *me-* verbs can be created that are pronounced *meseseb* — one passive and the other unaccusative. Palauan speakers can differentiate between the two in cases when an oblique *er*-phrase is present, as it must be licensed by passive *v*. If the oblique agent is present in an *er*-phrase, or if there is an implicit agent argument, then agent-oriented adverbials are licensed and control into purpose infinitivals is acceptable. But if the *er*-phrase PP is absent, the verb could be interpreted as an unaccusative formed from unaccusative *v*, which would also allow *di ngii*-predication.

4.6 PREDICTIONS AND IMPLICATIONS

The analysis makes certain predictions about transitivity alternations. For instance, nothing should prevent intransitive *me-* verbs from covarying with a transitive form, since they are composed compositionally in the syntax from a lexical verb root ($V/\sqrt{\text{ROOT}}$) and a verbalizer morpheme *v*. Since the information that encodes whether the verb is passive or unaccusative is contributed by the different intransitive *v* heads that are the locus of *me-* morphology, nothing should prevent verb roots from combining with other verbalizer prefixes, like one of the aspect-bundled transitive *v* heads proposed in §2.2. In cases of transitivity alternations, the subject of an intransitive *me-* verb bears the same thematic role as the direct object of its transitive counterpart, so the pieces are in place.

The morphological similarities between the verb roots in transitive and intransitive verbs might be said to stem from the fact that the verb roots in transitive and intransitive alternating verbs are instances of the same $V/\sqrt{\text{ROOT}}$, but that they combine with different *v* functional heads (verbalizers). That is, transitives would be built up from the same roots but with different verbalizer prefixes: e.g., *meN-* (which triggers nasal substitution) or *omek-*, a causative prefix (Josephs 1975), as illustrated in Figure 4.5 through Figure 4.7. This correlation in thematic relation between the subjects of intransitive *me-* verbs and the direct objects of corresponding transitive/causative verbs formed from the same roots is predicted on the present analysis, as the DP argument of each verb is uniformly introduced as a complement of the verb root in an unaccusative syntactic schema like those in Figure 4.2 through Figure 4.4. In effect, it makes no difference whether the *V* will later combine with an intransitive *me-* verbalizer or a transitive verbalizer like *omek-* or *meN-*, as long as the semantic requirements imposed by the *V* are satisfied at LF (i.e., all of the

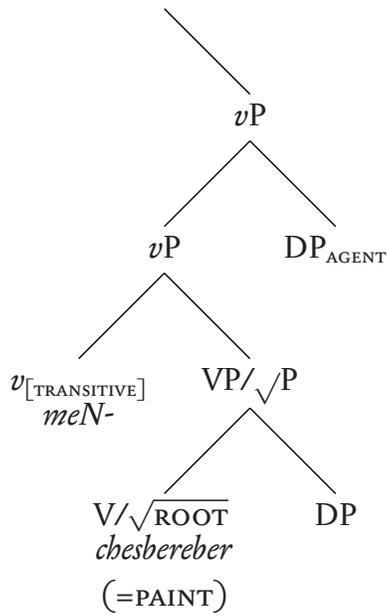


FIGURE 4.5 Transitive *mengesbereber*

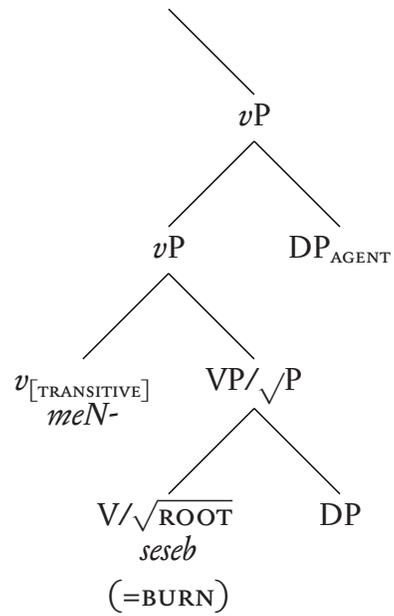


FIGURE 4.6 Transitive *meleseb*

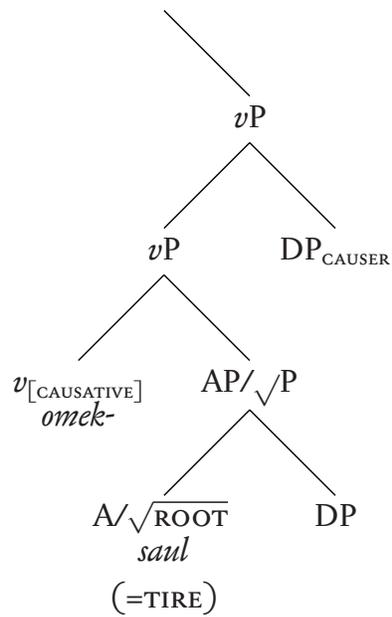


FIGURE 4.7 (Transitive) causative *omeksaul*

argument positions in the predicate are saturated, the appropriate s-selectional restrictions — such as animacy, volition, etc. — are satisfied, and so forth). But how are those semantic requirements represented formally?

Any analysis that even partially locates the source of argument structure alternations in a class of functional heads (like *v*) that merge with individual verb roots (V) faces the issue of determining what governs the relationship between *v* and V. Since it is not the case that every single verb root can have transitive, passive, and unaccusative alternants, what restricts the possible combinations of *v* and V? Based on the way the categories merge and project, one hypothesis is that each *v* *selects* a particular set of VPs (or Vs) that it can merge with.⁹⁵ Clearly, any analysis depending on selection (either downwards selection of a verb root by a verbalizer *v* or upwards selection of a verbalizer by a verb root) would have to rely heavily on stipulation. For each *v* in the small class of verbalizers, long lists of roots would have to be listed as selectees. Or, alternatively, each root would have to specify which of the verbalizers (*v*) may attach to it, essentially undermining the syntactic separation between roots and verbalizers. On a model of the grammar that includes a pre-syntactic lexicon, why not just attach verbalizers to roots directly in the lexicon? On a model with a post-syntactic Encyclopedia, why not just list combinations of roots and verbalizers together as words there?

I think one possible way of understanding the possible combinations of *v* and V depends on articulating morphosyntactic and/or lexical semantic properties of (verb) roots as features, which must be compatible with corresponding features on the functional heads that select (projections of) these roots.⁹⁶ Compatibility can be defined by feature unification, assuming a theory of feature sharing among sub-projections of an extended projection along the lines of the Extended Projection Theory outlined by Grimshaw (2005: Ch. 1). Extended Projection Theory maintains that lexical heads (N, A, and V) form “extended projections” with the functional heads that project above them. For instance, a V head forms a VP projection, but then when this VP combines with a functional head *v* (or Asp, T, Mood, etc.), the resulting *v*P (or AspP, TP, MoodP, etc.) is an extended projection of the VP. Morphosyntactic features on any of the heads in the extended projection become features on all of the heads in the extended projection.⁹⁷

The key to the theory is that extended projections are only built upwards when a *functional* head selects an XP *complement*, such as the extended projection of the

⁹⁵ Or, alternatively, a sort of “backwards” selection could ensure that particular instances of V are somehow specified as only being capable of combining with particular instances of *v*. It seems to me that the task of finding any sort of concrete empirical evidence for such a proposal would be at best daunting, and at worst impossible.

⁹⁶ See Ramchand 2008 for a proposal that is similar in spirit but implemented quite differently.

⁹⁷ But it seems unlikely that semantic or phonetic/phonological features should be shared in this way. How to formalize the differences in these features remains to be explained.

V, represented in *blue* in Figure 4.8.⁹⁸ Specifiers (such as the *green* subject DP in Figure 4.8), adjuncts (such as the *black* DegP modifier in Figure 4.8), and complements of lexical heads (such as the *red* complement PP in Figure 4.8) are not part of the extended projection, but are themselves extended projections of some other lexical head (V, N, or A). If v is a functional head that selects a VP (or \sqrt{P}) complement, then we can say that it forms an extended projection with its complement, and features are shared between the v and the $V/\sqrt{\text{ROOT}}$. A theory like this allows us to restrict the possible combinations of v and $V/\sqrt{\text{ROOT}}$ without relying on lexical subcategorizations or lists. We can simply say that features on multiple heads in an extended projection must unify, and determine an appropriate set of features that are both empirically motivated and yield the correct combinations of verbs (and predicates more generally) in a given language.

We might imagine a scenario in which we can encode information about category, aspect, argument structure, and so forth with features on roots and functional heads. Let's construct a crude example with just three features. The first is the familiar [CATEGORY] feature: roots are category-neutral and uniformly have the value [CATEGORY: ___]. The second is a [\pm DYNAMIC] aspectual feature, which distinguishes inherently dynamic [+DYNAMIC] events from non-dynamic [-DYNAMIC] states. The third is the [\pm INITIATOR] feature, which is an argument structure feature that specifies whether the event(uality) needs an initiator argument (*i.e.*, if it is [+INITIATOR]), allows but does not need an initiator argument (*i.e.*, if it is [-INITIATOR]), or does not permit an initiator argument (*i.e.*, if it is [-INITIATOR]).

With features like [CATEGORY], [\pm DYNAMIC], and [\pm INITIATOR], we can begin to restrict the possible combinations of v and $V/\sqrt{\text{ROOT}}$ by specifying which Vocabulary Items can be inserted into which positions in an extended projection, based on the Subset Principle. Assuming that category-neutral roots form the foundation of each extended projection, let's imagine a subset of Vocabulary Items that can be inserted into $\sqrt{\text{ROOT}}$ positions, such as those listed in Table 4.3, as well as some functional heads that could be inserted into the category-defining head positions, such as the three *me-* prefixes listed in Table 4.4.

If it were not for additional feature specifications, any of the category-defining heads in Table 4.4 would be able to merge with any projection of Table 4.3, but then we would not predict to find the syntactic differences in the class of *me-* predicates explored in this chapter. Instead, feature unification serves to restrict the possible combinations in the syntax, before Spell Out and Vocabulary Insertion. For instance, feature unification will only allow the passive *me-* morpheme to occupy a position in the phrase structure that is of category V and has a complement with compatible features. That is, it may select \sqrt{P} complements that are headed by

⁹⁸ In Figure 4.8 the head of the four extended projections are boxed, and the top of each extended projection is indicated with a color-coded arrow.

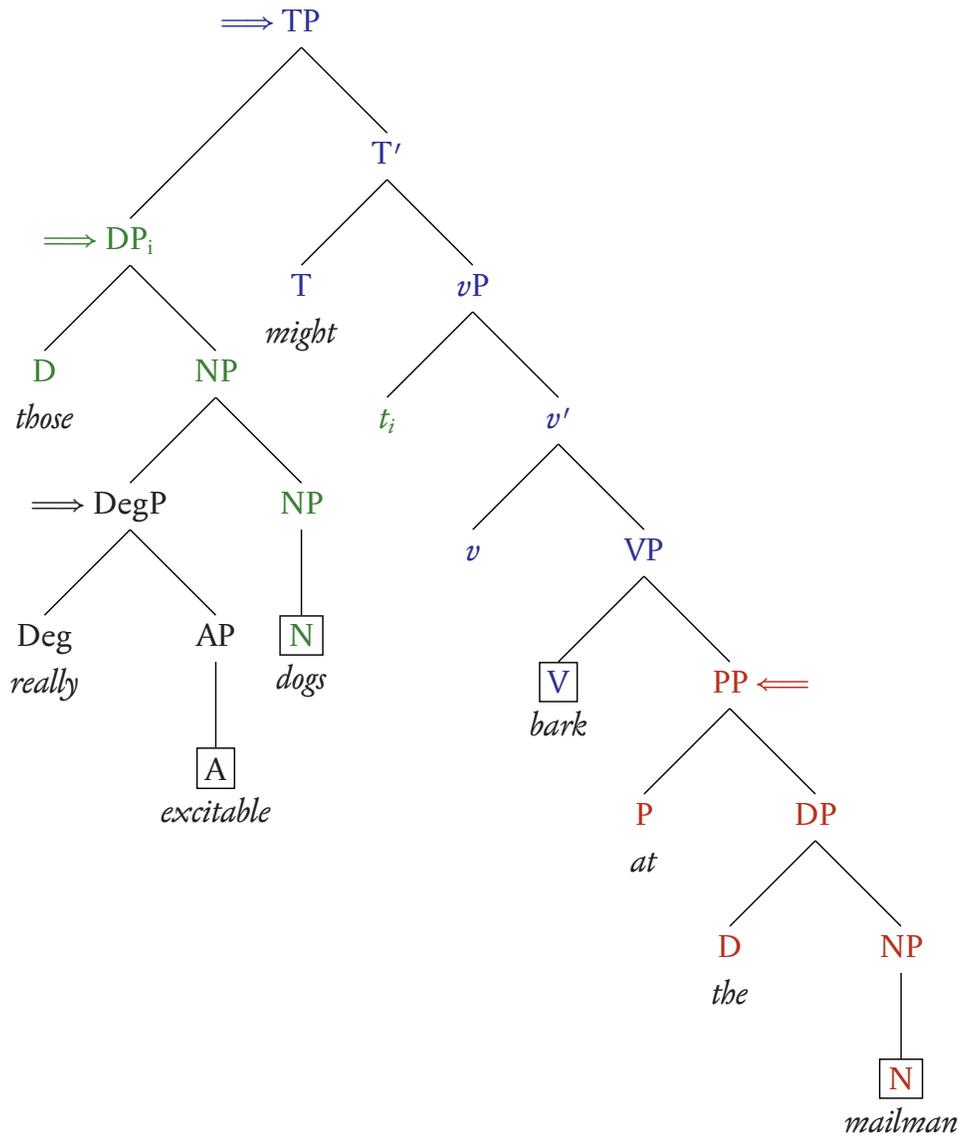


FIGURE 4.8 Four different extended projections

VOCABULARY		
ITEM	SUBCATEGORIZATION	FEATURES
$\sqrt{\text{CHESBEREBER}}$ “paint”	$[__ \text{DP}_{\text{THEME}}]$	[CATEGORY: $__$] [+DYNAMIC] [+INITIATOR]
$\sqrt{\text{CHITAKL}}$ “sing”	$[__ (\text{DP}_{\text{THEME}})]$	[CATEGORY: $__$] [+DYNAMIC] [+INITIATOR]
$\sqrt{\text{SESEB}}$ “burn”	$[__ \text{DP}_{\text{THEME}}]$	[CATEGORY: $__$] [+DYNAMIC] [$__$ INITIATOR]
$\sqrt{\text{OAD}}$ “die”	$[__ \text{DP}_{\text{EXPERIENCER}}]$	[CATEGORY: $__$] [+DYNAMIC] [$__$ INITIATOR]
$\sqrt{\text{SAUL}}$ “tired; exhausted”	$[__ \text{DP}_{\text{EXPERIENCER}}]$	[CATEGORY: $__$] [$__$ DYNAMIC] [$__$ INITIATOR]
$\sqrt{\text{BOK}}$ “open”	$[__ \text{DP}_{\text{THEME}}]$	[CATEGORY: $__$] [$__$ DYNAMIC] [$__$ INITIATOR]

TABLE 4.3 Some roots with associated features

VOCABULARY		
ITEM	SUBCATEGORIZATION	FEATURES
passive <i>me-</i>	$[__ \sqrt{\text{P}}]$	[CATEGORY: V] [+DYNAMIC] [+INITIATOR]
unaccusative <i>me-</i>	$[__ \sqrt{\text{P}}]$	[CATEGORY: V] [+DYNAMIC] [$__$ INITIATOR]
stative <i>me-</i>	$[__ \sqrt{\text{P}}]$	[CATEGORY: A] [$__$ DYNAMIC] [$__$ INITIATOR]

TABLE 4.4 Some category-defining functional heads with associated features

roots like $\sqrt{\text{CHESBEREBER}}$ “paint” and $\sqrt{\text{CHITAKL}}$ “sing” (and probably other creation verbs) because they are [+DYNAMIC] [+INITIATOR]. But it may also select a $\sqrt{\text{P}}$ complement that is headed by a root like $\sqrt{\text{SESEB}}$ “burn” even though it is [$__$ INITIATOR], because it allows an initiator but does not require one. On the other hand, passive *me-* cannot select a $\sqrt{\text{P}}$ complement that is headed by roots like $\sqrt{\text{OAD}}$ “die” (which is incompatible with initiators) or roots like $\sqrt{\text{SAUL}}$ “tired” (which is stative, *i.e.*, [$__$ DYNAMIC]).

The same goes for unaccusative and stative *me-* — each can only select $\sqrt{\text{P}}$ s with compatible features. Importantly, the features are already in the hierarchical syntactic structure: Vocabulary Insertion simply inserts compatible Vocabulary Items. Different Vocabulary Items can be inserted into different structures, depending on feature specifications. For instance, it is predicted that the root $\sqrt{\text{BOK}}$ “open” should be compatible with passive, unaccusative, and stative *me-* (unless there are additional relevant features that could cause a clash). This is because $\sqrt{\text{BOK}}$ has no value for any of the features. As a consequence, we should expect to find both

me- verbs and *me-* adjectives formed from $\sqrt{\text{BOK}}$ that have the syntactic behavior of passives, unaccusatives, and statives. Diagnostics for differences in syntactic behavior and distribution like the ones examined in this chapter (*e.g.*, co-occurrence with *er*-phrase PPs, *di ngii*-predication, etc.) should ideally motivate differences in feature specification. If an approach like the one outlined here is on the right track, then research at the syntax–lexical semantics interface, like Levin’s (1993) extensive investigation of the syntax and lexical semantics of English verb classes, is crucial to our understanding of the composition of lexical and functional morphemes.

Furthermore, the system predicts the productivity and behavior of new verbs. If the lexical semantics of any novel verb root can be understood from context, then the analysis here predicts that the new verb should have different variants resulting from its combination with any number of compatible functional *v* heads. I noticed one recent example on an episode of the television series “Gossip Girl” on the CW Network, in which a new transitive verb was coined, based on the title of “An Affair to Remember,” the 1957 film starring Cary Grant and Deborah Kerr in which one character proposes to meet the other in six months on the top of the Empire State Building in New York City. On the episode of “Gossip Girl,” an exchange between two principal characters is given in (4.56).

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

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

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

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

Many internet sites write recaps of episodes of popular TV shows, and the recap of this particular “Gossip Girl” episode on <http://gawker.com/> remarked on the exchange given in (4.56), using a passive of the newly coined transitive verb *Affair-to-Remember*, as shown in (4.57).

(4.57) Blair can’t be *Affair-to-Remember*-ed.

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

If viewers of *Gossip Girl* episode 64 lexicalized *Affair-to-Remember* as a verb root with the features [+DYNAMIC] and [+INITIATOR], then this verb root should be compatible with passive *v*, and the passive form in (4.57) is predicted. Furthermore, it is predicted that *Affair-to-Remember* should have no unaccusative form, a prediction that must be tested.

To summarize, this chapter examined a morphological class of Palauan intransitive predicates formed from the prefix *me-*, whose syntactic properties are puzzling if they are treated as a syntactically homogeneous class. I have shown that differ-

ences in the lexical semantics and argument structures of particular predicates (*i.e.*, roots) partially determine which *v* or *a* morphemes they may combine with. The result is that predicates that are formed with the prefix *me-* can be derived with three different functional heads: $v_{[PASSIVE]}$, $v_{[UNACCUSATIVE]}$, and $a_{[STATIVE]}$.

The choice has syntactic consequences: diagnostics for implicit arguments in passives were shown to be incompatible with the *di ngii*-predication diagnostic for unaccusatives. The pattern can be explained if implicit agents are licensed by passive voice (treated formally as a feature $[PASSIVE]$, which might decompose further into features like $[+DYNAMIC]$, $[+INITIATOR]$, etc.), while *di ngii*-predication is only compatible with verbs bearing the feature $[UNACCUSATIVE]$. And since multiple *v* heads may be spelled out as *me-*, ambiguities between passive and unaccusative interpretations of certain verbs are predicted — specifically those verbs which do not require an agent (*i.e.*, verbs that are $[_INITIATOR]$).

To close the chapter, it is worth noting that from a cross-linguistic standpoint, the fact that *me-* marks passives, unaccusatives, and statives in Palauan is not entirely surprising. Haspelmath (1990: 36) identifies a range of typologically unrelated languages displaying syncretism between passive and unaccusative morphology (at least Danish, Modern Greek, Kanuri, Margi, Motu, Nimboran, O’odham, Tigre, and Udmurt, and possibly also Uyghur), as well as (some type of) stative and unaccusative morphology (at least Latin, Mwera, and Nimboran, and possibly also Tahitian and Uyghur). Investigations of the syntactic properties of intransitive verbs in additional languages will most certainly help to shed more light on how differences among classes of predicates in different languages can be argued to result from differences in how speakers of different languages model knowledge linguistically.

CHAPTER 5

Resultatives and Word-Internal Syntax

“Prends donc l’habitude de
considérer que les choses
ordinaires arrivent aussi.”

Jean Giono (1895–1970)

Evidence that the morphophonological words that correspond to Palauan verbs and adjectives might be constructed (at least partially) in the syntax has by now been examined in the context of several different domains: the morphologically-distinct aspectual forms of transitive verbs in §2.2, transitivity and category alternations in phrasal idioms in §3.3.1, and the relationships between morphologically similar but syntactically distinct passive, unaccusative, and stative intransitive verbs in Chapter 4. Verbs are thus built from (i) a *v* that hosts verbalizer prefixes/infixes and (ii) a *V* (or $\sqrt{\text{ROOT}}$) that encodes the semantics of the event/state. On this view, the divide between words and phrases is blurred.

This chapter explores the idea that verbalizers (instances of *v*) and adjectivalizers (instances of *a*) can attach to constituents larger than VP or \sqrt{P} , focusing on data involving Palauan resultatives. The distinction that some languages exhibit between so-called verbal passives, also known as eventive passives, and adjectival passives, also known as stative passives or resultatives, is exemplified in the English examples (5.1a) and (5.1b), respectively. Roughly, a verbal passive describes an event, and an adjectival passive (resultative) describes a state that obtains as a result of some event having occurred.

- (5.1) a. During my visit, that door was quickly *taken off* by the tenant.
John’s requests are getting *satisfied*. [Emonds 2006: 18, ex. 2a]

- b. At my arrival, that door was already completely *taken off*.
 John now seems very *(un)satisfied*. [Emonds 2006: 18, ex. 2b]

Wasow (1977) analyzes the difference in interpretation as the result of a difference in how the verb participles are derived. On Wasow's view, verbal passives like those in (5.1a) are derived syntactically, whereas adjectival passives (resultatives) like those in (5.1b) are formed in the lexicon (see, *i.a.*, Siegel 1973; Anderson 1977; Wasow 1980; Bresnan 1982; Levin and Rappaport 1986; Dubinsky and Simango 1996). Embick (2004a, following the proposals of Kratzer 2000, 2005) has recently challenged this view and proposed a syntactic analysis of resultatives using some aspects of the technology of Distributed Morphology.

Palauan resultatives are described in the literature as *resulting state verbs* (Josephs 1975, 1990, 1997), which are "derived by taking the verb stem ... and inserting the infix *-l-* or *-el-* after the stem-initial consonant" (Josephs 1997: 273); this is exemplified in (5.2b).⁹⁹

(5.2) a. TRANSITIVE:

A sensei a **meluches** er a babier.
 D teacher TOP write.IMP ACC D letter
 "The teacher is writing the letter."

b. RESULTATIVE:

A babier a **l/uches**.
 D letter TOP RES.write
 "The letter is written."

[Josephs 1997: 273, ex. 17]

In the following sections, I examine the class of Palauan resultatives, whose syntactic properties suggest that they begin as instances of V or $\sqrt{\text{ROOT}}$ that are first verbalized as passives (via merge of passive *v* with VP/ $\sqrt{\text{P}}$) and then subsequently stativized, via a merge of an additional resultative *a* with the passive *v*P. The analysis treats Palauan resultatives as being derived syntactically rather than in the lexicon, with the structure given in Figure 5.1. If correct, the result aligns with Embick's (2004a) analysis of English resultatives as being derived syntactically, rather than in the lexicon.

The chapter is laid out as follows. §5.1 presents data suggesting that Palauan resultatives have a (non-stative) eventive component, drawing on evidence involving the presence of oblique initiator arguments (agents and causers), manner adverbials, and aspectual modifiers that target telic endpoints, all of which are ordinarily incompatible with adjectives and stative verbs. §5.2 examines evidence that despite having an eventive component, resultatives have the external distribution of

⁹⁹ The *-(e)l-* infix can assimilate to *-(e)r-* when it precedes [r].

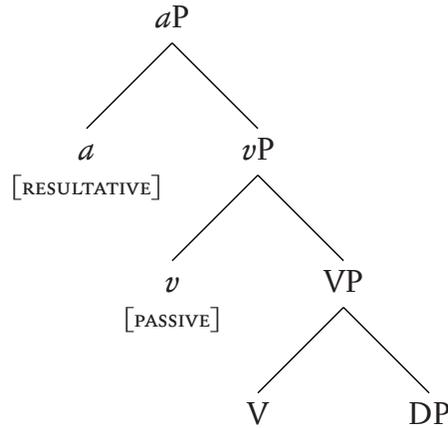


FIGURE 5.1 Proposed structure for Palauan resultatives

stative verbs and adjectives, drawing on evidence from their truth-conditional semantics, aspectual auxiliary selection, and interaction with tense morphology. §5.3 discusses the argument structure of resultatives, suggesting that the subject of a Palauan resultative predicate is base-generated as an internal argument of the verbal predicate in the *vP* that serves as the basis for resultative formation, aligning with the conclusions reached about passives in Chapter 4. §5.4 unites the two strains of evidence, suggesting that each Palauan resultative has a target state component (in the sense of Parsons 1990: 234–235) that merges with an internal argument DP along the lines of the proposal in §4.5, and this DP is a participant in the resultative (stative) eventuality. The resulting VP/ \sqrt{P} merges with passive *v*, which licenses the oblique arguments, manner adverbials, and aspectual modifiers seen in §5.1 (see Chapter 4 for details). At that point in the derivation, the passive *vP* merges with a resultative *a* head that transforms the eventive passive *vP* into a stative passive *aP* by existentially quantifying the neo-Davidsonian event argument, as proposed by Kratzer (2000: 391, ex. 14; cf. Kratzer 2005) for German resultatives (cf. Embick 2004a: 383, ex. 64 for English resultatives, Travis 2005b: 403–404 for Malagasy resultatives, and Anagnostopoulou 2003; Alexiadou and Anagnostopoulou 2008: 39, ex. 34 for a similar type of resultative in Greek). Finally, §5.5 discusses some of the implications and consequences of the analysis for the lexical semantics of Palauan verbs and the internal structure of the Palauan *vP*.

Essentially, I argue that Palauan resultatives have a complex semantics with both eventive and stative components, where the culmination of the event induces a resultative state. I propose that the syntax in Figure 5.1 provides the appropriate structure to compute the semantics using standard compositional operations (*e.g.*, Heim and Kratzer 1998). If correct, this analysis of Palauan resultatives advocates the idea that there is syntactic structure beneath the word level, as suggested by

Roeper (1987: 306) in examples like (5.3), containing English resultatives that co-occur both with *by*-phrases and *un*- prefixation.

- (5.3) a. The code was *un*-[broken by the Russians].
 b. The problem was *un*-[detected by anyone].
 c. The case was *un*-[contested by the lawyers].
 d. The man was *un*-[seen by police observers]. [Roeper 1987: 306, ex. 141a-d]

If it's true that *un*- prefixation is restricted to adjectives and oblique *by*-phrases are only licensed by verbal passives, then Roeper's examples suggest that English resultatives may also be formed from passive *v*Ps (indicated by the brackets in (5.3)) which then change category from verb to adjective. This is precisely the analysis I propose for Palauan resultatives.

5.1 EVIDENCE FOR INTERNAL VERBAL STRUCTURE

In this section, I present and discuss three types of evidence that resultative predicates are formed from full passive *v*Ps. Like verbal passives, resultatives allow internalized (oblique or implicit) external arguments, manner adverbials, and aspectual modifiers targeting telic endpoints, none of which may co-occur with adjectives or stative verbs. These three strands of evidence together suggest that resultatives, like verbal passives, must have a bounded (and thus necessarily non-stative) event structure component.

5.1.1 INTERNALIZED EXTERNAL ARGUMENTS

As was illustrated in Chapter 4, §4.2, the external argument of a transitive active sentence may be expressed obliquely or implicitly in passives, as shown in (5.4) through (5.6). The “internalized external argument” can be an agent, as in (5.4b) and (5.10), but it need not be, as in (5.5b) and (5.6b).

- (5.4) a. A dachelbai el chad er a chei a **mi/urech** a bdel-ul a lluich
 D skillful L man P D sea TOP PAST.spear.PF D head-3PLP D 20
 el ngikel.
 L fish
 “The skillful fisherman speared 20 fish in the head.”

EVENTIVE TRANSITIVE

b. A lluich el ngikel a **ule-burech** a bdel-ul (er a dachelbai el
 D 2O L fish TOP PAST.PASS-spear D head-3PLP (P D skillful L
 chad er a chei).
 man P D sea)

“20 fish were speared in the head (by the skillful fisherman).”

VERBAL PASSIVE

(5.5) a. A bli-l a kelebus a **merers** er a redart el
 D building-3SGP D prison TOP hold.inside.IMPf ACC D IOO L
 kelebus.
 prisoners

“The prison is holding 100 prisoners.”

STATIVE TRANSITIVE

b. A redart el kelebus a **me-sers** (er a bli-l a
 D IOO L prisoners TOP PASS-hold.inside (P D building-3SGP D
 kelebus).
 prison)

“100 prisoners are being held (by the prison).”

VERBAL PASSIVE

(5.6) a. Ke **ulle-siich** er a reng-uk.
 2SG= PAST.CAU-tight ACC D heart-ISGP

“You made me proud.” (*lit.* “You tightened my heart.”)

CAUSATIVE ψ -IDIOM

b. Ng **m/o-siich** a reng-uk (er kau).
 3SG= PASS.CAU-tight D heart-ISGP (P you)

“I was made proud (of you).” (*lit.* “My heart was tightened (by you).”)

VERBAL PASSIVE

Er-phrase PPs with internalized external arguments can also appear in resultatives, and just as in passives, they may contain agents, as in (5.7), or non-agents, as in (5.8) or (5.9).

(5.7) A lluich el ngikel a **mle b/urech** a bdel-ul (er a
 D 2O L fish TOP AUX.PAST RES.spear.PF D head-3PLP (P D
 dachelbai el chad er a chei).
 skillful L man P D sea)

“20 fish were speared in the head (by the skillful fisherman).” RESULTATIVE

(5.8) A redart el kelebus a *se/ers* (er a bli-l a kelebus).
 D 100 L prisoners TOP RES.enclose (P D building-3SGP D prison)
 “100 prisoners are held (by the prison).” RESULTATIVE

(5.9) Ng mle *ul-siich* a reng-uk (er kau).
 3SG= AUX.PAST RES.CAU-tight D heart-my (P you)
 “I was proud (of you).” (*lit.* “My heart was tightened (by you).”) RESULTATIVE

The examples in (5.7) through (5.9) were elicited from native speakers, but such examples also occur in texts, as in (5.10) through (5.12).

(5.10) Ng di Kot el Ngar er Bab el Dios a diak le-kiei a blai
 3SG= but most L be P top L god TOP NEG 3SGS.IRR-live D houses
 el *rruul* er a rechad.
 L RES.make P D humans
 “But the Most High God does not live in houses built by human hands.”
 (*approx.* “But the (one who does) not live in houses made by humans is the
 Most High God.”) [*Chedaol Biblia*, Acts 7:48]

(5.11) A bdel-um a *b/iull* er a cheltechat.
 D head-2SGP TOP RES.cover P D wounds
 “Your head is already covered with wounds.” [*Chedaol Biblia*, Isaiah 1:5]

(5.12) Tirkai a rechad el meruul a orars er a delongel-ir a
 these TOP people L make.IMPF D partition P D relationships-3PLP D
 rechad, el *te/uchel* er a di so-al a klechad.
 people L RES.influence P D just desires-3PL.-HUMP D lives
 “These are the people who cause divisions, who are controlled by their nat-
 ural desires.” [*Chedaol Biblia*, Jude 1:19]

The grammaticality of the examples in (5.7) through (5.9) and the occurrence of the examples in (5.10) through (5.12) together suggest that resultatives are formed from passives of transitive verbs, as there do not appear to be thematic restrictions on the types of external argument DPs that can appear in *er*-phrase PPs, just as in verbal passives.

In order to highlight an important contrast, recall that simple stative adjectives formed from *me-* (see §4.4 for further details) do not permit internalized external arguments in oblique *er*-phrase PPs because there are no external arguments to internalize, as shown in (5.13a) for the adjective *mesaul* “tired.” However, the resul-

tative *uleksaul* formed from the passive of the causativized verb *omeksaul* “exhaust” is perfectly acceptable with an *er*-phrase, as in (5.13b).

- (5.13) a. *Ak mle me-saul er a rengelek-ek.
 ISG= AUX.PAST INTR-tired P D children-ISGP
 (“I was tired by my children.”) STATIVE ADJECTIVE
- b. Ak mle ulek-saul (er a rengelek-ek).
 ISG= AUX.PAST RES.CAU-tired (P D children-ISGP)
 “I was exhausted (by my children).” RESULTATIVE

The fact that resultatives allow *er*-phrases while ordinary stative adjectives do not suggests that part of the denotation of a resultative will make reference to a non-stative eventuality. The data in the following sections strengthens the plausibility of that view: it will be shown that resultatives, unlike simple statives, permit manner adverbials and modifiers of telic endpoints with *er a chelsel a*-PPs (see Chapter 2, §2.1.2.3 and Chapter 3, §3.2.2.2).

5.1.2 THE COMPLEX EVENT STRUCTURE OF RESULTATIVES

5.1.2.1 MANNER ADVERBIALS

The evidence for implicit arguments in resultatives (*i.e.*, of the events that induce resulting states) suggests that they can be derived from passives of transitive verbs denoting events. If so, then we might expect manner adverbials to be able to modify the non-stative event denoted by the passive *vP* before it becomes a resultative, for instance in the examples in (5.14), which contain verbal passives that co-occur with the manner adverbials *omekedelad* “carefully” and *terrekakl* “sloppily.” Interestingly, the same manner adverbials can co-occur with resultatives, as shown in (5.15).

- (5.14) a. A blai a omekedelad el muk-beches.
 D house TOP careful L PASS.CAU-new
 “The house is being renovated carefully.” PASSIVE
- b. A siasing a terrekakl el me-luches.
 D picture TOP sloppy L PASS-draw
 “The picture is being drawn sloppily.” PASSIVE
- (5.15) a. A blai a mera el omekedelad el ulek-beches.
 D house TOP really L careful L RES.CAU-new
 “The house is really carefully renovated.” RESULTATIVE

- b. A siasing a mera el terrekakl el l/uches.
 D picture TOP really L sloppy L RES.draw
 “The picture is really sloppily drawn.” RESULTATIVE

That the acceptability of manner adverbials in the resultative predicates in (5.15) patterns with the corresponding verbal passives in (5.14) would be surprising if resultatives simply denoted resulting states with no (non-stative) event component, since these adverbials are incompatible with statives like *beches* “new” or *mengelengalek* “ugly,” as shown in (5.16).

- (5.16) a. *A blai a omekedelad el beches.
 D house TOP careful L new
 “The house is carefully new.” STATIVE
- b. *A siasing a terrekakl el mengelengalek.
 D picture TOP sloppy L ugly
 “The picture is sloppily ugly.” STATIVE

In short, the distribution of manner adverbials offers evidence that resultatives have event structures that are more complex than those of simple statives. If manner adverbials can only describe the actions undertaken by an initiator of some sort (often an agent), then in principle they should be incompatible with statives, which do not permit initiators. And yet they are compatible with resultatives. It would thus appear that resultatives either are not semantically stative (a view I will reject in §5.2) or are not *purely* stative (the view I will eventually adopt).

5.1.2.2 ASPECTUAL MODIFIERS TARGETING TELIC ENDPOINTS

Resultatives also permit aspectual adverbial PPs that target telic endpoints of events (*cf. in an hour* in English; see *i.a.*, Tenny 1987, 1994; Jackendoff 1996; Ramchand 1997; Arad 1998; Krifka 1998; Torrego 1998; van Hout and Roeper 1998; Kearns 2000; Rothstein 2004). As was mentioned in Chapter 2, the Palauan adverbial [*er a chelsel a* + <LENGTH OF TIME>] identifies the telic endpoint of a bounded predicate (*i.e.*, an achievement or an accomplishment) but is impossible with an unbounded predicate (*i.e.*, a process or a state) — the relevant examples are repeated below.

- (2.32) a. Te mi/tik a beresengt er tir er a chels-el a ta
 3PL= PAST.find D presents P them P D space.inside-3SG D one
 el sikang.
 L hour
 “They found their presents in an hour.” ACHIEVEMENT

- b. Te li/uches aike el siasing er a chels-el a ta
 3PL= PAST.draw.PF those L pictures P D space.inside-3SG D one
 el sikang.
 L hour
 “They drew those pictures in an hour.” ACCOMPLISHMENT
- c. *Te ulemais er a chels-el a ta el
 3PL= wander.around.PAST.IMPF P D space.inside-3SG D one L
 sikang.
 hour
 (“They wandered around in an hour.”) PROCESS
- d. *Te mle ungil a reng-rir er a chels-el a ta el
 3PL= AUX.PAST good D hearts-3PLP P D space.inside-3SG D one L
 sikang.
 hour
 (“They were happy in an hour.”) STATE

If resultatives can have internal bounded event structure, we might expect that [*er a chelsel a* + <LENGTH OF TIME>] modifiers would be acceptable in at least some resultatives, just as they are acceptable in passives like in (5.17), below. This is indeed what we find in (5.18).

- (5.17) a. A blai a m/uk-beches er a chels-el a ta el
 D house TOP PAST.PASS.CAU-new P D space.inside-3SGP D one L
 buil.
 month
 “The house was renovated in a month.” PASSIVE
- b. A siasing a mi/-luches er a chels-el a eim el
 D picture TOP PAST.PASS-draw P D space.inside-3PLP D five L
 bung.
 minutes
 “The picture was drawn in five minutes.” PASSIVE
- (5.18) a. A blai a mle ulek-beches er a chels-el a ta
 D house TOP AUX.PAST RES.CAU-new P D space.inside-3SGP D one
 el buil.
 L month
 “The house was renovated in a month.” RESULTATIVE

- b. A siasing a mle **l/uches** er a chels-el a eim el
 D picture TOP AUX.PAST RES.draw P D space.inside-3PLP D five L
 bung.
 minutes
 “The picture was drawn in five minutes.” RESULTATIVE

Once again, the acceptability of *er a chesel a*-PP modifiers in resultative predicate phrases contrasts with similar examples containing simple stative adjectives like *beches* “new” and *klebokel* “pretty,” which as statives are inherently unbounded; compare (5.18) with (5.19).

- (5.19) a. *A blai a mle **beches** er a chels-el a ta el
 D house TOP AUX.PAST new P D space.inside-3SGP D one L
 buil.
 month
 (“The house was new in a month.”) STATIVE
- b. *A siasing a mle **klebokel** er a chels-el a eim el
 D picture TOP AUX.PAST pretty P D space.inside-3PLP D five L
 bung.
 minutes
 (“The picture was pretty in five minutes.”) STATIVE

The contrast between (5.18) and (5.19) provides even further evidence that resultatives have more complex event structures than (simple) statives and pattern, in many ways, like verbal passives. The distribution of telic aspectual modifier PPs receives a natural explanation if resultatives are themselves derived syntactically from verbal passive *v*Ps.

5.2 RESULTATIVES AS RESULTING STATE PREDICATES

Despite the conclusions of the previous section, resultatives still seem to be treated like statives in some sense, both syntactically and semantically. Data showing that resultatives have the truth conditions of statives and are selected by the same auxiliaries as statives suggest that the event structure of resultatives contains both an eventive and a stative component (as is also suggested by Kratzer 2000 for German resultatives).

5.2.1 TRUTH CONDITIONS OF RESULTATIVES

Despite the syntactic similarities between verbal passives and resultatives in §5.1, resultatives nevertheless differ from passives in their truth-conditional semantics. Basically, passives describe events, and resultatives describe stative eventualities that arise as the result of a particular event’s completion. The contrast comes out very clearly under negation; consider (5.20). The sentences in (5.20a) and (5.20b) have different truth conditions. The passive sentence in (5.20a) is compatible with a scenario in which no house exists because the building has not yet begun. (5.20b), by contrast, is not compatible with this scenario — it describes an unfinished house. The difference is represented pictorially in (5.21).

- (5.20) a. A blai a dirkak **le-me-ruul**.
 D house TOP not.yet 3SG.IRR-PASS-make
 “The house is not built yet.” PASSIVE
- b. A blai a dirkak **le-rruul**.
 D house TOP not.yet 3SG.IRR-RES.make
 “The house is not built yet.” RESULTATIVE

(5.21) TWO CONTRASTING SCENARIOS INVOLVING THE BUILDING OF A HOUSE:

a. *No building has begun.*



↪ describes (5.20a), not (5.20b)

b. *The building is unfinished.*



↪ can describe (5.20b)

I take the differences in the pattern of (5.20a)’s and (5.20b)’s compatibility with the two scenarios in (5.21) to arise from the semantics of *rruul* “made” (RESULTATIVE). If resultatives like *rruul* describe target states that obtain as a result of the completion of an event, then it makes sense that (5.20b) is incompatible with scenario (5.21a), since the event has not yet begun.¹⁰⁰

¹⁰⁰ cf. Dubinsky and Simango 1996: 750 for a similar contrast in Chichewa, shown below in (5.i).

The contrast suggests that in addition to a (non-stative) eventive component, the denotation of a resultative predicate includes a stative component that must have some duration, possibly persisting to the present.

5.2.2 AUXILIARY SELECTION: *m̄la*

The distribution of the aspectual auxiliary *m̄la* provides some evidence that resultatives are treated on some level like other stative predicates. *M̄la* appears to have the properties in (5.22).

(5.22) INFORMAL SYNTAX AND SEMANTICS OF *m̄la*:

- a. *M̄la* is an aspectual auxiliary of category Asp which selects a predicate XP denoting a non-stative eventuality.
- b. *M̄la* asserts that the eventuality it describes is either complete or simply indefinitely terminated (if incomplete).

In some sense, *m̄la* appears to behave similarly to the English perfect auxiliary *have* in a great number of cases. *M̄la* only co-occurs with non-stative predicates (*i.e.*, processes, accomplishments, and achievements).¹⁰¹ As such, *m̄la* may precede predicates like *merael* “walk” (process), *omekoad* “kill” (accomplishment), and *remenges* “hear” (achievement), as shown in (5.23), but not with stative predicates, such as *mesisiich* “strong” or *beches* “new,” as in (5.24).

(5.23) a. PROCESS:

Ke ko el **m̄la** **merael** er a ulol-el a ngoaol?
 2SG= just L AUX walk P D floor-3SGP D deep.sea
 “Have you walked on the floor of the ocean?” [Chedaol Biblia, Job 38:16]

(5.i) CHICHEWA:

[Dubinsky and Simango 1996: 750, ex. 2a–b]

- a. Nyemba si-zi-na-phik-**idwe**.
 beans NEG-AGR-PAST-COOK-PASS
 “The beans were not cooked (at all).” PASSIVE
- b. Nyemba si-zi-na-phik-**ike**.
 beans NEG-AGR-PAST-COOK-STAT
 “The beans were not cooked.” STATIVE (RESULTATIVE)

¹⁰¹ In English, *m̄la* also occasionally translates as “already.”

b. ACCOMPLISHMENT:

A rechad er a Benjamin a **mla mek-od-eterir** a re-30 el
 D people P D Benjamin TOP AUX CAU.PFV-die-3PLO D PL-30 L
 chad er a Israel.
 people P D Israel

“The Benjaminites had already killed the thirty Israelites.”

[*Chedaol Biblia*, Judges 20:39]

c. ACHIEVEMENT:

Tirka el chad a **mla remenges** el kmo kau, e Rubak, a
 these L people TOP AUX PFV.hear L C you VOC Lord TOP
 obeng-kemam.
 accompany-IPL.EXCL

“These people have already heard that you, Lord, are with us.”

[*Chedaol Biblia*, Numbers 14:14]

(5.24) STATIVE:

a. *Ak **mla mesiiich**.

1SG= AUX strong
 (“I have been strong.”)

b. *Ng **mla beches a mlai**.

3SG= AUX new D car
 (“The car has been new.”)

Because *mla* cannot combine with statives but can combine with predicates of any non-stative aspectual class (Vendler 1957, 1967; Verkuyl 1972, 1989, 1993; Comrie 1976; Dowty 1979; Chung and Timberlake 1985; Smith 1991; Jackendoff 1996; Hay et al. 1999; Kearns 2000; Travis 2005a; Beavers 2006), co-occurrence with *mla* can be used as a diagnostic for stativity.

But there is one potential complication for the characterization of *mla* in (5.22). It might be argued that *mla* does not place any restrictions on temporality or boundedness, and so it should be able to combine with statives, as even states can cease to hold after some duration of time. If *mla* could combine with statives, then it could not actually serve as a reliable diagnostic for (non-)stativity.

But I think there is reason to believe that the view of *mla* in (5.22) is on the right track, particularly if we consider sentences that have been translated from English into Palauan. Whenever an English sentence containing a sequence of [*already* + STATE] is translated into Palauan, the verb *mo* “become” or a different verb is usually inserted, as in (5.25). Crucially, the state is transformed into an event describing a change of state (see Koontz-Garboden and Levin 2007, as well as Koontz-

Garboden 2007 for details and extensive references).

- (5.25) a. Kom **mla mo** meteet?
2PL= AUX become rich
“Are you already rich?” (*lit.* “Have you become rich?”)
[*Chedaol Biblia*, 1 Corinthians 4:8]
- b. A recherrou-ed a **mla me** er a Dan.
D enemy-IPL.INCLP TOP AUX arrive P D Dan
“Our enemies are already in the city of Dan.” (*lit.* “Our enemies have already arrived at Dan.”)
[*Chedaol Biblia*, Jeremiah 8:16]
- c. Ke di mo mereched el obes aike el **le-bla**
2SG= just AUX.FUT fast L forget those L IRR.3SG-AUX
bo mo-dengei.
IRR.become IRR.2SG-know
“You will soon neglect what you already know.” (*lit.* “You will be fast to forget those (things) which have become what you know.”)
[*Chedaol Biblia*, Proverbs 19:27]
- d. Ng **mla mo** kebesengei.
3SG= AUX become evening
“It is already very late.” (*lit.* “It has become evening.”)
[*Chedaol Biblia*, Matthew 14:15]
- e. Ngak a **mla mo** 80 a rek-ik.
I TOP AUX become 80 D age-1SGP
“I am already eighty years old.” (*lit.* “My age has become 80.”)
[*Chedaol Biblia*, 1 Samuel 19:35]

Some of the examples above in (5.25) illustrate that *mla* can combine with statives, but only if they undergo some sort of conversion into an event describing a change-of-state (*cf.* Embick’s (2004a: 366) “fientivization” process; see also Wunderlich 1997), usually involving the verb *mo* “become.” If this were always the case, which seems entirely possible to me, then a predicate’s co-occurrence with *mla* could indeed be used as a diagnostic for (non-)stativity.

In spite of the evidence in §5.1 that resultatives have an internal structure similar to verbal passives, (5.26) through (5.28) show us that *mla* can select (at least some) passive *v*P’s, as in the (a) examples. However, *mla* cannot select resultatives, as in the (b) examples, unless a verb occurs between *mla* and the resultative, like *mo* “become” in the (c) examples.

- (5.26) a. Ak mla tmuk a klokl-el a kleblill-iu er aike
 ISG= AUX PFV.measure.off D belongings-3SGP D tribes-2PLP P those
 el beluu el dirk medechel me aike el beluu el mla me-ngai.
 L lands L still left and those L lands L AUX PASS-take
 “I have assigned as the possession of your tribes the land of the nations
 that are still left, as well as of all the nations that I have already con-
 quered.”
 (*lit.* “...the nations that have been conquered”) PASSIVE
 [Chedaol Biblia, Joshua 23:4]
- b. *...aike el beluu el mla ng/ai.
 ...those L lands L AUX RES.take
 (“...the nations that have been conquered.”) RESULTATIVE
- c. ...aike el beluu el mla mo ng/ai.
 ...those L lands L AUX become RES.take
 “...the nations that have become conquered.” mo + RESULTATIVE
- (5.27) a. A Moses a ule-ker el kir-el a kaming el tenget er
 D Moses TOP PAST.IMPF-ask L status-3SGP D goat L offering P
 a klengit, e m/o medengei el kmo ng mla
 D sin and PAST.become know L C 3SG= AUX
 me-dul.
 PASS-burn
 “Moses asked about the goat for the sin offering and learned that it had
 already been burned.” PASSIVE
 [Chedaol Biblia, Leviticus 10:16]
- b. *...ng mla de/ul.
 ...3SG= AUX RES.burn
 (“...it had been burned.”) RESULTATIVE
- c. ...ng mla mo de/ul.
 ...3SG= AUX become RES.burn
 “...it had become burned (*i.e.*, was visibly roasted).” mo + RESULTATIVE

- (5.28) a. A rebebil er a rengelek-ed el redil a mla mo-terau el
 D some P D children-IPL.INCLP L female TOP AUX PASS-sell L
 mo sibai.
 become slave
 “Some of our daughters have already been sold as slaves.” PASSIVE
 [Chedaol Biblia, Nehemiah 5:5]
- b. *A rebebil er a rengelek-ed el redil a mla ul-terau.
 D some P D children-IPL.INCLP L female TOP AUX RES-sell
 (“Some of our daughters have been sold.”) RESULTATIVE
- c. A rebebil er a rengelek-ed el redil a mla mo
 D some P D children-IPL.INCLP L female TOP AUX
 ul-terau.
 RES-sell
 “Some of our daughters have become sold.” mo + RESULTATIVE

It would appear that *mla* cannot select (bare) resultatives, as shown in (5.26b), (5.27b), and (5.28b). If part of the denotation of a resultative predicate involves reference to an ongoing (resulting) state, then this fact receives a natural explanation: *mla* simply cannot select stative predicates of any type, simple or complex.

5.2.3 RESULTATIVES HAVE STATIVE PAST TENSE MORPHOLOGY

This section simply shows that resultatives share the external distribution of simple statives with respect to another morphosyntactic phenomenon involving the morphology of past tense marking. Past tense morphology takes different forms depending on whether the predicate is stative or non-stative.

Past tense forms of (non-stative) eventive verbs are formed with an infix *-il-*, as in (5.29).¹⁰² Past tense is expressed on stative predicates via insertion of an auxiliary verb *mle*, as in (5.30).¹⁰³

¹⁰² Passives formed with different passive verbalizer prefixes interact morphophonologically with past tense *-il-* in different ways. *Me-* passives treat *-il-* as a true infix, resulting in passives with a complex prefix *mil(e)-*. *O-* passives coalesce with *-il-*, resulting in passives with a complex prefix *ul(e)-*. Passives of *omek*-causatives, with the prefix *muk-*, result in past tense forms with *mluk-*. And so forth.

¹⁰³ The auxiliary *mle* also forms the past tense of some eventive verbs borrowed from other languages, such as *harau* “pay” (cf. Japanese *harau*).

(5.29) PAST TENSE WITH *-il-* INFIX (NON-STATIVES):

- a. A Osilek a ta er a **mi/rael** a chis-el.
 D Osilek TOP one P D PAST.travel D news-3SGP
 “Osilek was very well-known.” (*lit.* “Osilek was one of the (ones who)se
 news traveled.”) [OO 11]
- b. A Ignacio Anastacio a **ki/tmekl-ii** e oders-ii el
 D Ignacio Anastacio TOP PAST.prepare.PF-3SGO and offer.PF-3SGO L
 mo er a Court.
 go P D Court
 “Ignacio Anastacio prepared it and is offering it to the Court.”
 [Tia Belau, 12 October 2009]
- c. Ke **di/lu** el kmo ng mo omek-oad er a ngelek-el a
 2SG= PAST.say L C 3SG= AUX.FUT CAU-die P D child-3SGP D
 babii?
 pig
 “Did you say he is going to kill the baby pig?” [CB 3]

(5.30) PAST TENSE WITH *mle* AUXILIARY (STATIVES):

- a. A bech-ik a **mle** smecher.
 D wife-1SGP TOP AUX.PAST INTR-sick
 “My wife was sick.” [Josephs 1990: 204]
- b. Ng kmal **mle** me-rau.
 3SG= very AUX.PAST INTR-rich
 “He was very rich.” [Chedaol Biblia, Matthew 19:22]
- c. A Toki a **mle** medenge a tekoi er a Siabal.
 D Toki TOP AUX.PAST know D language P D Japan
 “Toki used to know Japanese.” [Josephs 1990: 146]

It has already been shown in several examples, repeated below, that the *mle* auxiliary is used to express past tense with resultative predicates.

- (5.7) A lluich el ngikel a mle **b/urech** a bdel-ul (er a
 D 20 L fish TOP AUX.PAST RES.spear.PF D head-3PLP (P D
 dachelbai el chad er a chei).
 skillful L man P D sea)
 “20 fish were speared in the head (by the skillful fisherman).”

- (5.9) Ng mle **ul-siich** a reng-uk (er kau).
 3SG= AUX.PAST RES.CAU-tight D heart-my (P you)
 “I was proud (of you).” (*lit.* “My heart was tightened (by you).”)
- (5.18) a. A blai a mle **ulek-beches** er a chels-el a ta
 D house TOP AUX.PAST RES.CAU-new P D space.inside-3SGP D one
 el buil.
 L month
 “The house was renovated in a month.”
- b. A siasing a mle **l/uches** er a chels-el a eim el
 D picture TOP AUX.PAST RES.draw P D space.inside-3PLP D five L
 bung.
 minutes
 “The picture was drawn in five minutes.”

Whatever the relevant property is that drives the differing past tense morphology on eventive and stative verbs, resultatives pattern with stative verbs rather than eventive verbs. This result aligns with the *m/a* auxiliary selection facts presented in §5.2.2 and the differences in truth-conditional semantics between passives and resultatives in §5.2.1.

5.3 ARGUMENT STRUCTURE OF RESULTATIVES

A possibly controversial aspect of the syntactic analysis in Figure 5.1 is the placement of the DP subject of the resultative predicates as a complement to the V (or $\sqrt{\text{ROOT}}$), essentially treating it as an internal argument, especially if resultatives are adjectives. Different researchers have proposed that adjectives are characteristically ergative (*i.e.*, have internal arguments; see Abraham 1983; Toman 1986; Koster 1987: 264), can only be unergative (*i.e.*, have external arguments; see Burzio 1986; Levin and Rappaport 1986; Stowell 1991), or fall into one or the other category, depending on the adjective (Cinque 1990).

As was mentioned in footnote 30 on page 63, there is at present little evidence in Palauan for a category A (*adjective*) to distinguish them from stative verbs, but given recent proposals that the category A is universal (*i.a.*, Baker 2003; Dixon 2004), I tentatively assume that resultatives are adjectival, given that they share the external distribution of stative verbs but are formed from roots that may also form non-stative verbs. Regardless of whether resultatives are of category V (or *v*) or A (or *a*), I suggest that the DP subjects of resultatives merge as internal arguments, *i.e.*, complements of the V or $\sqrt{\text{ROOT}}$ from which the resultative is (syntactically) derived.

TRANSITIVE Ψ-IDIOM	RESULTATIVE FORM
<i>olsebek er a rengul</i> “worry sb.” (lit. “make sb.’s heart fly”)	<i>ulsebek a rengul</i> “worried” (lit. “one’s heart is made to fly”)
<i>omtebechel er a rengul</i> “(re)assure sb.” (lit. “hold sb.’s heart steady”)	<i>ultebechel a rengul</i> “confident” (lit. “one’s heart is held steady”)
<i>melamet er a rengul</i> “do as one pleases” (lit. “straighten one’s heart”)	<i>telematel a rengul</i> “pleased; happy” (lit. “one’s heart is straightened”)
<i>omosech er a rengul</i> “make sb. suspicious” (lit. “break open sb.’s heart”)	<i>blosech a rengul</i> “suspicious” (lit. “one’s heart is broken open”)
<i>olsarech er a rengul</i> “hold in one’s emotions” (lit. “pin down one’s heart”)	<i>ulsarech a rengul</i> “one’s emotions are held in” (lit. “one’s heart is pinned down”)

TABLE 5.1 Some resultatives formed from ψ -idioms

5.4 SYNTACTIC ANALYSIS OF PALAUAN RESULTATIVES

What emerged from the discussion of resultatives in §5.1–5.2 is that Palauan resultatives appear to have the internal structure of (non-stative) passive v Ps (with regard to allowing internalized external arguments in *er*-phrase PPs, manner adverbials, and aspectual modification), but they behave syntactically and semantically like stative predicates (with regard to their truth conditions, as well as patterns of aspectual auxiliary selection and past tense formation). Resultatives have a complex event structure in which a completed event has brought about an ongoing resulting state.

Consequently, the syntactic analysis I proposed in Figure 5.1, repeated below, begins with a V (which might be substituted for a category-neutral $\sqrt{\text{ROOT}}$ in a theory in which lexical categories are defined in the syntax) that merges with a DP internal argument. The resulting VP then merges with passive v to form a passive v P. Finally, the passive v P merges with a resultative a head, which changes the lexical category of the predicate phrase from verbal to adjectival, *i.e.*, it transforms the passive v P into a resultative a P.

Now, although I have opted to analyze the syntactic functional head that derives a resultative predicate from a passive v P as a category-changing a morpheme, the resultative functional head might in actuality be either resultative v or resul-

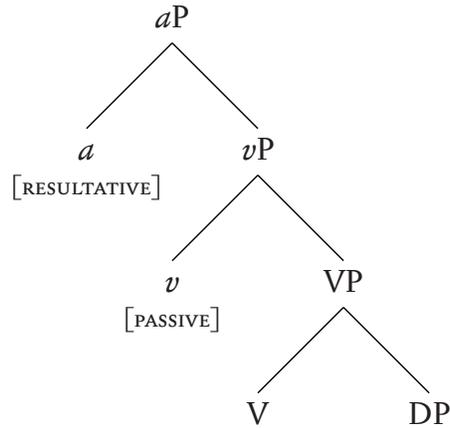


Figure 5.1: Proposed structure for Palauan resultatives

tative *a*. The line of demarcation between (especially stative) verbs and adjectives is extremely blurry in Palauan and in Austronesian more generally. The analysis aligns with Lieber’s (1980) analysis of English and German resultatives as adjectival, where a null suffix attaches to the (verbal) participle and changes the category from V to A. The difference between languages like German and English on one hand and Palauan on the other, then, is that the category-changing morpheme is overt in Palauan (*-(e)l-*). Furthermore, recent experimental research on verbal passives and “adjectival passives” (resultatives) suggests that, in some languages, resultatives require longer processing times than passives do. For instance, Stolterfoht et al. (to appear) analyze the differences in processing time between passives and resultatives as a byproduct of a syntactic category conversion from V to A.¹⁰⁴

On the analysis I propose, the resultative *a* head is the locus of the resultative *-(e)l-* morpheme¹⁰⁵ and *c*-selects a passive *vP* complement. A Kratzerian semantics for the resultative head might look something like (5.32) for the interpretation of (5.2b), repeated below.

(5.2b) A babier a **l**uches.
 D letter TOP RES.write
 “The letter is written.”

[Josephs 1997: 273, ex. 17]

¹⁰⁴ However, it is unclear whether similar differences in processing time would obtain in languages whose passives and resultatives are morphologically distinct, like Palauan. It’s an empirical question, and one which must be left for future research.

¹⁰⁵ I remain agnostic as to whether resultative *a* is spelled out post-syntactically as *-(e)l-* (compatible with morphological theories assuming late insertion of lexical material, e.g., Halle 1990; Anderson 1992; Halle and Marantz 1993, 1994) or whether there is a lexical entry for resultative *a* which specifies the morphophonological form *-(e)l-* (compatible with theories assuming that syntax operates on lexical items, e.g., Chomsky 2000, 2001, 2004).

- (5.32) KRATZERIAN SEMANTICS OF RESULTATIVE FORMATION (to be revised):
- $\llbracket vP_{[PASSIVE]} \rrbracket = \lambda s \lambda e [\text{WRITE}(e) \ \& \ \text{EVENT}(e) \ \& \ \text{WRITTEN}(\text{letter})(s) \ \& \ \text{CAUSE}(s)(e)]$
 - $\llbracket a_{[RESULTATIVE]} \rrbracket = \lambda \mathfrak{R} \lambda s \exists e . \mathfrak{R}(s)(e)$
 - $\llbracket aP_{[RESULTATIVE]} \rrbracket = \lambda s \exists e [\text{WRITE}(e) \ \& \ \text{EVENT}(e) \ \& \ \text{WRITTEN}(\text{letter})(s) \ \& \ \text{CAUSE}(s)(e)]$
(*cf.* Kratzer 2000: 391, ex. 14)

The resultative *a* head functions to existentially quantify the event argument of a passive *vP* that also contains a target state component (Parsons 1990: 234–235), following Kratzer (2000, 2005). That Palauan resultatives formed from the infix *-(e)l-* denote (or at least *can* denote) what Parsons calls target states is indicated by their ability to co-occur with *dirk* “still,” as shown in (5.33).

- (5.33) TARGET STATE RESULTATIVES CO-OCCUR WITH *dirk* “still”
- A teki-ngel a Rubak a m/o er a Jeremia er se er
D words-3SGP D Lord TOP PAST.go P D Jeremiah P that.(time) P
a **dirk le-che/simer** er a mekesekes-ir a remengkar.
D still 3SGS.IRR-RES.imprison P D yard-3PLP D guards
“The words of the Lord came to Jeremiah while he was still imprisoned
in the palace courtyard.” [*Chedaol Biblia*, Jeremiah 39:15]
 - Kemiu a **dirk rrengodel** er a kngt-miu.
you.PL TOP still RES.bind P D sins-2PLP
“You are still lost in your sins.” [*Chedaol Biblia*, 1 Corinthians 15:17]

The ability to co-occur with *dirk* “still” suggests that the resulting state is not permanent (*i.e.*, not a resultant state, in Parsons’s terminology).

On the analysis I propose above, resultative predicates have an internal eventive structure (*i.e.*, a full passive *vP*), which aims to explain why certain properties that characterize passive *vPs* manifest themselves in resultatives as well, as was shown in §5.1. The resultative *a* head effectively transforms the (non-stative) event into an internally complex stative *aP* predicate, as suggested by the truth-conditional semantics of resultatives and their (predicate-external) syntax, as was shown in §5.2.

5.5 CONSEQUENCES OF THE ANALYSIS

The analysis has at least two primary consequences. The first consequence is that the analysis in principle allows the resultative *a* head to merge freely with any pas-

sive *vP* in the syntax, even those that lack a target state component.¹⁰⁶ But it is important to note that this analysis of resultatives depends on my classification of intransitive verbs in Chapter 4, in which passive *vP*, unaccusative *vP*, and stative *aP* are distinguished in the syntax in some way — I’ve encoded the distinction featurally.

But the selectional restrictions of resultative *a* could have been formulated differently, perhaps permitting intransitive *vP* complements of any type (including unergatives and unaccusatives) or just intransitive *vPs* with internal arguments (including unaccusatives, but barring unergatives). With simple modifications of this type, the analysis still predicts that the derivation will crash at LF if the event denoted by the *vP* doesn’t have a target state component. For instance, there are unaccusatives of achievement and existence which do not have resultative forms in English, e.g., *appear* in (5.34) and *flourish* in (5.35). They do not have target states, but might be argued to have resultant states, rendering the ungrammaticality of the (b) and (c) sentences potentially surprising.

¹⁰⁶ Note that in English, unlike in German, adjectival passives may be formed from certain verbs which lack target states, such as *know* and *own*, as in (5.ii) below (and indicated by *un-* prefixation and/or the presence of *remain*; see Emonds 2006 and references therein for further details).

- (5.ii) a. Ms. Kennedy is a paradox: a universally recognized person who **remains** largely **unknown** by the public, and has no obvious appetite for the glad-handing of the campaign trail.
 [“As Privacy Ends for Kennedy, a Rough Path Awaits,” *The New York Times*, 16 December 2008]
- b. As Thomas Jefferson wrote on behalf of the frank, communications between elected officials and their constituents should be “free, full and **unowned** by any.”
 [“Two Cents’ Worth for Nothing,” *The New York Times*, 29 September 1991]

Kratzer 2000 reports that comparable adjectival passives of *wissen* “know” and *besitzen* “own” are impossible in German, as shown in (5.iii).

- (5.iii) a. *Die Antwort ist gewusst.
 “The answer is known.” [Kratzer 2000: 389, ex. 9b]
- b. *Dieses Haus ist besessen.
 “This house is owned.” [Kratzer 2000: 389, ex. 9a]

I have never encountered a resultative form of *medengei* “know” in Palauan, and Palauan has no verb for *own*, but there are is a small class of optionally transitive (but usually intransitive) denominal verbs formed from the prefix *ou-*, e.g., *oublai* “own a (particular type of) house” (cf. *blai* “house”), *oucharm* “own/keep a (particular type of) animal” (cf. *charm* “animal”), *oubilas* “own a (particular type of) boat” (cf. *bilas* “boat”), etc., where the direct object DP specifies which type of house, animal, boat, etc. is owned. While the transitive variants of these verbs of the *ou-NOUN* type may occasionally form verbal passives, Josephs (1990) does not list any resultative forms of these verbs.

(5.34) UNACCUSATIVE OF ACHIEVEMENT *appear*:

- a. The stars appeared.
- b. *The stars are/remain (un)appeared.
- c. *_[DP the (un)appeared stars]

(5.35) UNACCUSATIVE OF EXISTENCE *flourish*:

- a. My plants flourished.
- b. *My plants are/remain (un)flourished.
- c. *_[DP the (un)flourished plants]

If Palauan resultatives are only compatible with *v*Ps that denote a target state, then resultatives just should not be able to be formed from a verb (or $\sqrt{\text{ROOT}}$) corresponding in meaning to *appear* or *flourish*. A natural empirical question to ask at this point is whether the class of verbs/roots that have resultative forms shares any semantic properties. A detailed study of the lexical semantics of verbs of different languages (such as Levin 1993 for English) is necessary to find answers to empirical questions like this one.

The second consequence of the analysis is that resultatives cannot be formed from transitive *v*Ps. This is a natural fact of German and English resultatives, (possibly) the Malagasy *tafa-* resultative, and the Greek *-tos* resultative (none of which exhibit agentivity effects; see Kratzer 2000 for German, Emonds 2006 for English, Travis 2005b for Malagasy, and Anagnostopoulou 2003; Alexiadou and Anagnostopoulou 2008 for Greek). But Palauan clearly allows external arguments to appear in oblique *er*-phrase PPs even in resultatives (with associated agentivity effects if the DP in the *er*-phrase is an agent), as do the Malagasy *voa-* resultative and the Greek *-menos* resultative.

This fact is captured on the present analysis via selection: the resultative *a* head may only select passive *v*Ps, not transitive *v*Ps. But this is more of a descriptive generalization than an analysis. For instance, resultatives can be formed from canonically intransitive predicates that have been causativized. Several such examples have already been mentioned, including the resultatives *uleksaul* “exhausted” (cf. *omeksaul* “exhaust sb.” and *mesaul* “be tired”) in (5.13b) and *ulekbeches* “renovated” (cf. *omekbeches* “renovate sthg.” and *beches* “new”) in (5.15b), both repeated below.

- (5.13b) Ak mle ulek-saul (er a rengelek-ek).
 ISG= AUX.PAST RES.CAU-tired (P D children-ISGP)
 “I was exhausted (by my children).”

- (5.15a) A blai a mera el omekedelad el **ulek-beches**.
 D house TOP really L careful L RES.CAU-new
 “The house is really carefully renovated.”

If *omek-* is a reflex of a transitive, causative *v*, then we might expect to see sentences with transitive resultatives like in (5.36) since there is no problem with having both a theme argument and an initiator (agent or causer) argument represented in the semantics. The syntax, however, requires that the initiator either be implicit or represented obliquely. Verbs with resultative morphology simply cannot be transitive — the examples in (5.36) are fully ungrammatical on the interpretations below.¹⁰⁷

- (5.36) a. *A urur-ek a mle **ulek-saul** er ngak.
 D job-ISgP TOP AUX.PAST RES.CAU-tired ACC me
 (“My job (is) exhausted me.”)
 b. *Ak **ulek-beches** er a blai.
 ISG= RES.CAU-new ACC D house
 (“I (am) renovated the house.”)

What is at issue is that there is no inherent incompatibility between resultatives and agents (and external arguments more generally), but it seems to be the case that agents (and other external arguments) must be implicit or realized in an oblique *er*-phrase. If the syntactic stipulation that resultative *a* selects a *passive vP* is removed, then a structure like the one shown in Figure 5.2 should be well-formed semantically according to (5.32), yielding transitive resultative predicates that are fully grammatical, contrary to fact.

The situation gives us reason to believe that the causative morpheme that forms verbs like *omeksaul* “exhaust sb.” and *omekbeches* “renovate sth.” from the stems that ordinarily form adjectives like *mesaul* “tired” and *beches* “new” is the morphological exponent of a causative *v* head, spelled out as something like a prefix *uek-* and with the semantics in (5.37) (*cf.* Pustejovsky 1991; Alsina 1992; Wunderlich 1997).

- (5.37) EVENT SEMANTICS OF THE CAUSATIVE PREFIX *uek-*:
- a. $\llbracket \text{XP} \rrbracket = \lambda e \llbracket \text{EVENTUALITY}(e) \rrbracket$
 b. $\llbracket v_{[\text{CAUSATIVE}]} \rrbracket = \lambda \mathfrak{R} \lambda e \lambda f . \mathfrak{R}(f)(e) \ \& \ \text{EVENTUALITY}(f) \ \& \ \text{CAUSE}(e)(f)$
 c. $\llbracket vP_{[\text{CAUSATIVE}]} \rrbracket = \lambda e \lambda f \llbracket \text{EVENTUALITY}(e) \ \& \ \text{EVENTUALITY}(f) \ \& \ \text{CAUSE}(e)(f) \rrbracket$

¹⁰⁷ Note that due to the homophony of the accusative case marker *er* and the preposition *er* that introduces the equivalent of a passive *by*-phrase, the sentences are grammatical on (irrelevant) non-sensical interpretations like *My job is exhausted by me.* and *I am renovated by the house.*

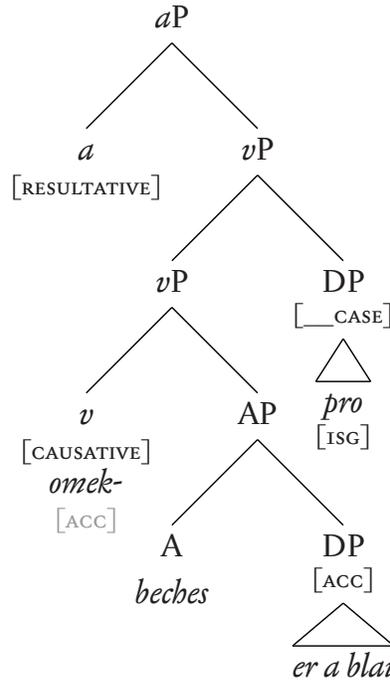


FIGURE 5.2 (Impossible) structure for (unattested) transitive Palauan resultatives

Essentially, we might say that the CAUS head transforms states and events which are specified with the feature $[-\text{CAUSER}]$ (incompatible with causers) into states and events that are specified with the feature $[\text{+CAUSER}]$ (requiring a causer), using the featural system laid out in Chapter 4. The causative v head *uek* enables predicates (A, V, N, or $\sqrt{\text{ROOT}}$) that are not specified as allowing external causers to become compatible with causer argument DPs that are introduced syntactically by a higher transitive v (like *meN-*, which when combined with *uek* would form *omek-* via nasal substitution; see Wilson 1972 and Flora 1974) or an implicit or oblique causer introduced by a passive v (like *me-*, which when combined with *uek* would form *muk-*). Importantly, the causative v head does not license a DP itself; it merely imposes the necessity for a higher functional head to create an opportunity to license a DP that can serve as an argument of the newly created event of causation, which brings about the eventuality denoted by the XP.

On this analysis, passives of causative verbs are then (correctly) predicted to be able to combine with resultative *a* precisely because causative verbs can have passive forms. Even if a particular predicate formed from a verb or adjective stem cannot combine with resultative *a*, we predict that its causative form should be able to, *e.g.*, in a structure like Figure 5.3. Causative v P's should be able to freely

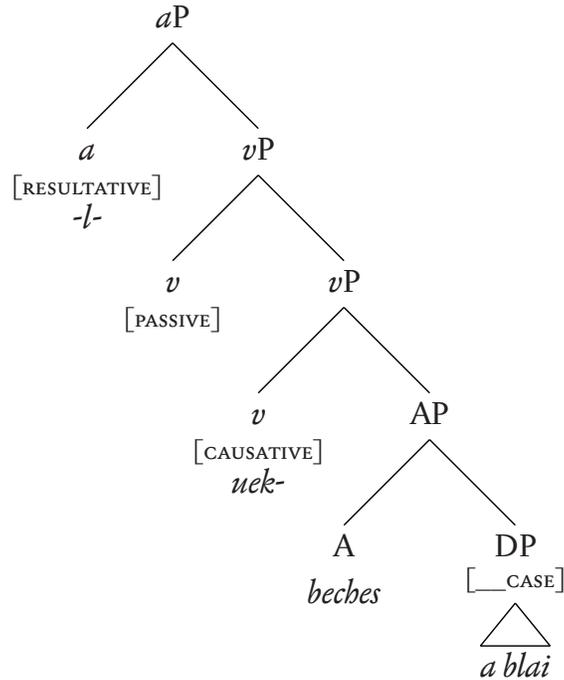


FIGURE 5.3 Palauan resultatives formed on passives of causatives

merge as complements either of transitive *v* or of passive *v*.¹⁰⁸ Still, the issue of why resultative *a* cannot merge with a transitive *vP* has not been addressed. The answer to this question probably does not lie in the truth-functional semantics of resultative *a* or passive/transitive *v* — Palauan is a language in which agents can be expressed obliquely or implicitly in resultatives. So what is the answer?

The answer may lie at the syntax–semantics interface. If resultative *a* functions to transform a predicate into a complex stative predicate, this complex predicate could require a new argument (of which the state holds). This view amounts to eliminating the target state component from the semantics of the base predicate and locating it instead in the semantics of resultative *a* itself. The issue then is how to ensure that the DP of which the resulting state predicate holds is co-referent with the DP that is affected by the event expressed by the passive verb (see Levin and Rappaport 1986 for discussion). One solution is that it need not be co-referent in the syntax, but that if it is not, the derivation will crash at LF at the point of semantic computation. This sort of approach treats the problem as a syntactic locality issue. The intuition is that the DP of which the target state is predicated is not in any sort of local relation with resultative *a*. Recall Chomsky’s Phase Impenetrability Condition from Chapter 1, repeated below in (1.2).

¹⁰⁸ That is to say, it is non-voice-bundling in the terminology of Pylkkänen 2008.

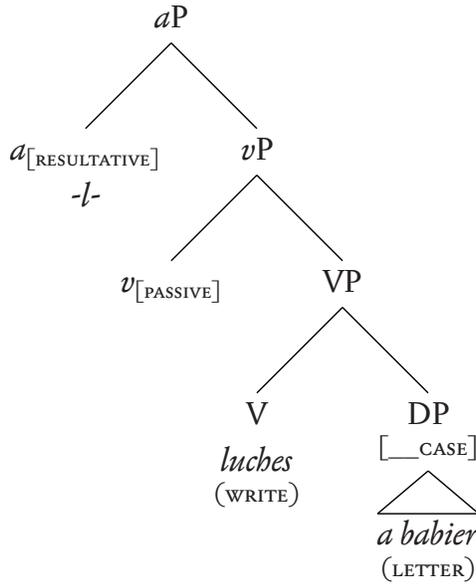


FIGURE 5.4 Resultative predicate structure

- (I.2) PHASE-IMPENETRABILITY CONDITION: In phase α with head H, the domain of H is not accessible to operations outside α ; only H and its edge (the residue outside of H' — either specifiers or elements adjoined to HP) are accessible to such operations. [Chomsky 2000: 108, ex. 21; Chomsky 2001: 13, ex. 7]

If resultative a merged with a transitive vP and if transitive v were a phase head, then the internal argument DP inside of the transitive vP would be inaccessible to operations triggered by resultative a , according to the definition in (I.2). If resultative a creates a predicate that requires an argument of type e (see, e.g., Heim and Kratzer 1998) but it does not project an external argument in its specifier, then the argument might be able to be saturated by moving a DP that was already introduced somewhere in the vP complement of resultative a . The semantics might look something like (5.38) for the structure shown in Figure 5.4 (*approx.* “The letter is written”).

- (5.38) A DIFFERENT EVENT SEMANTICS FOR RESULTATIVE FORMATION:
- $\llbracket V \rrbracket = \lambda x \lambda e [\text{WRITE}(x)(e) \ \& \ \text{EVENT}(e)]$
 - $\llbracket DP \rrbracket = \text{letter}$
 - $\llbracket vP_{[PASSIVE]} \rrbracket = \lambda x \lambda e [\text{WRITE}(x)(e) \ \& \ \text{EVENT}(e)] . \text{letter}$
 - $\llbracket a_{[RESULTATIVE]} \rrbracket = \lambda \mathfrak{A} \lambda z \lambda s \exists e [\mathfrak{A}(s)(e) \ \& \ \text{CAUSE}(s)(e) \ \& \ \text{STATE}(z)(s) \ \& \ z=x]$

$$e. \llbracket aP_{[RESULTATIVE]} \rrbracket = \lambda x \lambda z \lambda s \exists e [\text{WRITE}(x)(e) \ \& \ \text{EVENT}(e) \ \& \ \text{CAUSE}(s)(e) \ \& \ \text{STATE}(z)(s) \ \& \ z=x] . \text{letter}$$

After functional application, the denotation of the resultative *a*P is shown in (5.39).

(5.39) DENOTATION OF THE RESULTATIVE *a*P in Figure 5.4:

$$\llbracket aP_{[RESULTATIVE]} \rrbracket = \lambda z \lambda s \exists e [\text{WRITE}(\text{letter})(e) \ \& \ \text{EVENT}(e) \ \& \ \text{CAUSE}(s)(e) \ \& \ \text{STATE}(z)(s) \ \& \ z=\text{letter}]$$

At this point, the resultative predicate needs an argument of type *e* to saturate the argument represented by the variable *z*. Since resultative *a* does not project a DP in its specifier, it must move a DP from somewhere within its domain. The only accessible DP is *a babier*, which moves to the specifier of the resultative *a*P, as in Figure 5.5.

If transitive *v* (rather than passive *v*) merged with VP, then the complement of V would be within the transitive *v*P phase's Spell Out domain. As such, the Phase Impenetrability Condition dictates that it would be inaccessible to operations outside of the *v*P phase, such as an application of Move triggered by resultative *a*. The only DP that could move to the specifier of resultative *a* would be the external ar-

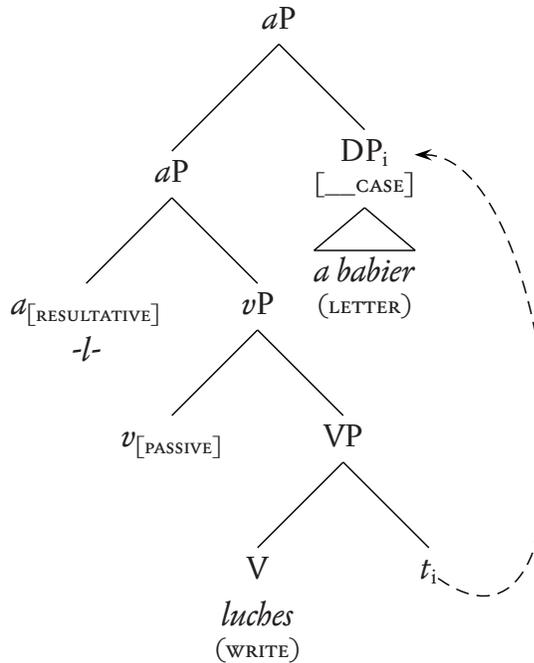


FIGURE 5.5 DP Movement for resultative argument saturation

gument DP, causing a clash in the semantics, since there would be no way for the DP affected by the event denoted by the *v*P to be the DP on which the resultative *a* predicates, *i.e.*, the $z = x$ component in (5.38) would be false.

5.6 CONCLUSION

The two consequences of the analysis essentially amount to restrictions on which verb stems allow resultative forms. The first consequence involves issues surrounding how to delimit the class of possible verb stems based on their lexical semantics, arguing that the class of verb stems that may form resultatives coincides with the class of verb stems that may appear in the passive. In some sense, then, the term “adjectival passive” is quite suitable for the analysis of Palauan resultatives presented here.

The second consequence takes this point seriously, showing both that (i) a verb stem that ordinarily has no resultative form can suddenly have one as long as it is causativized (and, I argue, subsequently passivized), and (ii) a verb stem that ordinarily does have a resultative form can suddenly not have one if it has a transitive argument structure (*i.e.*, if it is not passivized). The analysis predicts that in the absence of any modifications to (or further restrictions on) resultative *a*, the number of resultative predicates should be roughly equivalent to the number of transitive verbs that may appear in the verbal passive.

This result seems to align with the conclusion of Chapter 4, namely that the functional material above the lexical root serves as a sort of extended projection, and that the syntactic relation between functional heads and their complements essentially amounts to selection and feature unification, leaving open the possibility that certain combinations of functional heads and lexical heads will be permitted syntactically but ruled out later in the derivation if they are semantically incompatible.

CHAPTER 6

Overall Conclusions

“Remember not only to say the right thing in the right place, but far more difficult still, to leave unsaid the wrong thing at the tempting moment.”

Benjamin Franklin (1706–1790)

In this dissertation, I have investigated many different empirical phenomena and theoretical issues in Palauan syntax. In Chapter 1, two types of questions were introduced which that have guided the empirical investigations discussed in Chapters 2 through 5: (i) morphological questions about the formal status of verbs (and predicates more generally) in Palauan and in linguistic theory, and (ii) syntactic questions about the distribution of features across different elements in a phrase marker, and how these features are realized morphologically. The investigations themselves have led to new discoveries and generalizations about Palauan syntax and morphology that push beyond those in the existing descriptive literature, largely due to the increased use of naturally occurring data from written and other sources, like texts, newspapers, books, and so forth.

As was noted in Chapter 1, much ground has already been covered in the previous descriptions and analyses of the structure of Palauan. That said, this dissertation represents a step forward in our understanding of various empirical phenomena that I think not only augment our knowledge of the internal structure of the language, but how it relates typologically to other languages in the Austronesian family and even unrelated languages spoken in Southeast Asia and the Pacific. This last chapter reviews how the various empirical investigations have addressed the preceding questions. The aim is to integrate the results of the various chapters into a cohesive picture of the how the individual investigations fit together to help us

construct a theory of the architecture of the Palauan verbal complex (for summaries of each individual chapter, see Chapter 1, §1.3).

First, it was shown in Chapter 1 that Palauan has discourse-configurational properties (É. Kiss 1995: 6), with a dedicated syntactic position for topics. Empirical evidence drawn from the domain of demonstrative DPs and plural marking on nominalizations suggests that a refinement of Georgopoulos's (1991b) analysis of topicalization structures is necessary. I proposed that the *a* morpheme that appears in topicalizations is not a determiner *a*, but instead is a topic marker, perhaps cognate with Tagalog *ay*, as suggested by DeWolf 1988. It is of category Top(ic) and heads the only projection in Palauan that allows a leftward-branching specifier, presumably for discourse-functional/information-structural reasons. The DP in its specifier binds a resumptive pronoun in an argument position.

Next, I demonstrated that one way of analyzing the possessor ascension construction is to assume that Palauan has Multiple Agree (Hiraiwa 2001, 2005), where a genitive possessor DP might raise to Spec TP to satisfy an [EPP] feature on finite T (rather than the nominative DP). There are both morphological and syntactic reflexes of the process: subject agreement targets the possessor DP, and adjunct PPs can intervene between the possessor DP and the possessee DP from which it has extracted, suggesting movement. The possessor shares its φ -features with finite T and moves to Spec TP to satisfy the [EPP] feature. The natural question (and one which, since at least the 1980s, has puzzled syntacticians assuming some version of the Case-filter) is how the remnant DP from which the possessor is extracted is licensed with Case. I proposed that if Agree can be instantiated more than once, then the [NOM] feature on finite T can value the unvalued [___CASE] feature on the possessee DP via a separate instantiation of Agree. The situation is reminiscent of the Icelandic quirky dative subject construction, but the crucial difference is that subject agreement morphology matches the DP situated in the Spec TP position in Palauan, while it matches the lower DP that gets Nominative Case in Icelandic.

The (in)famous Western Austronesian “voice morphemes” have been reanalyzed in modern Palauan as *v* morphemes that are bundled with various types of other features (category features, aspect, information about valence, and possibly more). Evidence for the bundling of aspect together with transitive *v* morphemes arises from the aspectually-driven split in how accusative case morphology is realized, assuming that structural Accusative Case is licensed by some instance of transitive *v* via Agree. Treating these *v* affixes as either lexical items that are inserted as instances of *v* (in a theory like Minimalism) or as morphological exponents of feature bundles that occupy the *v* position (in a theory like Distributed Morphology), the result is that the morphophonological material that corresponds to “verbs” in Palauan is distributed over at least two syntactic heads. Given the morphological complexity of Palauan verbs, it is not inconceivable that the actual number is greater

than two: tense and mood information is presumably encoded morphologically on additional heads higher up in the structure, *e.g.*, T.

Another theme that received attention throughout much of the dissertation is the relationship between *v* and its possible set of XP complements. I concluded that category-selection is too strict a notion, whereas allowing *v* heads and XP complements to combine freely (and appealing to the semantics to rule out incompatible combinations) is too loose a notion. Still, we do not find unlimited variants in the inventory of Palauan verbs, and so I proposed that something like feature-unification seems more promising. The result is a theory that is effectively a sort of hybrid of the Minimalist theory in Chomsky 2000, 2001, 2004, 2008, the Extended Projection theory of Grimshaw 2005, and the theory of Head-Driven Phrase Structure Grammar of Pollard and Sag 1994 and Sag et al. 2003. The combination of the feature unification mechanism and the Case-filter should suffice to constrain the possible combinations of *v* and their XP complements to ensure that the right combinations of verbs are constructed syntactically.

In this vein, the evidence from ψ -idioms and resultatives suggests that the category of not only words but entire XPs can change when they Merge with a category-defining head like *v*, *n*, or *a*. The striking cases are those in which a morpheme (*i.e.*, a terminal node in the phrase structure) can merge with an phrasal XP but form a morphophonological word with just a proper subpart of that XP, such as the nominalizations of ψ -idioms via Merge with *n*, resulting in the argument DP being grammaticized as a possessor, and particularly the case of resultative *a* combining with an entire passive *v*P, changing the category to form an *a*P. In both of these cases, the morpheme corresponding to *v*, *n*, or *a* forms a morphophonological word with a $\sqrt{\text{ROOT}}$ but has syntactic and/or semantic effects on its entire complement: transitive *v* can license structural Accusative Case, the nominalizer *n* can form a DP from a phrasal idiom headed by an abstract noun which can itself be selected as an argument of another predicate, and resultative *a* transforms an event into a state, evidenced by its truth-conditional semantics and its interaction with tense and aspectual auxiliaries.

In sum, I have constructed a theory of the Palauan verbal complex that addresses the questions posed in Chapter 1. The diverse areas of inquiry in this dissertation suggest that Palauan verbs do not enter the syntax fully inflected, and that the numeration in Chomsky's (1995, 2000, etc.) Minimalism does not contain fully inflected morphophonological words. Instead, it appears that the syntax can manipulate bundles of morphosyntactic features drawn from something like a pre-syntactic lexicon, and morphophonological material is inserted post-syntactically, as suggested first by Anderson (1982, 1992) in his theory of A-Morphous Morphology and elaborated in the theory of Distributed Morphology advanced by Halle (1990), Halle and Marantz (1993, 1994), Marantz (1997), Harley and Noyer (1999), and

many others. Despite initial appearances, it seems that many unusual empirical phenomena in Palauan can receive natural explanations using current theoretical mechanisms, including the operations Merge, Move, and Agree, which together enable us to generate basic clause structures that differ minimally from those of better-studied languages. The primary differences between languages then lie in the way different features are bundled and how they are later realized morphologically, *i.e.*, in the outputs of various operations used to construct linguistic utterances and not in the set or operations themselves. This conclusion is certainly not new, but it receives very strong additional support from the detailed investigations undertaken here.

The dissertation (in conjunction with the extensive descriptive and theoretical Palauan literature from especially the 1970s – 1990s) reveals enough about the structure of Palauan to count Palauan among the class of well-studied languages which linguists can use to test predictions about different syntactic and morphological theories. If the conclusions about Palauan syntax drawn here are correct, then they constitute evidence that the architecture of the verbal complex¹⁰⁹ 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 and Thráinsson (1998). Despite how complicated Palauan is morphophonologically (even within the Austronesian language family), its initial (morpho)syntactic oddness starts to dissolve as one peels back the layers of morphological oddity, leaving familiar-looking structures and issues to remain.

The conclusion is quite interesting from the biolinguistic perspective. If syntactic structures are built using universal operations like Merge, Move,¹¹⁰ and Agree, then the fact that Palauan clause structure and the behaviors of different subclasses of the inventory of Palauan verbs are so similar to those of other languages is not surprising. If Universal Grammar provides a set of linguistic features and a set of operations to manipulate them, then Palauan can be viewed as just another instance of one possible final state of the faculty of language, where these operations have manipulated the features into a particular pre-syntactic lexicon (containing a list of abstract feature bundles), and Palauan speakers acquire Vocabulary Items (part of which contain information about morphological exponents of particular bundles of features) that are stored in a post-syntactic Encyclopedia (to borrow the ter-

¹⁰⁹ In this case, the term *verbal complex* refers to the hierarchy of lexical and functional projections that form a verbal predicate phrase.

¹¹⁰ Though see recent theories of syntax that eliminate Move as an operation distinct from Merge by relying on a relevant linearization algorithm to pronounce only particular copies of elements that Merge in more than one place. One such theory is that in Ramchand 2008.

minology from Distributed Morphology) or post-syntactic lexicon (adopting the term from A-Morphous Morphology).

REFERENCES

- Abney, Steven. 1987. The English noun phrase in its sentential aspect. Doctoral Dissertation, MIT.
- Abraham, Werner. 1983. Adjektivreaktion im Deutschen. Ms., University of Groningen.
- Acquaviva, Paolo. 2008. Roots and lexicality in Distributed Morphology. Ms., University College Dublin/Universität Konstanz.
- Aissen, Judith. 1979. Possessor ascension in Tzotzil. *Papers in Mayan linguistics*, ed. Laura Martin, 89–108. Columbia, Missouri: Lucas Brothers.
- Aissen, Judith. 1987. *Tzotzil clause structure*. Dordrecht: Kluwer.
- Aissen, Judith. 1992. Topic and focus in Mayan. *Language* 68: 43–80.
- Aissen, Judith. 1999. External possessor and logical subject in Tz'utujil. *External possession*, ed. Doris Payne and Immanuel Barshi, 167–193. Amsterdam: John Benjamins (*Typological Studies in Language* Volume 39).
- Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language and Linguistic Theory* 21: 435–483.
- Alber, Birgit. 2008. Tyrolean A-bar movement: Doubling and resumptive pronoun structures. *Microvariation in syntactic doubling*, ed. Sjeff Barbiers, Olaf Koenenman, Marika Lekakou, and Margreet van der Ham, 141–170. Bingley: Emerald.
- Alexiadou, Artemis. 2010. The morphosyntax of (anti)causative verbs. *Lexical semantics, syntax, and event structure*, ed. Malka Rappaport Hovav, Edit Doron, and Ivy Sichel, 177–203. Oxford: Oxford University Press.
- Alexiadou, Artemis, and Elena Anagnostopoulou. 2004. Voice morphology in the causative–inchoative alternation: Evidence for a non-unified structural analysis of unaccusatives. *The unaccusativity puzzle: Explorations of the syntax–lexicon interface*,

- ed. Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert, 114–136. Oxford: Oxford University Press.
- Alexiadou, Artemis, and Elena Anagnostopoulou. 2008. Structuring participles. *Proceedings of WCCFL 26*, ed. Charles Chang and Hannah Haynie, 33–41. Somerville, Mass.: Cascadilla.
- Alsina, Alex. 1992. On the argument structure of causatives. *Linguistic Inquiry* 23: 517–555.
- Anagnostopoulou, Elena. 2003. Participles and voice. *Perfect explorations*, ed. Artemis Alexiadou, Monika Rathert, and Arnim Von Stechow, 1–36. Berlin: Mouton de Gruyter.
- Anderson, Stephen. 1977. Comments on the paper by Wasow. *Formal syntax*, ed. Peter Culicover, Thomas Wasow, and Adrian Akmajian, 361–377. New York: Academic Press.
- Anderson, Stephen. 1982. Where's morphology? *Linguistic Inquiry* 13: 571–612.
- Anderson, Stephen. 1992. *A-morphous morphology*. Cambridge, Mass.: MIT Press.
- Arad, Maya. 1998. VP-structure and the syntax–lexicon interface. Doctoral Dissertation, University College London. Published as MITOPL 16.
- Arad, Maya. 2003. Locality constraints on the interpretation of roots: The case of Hebrew denominal verbs. *Natural Language and Linguistic Theory* 21: 737–778.
- Arad, Maya. 2005. *Roots and patterns: Hebrew morphosyntax*. Dordrecht: Springer.
- Aronoff, Mark. 1976. *Word formation in generative grammar*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 1).
- Bach, Emmon. 1982. Purpose clauses and control. *The nature of syntactic representation*, ed. Pauline Jacobson and Geoffrey Pullum, 35–57. Dordrecht: Reidel.
- Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark. 2003. *Lexical categories: Verbs, nouns, and adjectives*. Cambridge: Cambridge University Press (*Cambridge Studies in Linguistics* 102).
- Baker, Mark, Kyle Johnson, and Ian Roberts. 1989. Passive arguments raised. *Linguistic Inquiry* 20: 219–251.

- Beavers, John. 2006. Argument/oblique alternations and the structure of lexical meaning. Doctoral Dissertation, Stanford University.
- Bejar, Susana. 2003. Phi-syntax: A theory of agreement. Doctoral Dissertation, University of Toronto.
- Bell, Sarah. 1983. Advancements and ascensions in Cebuano. *Studies in Relational Grammar I*, ed. David Perlmutter, 143–218. Chicago: University of Chicago Press.
- Belletti, Adriana. 1988. The case of unaccusatives. *Linguistic Inquiry* 19: 1–34.
- Belletti, Adriana, and Luigi Rizzi. 1988. Psych-verbs and θ -theory. *Natural Language and Linguistic Theory* 6: 291–352.
- Benmamoun, Elabbas, Archana Bhatia, and Maria Polinsky. 2010. Closest conjunct agreement in head final languages. *Linguistic Variation Yearbook 2009*, ed. Jeroen Van Craenenbroeck, 67–88. Amsterdam: John Benjamins.
- Bittner, Maria, and Ken Hale. 1996a. Ergativity: Toward a theory of heterogeneous class. *Linguistic Inquiry* 27: 531–604.
- Bittner, Maria, and Ken Hale. 1996b. The structural determination of case and agreement. *Linguistic Inquiry* 27: 1–68.
- Blake, Barry. 1990. *Relational Grammar*. London: Routledge.
- Blust, Robert. 1977. The Proto-Austronesian pronouns and Austronesian subgrouping: A preliminary report. *University of Hawaii Working Papers in Linguistics* 9: 1–15.
- Blust, Robert. 2004. Austronesian nasal substitution: A survey. *Oceanic Linguistics* 43: 73–148.
- Bobaljik, Jonathan, and Höskuldur Thráinsson. 1998. Two heads aren't always better than one. *Syntax* 1: 37–71.
- Borer, Hagit. 2005a. *In name only (Structuring sense, Volume I)*. Oxford: Oxford University Press.
- Borer, Hagit. 2005b. *The normal course of events (Structuring sense, Volume II)*. Oxford: Oxford University Press.
- Bosson, Georg. 1985. *Empirische Universalienforschung: differentielle Objektmarkierung in den neuiranischen Sprachen*. Tübingen: Gunter Narr Verlag.
- Bresnan, Joan. 1982. The passive in lexical theory. *The mental representation of gram-*

- matical relations*, ed. Joan Bresnan, 3–86. Cambridge, Mass.: MIT Press.
- Brody, Michael. 1995. *Lexico–logical form: A radically minimalist theory*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 27).
- Burzio, Luigi. 1986. *Italian syntax: A Government–Binding approach*. Dordrecht: Reidel.
- Campana, Mark. 2000. The structure of inflection in Palauan. *Formal issues in Austronesian linguistics*, ed. Ileana Paul, Vivianne Phillips, and Lisa Travis, 1–25. Dordrecht: Kluwer.
- 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.
- Chafe, Wallace. 1968. Idiomaticity as an anomaly in the Chomskyan paradigm. *Foundations of Language* 4: 109–127.
- Cherney, Lynn. 1993. The role of agreement and modality in Palauan. *Proceedings of WCCFL II*, ed. Jonathan Mead, 78–92. Stanford: CSLI.
- Chierchia, Gennaro. 2004. A semantics for unaccusatives and its syntactic consequences. *The unaccusativity puzzle: Explorations of the syntax–lexicon interface*, ed. Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert, 22–59. Oxford: Oxford University Press.
- Chomsky, Noam. 1957. *Syntactic structures*. The Hague: Mouton.
- Chomsky, Noam. 1965. *Aspects of the theory of syntax*. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 1970. Remarks on nominalization. *Readings in English Transformational Grammar*, ed. Roderick Arnold Jacobs and Peter Rosenbaum, 184–221. Waltham, Mass.: Blaisdell-Ginn.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, Noam. 1982. *Some concepts and consequences of the theory of government and binding*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 6).
- Chomsky, Noam. 1986a. *Barriers*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 13).
- Chomsky, Noam. 1986b. *Knowledge of language: Its nature, origin, and use*. New York: Praeger.

- Chomsky, Noam. 1995. *The minimalist program*. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. *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. *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. *Structures and beyond*, ed. Adriana Belletti, 104–131. Oxford: Oxford University Press.
- Chomsky, Noam. 2008. On phases. *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, ed. Robert Freidin, Carlos Otero, and Maria Luisa Zubizarreta, 133–166. Cambridge, Mass.: MIT Press.
- Chomsky, Noam, and Howard Lasnik. 1977. Filters and control. *Linguistic Inquiry* 8: 425–504.
- Chung, Sandra. 1982. On extending the null subject parameter to NP's. *Proceedings of WCCFL 1*, ed. Daniel Flickinger, Marlys Macken, and Nancy Wiegand, 125–136. Stanford: Stanford University Dept. of Linguistics.
- 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. *Agreement in natural language: Approaches, theories, descriptions*, ed. Michael Barlow and Charles Ferguson, 251–267. Stanford: CSLI.
- Chung, Sandra, and William Ladusaw. 2003. *Restriction and saturation*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 42).
- Chung, Sandra, and Alan Timberlake. 1985. Tense, aspect, and mood. *Language typology and syntactic description, Volume III: Grammatical categories and the lexicon*, ed. Timothy Shopen, 202–258. Cambridge: Cambridge University Press.
- Cinque, Guglielmo. 1990. Ergative adjectives and the lexicalist hypothesis. *Natural Language and Linguistic Theory* 8: 1–39.
- Clark, Marybeth. 1996. Where do you feel? Stative verbs and body part terms in Mainland Southeast Asia. *The grammar of inalienability: A typological perspective on body part terms and the part-whole relation*, ed. Hilary Chappell and William McGregor, 529–563. Berlin: Mouton de Gruyter.

- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Comrie, Bernard. 1989. *Language universals and linguistic theory*. Chicago: University of Chicago Press.
- Conant, Carlos Everett. 1915. Notes on the phonology of the Palau language. *Journal of the American Oriental Society* 35: 1–15.
- Corbett, Greville. 1979. *Predicate agreement in Russian*. Birmingham: University of Birmingham (Slavonic Monographs 7).
- Corbett, Greville. 1983. *Hierarchies, targets, and controllers*. London: Croon Helm.
- Corbett, Greville. 1988. Agreement: A partial specification based on Slavonic data. *Agreement in natural language: Approaches, theories, descriptions*, ed. Michael Barlow and Charles Ferguson, 23–55. Stanford: CSLI.
- Cortés Rodríguez, Francisco. 2008. The inchoative construction: Semantic representation and unification constraints. *Deconstructing constructions*, ed. Christopher Butler and Javier Martín Arista, 247–270. Amsterdam: John Benjamins.
- Dahl, Östen. 2008. Animacy and egophoricity: Grammar, ontology, and phylogeny. *Lingua* 118: 141–150.
- Dayley, Jon. 1985. *Tɔ'utujil grammar*. Berkeley: University of California Press.
- Deal, Amy Rose. 2009. The origin and content of expletives: Evidence from 'selection'. *Syntax* 12: 285–323.
- Delancey, Scott. 1984. Notes on agentivity and causation. *Studies in Language* 8: 181–213.
- Demonte, Violeta. 1987. C-command, prepositions and predication. *Linguistic Inquiry* 18: 147–157.
- Dempwolff, Otto. 1934–38. *Vergleichende Lautlehre des austronesischen Wortschatzes*. Berlin: Reimer.
- DeWolf, Charles. 1979. Sentential predicates: A cross-linguistic analysis. Doctoral Dissertation, University of Hawaii.
- DeWolf, Charles. 1988. Voice in Austronesian languages of Philippine type: Passive, ergative, or neither? *Passive and voice*, ed. Masayoshi Shibatani, 143–193. Amsterdam: John Benjamins.

- Di Sciullo, Anna-Maria, and Edwin Williams. 1987. *On the definition of word*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 14).
- Dixon, R. M. W. 2004. Adjective classes in typological perspective. *Adjective classes: A cross-linguistic typology*, ed. R. M. W. Dixon and Alexandra Aikhenvald, 1–49. Oxford: Oxford University Press (*Explorations in Linguistic Typology* 1).
- Doron, Edit. 2000. VSO and left-conjunct agreement. *The syntax of verb initial languages*, ed. Andrew Carnie and Eithne Guilfoyle, 75–95. Oxford: Oxford University Press.
- Dowty, David. 1979. *Word meaning and Montague Grammar: The semantics of verbs and times in Montague's PTQ*. Dordrecht: Kluwer.
- Dowty, David. 1991. Thematic proto-roles and argument selection. *Language* 67: 547–619.
- Dubinsky, Stanley, and Sylvester Ron Simango. 1996. Passive and stative in Chichewa: Evidence for modular distinctions in grammar. *Language* 25: 749–781.
- Dyen, Isidore. 1965. *A lexicostatistical classification of the Austronesian languages*. Baltimore: Waverly Press. Memoir 19, Supplement to the *International Journal of American Linguistics* 31.1.
- É. Kiss, Katalin. 1995. *Discourse configurational languages*. Oxford: Oxford University Press.
- Embick, David. 1997. Voice and the interfaces of syntax. Doctoral Dissertation, University of Pennsylvania.
- Embick, David. 2004a. On the structure of resultative participles in English. *Linguistic Inquiry* 25: 355–392.
- Embick, David. 2004b. Unaccusative syntax and verbal alternations. *The unaccusativity puzzle: Explorations of the syntax–lexicon interface*, ed. Artemis Alexiadou, Elena Anagnostopoulou, and Martin Everaert, 137–158. Oxford: Oxford University Press.
- Embick, David, and Alec Marantz. 2008. Architecture and blocking. *Linguistic Inquiry* 39: 1–53.
- Embick, David, and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32: 555–595.

- Embick, David, and Rolf Noyer. 2007. Distributed Morphology and the syntax/morphology interface. *The Oxford handbook of linguistic interfaces*, ed. Gillian Ramchand and Charles Reiss, 289–324. Oxford: Oxford University Press.
- Emonds, Joseph. 2006. Adjectival passives: The construction in the iron mask. *The Blackwell companion to syntax, Volume I*, ed. Martin Everaert and Henk van Riemsdijk, 16–60. Malden, Mass.: Blackwell.
- Everaert, Martin. 2010. The lexical encoding of idioms. *Lexical semantics, syntax, and event structure*, ed. Malka Rappaport Hovav, Edit Doron, and Ivy Sichel, 76–98. Oxford: Oxford University Press.
- Faraci, Robert. 1974. Aspects of the grammar of infinitives and *For*-phrases. Doctoral Dissertation, MIT.
- Farkas, Donka, and Henriëtte de Swart. 2003. *The semantics of incorporation: From argument structure to discourse transparency*. Stanford: CSLI.
- Finer, Daniel. 1986. Reduplication and verbal morphology in Palauan. *The Linguistic Review* 6: 99–130.
- Fitch, W. Tecumseh, Marc Hauser, and Noam Chomsky. 2005. The evolution of the language faculty: Clarifications and implications. *Cognition* 97: 179–210.
- Flora, Jo-Ann. 1974. Palauan phonology and morphology. Doctoral Dissertation, University of California, San Diego.
- Fox, Danny, and David Pesetsky. 2005. Cyclic linearization of syntactic structure. *Theoretical Linguistics* 31: 1–45.
- Fraser, Bruce. 1970. Idioms within a transformational grammar. *Foundations of Language* 6: 22–42.
- Gazdar, Gerald, Ewan Klein, Geoffrey Pullum, and Ivan Sag. 1985. *Generalized Phrase Structure Grammar*. Cambridge, Mass.: Harvard University Press.
- van Geenhoven, Veerle. 1998. *Semantic incorporation and indefinite descriptions: Semantic and syntactic aspects of noun incorporation in West Greenlandic*. Stanford: CSLI.
- Georgopoulos, Carol. 1985. Variables in Palauan syntax. *Natural Language and Linguistic Theory* 3: 59–94.
- Georgopoulos, Carol. 1986. Palauan as a VOS language. *FOCAL I: Papers from the Fourth International Conference on Austronesian Linguistics*, ed. Paul Geraghty, Lois

- Carrington, and Stephen Wurm, 187–198. Canberra: Pacific Linguistics, C-93.
- Georgopoulos, Carol. 1991a. On psych predicates. *Interdisciplinary approaches to language: Essays in honor of S.-Y. Kuroda*, ed. Carol Georgopoulos and Roberta Ishihara, 217–238. Dordrecht: Kluwer.
- Georgopoulos, Carol. 1991b. *Syntactic variables: Resumptive pronouns and A' binding in Palauan*. Dordrecht: Kluwer.
- Gerassimova, Veronica. 2005. Unbounded dependency constructions in Western Austronesian. Doctoral Dissertation, Stanford University.
- Gerner, Matthias. 2005. The zoom-on-possessee construction in Kam (Dong): The anatomy of a new construction type. *Journal of Linguistics* 41: 307–352.
- Giannakidou, Anastasia. to appear. Negative and positive polarity items: Licensing, compositionality and variation. *Semantics: An international handbook of natural language meaning*, ed. Claudia Maienborn, Klaus von Stechow, and Paul Portner. Berlin: Mouton de Gruyter.
- Gibson, Robert. 1993. Palauan causatives and passives: An incorporation analysis. Doctoral Dissertation, University of Hawaii.
- Grimshaw, Jane. 2005. *Words and structure*. Stanford: CSLI.
- Guilfoyle, Eithne, Henrietta Hung, and Lisa Travis. 1992. Spec of IP and spec of VP: Two subjects in Austronesian languages. *Natural Language and Linguistic Theory* 10: 375–414.
- Hagège, Claude. 1986. *La langue Palau: Une curiosité typologique*. Munich: Wilhelm Fink Verlag. English translation by Margaret Dunham. 2008. *The Palauan language: A typological curiosity*. Manila: Ambassade de France aux Philippines.
- Halle, Morris. 1973. Prolegomena to a theory of word formation. *Linguistic Inquiry* 4: 3–16.
- Halle, Morris. 1990. An approach to morphology. *Proceedings of NELS 20*, ed. Juli Carter, Rose-Marie Déchaine, Bill Philip, and Tim Sherer, 150–184. Amherst, Mass.: GLSA.
- Halle, Morris. 1997. Distributed Morphology: Impoverishment and fission. *Papers at the interface (MITWPL 30)*, ed. Yoonjung Kang Benjamin Bruening and Martha McGinnis, 425–449. Cambridge, Mass.: MITWPL.

- Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. Kenneth Hale and Samuel Jay Keyser, 111–176. Cambridge, Mass.: MIT Press.
- Halle, Morris, and Alec Marantz. 1994. Some key features of Distributed Morphology. *MITWPL 21: Papers on phonology and morphology*, ed. Andrew Carnie and Heidi Harley, 275–288. Cambridge, Mass.: MITWPL.
- Harley, Heidi. 2002. Possession and the double object construction. *Linguistic Variation Yearbook 2*: 29–68.
- Harley, Heidi. 2008. Compounding in Distributed Morphology. *The Oxford handbook of compounding*, ed. Rochelle Lieber and Pavol Štekauer, 129–144. Oxford: Oxford University Press.
- Harley, Heidi, and Rolf Noyer. 1999. State-of-the-article: Distributed Morphology. *GLOT International 4*: 3–9.
- Harrison, Sheldon. 1976. *Mokilese reference grammar*. Honolulu: University of Hawaii Press.
- Härtl, Holden. 2003. Conceptual and grammatical characteristics of argument alternations: The case of decausative verbs. *Linguistics 41*: 883–916.
- Haspelmath, Martin. 1990. The grammaticization of passive morphology. *Studies in Language 14*: 25–72.
- Hauser, Marc, Noam Chomsky, and W. Tecumseh Fitch. 2002. The language faculty: What is it, who has it, and how did it evolve? *Science 298*: 1569–1579.
- Hay, Jen, Christopher Kennedy, and Beth Levin. 1999. Scale structure underlies telicity in ‘degree achievements’. *Proceedings of SALT IX*, ed. Tanya Matthews and Devon Strolovitch, 127–144. Ithaca: CLC Publications.
- Hayes, Bruce. 1989. The prosodic hierarchy in meter. *Rhythm and meter*, ed. Paul Kiparsky and Gilbert Youmans, 201–260. Orlando: Academic Press.
- Heim, Irene, and Angelika Kratzer. 1998. *Semantics in generative grammar*. Oxford: Blackwell.
- Hiraiwa, Ken. 2001. Multiple agree and the defective intervention constraint in Japanese. *MITWPL 40: HUMIT 2000*, ed. Ora Matushansky, Albert Costa, Javier Martin-Gonzalez, Lance Nathan, and Adam Szczegielniak, 67–80. Cambridge,

- Mass.: MIT Working Papers in Linguistics.
- Hiraiwa, Ken. 2005. Dimensions of symmetry in syntax: Agreement and clausal architecture. Doctoral Dissertation, MIT.
- Hockin, John Pearce. 1803. *A supplement to the account of the Pelew Islands; compiled from the journals of the Panther and Endeavour, two vessels sent by the honourable East India Company to those islands in the year 1790; and from the oral communications of Captain H. Wilson*. London: W. Bulmer & Co.
- Hoekstra, Teun. 1984. *Transitivity: Grammatical relations in Government–Binding Theory*. Dordrecht: Foris.
- Holmberg, Anders, and Thorbjörg Hróarsdóttir. 2003. Agreement and movement in Icelandic Raising Constructions. *Lingua* 113: 997–1019.
- van Hout, Angeliek, and Thomas Roeper. 1998. Events and aspectual structure in derivational morphology. *Papers from the UPenn/MIT roundtable on argument structure and aspect*, ed. Heidi Harley, 175–200. Cambridge, Mass.: MIT Working Papers in Linguistics, Volume 32.
- Huffman, Franklin. 1970. *Modern spoken Cambodian*. New Haven, Conn.: Yale University Press.
- Hume, David. 1825. *The history of England, from the invasion of Julius Cæsar to the revolution of 1688*. London: Jones & Company.
- Iwasaki, Shoichi. 2002. Proprioceptive-state expressions in Thai. *Studies in Language* 26: 33–66.
- Jackendoff, Ray. 1975. Morphological and semantic regularities in the lexicon. *Language* 51: 639–671.
- Jackendoff, Ray. 1996. The proper treatment of measuring out, telicity, and perhaps even quantification in English. *Natural Language and Linguistic Theory* 14: 305–354.
- Jackendoff, Ray, and Steven Pinker. 2005. The nature of the language faculty and its implications for evolution of language (Reply to Fitch, Hauser, and Chomsky). *Cognition* 97: 211–225.
- Jackson, Frederick. 1986. On determining the external relationships of the Micronesian languages. *FOCAL II: Papers from the Fourth International Conference on Austronesian Linguistics*, ed. Paul Geraghty, Lois Carrington, and Stephen A. Wurm, 201–238. Canberra: Pacific Linguistics, C-94.

- Jaisser, Annie. 1990. Delivering an introduction to psycho-collocations with *siab* in Hmong. *Linguistics of the Tibeto-Burman Area* 13: 159–178.
- Jensen, John. 1977. *Yapese reference grammar*. Honolulu: University of Hawaii Press.
- Jespersen, Otto. 1940. *A modern English grammar on historical principles: Volume 5*. London: G. Allen and Unwin.
- Johnson, Kyle. 1991. Object positions. *Natural Language and Linguistic Theory* 9: 577–636.
- Jones, Charles. 1985. Syntax and thematics of infinitival adjuncts. Doctoral Dissertation, University of Massachusetts, Amherst.
- Jones, Charles. 1991. *Purpose clauses: Syntax, thematics, and semantics of English purpose constructions*. Dordrecht: Kluwer.
- 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. 1994. Review of *Problèmes de sémantique et de syntaxe en Palau* [Lemaréchal 1991]. *Oceanic Linguistics* 33: 231–256.
- 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.
- Kallulli, Dalina. 2007. Rethinking the passive/anticausative distinction. *Linguistic Inquiry* 38: 770–780.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 25).
- Kearns, Kate. 2000. *Semantics*. New York: Palgrave.
- Keate, George. 1788. *An account of the Pelew Islands, situated in the western part of the Pacific Ocean: Composed from the journals and communications of Captain Henry Wilson, and some of his officers, who, in August 1783, were there shipwrecked, in the Antelope*. Dublin: Luke White.

- Kesolei, Katherine. 1971. *Cheldecheduc er a Belau*. Koror: Palau Community Action Agency.
- Kirkpatrick, Charles. 1982. The transitive purpose clause in English. *Texas Linguistic Forum* 19: 99–123.
- Kitagawa, Yoshihisa. 1994. *Subjects in Japanese and English*. New York: Garland. Published version of 1986 University of Massachusetts, Amherst dissertation.
- Koontz-Garboden, Andrew. 2007. States, changes of state, and the Monotonicity Hypothesis. Doctoral Dissertation, Stanford University.
- Koontz-Garboden, Andrew, and Beth Levin. 2007. The morphological typology of change of state event encoding. *Proceedings of the fifth Mediterranean Morphology Meeting, Fréjus, 15–18 September 2005*, ed. Geert Booij, Luca Ducceschi, Bernard Fradin, Emiliano Guevara, Angela Ralli, and Sergio Scalise, 185–194. Bologna: Università degli Studi di Bologna.
- Koopman, Hilda, and Dominique Sportiche. 1991. The position of subjects. *Lingua* 85: 211–258.
- Koster, Jan. 1987. *Domains and dynasties: The radical autonomy of syntax*. Dordrecht: Foris.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. *Phrase structure and the lexicon*, ed. Johan Rooryck and Laurie Zaring, 109–137. Dordrecht: Kluwer.
- Kratzer, Angelika. 2000. Building statives. *Proceedings of BLS 26*, ed. Lisa Conathan, Jeff Good, Darya Kavitskaya, Alyssa Wulf, and Alan Yu, 385–399. Berkeley: Berkeley Linguistics Society.
- Kratzer, Angelika. 2004. Telicity and the meaning of objective case. *The syntax of time*, ed. Jacqueline Guéron and Jacqueline Lecarne, 389–423. Cambridge, Mass.: MIT Press.
- Kratzer, Angelika. 2005. Building resultatives. *Events in syntax, semantics, and discourse*, ed. Claudia Maienborn and Angelika Wöllstein-Leisten, 177–212. Tübingen: Niemeyer.
- Krifka, Manfred. 1992. Thematic relations as links between nominal reference and temporal constitution. *Lexical matters*, ed. Ivan Sag and Anna Szabolcsi, 29–53. Stanford: CSLI.

- Krifka, Manfred. 1998. The origins of telicity. *Events and grammar*, ed. Susan Rothstein, 197–235. Dordrecht: Kluwer.
- Kuroda, S.-Y. 1988. Whether we agree or not. *Linguisticæ Investigationes* 12: 1–47.
- Ladusaw, William. 1979. Polarity sensitivity as inherent scope relations. Doctoral Dissertation, University of Texas, Austin. Published 1980. Bloomington: Indiana University Linguistics Club.
- Lakoff, George, and Mark Johnson. 1980. *Metaphors we live by*. Chicago: University of Chicago Press.
- Lapointe, Steven. 1980. A theory of grammatical agreement. Doctoral Dissertation, University of Massachusetts, Amherst.
- Larson, Richard. 1988. On the double object construction. *Linguistic Inquiry* 19: 335–391.
- Lavine, James. 2010. Case and events in transitive impersonals. *Journal of Slavic Linguistics* 18: 101–130.
- Lee, Kee-dong. 1975. *Kusaiean reference grammar*. Honolulu: University of Hawaii Press.
- Lees, Robert. 1960. *The grammar of English nominalizations*. The Hague: Mouton.
- Legate, Julie. 2008. Morphological and abstract case. *Linguistic Inquiry* 39: 55–101.
- Legendre, Géraldine. 1989. Inversion with certain French experiencer verbs. *Language* 65: 752–782.
- Lemaréchal, Alain. 1991. *Problèmes de sémantique et de syntaxe en palau*. Paris: Presses du CNRS.
- Lemaréchal, Alain. 1993. Pluriel, animéité et référentialité en palau. *Faits de langues* 2: 169–177.
- Levin, Beth. 1993. *English verb classes and alternations: A preliminary investigation*. Chicago: University of Chicago Press.
- Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity: At the syntax–lexical semantics interface*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 26).
- Levin, Beth, and Malka Rappaport. 1986. The formation of adjectival passives.

- Linguistic Inquiry* 17: 623–661.
- Leyens, Jacques-Philippe, Vincent Yzerbyt, and Anouk Rogier. 1997. Personality traits that distinguish you and me are better memorized. *European Journal of Social Psychology* 27: 511–522.
- Li, Charles, and Sandra Thompson. 1981. *Mandarin Chinese: A functional reference grammar*. Berkeley: University of California Press.
- Lieber, Rochelle. 1980. On the organization of the lexicon. Doctoral Dissertation, MIT.
- Lieber, Rochelle. 1992. *Deconstructing morphology*. Chicago: University of Chicago Press.
- Liêm, Nguyễn Đăng. 1970. *Four-syllable idiomatic expressions in Vietnamese*. Canberra: Pacific Linguistics D-6.
- Malsol, Yosko. 1999. Palauan language workbook. Ms., Koror, Palau.
- Marantz, Alec. 1992. Case and licensing. *Proceedings of the 1991 Eastern States Conference on Linguistics*, ed. Germán Westphal, Benjamin Ao, and Hee-Rahk Chae, 234–253. Columbus: Ohio State University. Reprinted as Marantz 2000.
- Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *Proceedings of PLC 21*, ed. Alexis Dimitriadis, Laura Siegel, Clarissa Surek-Clark, and Alexander Williams, 201–225. Philadelphia: Special issue of *University of Pennsylvania Working Papers in Linguistics* 4.2.
- Marantz, Alec. 2000. Case and licensing. *Arguments and Case: Explaining Burzio's Generalization*, ed. Eric Reuland, 1–30. Amsterdam: John Benjamins. Revision of Marantz 1992.
- Marantz, Alec. 2001. Words. Paper presented at the 20th West Coast Conference on Formal Linguistics, University of Southern California, 23–25 February.
- Marantz, Alec. 2007. Phases and words. *Phases in the theory of grammar*, ed. Sook-Hee Choe, 191–222. Seoul: Dong In.
- Martinez, Manuel, Mercedes Diaz-Mendoza, Laura Carrillo, and Isabel Diaz. 2007. Carboxy terminal extended phytocystatins are bifunctional inhibitors of papain and legumain cysteine proteinases. *Federation of European Biochemical Societies (FEBS) Letters* 581: 2914–2918.

- Massam, Diane. 1985. Case theory and the projection principle. Doctoral Dissertation, MIT.
- Massam, Diane. 2001. Pseudo noun incorporation in Niuean. *Natural Language and Linguistic Theory* 19: 153–197.
- Massam, Diane. 2009. Existential incorporation constructions. *Lingua* 119: 166–184.
- Matisoff, James. 1986. Hearts and minds in South-East Asian languages and English: An essay in the comparative lexical semantics of psycho-collocations. *Cahiers de Linguistique Asie-Orientale* 15: 5–57.
- Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37: 69–109.
- May, Robert. 1985. *Logical form*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 12).
- McCloskey, James. 1997. Subjecthood and subject positions. *Elements of grammar: Handbook of generative syntax*, ed. Liliane Haegeman, 197–235. Dordrecht: Kluwer.
- McCloskey, James, and Kenneth Hale. 1984. On the syntax of person–number inflection in Modern Irish. *Natural Language and Linguistic Theory* 1: 487–534.
- McFadden, Thomas. 2004. The position of morphological case in the derivation: A study on the syntax–morphology interface. Doctoral Dissertation, University of Pennsylvania.
- McGinnis, Martha. 2002. On the systematic aspect of idioms. *Linguistic Inquiry* 33: 665–672.
- McVeigh, Brian. 1996. Standing stomachs, clamoring chests and cooling livers: Metaphors in the psychological lexicon of Japanese. *Journal of Pragmatics* 26: 25–50.
- Mikkelsen, Line. 2005. *Copular clauses: Specification, predication and equation*. Amsterdam: John Benjamins.
- Munn, Alan. 1993. Topics in the syntax and semantics of coordinate structures. Doctoral Dissertation, University of Maryland, College Park.
- Munro, Pamela. 1999. Chickasaw subjecthood. *External possession*, ed. Doris Payne and Immanuel Barshi, 251–259. Amsterdam: John Benjamins (*Typological Studies in*

Language Volume 39).

- Nespor, Marina, and Irene Vogel. 1986. *Prosodic phonology*. Dordrecht: Foris. 2nd edition published 2007. Berlin: Mouton de Gruyter.
- Nichols, Johanna. 1986. Head-marking and dependent-marking grammar. *Language* 62: 56–119.
- Ntelitheos, Dimitrios. 2010. Linking compounds in Malagasy. Paper presented at AFLA 17, 7–9 May, Stony Brook University.
- Nunberg, Geoffrey, Ivan Sag, and Thomas Wasow. 1994. Idioms. *Language* 70: 491–538.
- Oey, Eric. 1990. “Psycho-collocations” in Malay. *Linguistics of the Tibeto-Burman Area* 13: 141–158.
- O’Grady, William. 1998. The syntax of idioms. *Natural Language and Linguistic Theory* 16: 279–312.
- Parsons, Terrence. 1990. *Events in the semantics of English: A study in subatomic semantics*. Cambridge, Mass.: MIT Press.
- Pätzold, Klaus. 1969. Die Palau-Sprache und ihre Stellung zu anderen indonesischen Sprachen. Doctoral Dissertation, Universität Hamburg.
- Payne, Doris, and Immanuel Barshi. 1999. *External possession*. Amsterdam: John Benjamins (*Typological Studies in Language* Volume 39).
- Perlmutter, David. 1978. Impersonal passives and the Unaccusative Hypothesis. *Proceedings of BLS 4*, ed. Jeri Jaeger, Anthony Woodbury, Farrell Ackerman, Christine Chiarello, Orin Gensler, John Kingston, Eve Sweetser, Henry Thompson, and Kenneth Whitler, 157–189. Berkeley: Berkeley Linguistics Society.
- Perlmutter, David. 1980. Relational grammar. *Syntax and semantics, Volume 13: Current approaches to syntax*, ed. Edith Moravcsik and Jessica Wirth, 195–229. New York: Academic Press.
- Perlmutter, David. 1983. *Studies in Relational Grammar 1*. Chicago: University of Chicago Press.
- Perlmutter, David. 1984. Working 1s and inversion in Italian, Japanese, and Quechua. *Studies in Relational Grammar 2*, ed. David Perlmutter and Carol Rosen, 292–330. Chicago: University of Chicago Press.

- Perlmutter, David, and Brian Joseph. 1990. *Studies in Relational Grammar 3*. Chicago: University of Chicago Press.
- Perlmutter, David, and Paul Postal. 1984. The I-advancement exclusiveness law. *Studies in Relational Grammar 2*, ed. David Perlmutter and Carol Rosen, 81–125. Chicago: University of Chicago Press.
- Perlmutter, David, and Carol Rosen. 1984. *Studies in Relational Grammar 2*. Chicago: University of Chicago Press.
- Pesetsky, David. 1995. *Zero syntax: Experiencers and cascades*. Cambridge, Mass.: MIT Press.
- Pinker, Steven, and Ray Jackendoff. 2005. The faculty of language: What's special about it? *Cognition* 95: 201–236.
- Pollard, Carl, and Ivan Sag. 1994. *Head-Driven Phrase Structure Grammar*. Chicago: University of Chicago Press.
- Postal, Paul. 1966. On so-called 'pronouns' in English. *Monograph series on languages and linguistics (Georgetown University), Volume 19*, ed. Francis Dinneen, 177–206. Washington, DC: Georgetown University Press.
- Postal, Paul. 2004. *Skeptical linguistic essays*. Oxford: Oxford University Press.
- Pullum, Geoffrey, and Arnold Zwicky. 1992. A misconceived approach to morphology. *Proceedings of WCCFL 10*, ed. Dawn Bates, 387–398. Stanford: CSLI.
- Pustejovsky, James. 1991. The generative lexicon. *Computational Linguistics* 17: 409–441.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 49).
- Quine, Willard Van Orman. 1936. On the axiom of reducibility. *Mind* 45: 498–500.
- Ramarui, Augusta, and Melii Temaël. 1999. *Kerresel a klechibelau: Tekoi er a Belau me a omesudel*. Koror: Belau National Museum.
- Ramchand, Gillian. 1997. *Aspect and predication: The semantics of argument structure*. Oxford: Oxford University Press.
- Ramchand, Gillian. 2008. *Verb meaning and the lexicon: A first-phase syntax*. Cambridge: Cambridge University Press.

- Rehg, Kenneth. 1981. *Ponapean reference grammar*. Honolulu: University of Hawaii Press.
- Reinhart, Tanya. 1976. The syntactic domain of anaphora. Doctoral Dissertation, MIT.
- Reinhart, Tanya. 1983. *Anaphora and semantic interpretation*. London: Croon Helm.
- Reinhart, Tanya. 2000. *The theta system: Syntactic realization of verbal concepts*. Utrecht: UIL OTS Working Papers in Linguistics (00,01/TL).
- Richards, Norvin. 2001. An idiomatic argument for lexical decomposition. *Linguistic Inquiry* 32: 183–192.
- Riddle, Elizabeth. 1999. Metaphorically speaking in White Hmong. *Papers from the Ninth Annual Meeting of the Southeast Asian Linguistics Society*, ed. Graham Thurgood, 377–392. Tempe, Ariz.: Program for Southeast Asian Studies Monograph Series, Arizona State University.
- Ritter, Elizabeth. 1991. Two functional categories in noun phrases: Evidence from Modern Hebrew. *Perspectives on phrase structure: Heads and licensing*, ed. Susan Rothstein, 37–62. San Diego: Academic Press.
- Ritter, Elizabeth. 1992. Cross-linguistic evidence for Number Phrase. *Canadian Journal of Linguistics* 37: 197–218.
- Ritter, Elizabeth, and Sara Rosen. 2000. Event structure and ergativity: The converging perspectives of lexical semantics and syntax. *Events as grammatical objects*, ed. Carol Tenny and James Pustejovsky, 187–238. Stanford: CSLI.
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 16).
- Rizzi, Luigi. 2001. Relativized Minimality effects. *The handbook of contemporary syntactic theory*, ed. Mark Baltin and Chris Collins, 89–110. Oxford: Blackwell.
- Rizzi, Luigi, and Ian Roberts. 1989. Complex inversion in French. *Probus* 1: 1–30.
- Roberts, Ian. 1986. *The representation of implicit and dethematized subjects*. Dordrecht: Foris.
- Rodríguez-Mondoñedo, Miguel. 2007. The syntax of objects: Agree and differential object marking. Doctoral Dissertation, University of Connecticut.
- Roeper, Thomas. 1987. Implicit arguments and the head–complement relation.

- Linguistic Inquiry* 18: 267–310.
- Roeper, Thomas, and Muffy Siegel. 1978. A lexical transformation for verbal compounds. *Linguistic Inquiry* 9: 199–260.
- Ross, John Robert “Haj”. 1967. Constraints on variables in syntax. Doctoral Dissertation, MIT.
- Rothstein, Susan. 2001. What are incremental themes? *ZAS Papers in Linguistics* 22, ed. Gerhard Jäger, Anatolij Strigin, Chris Wilder, and Ning Zhang, 139–157. Berlin: Zentrum für Allgemeine Sprachwissenschaft.
- Rothstein, Susan. 2004. *Structuring events: A study in the semantics of lexical aspect*. Malden, Mass.: Blackwell.
- Sag, Ivan, Thomas Wasow, and Emily Bender. 2003. *Syntactic theory: A formal introduction (2nd ed.)*. Stanford: CSLI.
- de Saussure, Ferdinand. 1916. *Cours de linguistique générale*. Paris: Payot.
- Scalise, Sergio. 1984. *Generative morphology*. Dordrecht: Foris.
- Schachter, Paul, and Fe Otnes. 1972. *Tagalog reference grammar*. Berkeley: University of California Press.
- Schäfer, Florian. 2008. *The syntax of (anti-)causatives: External arguments in change-of-state contexts*. Amsterdam: John Benjamins.
- Schütze, Carson. 1997. INFL in child and adult language: Agreement, case and licensing. Doctoral Dissertation, MIT.
- Selkirk, Elizabeth. 1982. *The syntax of words*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 7).
- Selkirk, Elizabeth. 1986. On derived domains in sentence phonology. *Phonology Yearbook* 3: 371–405.
- Shimoji, Michinori. 2005. Conditionals in Palauan: A case for topicalization. *Lexicon and grammar in corpus linguistics*, ed. Yoichiro Tsuruga, Toshihiro Takagaki, and Kazuyuki Urata, 75–95. Tokyo: Tokyo University of Foreign Studies, *Working Papers in Linguistic Informatics* 7.
- Siddiqi, Daniel. 2009. *Syntax within the word: Economy, allomorphy, and argument selection in Distributed Morphology*. Amsterdam: John Benjamins.

- Siegel, Dorothy. 1973. Non-sources of un-passives. *Syntax and semantics* 2, ed. John Kimball, 301–317. New York: Seminar Press.
- Sigurðsson, Halldór Ármann. 1989. Verbal syntax and case in Icelandic. Doctoral Dissertation, University of Lund.
- Smith, Carlota. 1991. *The parameter of aspect*. Dordrecht: Kluwer. 1997, 2nd edition.
- Smith-Stark, T. Cedric. 1974. The plurality split. *Papers from CLS 10*, ed. Michael La Galy, Robert Fox, and Anthony Bruck, 657–671. Chicago: Chicago Linguistic Society.
- Sneddon, James Neil. 1996. *Indonesian: A comprehensive grammar*. London: Routledge.
- Sohn, Ho-min. 1975. *Woleaian reference grammar*. Honolulu: University of Hawaii Press.
- Sproat, Richard. 1985. On deriving the lexicon. Doctoral Dissertation, MIT.
- von Stechow, Arnim. 1995. Lexical decomposition in syntax. *The lexicon in the organization of language*, ed. Urs Egli, Peter Pause, Christoph Schwarze, Arnim von Stechow, and Götz Wienold, 81–118. Amsterdam: John Benjamins.
- Stolterfoht, Britta, Helga Gese, and Claudia Maienborn. to appear. Word category conversion causes processing costs: Evidence from adjectival passives. *Psychonomic Bulletin & Review*.
- Stowell, Tim. 1986. Psych-movement in the mapping from D-structure to logical form. Paper presented at the Generative Linguistics in the Old World (GLOW) Colloquium.
- Stowell, Tim. 1991. As *So*, not *So As*. *Boletim da Associação Brasileira de Linguística* 11: 9–49.
- Svenonius, Peter. 2004. On the edge. *Peripheries: Syntactic edges and their effects*, ed. David Adger, Cécile De Cat, and George Tsoulas, 259–287. Dordrecht: Springer.
- de Swart, Peter. 2007. Cross-linguistic variation in object marking. Doctoral Dissertation, Radboud Universiteit Nijmegen. Published in the LOT Dissertation Series (no. 168).
- Swinney, David, and Anne Cutler. 1979. The access and processing of idiomatic expressions. *Journal of Verbal Learning and Verbal Behavior* 18: 523–534.

- Szabolcsi, Anna. 1994. The noun phrase. *Syntax and semantics, Volume 27: The syntactic structure of Hungarian*, ed. Ferenc Kiefer and Katalin É. Kiss, 179–274. San Diego: Academic Press.
- Tenny, Carol. 1987. Grammaticalizing aspect and affectedness. Doctoral Dissertation, MIT.
- Tenny, Carol. 1994. *Aspectual roles and the syntax–semantics interface*. Dordrecht: Kluwer.
- Thráinsson, Höskuldur. 1979. *On complementation in Icelandic*. New York: Garland.
- Tkel-Sbal, Debbie. 1992. *Ngalek er a Belau: Ngeso el mo er a sensei*. Mangilao: BEAM Center, University of Guam.
- Tkel-Sbal, Debbie. 1996. *Conversational Palauan*. Mangilao: Micronesian Language Institute, University of Guam.
- Tmodrang, Masaharu. 1997. *Cbeldecheduch er a Belau*. Koror: Education Media Center.
- Toman, Jindrich. 1986. A (word-)syntax for participles. *Linguistische Berichte* 105: 367–408.
- Topping, Donald. 1973. *Chamorro reference grammar*. Honolulu: University of Hawaii Press.
- Torrego, Esther. 1998. *The dependencies of objects*. Cambridge, Mass.: MIT Press (*Linguistic Inquiry* Monograph 34).
- Travis, Lisa. 1992. Inner aspect and the structure of VP. *Cahiers de Linguistique de l'UQAM* 1: 130–146.
- Travis, Lisa. 2005a. Articulated vPs and the composition of aspectual classes. *Aspectual inquiries*, ed. Paula Kempchinsky and Roumyana Slabakova, 69–94. Dordrecht: Springer.
- Travis, Lisa. 2005b. Passives, states, and roots in Malagasy. *Proceedings of AFLA XII*, ed. Jeffrey Heinz and Dimitrios Ntelitheos, 395–409. Los Angeles: *UCLA Working Papers in Linguistics* 12.
- Truckenbrodt, Hubert. 1999. On the relation between syntactic phrases and phonological phrases. *Linguistic Inquiry* 30: 219–255.
- Vendler, Zeno. 1957. Verbs and times. *The Philosophical Review* 66: 143–160.

- Vendler, Zeno. 1967. *Linguistics in philosophy*. Ithaca: Cornell University Press.
- Verkuyl, Henk. 1972. *On the compositional nature of aspects*. Dordrecht: Reidel.
- Verkuyl, Henk. 1989. Aspectual classes and aspectual composition. *Linguistics and Philosophy* 12: 39–94.
- Verkuyl, Henk. 1993. *A theory of aspectuality: The interaction between temporal and atemporal structure*. Cambridge: Cambridge University Press.
- Wagner, Michael. 2005. Prosody and recursion. Doctoral Dissertation, MIT.
- Walleser, P. Salvator. 1911. Grammatik der Palausprache. *Mitteilung des Seminars für Orientalische Sprachen* 14: 121–231.
- Walleser, P. Salvator. 1913. *Palau-Wörterbuch*. Hong Kong: Mission Society.
- Wasow, Thomas. 1977. Transformations and the lexicon. *Formal syntax*, ed. Peter Culicover, Thomas Wasow, and Adrian Akmajian, 327–360. New York: Academic Press.
- Wasow, Thomas. 1980. Major and minor rules in Lexical Grammar. *Lexical Grammar*, ed. Teun Hoekstra, Harry van der Hulst, and Michael Moortgat, 285–312. Dordrecht: Foris.
- Waters, Jennifer, Rey-Huei Chen, Andrew Murray, and E. D. Salmon. 1998. Localization of Mad2 to kinetochores depends on microtubule attachment, not tension. *The Journal of Cell Biology* 141: 1181–1191.
- Waters, Richard. 1980. Topicalization and passive in Palauan. Ms., MIT.
- White, E. B. 1952. *Charlotte's web*. New York: HarperCollins.
- Williams, Edwin. 1980. Predication. *Linguistic Inquiry* 11: 203–238.
- Wilson, Helen. 1972. The phonology and syntax of Palauan verb affixes. Doctoral Dissertation, University of Hawaii. Published 1972. Honolulu: *University of Hawaii Working Papers in Linguistics* 4.5.
- Woolford, Ellen. 2000. Object agreement in Palauan: Specificity, humanness, economy and optimality. *Formal issues in Austronesian linguistics*, ed. Ileana Paul, Vivianne Phillips, and Lisa Travis, 215–245. Dordrecht: Kluwer.
- Wunderlich, Dieter. 1997. Cause and the structure of verbs. *Linguistic Inquiry* 28: 27–68.

- Yaoch, Felix, Francisco Morei, Huan Polloi, Timarong Sisior, Rengulbai Ngeburch, Santos Ngodrii, Hermana Remarui, Hubert Elechuus, Masa-Aki Eme-siochl, Masaharu Tmodrang, and Sadang Ngiraecherang. 1972. Palauan orthography: A final report on the decisions of the Palau Orthography Committee. Ms., Pacific and Asian Linguistic Institute (PALI), University of Hawaii; photocopied in Koror at the Palau Community College Library.
- Zaenen, Annie, Joan Maling, and Höskuldur Thráinsson. 1985. Case and grammatical functions: The Icelandic passive. *Natural Language and Linguistic Theory* 3: 441–483.
- Zagona, Karen. 2002. *The syntax of Spanish*. Cambridge: Cambridge University Press.
- Zobel, Erik. 2002. The position of Chamorro and Palauan in the Austronesian family tree: Evidence from verb morphosyntax. *The history and typology of Western Austronesian voice systems*, ed. Fay Wouk and Malcolm Ross, 405–434. Canberra: Pacific Linguistics #518.
- Zoerner, Cyril Edward. 1995. Coordination: The syntax of &P. Doctoral Dissertation, University of California, Irvine.
- Zuraw, Kie. 2003. Vowel reduction in Palauan reduplicants. *Proceedings of AFLA 8*, ed. Andrea Rackowski and Norvin Richards, 385–398. Cambridge, Mass.: MITWPL #44.
- Zuraw, Kie. 2007. Extrapolation of generalizations from existing words to new words: Palauan suffixation. Paper presented at the 14th Meeting of the Austronesian Formal Linguistic Association. McGill University, Montréal, Québec, Canada.
- Zwicky, Arnold, and Geoffrey Pullum. 1986. The principle of Phonology-Free Syntax: Introductory remarks. *Ohio State University Working Papers in Linguistics* 32: 63–91.