



# Two steps to high absolutive syntax: Austronesian voice and agent focus in Mandarin

Dan Brodtkin<sup>1</sup>

Received: 7 February 2021 / Accepted: 17 September 2022 / Published online: 28 December 2022  
© The Author(s) 2022

## Abstract

The westernmost languages of the Austronesian family show verbal alternations that are traditionally referred to as a *voice* system. This paper investigates the syntax of the voice system in Mandarin, a language of the South Sulawesi subfamily. It argues that this alternation tracks alternations in argument structure, determines patterns of Case-Licensing in the *voiceP*, and positions a single argument, the pivot, to raise to the highest A-position in the clause. The process that positions the pivot is decomposed into two steps: first, a process of Object Shift that moves definite arguments out of the VP and second, a process that places the pivot in SPEC,TP as the result of Case-Licensing by  $T^0$ . Evidence for this analysis is drawn from contexts where the external argument undergoes  $\bar{A}$ -extraction and the internal argument is definite. In that context, the language employs a special construction which allows the external argument to be the pivot, allows the internal argument to undergo Object Shift, and provides the means to Case-License it within the *vP*. I refer to this construction as the Agent Focus and argue that it has a syntax similar to the analogous construction in the Mayan languages of the Q'anjob'alan subfamily.

**Keywords** Mandarin · South Sulawesi · Sulawesi · Austronesian · Voice · Ergativity · High absolutive · Object shift · Case licensing · Agent focus · Mayan

---

✉ Dan Brodtkin  
ddbrodki@ucsc.edu

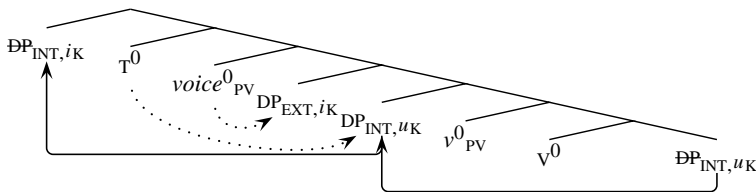
<sup>1</sup> Department of Linguistics, University of California Santa Cruz, 1156 High Street, Santa Cruz, CA, USA

## 1 Introduction

The westernmost languages of the Austronesian family, spoken along an arc that stretches from Taiwan to Sulawesi to Madagascar, show morphological alternations on the verb that are traditionally referred to as a voice system. (van der Tuuk 1864; Adriani 1893). These alternations have ramifications that spread through the morphosyntactic system, determining patterns of case-marking, interacting with  $\bar{A}$ -extraction, and singling out one argument- the “pivot”- as the most prominent nominal in the clause (Keenan 1976; Guilfoyle et al. 1992; Kroeger 1993a; Rackowski 2002; Aldridge 2004; Pearson 2005; Erlewine 2018; Nie 2020; Hsieh 2020). The complexity of these systems has inspired a body of research on the nature of the voice morphology, the position of the pivot, and the mechanisms that position that argument in its final position, and these topics continue to be debated in individual languages and at the broader regional level (Payne 1982; De Guzman 1988; Gerdtz 1988a; Shibatani 1988; Kroeger 1993a; Richards 1993, 1996, 2000; Paul 2000; Pearson 2001, 2005; Aldridge 2008, 2011, 2012; Liao 2004; Paul and Travis 2006; Ndayiragije 2006; Chang 2011; Chen 2017; Erlewine and Lim 2022)

The goal of this paper is to investigate the syntax of this system in Mandar, a language of the South Sulawesi subfamily of central Indonesia. The languages of this subfamily show a morphological profile that is relatively unique to the island of Sulawesi, and as a result, typological and formal discussions have made few attempts to connect their voice systems to those of the Philippines (Finer 1997; Himmelmann 2005; Blust 2013; Chen and McDonnell 2019). But when we look deeper into the syntax of this system in Mandar, we will find that it can be understood along much the same lines as the systems of that type. I will show that the voice alternation in this language tracks alternations in argument structure, as it does in Philippine-type languages on the ergative tradition of analysis (Payne 1982; De Guzman 1988; Gerdtz 1988a; Aldridge 2004; Liao 2004; Paul and Travis 2006; Ndayiragije 2006; Chang 2011). The alternation between the two basic voices- the Agent Voice and the Patient Voice- turns on the requirement for definiteness-related Object Shift (Rackowski 2002; Aldridge 2004) and determines patterns of Case-Licensing in the *voice*P. Its ultimate result is to position one argument- the pivot- to be Case-Licensed by  $T^0$  and to raise to SPEC,TP (Guilfoyle et al. 1992). The resultant analysis is one on which the pivot reaches its final position in the Patient Voice through two distinct steps, and this is shown in the tree in (1). I will refer to this theory of Mandar clause structure as the Two-Step Theory.

(1) *The Two-Step Theory: Patient Voice*



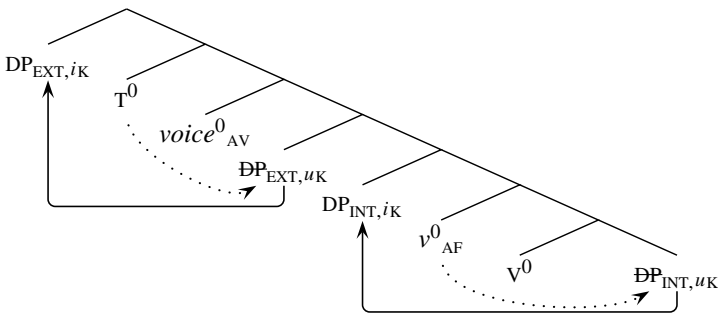
On the Two-Step Theory, the syntax of the Mandar voice alternation resembles the transitivity alternations that occur in ergative languages which require the absolutive

argument to raise to the highest A-position in the clause: namely, those which show High Absolutive Syntax (Bittner and Hale 1996b, a; Legate 2006; Coon et al. 2014; Brown 2016; Ershova 2019). From this perspective, it is possible to integrate this language into a broader continuum of High-Absolutive ergative systems that stretches across Western Austronesia (Payne 1982; De Guzman 1988; Gerds 1988a; Aldridge 2004; Liao 2004; Paul and Travis 2006; Ndayiragije 2006; Chang 2011). But pressing further than earlier work in the ergative paradigm, the Two-Step Theory makes it possible to recognize a parallel with certain High Absolutive languages of the Mayan family which has gone unnoticed in previous work in the region. Mandarin shows a Subjects-Only Extraction Constraint in the  $\bar{A}$ -domain, and in clauses that launch extraction of the external argument, it is impossible for the internal argument to interact with  $T^0$ . On the Two-Step Theory, this raises a problem when the internal argument is definite: the internal argument must undergo Object Shift and be Case-Licensed without interacting with  $T^0$ , but these requirements cannot be satisfied in the Agent Voice (which does not allow Object Shift) or the Patient Voice (which does not allow the external argument to interact with  $T^0$  and be extracted). As a result, the Two-Step Theory predicts that the language must resort to a distinct construction, and this prediction is correct. In that context, Mandarin employs the verbal form in (2). I will refer to this construction as the Agent Focus and argue that it shows the syntax in (3): it allows the internal argument to undergo Object Shift and be Case-Licensed in the vP.

(2) *The Agent Focus Construction*

Apa [ mam-bokko=i \_\_\_ i=Kaco' ]?  
 what AF-bite=3ACC PRS=NAME  
 ‘What bit Kaco?’

(3) *The Two-Step Theory: Agent Focus*



The Mandarin Agent Focus construction in (2) is analogous to a verbal form with the same shape and distribution in many languages of Sulawesi (Martens 1988; Friberg 1991; Mead 1998, 2002; Zobel 2002; Jukes 2006). When properly understood, its properties will provide clear support to the key claims of the Two-Step Analysis in Mandarin. But beyond the level of language-internal analysis, this investigation will also deliver a parallel to a similar construction that appears in many High Absolutive

languages of the Mayan family: the Agent Focus Construction. In certain Mayan languages that show a clausal syntax on which the absolutive argument is Case-Licensed by  $T^0$ , it has been argued to provide the means to Case-License the internal argument when it cannot interact with that head, along the lines of (3) (Coon et al. 2014).

The remainder of the paper proceeds as follows. In Sect. 2, I provide background information on Mandar, show that the voice system tracks alternations in argument structure, and demonstrate that the pivot raises to an A-position. In Sect. 3, I present the Two-Step Theory. In Sect. 4, I adduce further evidence for this proposal from the contexts where the demands of the systems of Extraction, Object Shift, and Case Licensing conflict, in which the language employs the Agent Focus Construction. In Sect. 5, I conclude.

## 2 High absolutive syntax in Mandar

Mandar is an Austronesian language of the South Sulawesi subfamily which is spoken by 400,000 people on the south coast of West Sulawesi, Indonesia (Grimes and Grimes 1987). It has been the subject of several publications by the Indonesian Ministry of Education and Culture, including a grammar (Pelenkahu et al. 1983), a description of adverbs (Sikki et al. 1987), and a compilation of poetry (Muthalib and Sangi 1991). Those publications and this paper focus on the prestige variety of the language, which is the dialect spoken in the district of Polewali Mandar (Grimes and Grimes 1987). I will refer to it as Mandar.

The data that appear in the discussion to come are drawn from prior descriptive work, Mandar-language media, and elicitation with one native speaker of the language, Jupri Talib (JT). This elicitation has been ongoing since the fall of 2018, and it has been conducted using a standard methodology for linguistic fieldwork (Matthewson 2004). Judgments were collected in the following way: a discourse context was set up in Indonesian, and the consultant then was presented with a sentence or pair of sentences in Mandar (attributed to an imagined speaker interacting with an established set of characters). The consultant was then asked, in Mandar, to judge the well-formedness of each sentence in comparison with minimally different examples of similar shape. Each example was then discussed in Mandar, with occasional recourse to Indonesian to clarify the context or cross-check the interpretation. All judgments were checked on minimally two separate occasions, and data are cited from the date of their final elicitation.

### 2.1 Mandar basics

Mandar has much in common with typical Philippine-type languages (Himmelmann 2005), including a complex voice system, a system of second-position clitics, and a predicate-initial word order (Brodtkin 2020, 2021a, b, c, 2022b, a). These properties are shared with the other languages of the South Sulawesi subfamily, and they have been well-described in those languages in a body of descriptive and theoretical work (Campbell 1989; Friberg 1991, 1996; Strømme 1994; Matti 1994; Valkama 1995a, b;

Jukes 2006; Lee 2008; Kaufman 2008; Laskowske 2016; Finer 1994, 1997, 1998, 1999; Béjar 1999; Finer and Basri 2020). The structural parallels between these languages and those of the Philippines are partially obscured by a set of morphological innovations common to many languages of Sulawesi, including the loss of case morphology and the rise of agreement, and as a result, they are often left unmentioned or excluded from typological discussion of the languages of Western Austronesia (Himmelmann 2005; Chen and McDonnell 2019). But pursuing the connection between these systems will provide the means to sharpen our investigation of Mandar and inform our broader understanding of Western Austronesian voice systems in turn.

To begin, the language shows a predicate-initial word order. The verb follows negation and aspectual auxiliaries, and in pragmatically neutral contexts, it precedes all arguments and VP-level adjuncts (4a). Across all bivalent clause types, the external argument (EXT) canonically precedes the internal argument (INT) (4b), yielding a basic word order of VSO (more accurately, V-EXT-INT). Constituent order is flexible in the postverbal domain, and all arguments can be separated from the verb and reordered with each other, as elsewhere in the South Sulawesi Subfamily (Friberg 1996; Finer 1997; Jukes 2006). Nevertheless, non-default orders like VOS (VERB-INT-EXT) are prosodically and pragmatically marked.<sup>1</sup>

#### (4) VSO Word Order

- a. N dang=i pura m-elo' lamba s<um>obal i=Kaco'.  
 not=3ABS finished AV-want go AV-sail PRS=NAME  
 'Kaco' never stopped wanting to go sail.' Kaufman (2008, 36)
- b. Na-ita=i i=Kaco' i=Ali.  
 PV.3ERG-see=3ABS PRS=NAME PRS=NAME  
 'Kaco' saw Ali.' JT: 3.19.21; 23

Every finite clause in the language contains a syntactically privileged argument that I will underline and refer to as the pivot. This argument is the most phrase-structurally prominent nominal in the clause. It can originate in any of several thematic positions, much like the arguments identified as pivots in other languages of Western Austronesia (Keenan 1976; Schachter 1976, 1996; De Guzman 1988; Shibatani 1988; Gerds 1988b; Guilfoyle et al. 1992; Kroeger 1993b; Richards 2000; Rackowski 2002; Rackowski and Richards 2005; Pearson 2005; Legate 2014; Chen 2017; Erlewine et al. 2017). The pivot is not distinguished from other postverbal arguments by its morphological case or linear position, as the language lacks morphological case distinctions and shows a consistent basic word order of V-EXT-INT. Rather, it is singled out in the system of agreement. Every finite clause contains an agreement enclitic which surfaces in second position, following the leftmost phonological phrase. It spells out the person features of the pivot. An example is shown in (5), where the pivot is a 1SG pronoun and it is indexed by the first-person agreement enclitic *a'*.

<sup>1</sup> GLOSSING CONVENTIONS: ABS: absolutive, ACC: accusative, ADV: adversative, AF: agent focus, AV: agent voice, APPL: applicative, CAUS: causative, CV: comitative voice, DEF: definite, ERG: ergative, EXT: external argument, FUT: future, GEN: genitive, GOAL: applied argument, INT: internal argument, INVOL: involuntary, IPFV: imperfective, IRR: irrealis, LV: locative voice, OBL: oblique, PASS: passive, PFV: perfective, PRS: person prefix, PV: patient voice, SG: singular, STAT: stative. ORTHOGRAPHY: <c> = /tʃ/, <'> = /ʔ/.

(5) *The Pivot Triggers Agreement*

Lamba=to=a' **yau**.  
 go=also=1ABS 1SG

'I will go too.'

Sikki et al. (1987, 566)

The identity of the pivot is closely tied up with a system of morphological alternations on the verb. In Mandar, finite verbs typically surface in one of two forms when they take both an EXT and an INT. The first is the AGENT VOICE (AV), which is marked with *m*-initial prefixes like *maN*- (6a; note that coda nasals denasalize before all non-nasal segments but /*b d d̥ʒ g*/; Pater 1999). The second is the PATIENT VOICE (PV), which is marked with a prefix that spells out the person features of the EXT (6b).

(6) *The Voice Alternation: AV and PV*

a. **Mang-giling=a'** bata'.

AV-turn=1ABS corn

'I'm grinding corn.'

Friberg and Jerniati (2000, 38)

b. **Na-lesa=a'** tedong.

PV.3ERG-tread.on=1ABS water.buffalo

'The water buffalo tread on me.'

Muthalib and Sangi (1991, 229)

The alternation between AV and PV determines the pattern of clause-level agreement and, as a result, the identity of the pivot. In clauses whose verbs surface in AV, the second-position clitic tracks the EXT (6a), and in those clauses, the pivot is the EXT. In clauses whose verbs show PV, in contrast, the clitic tracks the INT (6b), and in those clauses, the pivot is the INT. The resultant interaction between voice, agreement, and pivot status is very similar to the system that has been described in Philippine-type languages, where an analogous voice alternation determines the identity of the argument that receives a particular morphological case and shows the morphosyntactic privileges of pivot status (Schachter 1976; Payne 1982; Cumming and Wouk 1987; De Guzman 1988; Shibatani 1988; Gerdtz 1988b; Guilfoyle et al. 1992; Kroeger 1993b; Mithun 1994; Himmelmann 1996, 2005; Richards 2000; Wouk and Ross 2002; Rackowski 2002; Rackowski and Richards 2005; Aldridge 2004; Riesberg 2014; McDonnell 2016; Chen 2017; Erlewine et al. 2017; Erlewine and Lim 2022; Nie 2019, 2020; Hsieh 2020), and similar systems in other languages of Western Austronesia (Chung 1976b; Wechsler and Arka 1998; Paul 2000; Pearson 2001, 2005; Legate 2014; Hemmings 2015, 2016; Erlewine 2018).

The languages of the South Sulawesi subfamily are traditionally described as showing morphological ergativity, as the system of agreement contrasts a paradigm of agreement with the transitive EXT (the prefixes that mark PV) with a paradigm of agreement with the transitive INT and the sole argument of an intransitive verb (the second-position clitics that index the pivot). In this respect, it can be compared directly to the system of case-marking in Philippine-type languages on the tradition that takes those languages to show morphological ergativity as well (Payne 1982; De Guzman 1988; Gerdtz 1988a; Aldridge 2004; Liao 2004; Paul and Travis 2006; Chang 2011;

Nie 2020). Adopting this perspective, I take the the second-position clitic that tracks the pivot to spell out absolutive agreement, assume that PV is the basic transitive construction, and take the prefixes that track the non-pivot EXT in that voice to spell out ergative agreement, on a par with the ergative analysis of the case morphology of the languages of that type.

As a consequence of this analysis, AV is treated as a morphologically intransitive construction which allows the EXT to trigger absolutive agreement despite the presence of an INT. Following the ergative analysis, I will refer to it as an antipassive. This terminological move obscures the fact that AV does not require the INT to be demoted (in fact, I will argue that it assigns abstract Accusative Case), but it accounts for the fact that it allows the INT to be omitted (7), as is typical of antipassives outside of Western Austronesia (Heaton 2020). And looking ahead, this move will open up a productive line of comparison with the transitivity alternations that occur in ergative languages outside of Western Austronesia (Craig 1979; Ayres 1983; Bittner 1987; Spreng 2006, 2013; Polinsky 2017a; Vigus 2018; Heaton 2020).

(7) AV: *Implicit INT*

- a. **Mam**-baca=di      i=Aco'      di=passikolangan?  
 AV-read=JUST.3ABS PRS=NAME in=school  
 'Is Aco' reading (books) in school?'      Sikki et al. (1987, 551)
- b. M-oka=mi      **ma'**-balu'.  
 AV-not.want=PFV.3ABS AV-sell  
 'He no longer wanted to sell (things).'      Sikki et al. (1987, 307)
- c. **Me**-bokko=ada=mi      asu-mmu.  
 AV-bite=maybe=PFV.3ABS dog-2GEN  
 'Your dog might bite (people).'      Sikki et al. (1987, 414)
- d. Mamanya=i      **me'**-guru.  
 currently=3ABS AV-study  
 'He's currently studying (something).'      Sikki et al. (1987, 108)

Beyond the interaction between voice, agreement, and pivothood, there are two further properties of the Mandar voice system that will be important in the discussion to come. The first involves the system of extraction. In Mandar, the processes of WH-movement, focus-fronting, and relativization are subject to the restriction that they target only the pivot. This is the Mandar-particular instantiation of the Subjects-Only Extraction Constraint that is common to many languages of Western Austronesia (Keenan 1976), and it resembles the Ergative Extraction Constraint that recurs in High Absolutive languages further afield (Larsen and Norman 1979; Campana 1992; Murasugi 1992; Campana 1992; Bittner and Hale 1996b, a; Otsuka 2006; Legate 2008; Coon et al. 2014; Assmann et al. 2015; Brown 2016; Deal 2016; Polinsky 2016, 2017b; Aissen 2017; Ershova 2019).

The following examples show the Subjects-Only Extraction Constraint with WH-movement. In Mandar, there is a process of WH-movement that moves WH-words to the left periphery and triggers the disappearance of absolutive agreement, rendering the clause non-finite. This is a pattern of Anti-Agreement (Ouhalla 1993), and here I

assume that it arises as a result of morphological impoverishment linked to  $\bar{A}$ -extraction (Baier 2018; cf. Brodtkin 2021a). Example (8a) shows an AV clause, where the pivot is the EXT. In such a clause, it is possible and obligatory for the EXT to undergo WH-movement when it is a WH-word (8b). It is impossible, however, for a non-pivot INT to do the same (8c).

(8) *The Pivot: Extraction Privilege*

- a. Mas-saka=a' **yau** manu'.  
AV-catch=1ABS 1SG chicken  
'I'm catching chickens.' JT: 4.2.21, 295
- b. Innai [ mas-saka \_\_\_ manu' ]?  
who AV-catch chicken  
'Who is catching chickens?' JT: 4.2.21, 296
- c. \*Apa [ mas-saka=a' \_\_\_ ]?  
what AV-catch=1ABS  
Intended: 'What am I catching?' JT: 4.2.21, 297

The second pattern of interest involves a definiteness effect (Milsark 1974). In bivalent clauses that do not show extraction, the choice of voice morphology is restricted by the definiteness of the INT (Lee 2008). The basic alternation is shown in the examples in (9), which form an excerpt from a narrative. In example (9a), the verb *ala* "catch" has an INT which is indefinite: *bau* "fish." In that context, the verb must surface in AV, which is marked on this verb with the prefix *me-*. In example (9b), the verb *ande* "eat" takes an INT which is definite: *di'o bau o* "those fish." In that context, this verb is forced to surface in PV. The class of internal arguments that trigger this alternation includes pronouns, names, strongly quantified nouns, and all types of definite description, including those which are not explicitly anaphoric but still contextually unique (Russell 1905; Abbott 1999; Roberts 2003): This can be seen in contexts like (9c), which represents an out of the blue comment made in England. There, the verb must surface in PV when the INT is the non-anaphoric but contextually unique *mara'dia* "queen."

(9) *The Definiteness Effect*

- a. **Me**-ala=i **bau** wattu di'o.  
AV-catch=3ABS fish time that  
'He caught some fish at that time.' Pelenkahu et al. (1983, 153)
- b. **Na**-ande=i **di'o bau o**.  
PV.3ERG-eat=3ABS that fish there  
'He ate those fish.' Pelenkahu et al. (1983, 159)
- c. Mane u-ita=i **mara'dia!**  
Just PV.1ERG-see=3ABS monarch  
'I just saw the queen!' JT: 3.9.21, 206

The Definiteness Effect, once again, reflects a broader pattern that is common to many languages of the region: both those of the South Sulawesi subfamily (Campbell 1989; Valkama 1995b; Friberg 1996; Jukes 2006; Laskowske 2016), and many



languages of the Philippines as well (Bloomfield 1917; Adams and Manaster-Ramer 1988). This pattern will provide the motivation for a key step in the syntactic analysis of the voice system, and once its analysis is in place, we will return to the way it which it interacts with the Subjects-Only Extraction Constraint to develop an argument for the Two-Step Theory.

## 2.2 The role of the voice morphology

With the basic shape of the voice system established, we can now turn to the role of the voice morphology. On the ergative analysis, the voice alternations of Philippine-type languages are traditionally understood to track alternations in argument structure (Payne 1982; De Guzman 1988; Gerdtts 1988a; Aldridge 2004; Liao 2004; Paul and Travis 2006; Chang 2011; Nie 2020). I will refer to this view as the Argument Structure Analysis. It contrasts with an alternative, the Indexing Analysis, which takes the voice morphology to index properties of the argument that becomes the pivot, such as its abstract Case or its thematic role (Shibatani 1988; Kroeger 1993a; Pearson 2001, 2005; Rackowski 2002; Rackowski and Richards 2005; Chen 2017). The analytical divide between these approaches has ramifications that spread throughout the analysis of the syntax, influencing theories of the structural position of the voice morphology, the position of the pivot, and the extraction restriction. The debate between the two, moreover, cross-cuts the debate on morphological ergativity, and many authors do not employ the terminology of ergativity but adopt proposals that pattern more closely with those of the first camp (Guilfoyle et al. 1992; Legate 2014; Erlewine et al. 2017; Erlewine 2018; Erlewine and Lim 2022; Ting 2022).

The Argument Structure Analysis has been extended to many languages that are not Philippine-type, such as Malagasy (Ndayiragije 2006; Ting 2022) and Indonesian (Aldridge 2008), and here I argue that it provides the right means to understand the voice system of Mandarin as well. This move continues the traditional stance of the descriptive literature on the languages of the South Sulawesi subfamily (Campbell 1989; Valkama 1995b; Jukes 2006; Laskowske 2016), and it allows the analysis of Mandarin to be integrated into a framework that places the languages of Western Austronesia along a broad continuum of Ergative-to-Nominative alignment (Paul and Travis 2006; Aldridge 2011; Chang 2011).

The first piece of evidence for the Argument Structure Analysis comes from the shape of the voice morphology. Consider a version of the Indexing Analysis which took the Mandarin voice morphology to spell out the Abstract Case of the pivot (Rackowski 2002). This analysis would encounter an immediate challenge in the morphology of PV, which is an ergative prefix that spells out the person features of the non-pivot EXT. It is not clear how this could be taken to spell out abstract Accusative Case or any other property of the INT. This suggests that the Indexing Analysis is on the wrong track.

The second argument for this analysis comes from the distribution of the voice morphology. In Mandarin, the presence of voice morphology is sensitive to the argument structure of the verb. There is a morphological split between two types of syntactically

intransitive verbs in this language: unaccusative verbs invariably lack voice morphology (10), while unergative verbs typically surface with an AV affix like *-um-* (11).

(10) *Unaccusative Verbs: No Voice Morphology*

Bemme, lambi', lesse', lippa', pa'da, rato, sape', simbar, tanda  
 fall reach slip explode be absent come loose snap shine arrive

'Fall, reach, slip, explode, be absent, come loose, snap, shine, arrive'

(11) *Unergative Verbs: AV*

**Umm-**ondong, **umm-**orong, **umm-**ewa, t<**um**>ekke', t<**um**>adu.  
 AV-jump AV-swim AV-disagree AV-climb AV-chew.betel

'Jump, swim, disagree, climb, chew betel' Pelenkahu et al. (1983, 53-60)

This split can be easily captured on the Argument Structure Analysis, on which the voice morphology can be positioned in a set of heads that select for those which determine the argument structure of the verb. But it is difficult to explain on an Indexing approach, which would be forced to stipulate that agreement-like morphology was absent from a broad class of verbs that shared a single argument structure.

The third argument for the Argument Structure Analysis comes from the broader voice system of the language. Beyond AV and PV, Mandar shows a range of additional voices that demonstrably trigger the introduction or suppression of arguments. There are, for instance, three passive constructions that prohibit the expression of the EXT (12). These constructions are each built with a prefix that appears in complementary distribution with the morphology of AV and PV: *di-* (12a), *ti-* (12b), and *ka-* (12c).

(12) *The Passive Voices*

- a. **Di-**issang=di carita-nna di'e kapping e?  
 PASS-know=JUST.3ABS story-3GEN this village here  
 'Are the stories of this village known?' Friberg and Jerniati (2000, 207)
- b. **Ti-**saka=mi di'o posa o.  
 INVOL-catch=PFV.3ABS that cat there  
 'That cat has gotten itself caught.' Pelenkahu et al. (1983, 209)
- c. **Ka-**issang-ang=i dio di=kapping ma'ua tau ma-kikkir  
 ADV-know-APPL=3ABS there in=village as person STAT-stingy  
 sanna'.  
 very  
 'He was known in the village as a miser.' Pelenkahu et al. (1983, 156)

In the same vein, the language has a Comitative Voice (CV) that is built with the prefix *si-* (13). This prefix alternates with the morphology of AV and PV and creates several different types of predicates, including reciprocals (13) and comitatives (for careful discussion of its function in other languages of the subfamily, see Valkama 1995b and Jukes 2006). In many cases, it plays an applicative function: the predicates

that surface in this voice are able to take arguments that would otherwise need to be expressed in PPs. This is shown in the examples in (14). The adjective *kadeppe* ‘near’ requires its locative argument to surface in a PP when it takes no voice morphology (14a), but in CV, it allows that argument to surface without the  $P^0$  (14b).

(13) *The Comitative Voice*

**Si-ala=ma’**                    i=Cicci.  
CV-take=PFV.1ABS PRS=NAME

‘Cicci’ and I got married (took each other).’                    JT: 12.9.20, 37

(14) *The Comitative Voice: Introduces Arguments*

a. Ka-deppe’=a=di                    **pole** di uma-nna.  
STAT-near=maybe=JUST.3ABS from in orchard-3GEN  
‘Maybe it’s near the orchard.’                    Sikki et al. (1987, 464)

b. Indio=i            **si-ka-deppung**            **masigi**.  
there=3ABS CV- STAT-very.near mosque  
‘It’s there near the mosque.’                    Friberg and Jerniati (2000, 156)

Finally, the language has a Locative Voice (LV) which is built from two morphological parts: the ergative prefixes that mark PV and an applicative suffix *-ang* (8). This suffix continues the Proto-Austronesian LV suffix *\*-en* (Zobel 2002), but it does not only appear in contexts in which the pivot is an applied argument (GOAL), like (15a). Rather, it also appears in contexts where applied arguments are introduced but do not trigger absolutive agreement. For instance, ditransitive verbs take this suffix even when they surface in AV, though the resultant clauses show absolutive agreement with the EXT (15b). This suggests that *-ang* is simply an applicative suffix, much like the Indonesian *-kan* (Chung 1976a).

(15) *The Applicative Suffix*

a. **Na-giling-am=ma’**                    gayan-na.  
LV.3ERG-turn-APPL=PFV.1ABS sword-3GEN  
‘He turned his sword at me.’                    Muthalib and Sangi (1991, 26)

b. **Mam-beng-ang=a’** buku passikola.  
AV-give-APPL=1ABS book student  
‘I’m giving books to students.’                    JT: 4.2.21, 98.

## 2.3 The subject position

With the Argument Structure Analysis secure, we can now turn to the syntactic behavior of the pivot. On the basis of patterns like the Subjects-Only Extraction Constraint, it is commonly assumed that the pivot raises to a phrase-structurally prominent position in many languages of Western Austronesia. Despite near-consensus around this view, there is disagreement over the nature of the position to which the pivot moves. Some authors take it to be an A-position, and as a result, treat the pivot as a nominative subject or High Absolutive argument (Guilfoyle et al. 1992; Rackowski 2002; Aldridge

2004; Erlewine and Lim 2022, a.o.). Others take it to be an  $\bar{A}$ -position (Richards 1993, 1996, 2000; Pearson 2001, 2005; a.o.) or a mixed  $A/\bar{A}$ -position (Erlewine et al. 2017; cf. Van Urk 2015; Zyman 2018) and as a result, treat the pivot as a type of topic.

Following the A-analysis, I propose that the pivot in Mandar raises to the highest A-position in the clause. This step of movement is covert and has no influence on the word order of the language, but it can be shown to occur with a range of diagnostics which are familiar from other languages of the area.

### 2.3.1 Condition C

The first argument for A-movement comes from patterns of pronominal coindexation. Following Chomsky 1981 and Reinhart 1983, I assume that Condition C of the Binding Theory rules out coindexation between a pronoun in an A-position and an R-expression that sits in its C-command domain. This sets up two predictions. First, if the pivot moves to an A-position above all other arguments in the clause, then it should be impossible for it to be a pronoun that is coindexed with an R-expression in another argument. This yields a ban on the Mandar analogue of the coindexation in (16):

(16) \*Nina's<sub>i</sub> mom saw<sub>PV</sub> her<sub>j</sub>.

Second, on the assumption that A-movement does not reconstruct for Condition C, it predicts that it should be possible for a pivot to contain an R-expression that is coindexed with a pronoun in the position of any non-pivot argument in the clause. This yields the possibility for the Mandar analogue of the coindexation in (17).

(17) She<sub>i</sub> saw<sub>PV</sub> Nina's<sub>j</sub> mom.

In Mandar, these predictions are both correct. The pattern of coindexation in (16) is indeed impossible: when the pivot is the INT, it cannot be a pronoun that is coindexed with an R-expression in the EXT. This is shown in example (18).

(18) *The Pivot Cannot be a Pronoun Coindexed with an R-Expression in the EXT*

Na-ita=i                    pro<sub>\*i,j</sub> kindo'-na    i=Nina<sub>i</sub>    anna' i=Kaco'.  
PV.3ERG-see=3ABS her    mom-3GEN PRS=NAME and    PRS=NAME

'Nina<sub>i</sub> and Kaco's mom saw<sub>PV</sub> her<sub>\*i,j</sub>.

JT: 1.19.21, 15

In this example, the pivot is the INT, which is a null pronoun, and the EXT is the DP "Nina and Kaco's mom." It is impossible for the R-expressions in the EXT, *Nina* and *Kaco'*, to be interpreted as coindexed with the null pronominal INT. In other words, the pattern of coindexation in (16) is ruled out.

In the same vein, the pattern of coindexation in (17) is grammatical: when the INT is the pivot, it can contain an R-expression that is coindexed with a pronoun in the position of the EXT. There are several contexts in which this pattern can be seen. For instance, it comes into view in clauses where the INT contains a possessor, as in (19).

(19) *The Pivot Can Contain an R-expression Coindexed with a Pronoun in the EXT*

Na-ita=i                             $pro_{i,j}$     kindo'-na    **i=Nina<sub>i</sub>**    anna' i=Kaco'  
 PV.3ERG-see=3ABS she          mom-3GEN PRS=NAME and    PRS=NAME

'She<sub>*i,j*</sub> saw<sub>PV</sub> Nina<sub>*i*</sub> and Kaco's mom.

JT: 1.19.21, 14

In this example, the pivot is the INT “Nina and Kaco’s mom,” and the EXT is the null pronoun “she.” This sentence allows the coindexation in (17): the pronominal EXT may be coindexed with the R-expression *Nina*, which is a possessor of the INT.

The same pattern can be seen in contexts where the INT contains a relative clause. An example of such a configuration is given in (20).

(20) *The Pivot Can Contain an R-expression Coindexed with a Pronoun in the EXT*

Na-na-baca=i                             **$pro_{i,j}$**     buku [<sub>RC</sub> na-alli                            **i=Nina<sub>i</sub>**  
 FUT-PV.3ERG-read=3ABS she          book          PV.3ERG-buy PRS=NAME

dionging ].

yesterday

'She<sub>*i,j*</sub> will read<sub>PV</sub> the book that Nina<sub>*i*</sub> bought yesterday.'

JT: 5.4.21, 137

In this example, the pivot is the INT “the book that Nina bought yesterday,” and the EXT is the null pronoun “she.” This clause, like that in (19), allows the pronominal EXT to be coindexed with the R-expression inside of the pivot. For this pattern of coindexation to be possible, it follows that the pivot must undergo a step of A-movement to a position above all other arguments in the clause.

### 2.3.2 Variable binding

The second argument for the A-analysis lies in the system of variable binding. Following Reinhart 1983, I assume that variable binding between clausemate arguments is sensitive to C-command: quantified arguments can only bind variables in their C-command domain. On the A-movement analysis, this assumption leads to two predictions. First, it should be possible for the pivot to bind variables in every other argument in the clause, on a par with the arguments that undergo A-movement to the subject position in English (21).

(21) Every<sub>*i*</sub> child seems to her<sub>*i*</sub> mother [ \_\_\_ to be a wonder ].

Second, it should be possible for a variable in the pivot to be bound by a quantified argument that C-commands it in its base position. This is because unambiguous cases of A-movement are able to reconstruct for variable binding, as seen with Raising in (22).

(22) His<sub>i</sub> mother seems to every boy<sub>i</sub> [ \_\_\_ to be a genius ]. Lebeaux (1991, 231)

Transposed to Mandar clauses in PV, this leads to the following predictions. First, it should be possible to observe the pattern of variable binding in (23a): a quantified INT should be able to bind a variable in the EXT. Second, it should be possible to observe the pattern of variable binding in (23b): the INT should be able to contain a variable that is bound by the EXT.

- (23) a. Her<sub>i</sub> teacher scolded<sub>PV</sub> every<sub>i</sub> student.  
 b. Every<sub>i</sub> teacher scolded<sub>PV</sub> her<sub>i</sub> student.

To test these predictions, a brief detour into the system of quantification is required. In Mandar, universal quantification is expressed with the second-position element *nasang*. This element construes with one postverbal argument, but is linearly separated from it by other second-position clitics and any other arguments or adjuncts that intervene. Its position is shown in example (24): there, it associates with the DP *di'o bau o* "those fish."

(24) *Universal Quantification: Nasang*

Na-paressu'=nasam=bo=mi                      di'o bau o.  
 PV.3ERG-cook=every=again=PFV.3ABS that fish there

'She cooked every one of those fish again.'                      Pelenkahu (1983, 158)

The quantifier *nasang* can associate with many types of arguments. Its associate can be the pivot, as in (24), or it can be the EXT of a verb in PV, as in (25a). It can also be an oblique argument that surfaces inside of a PP, as in (25b).

(25) *Nasang Associates with Different Types of Arguments*

- a. Pura=nasam=bandi                      mu-urung      lima-nna      guru'-mu?  
 finished=every=really.3ABS PV.2ERG-kiss hand-3GEN teacher-2GEN  
 'Has every one of you kissed your teacher's hand?'                      JT: 3.19.21, 279
- b. Si-alla=nasang=a'      sola kandi'-u.  
 CV-fight=every=1ABS with younger.sibling-1GEN  
 'I fight with every one of my little siblings.'                      JT: 1.18.21, 29

With this background, we can now see that the predictions in (23a)-(23b) are correct. First, the language allows the pattern of reconstruction in (23b): when the pivot is the INT, it can contain a variable that is bound by a quantified EXT. This is shown in (26): the pivot is the INT *sanaekena* 'her kid,' and the EXT is the quantified *nasang...kindo* 'every mother.' The EXT can bind the variable in the INT, in the same way that experiencers can bind variables in the arguments that raise across them in English (22).<sup>2</sup>

<sup>2</sup> Richards 1993 and Pearson 2005 take this pattern as evidence against the A-movement analysis in Tagalog and Malagasy. In Mandar, I argue that this conclusion is not warranted: as A-movement can reconstruct for variable binding, this pattern does not provide an argument against the A-movement analysis.

(26) *The Pivot can Reconstruct for Variable Binding*

Na-allai=**nasang**<sub>i</sub>=i            kindo'<sub>i</sub> sanaeke-**na**<sub>i,j</sub>  
 PV.3ERG-scold=every=3ABS mom    child-3GEN

'Every<sub>i</sub> mother scolded<sub>PV</sub> her<sub>i,j</sub> child.'  
 JT: 3.25.21, 789

Second, the language allows the pattern of binding in (23a): when the pivot is the INT, it can bind a variable in the EXT. This pattern holds without regard to the linear order of arguments in the postverbal domain, and it is shown with several different word orders in (27).

(27) *The Pivot can Bind Variables in the EXT*

a. Na-allai=**nasang**<sub>i</sub>=i            guru-**na**<sub>i,j</sub>    passikola<sub>i</sub>  
 PV.3ERG-scold=every=3ABS teacher-3GEN student

'Her<sub>i,j</sub> teacher scolded<sub>PV</sub> every<sub>i</sub> student.'  
 JT: 3.11.21, 90

b. Na-salili=**nasang**<sub>i</sub>=i            sanaeke<sub>i</sub> kindo'-**na**<sub>i,j</sub>  
 PV.3ERG-miss=every=3ABS child    mom-3GEN

'Her<sub>i,j</sub> mother misses<sub>PV</sub> every<sub>i</sub> child.'  
 JT: 11.23.20, 31

In example (27a), the pivot is the INT *nasang... passikola* "every student" and the EXT, which precedes it, is *gurunna* "her teacher." The EXT contains a variable, and it is possible for the INT to bind this variable. Example (27b) shows a similar pattern with the order of the EXT and INT reversed: here, the pivot is the INT *nasang... sanaeke* "every kid," and the EXT, which follows it, is *kindo'na* "her mom." As in (27a), this clause allows the INT to bind the variable in the EXT.

These patterns of variable binding, then, provide a second argument that the pivot moves to an A-position above all other arguments in the clause.<sup>3</sup>

<sup>3</sup> Linear order does not influence patterns of variable binding between clausemate arguments. This fact can be seen in two ways. First, changes in the linear order of clausemate arguments never rule out patterns of variable binding that reflect relationships of C-command. This can be seen in the VSO and VOS clauses in (27), which both allow the INT to bind into the EXT. Second, changes in linear order never license patterns of variable binding that run against relationships of C-command. This can be seen in the examples in (1)–(2), which contain a quantified argument that sits inside of a PP and a pivot that hosts a possible target for binding (*kandi'na* "his younger sibling"). It is impossible for the quantified argument in the PP to bind into the pivot, no matter the linear order of those arguments and despite the fact that both follow the quantifier.

(1) Si-alla=**nasang**<sub>i</sub>=i    kandi'-na<sub>\*i,j</sub>            sola sanaeke<sub>i</sub>.  
 CV-fight=every=3ABS younger.sibling-3GEN with kid  
 'His<sub>\*i,j</sub> younger sibling fought with every<sub>i</sub> kid.'  
 JT: 1.18.21, 78

(2) Si-alla=**nasang**<sub>i</sub>=i    sola sanaeke<sub>i</sub> kandi'-na<sub>i,j</sub>.  
 CV-fight=every=3ABS with kid            younger.sibling-3GEN  
 'His<sub>\*i,j</sub> younger sibling fought with every<sub>i</sub> kid.'  
 JT: 1.18.21, 79

This shows that the language prohibits patterns of variable binding that run against C-command between clausemate arguments. It cannot be derived from a separate constraint, such as a ban on variable binding out of PPs, as comitative arguments are able to bind variables that sit beneath their base positions (3).

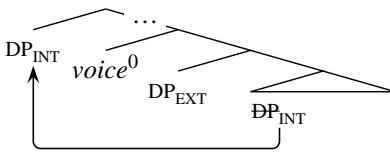
(3) Si-ita=**nasang**<sub>i</sub>=a'    sola sola-u<sub>i</sub>            di=boyan-**na**<sub>i,j</sub>.  
 CV-see=every=1ABS with friend-1GEN in=house-3GEN  
 'I met every<sub>i</sub> one of my friends in his<sub>i,j</sub> house.'  
 JT: 4.9.21, 133

### 3 Two steps to high absolutive syntax

The conclusions of the preceding section guide the analysis of the Mandar voice system in two ways. First, the adoption of the Argument Structure Analysis suggests that the voice alternation must be localized to a set of heads that sit in the thematic domain. Second, the fact that the pivot raises to an A-position suggests that these alternations must trigger or feed movement to such a position. These conclusions are familiar from work on the syntax of other languages of the Western Austronesian region (Aldridge 2004), and they are similar to those that have been drawn in many ergative languages outside of this region which show High Absolutive syntax (Bittner and Hale 1996b, a; Legate 2008, 2017; Coon et al. 2014; Brown 2016; Ershova 2019).

The principal puzzle that surrounds the High Absolutive configuration is one of locality: in contexts where the absolutive argument originates beneath the EXT, how can it cross over that argument to reach its high position? This problem is sketched for PV in (28).

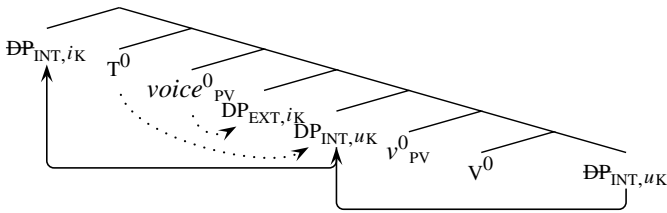
(28) *High Absolutive Syntax*



The literature has furnished two types of answer to this question. The first involves non-intervention: in contexts where a non-highest argument raises to the position of the pivot, some independent constraint is claimed to render all intervening arguments invisible to the attracting probe (*e.g.*, *Activity*: Chomsky 2001) (Guilfoyle et al. 1992; Legate 2012, 2014, 2017; Ershova 2019). An alternative analysis involves leapfrogging (Douglas et al. 2017): in contexts where the INT is the pivot, it has been argued that it undergoes an intermediate step of A-movement to become the highest DP in the C-command domain of the head which attracts it to its final position (McGinnis 1998; see also Coon et al. 2014). In the Western Austronesian context, an influential line of work adopts the second analysis and formalizes it in terms of Object Shift: the INT invariably undergoes a step of leapfrogging movement above the EXT when it is definite, and this positions it to become the pivot (Rackowski 2002).

This paper argues for a variant of the non-intervention analysis. In Mandar, I argue that the pivot raises to SPEC,TP because it enters into a Case-Licensing relationship with  $T^0$ , yielding absolutive agreement. This step of movement draws the pivot over the base position of the EXT in PV and LV, and this apparent violation of locality is made possible by the fact that in those voices the EXT is Case-Licensed- and thus rendered Inactive- within the *voice*P. It is prefigured by a step of definiteness-related Object Shift in PV and LV, but this step does not place its target above the base position of the EXT. As a result, the pivot reaches its high position in two distinct steps in PV and LV. The resultant syntax of a PV clause is schematized in tree (29). I will refer to this approach as the Two-Step Theory of High Absolutive Syntax.



(29) *The Two-Step Theory: Patient Voice*

### 3.1 The anatomy of the voice system

We can begin to build toward this theory by laying out a syntactic analysis of the voice morphology. So far, we have seen that AV and PV appear in complementary distribution with other voices that drive the introduction and suppression of arguments. On the assumption that argument introduction is localized to a syntactic space that is close to the verbal root (Baker 1988), this pattern suggests that the morphology of the voice system is localized to a single string of heads that sits within that syntactic space.

This assumption is one that has much precedent in the literature on the Argument Structure Analysis in other languages of Western Austronesia (Aldridge 2004; Nie 2020; Erlewine and Lim 2022), and in Mandarin, it can be supported with a separate line of evidence from the domain of morphology. In this language, many of the affixes in the voice system show a distribution that is lexically idiosyncratic, surfacing exclusively before certain roots or taking different shapes before others. These patterns suggest that the voice morphology sits in a set of heads that are able to select the root or show contextual allomorphy in its presence. And as both selection and contextual allomorphy turn on relationships of syntactic locality (Embick 2010; Bobaljik 2012; Merchant 2019), this provides convergent evidence that it sits close to the root.

This pattern is illustrated first with CV and the involuntary passive. Before certain roots, the prefix *si-* surfaces as *siN-* (30a), and before others, *ti-* surfaces as *ta'-* (30b).

#### (30) *Allomorphy in CV and the Ti-Passive*

- a. Allo bongi=mi      u-sossor      gayang      **sim**-balle' bose.  
 day night=PFV.3ABS PV.1ERG-hone ritual.sword CV-broad oar  
 'Day to night I hone the sword wide as an oar.'      Muthalib and Sangi  
 (1991, 47)
- b. Ma-rakke=i      angga'-na **tat**-temeteme  
 STAT-scared=3ABS until-3GEN INVOL-urinate  
 'He was so scared that he wet himself'      Sikki et al. (1987, 116)

The same pattern can be seen in AV. Beyond *maN-* and *-um-*, there are eight other prefixes that are recruited to mark this voice in Mandarin: *ma'*-, *me-*, *me'*-, *ma-*, *mo-*, *meN-*, *mu-*, and *m-* (31; see Valkama 1995b for discussion of this morphology the related Duri). These affixes can be split into two syntactic classes, as the verbs which bear *maN-*-, *ma'*-, *me-*-, and *me'*- can take an INT (31b) and those which take *-um-*-, *ma-*-, *mo-*-, *meN-*-, *mu-*-, and *m-* cannot (31c). But within each class, it is not possible to

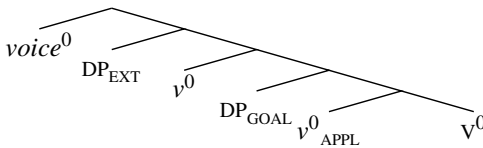
predict the affix that any given root will take when placed in AV. As a result, a proper analysis of the distribution of these forms must involve some degree of contextual allomorphy or selection between the affix and the root.

(31) *The AV Affixes*

- a. **ma'**-balu', **me**-api, **me'**-guru, **ma**-tindo, **mo**-sasi', **men**-dai', **mu**-ayi,  
 AV-sell AV-fire AV-learn AV-sleep AV-sea AV-up AV-hajj  
**m**-ala  
 AV-get  
 'Sell, cook, study, sleep, work the sea, ascend, make a pilgrimage, be able.'
- b. **Ma'**-ande=a' **bau**.  
 AV-eat=1ABS fish  
 'I'm eating fish.' JT: 8.22.20, 51
- c. **Umm**-ande=a' (\*bau)  
 AV-eat=1ABS fish  
 'I'm eating.' JT: 8.22.20, 52

Where, then, do these morphemes lie? I assume that the syntactic space around the verb has the shape in (32). It consists of four heads. The most deeply embedded is the verb itself. Above this is a low applicative head,  $v^0_{APPL}$ , which introduces applied arguments in its specifier (Pylkkänen 2008). Above this head sits  $v^0$ , which is the head responsible for three separate roles: the introduction of the EXT, the triggering of Object Shift, and the assignment of abstract Accusative Case (Marantz 1997; Collins 2005; Merchant 2013). This head, finally, is selected by  $voice^0$ , which determines the morphological transitivity of the verb. To derive the surface V-EXT-INT word order, I assume that the verb undergoes head-movement up to  $voice^0$ , placing it before all of its arguments and  $voiceP$ -level adjuncts. I will refer to the space that contains these heads as the thematic domain.<sup>4</sup>

(32) *The Thematic Domain: Syntax*



This decomposition provides the means to capture the network of syntactic relationships that hold between the appearance of particular voice morphemes and alternations in argument structure. Working from the bottom up, I propose that  $v^0_{APPL}$  hosts the two morphemes that introduce applied arguments: the suffix *-ang* and the CV prefix *si-*. In the same vein, I argue that  $v^0$  is the locus of the morphology that appears on verbs that

<sup>4</sup> Much work on argument structure posits a similar inventory of heads but labels them in different ways: for instance, by terming the head which introduces the EXT and Case-Licenses the INT  $voice^0$ , not  $v^0$  (Pylkkänen 2008; Harley 2013, 2017; Legate 2014; Nie 2020, *pace* Collins 2005; Merchant 2013, 2019; Arregi and Nevins 2014). Nothing in the present analysis hinges on the choice of labels.

do not take an EXT, such as the passive prefixes *di-*, *ti-*, and *ka-*. This move captures the behavior of these morphemes: the suffix *-ang* and the CV prefix are applicative heads, while the passive prefixes are  $v^0$ s which do not introduce an EXT.

Finally, I take the outermost morphology of AV and PV to sit in *voice*<sup>0</sup>. This move has a number of advantages. To begin, it allows us to link the position of ergative agreement in Mandar to the low position of ergative agreement outside of Western Austronesia (Wiltschko 2006; Coon 2017). Moreover, it captures the linear position of the AV and PV morphology in the verbal complex. This is because the AV and PV affixes strictly follow the prefixes that spell out heads in the middle field, such as the future marker *na-* (33a) and the emphatic negator *taN-* (33b). This fact of order follows from the mirror principle (Baker 1985) if they sit beneath the middle field.

(33) *AV/PV Morphology: Beneath Middle-Field Affixes*

- a. **Na-mang-giling**=a' topalla'; **na-u-pipi'**olo'i=i.  
 FUT-AV-turn=1ABS detractor; FUT-1ERG-make.face=3ABS  
 'I will turn a detractor; I will make him face me.' Muthalib and Sangi (1991, 236)
- b. **Ande tam-m-ala** u-ande; **uwai ta'-u-rundu**.  
 food NEG-AV-can PV.1ERG-eat water NEG-1ERG-drink  
 'I can't eat FOOD; I can't drink WATER. Muthalib and Sangi (1991, 166)

Pressing further, this analysis provides the means to capture a number of the distributional restrictions that we have seen through selection. The morphology of AV and PV sits in complementary distribution with the passive prefixes *di-*, *ti-*, and *ka-* because the *voice*<sup>0</sup><sub>AV</sub> and *voice*<sup>0</sup><sub>PV</sub> select for  $v^0$ s that introduce an EXT. By the same logic, the *voice*<sup>0</sup><sub>AV</sub> and *voice*<sup>0</sup><sub>PV</sub> do not appear with unaccusative verbs because these are selected by a null unaccusative  $v^0$ . I assume that the passive  $v^0$  and the unaccusative  $v^0$  are both selected by a null intransitive *voice*<sup>0</sup>.

Most importantly, however, the analysis allows us to decompose AV and PV in a manner that will be useful for the analysis to come. PV is built from two heads: first, a *voice*<sup>0</sup><sub>PV</sub> which hosts the ergative prefixes and second, a null  $v^0$ <sub>PV</sub>. In the same vein, AV is decomposed into two heads as well: a *voice*<sup>0</sup><sub>AV</sub>, which contributes the segment *m-*, and a  $v^0$ <sub>AV</sub>, which contributes the remainder of the segmental content of the ten AV affixes in the language.<sup>5</sup> These affixes appear exclusively in AV because the  $v^0$ <sub>AV</sub> is strictly selected by the *voice*<sup>0</sup><sub>AV</sub>. The syntactic split between these affixes can be

<sup>5</sup> The decomposition of the AV portmanteaux into two heads is assumed in all prior work on other languages of the South Sulawesi subfamily (Campbell 1989; Valkama 1995b; Jukes 2006; Laskowska 2016), and it is made in much work on other languages of Western Austronesia (Starosta et al. 1982; Zobel 2002; Paul 2000; Rackowski 2002). In Mandar, it can be synchronically justified in several ways. To provide one piece of evidence, the AV prefixes systematically alternate with corresponding forms that begin with the segment *p-* in nominalizations. For verbs that take the prefixes *maN-*, *ma'*-, *me-*, and *me'*- in AV, the corresponding agentive nominalizations take the prefixes *paN-*, *pa'*-, *pe-*, and *pe'*-. This is shown in (1).

(1) *Agent Nominalization: P-Prefixes*

**pam-baca**, **pa'**-balu', **pe**-bokko, **pe'**-guru  
 AV-read AV-sell AV-bite AV-learn

'Reader, seller, biter, student'

localized to  $v^0$ : those which allow for the presence of an INT ( $maN-$ ,  $ma'-$ ,  $me-$ ,  $me'-$ ) contain an antipassive  $v^0_{AV}$  which is able to Case-License an INT, while those that do not allow for the presence of an INT ( $-um-$ ,  $ma-$ ,  $mo-$ ,  $meN-$ ,  $mu-$ ,  $m-$ ) contain an unergative  $v^0_{AV}$  which plays no Case-Licensing role.

The resultant analysis of the morphology at the core of the voice system is tabled in (34). In the discussion to come, I will abstract away from the morphological details of this system to focus on the syntactic properties of two heads: the  $v^0_{PV}$ , which is null, and the antipassive  $v^0_{AV}$ , which is variably realized in portmanteaux with the  $voice^0_{AV}$  as  $maN-$ ,  $ma'-$ ,  $me-$ , and  $me'-$ . We will return to the morphology of AV in Sect. 4.

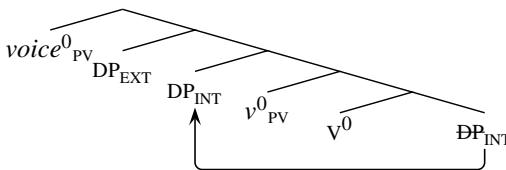
(34) *The Mandar Voice System: Syntax*

| VOICE | AFFIX  | $voice^0$      | $v^0$            | $v^0_{APPL}$ |
|-------|--|----------------|------------------|--------------|
| AV    | $maN-$ , $ma'-$ , $me-$ , $me'-$               | $voice^0_{AV}$ | $v^0_{AV.ANTIP}$ | ✗            |
|       | $-um-$ , $ma-$ , $mo-$ , $meN-$ , $mu-$ , $m-$ | $voice^0_{AV}$ | $v^0_{AV.UNERG}$ | ✗            |
| PV    | ERG-   | $voice^0_{PV}$ | $v^0_{PV}$       | ✗            |
| LV    | ERG-...-ang                                    | $voice^0_{PV}$ | $v^0_{PV}$       | ✓            |

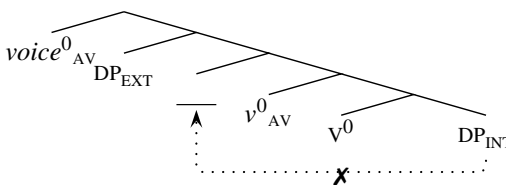
### 3.2 Voice and object shift

With this much in place, we can now turn to the syntax of the voice alternation. Our starting point is the Definiteness Effect. As we have seen, the language requires bivalent verbs to surface in PV when the INT is definite and AV when it is not. Following Rackowski (2002) and Aldridge (2004), I take this alternation to turn on a need for Object Shift. In Mandar, I assume that all definite nominals are subject to a requirement that they move out of the VP (Diesing 1992). The INT can only undergo this step of movement in the presence of an [+EPP] feature on  $v^0$ , which triggers Object Shift and allows it to satisfy this constraint. I propose that the  $v^0_{PV}$  and the  $v^0_{AV}$  differ with regard to the presence of this feature. The null  $v^0_{PV}$  bears the feature [+EPP] and allows Object Shift (35a). The  $v^0_{AV}$  lacks the feature [+EPP], and as a result, does not allow Object Shift (35b).

(35) a. *Patient Voice: Object Shift*



b. *Agent Voice: No Object Shift*



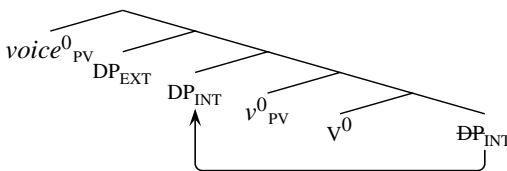
This proposal provides the means to capture the relationship between voice and the definiteness of the INT through a theoretical paradigm that has been developed around the Definiteness Effect in Tagalog (Rackowski 2002; Aldridge 2004; Rackowski and Richards 2005; Sabbagh 2016). In the terminology of that framework, the antipassive  $v^0_{AV}$ s cannot occur in contexts where the INT is definite because they are *anti-EPP morphemes*: like the Tagalog *pag-*, they spell out a  $v^0$  which does not allow the INT to undergo Object Shift. The distribution of the  $v^0_{AV}$  and  $v^0_{PV}$  is governed by the logic of Last Resort. Following Chomsky 2001, I assume that the  $v^0$ s which bear the [+EPP] feature are merged only when they will trigger movement that has an effect on semantic interpretation. As such, they only appear in clauses in which a definite argument must raise out of the domain of existential closure. Following Rackowski 2002, I assume further that the  $v^0_{AV}$ , which lacks the feature [+EPP], is “the default [ $v^0$ ] and is blocked by a competing contextually conditioned  $\emptyset$ -[ $v^0_{PV}$ ] in the presence of a [+EPP] value.” (Rackowski 2002, 89). This places the two  $v^0$ s in a relationship of complementary distribution that is determined by the presence or absence of an argument that must undergo Object Shift.

Given that the  $v^0_{AV}$  is strictly selected by the  $voice^0_{AV}$ , the result of this analysis is that AV is ruled out in clauses where the INT must undergo Object Shift. In that context, rather, the language requires the presence of a  $v^0$  that allows this process. Under typical circumstances, its response is to employ the  $v^0_{PV}$ . And as this  $v^0$  is generally selected by the  $voice^0_{PV}$ , the use of PV is forced.

### 3.3 The landing site of object shift

In Mandar, I propose that Object Shift places its target beneath the EXT in an inner specifier of  $v^0$  (see Pearson 1998, Travis 2010 and Paillé 2021 for similar proposals in other languages of the region). As a result, PV clauses show the  $vP$ -level syntax in (36).

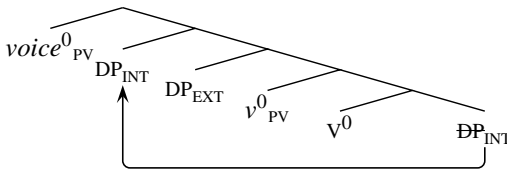
#### (36) Proposal: Low Object Shift



This proposal breaks from a range of previous analyses which assume that Object Shift places shifted arguments above the base position of the EXT, as part of a leapfrogging derivation (Douglas et al. 2017). This class includes the proposals of Rackowski 2002, Aldridge 2004 and Rackowski and Richards 2005, other approaches to Philippine-type voice systems which assume that the pivot raises to the highest A-position within the  $vP$  (often for reasons other than definiteness-related Object Shift per se: Legate 2014; Erlewine and Levin 2021; Erlewine and Lim 2022, a.o.), and similar analyses of High Absolutive systems outside of Western Austronesia (Coon et al. 2014; Yuan 2018). The kind of movement that these analyses generally assume is sketched in (37).

(37) *Rejected: High Object Shift*

Rackowski (2002), Aldridge (2004)



The evidence for the proposed process of Low Object Shift in (36) comes from a set of contexts in which the influence of definiteness can be disentangled from that of Case-Licensing. In finite bivalent clauses, these two properties cannot be separated, because in all contexts where the INT is definite, it triggers absolutive agreement and raises to become the pivot. As a result, it is impossible to determine whether the INT moves above the EXT as the result of a process of definiteness-related Object Shift, as in (37), or as the result of a separate interaction with the head that hosts agreement and assigns it abstract Case (as on the proposal of Guilfoyle et al. 1992). But the influence of definiteness can be separated from the influence of Case-Assignment in trivalent constructions, in which it is the GOAL that triggers absolutive agreement and raises to the position of the pivot. It is possible for the INT to be definite in contexts of that type, and under those circumstances, it is clear that it cannot raise above the EXT.

The low position of the definite but non-pivot INT can be seen in clauses whose verbs surface in LV. In that context, the GOAL triggers absolutive agreement and raises to the position of the pivot. This step can be shown with the familiar diagnostics for A-movement. For instance, when the GOAL is quantified, it can bind into the EXT (38).

(38) *When the GOAL is the pivot, it can bind into the EXT*

Na-be-ngan=**nasang**<sub>i</sub>=i                      kindo'-**na**<sub>i,j</sub>    **sanaeke**<sub>i</sub>    kandekande.  
 LV.3ERG-give-APPL=every=3ABS mom-3GEN    kid                      snack

'His<sub>i,j</sub> mom gave<sub>LV</sub> every<sub>i</sub> kid a snack.'  
 JT: 4.16.21, 49

Given that the INT does not raise to the position of the pivot in LV, it is possible to observe the influence of definiteness-related Object Shift in isolation. If this process placed the INT above the EXT, then we would expect the INT to be able to bind into the EXT, even though it would not raise further to the position of the pivot, as in (39).

(39) Its<sub>i</sub> author sent<sub>LV</sub> me every<sub>i</sub> book.

In Mandar, this is impossible. This fact can be seen in example (40), which is an LV clause that contains a quantified non-pivot INT. That argument, the DP *nasang...buku* "every book," is unable to bind the variable in the EXT.

(40) *When the INT is not the pivot, it cannot bind into the EXT*

Na-kiring-an=**nasang**<sub>i</sub>=a'                      panulis-**na**<sub>\*i,j</sub> **buku**<sub>i</sub>.  
 LV.3ERG-send-APPL=every=1ABS author-3GEN    book

'Its<sub>\*i,j</sub> author sent<sub>LV</sub> me every<sub>i</sub> book.'  
 JT: 4.16.21, 68

This pattern holds despite the fact that universally quantified DPs must undergo Object Shift in the language, as evidenced by the fact that they cannot appear in the position of the INT in AV (41). It suggests that the process of definiteness-related Object Shift does not place the INT above the EXT, as in the tree in (36).

(41) *Universally Quantified DPs undergo Object Shift*

- a. \*Mam-baca=**nasang**=a' **buku**.  
 AV-read=every=1ABS book  
 Intended: 'I read every book.' JT: 12.6.20, 97
- b. U-baca=**nasang**=i **buku**.  
 PV.1ERG-read=every=3ABS book  
 'I read every book.' JT: 12.6.20, 98

This fact can be replicated in every context that allows the INT to be definite without raising to the position of the pivot. It can also be shown, for instance, in the causative. Mandar has a causative construction that is built with the  $v^0_{\text{CAUS}}$  *pa-* (42a). When a causative verb surfaces in PV, it is the causee that raises to the position of the pivot. The movement of that argument can be shown with the familiar set of diagnostics. When it is quantified, for instance, it can bind into the EXT (42b).

(42) *The Causative Construction*

- a. M-elo'=o u-**pa**-sissang di'e sola-u e.  
 AV-want=2ABS PV.1ERG- CAUS-meet this friend-1GEN here  
 'I want to introduce you to this friend of mine.' Friberg and Jerniati (2000, 77)
- b. Na-pa-sita=**nasang**<sub>i</sub>=i kindo'-**na**<sub>i,j</sub> **sanaeke**<sub>i</sub> i=Jokowi.  
 3ERG- CAUS-meet=every=3ABS mother-3GEN child PRS=NAME  
 'Her<sub>i,j</sub> mom showed every<sub>i</sub> kid to [the President of Indonesia]' JT: 4.16.21, 52

As the INT is not the pivot in this context, it is possible to test the influence of Object Shift in isolation once again. If this process placed the INT above the EXT, then we would expect the INT to be able to bind into the EXT, as in (43a). It cannot (43b).

(43) *When the INT is not the pivot, it cannot bind into the EXT*

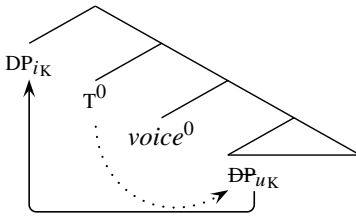
- a. Her<sub>i</sub> mother introduced me to every<sub>i</sub> child.
- b. Na-pa-sissang=**nasang**<sub>i</sub>=a' kindo'-**na**<sub>\*i,j</sub> **sanaeke**<sub>i</sub>  
 PV.3ERG- CAUS-meet=every=1ABS mother-3GEN child  
 'Her<sub>\*i,j</sub> mother introduced me to every<sub>i</sub> child.' JT: 4.16.21, 68

### 3.4 The role of agreement

The facts of trivalent clauses show that Object Shift does not place the INT above the EXT. It follows, then, that there must be a second process in the language which attracts this argument to an higher position in the contexts where it is the pivot. The

natural candidate for such a process is a step of movement linked to Case-Licensing by a higher functional head. In Mandarin, as we have seen, the pivot invariably triggers absolutive agreement. I propose that this agreement arises as the result of a Case-Licensing relationship between the pivot and  $T^0$ . Endowing  $T^0$  with the feature [+EPP], we can derive the observed correlation between pivot status, agreement, and position: the pivot undergoes a step of covert movement to the highest A-position in the clause because it triggers agreement on  $T^0$  and is Case-Licensed by that head. This analysis is shown in (44).

(44) *Case-Licensing and Movement to the Pivot Position*



The analysis in (44) follows the logic of a broader approach which takes the pivot to raise to a high A-position for reasons of Case-Licensing in Philippine-type languages and Malagasy (Guilfoyle et al. 1992; Ting 2022) and in many languages of Western Indonesia (Aldridge 2008; Erlewine 2018). An important component of this analysis is the claim, first made by Hung 1988 for Malagasy, that the head which Case-Licenses the pivot sits above the class of heads that host voice morphology (and on the present proposal, trigger Object Shift).

Within the generative literature on the languages of South Sulawesi, there is disagreement over this point. In Selayarese, Béjar 1999 asserts that the pivot is Case-Licensed by  $T^0$  and that the voice morphology sits in a lower  $v^0$ , while Finer 1997, 1998 proposes that the pivot is Case-Licensed by an  $ABS^0$  that sits below an  $ERG^0$  that hosts the morphology of PV. In Mandarin, it is clear that the first perspective is correct. The key evidence for this view comes from the distribution of absolutive agreement. There are a number of constructions in the language in which this agreement does not occur, and these have the distribution of non-finite clauses in English. Some are selected by  $C^0$  (45a), others appear bare (45b), and yet others are selected by control verbs (46a) and raising predicates (46b). I assume that these constructions lack absolutive agreement because they do not form finite TPs.

(45) *Non-Finite Adjunct Clauses*

- a. [ Mau mi'-oro ], ma-tindo=to=i.  
 Though AV-sit AV-sleep=also=3ABS  
 'Though sitting, he was still asleep.' Sikki et al. (1987, 188)
- b. [ Ururu u-ita-mmu ], tappa' monge'=a' mating.  
 first PV.1ERG-see-2GEN suddenly ache=1ABS for.you  
 'First seeing you, I fell in love straightaway.' Muthalib and Sangi (1991, 3)

(46) *Non-Finite Complement Clauses*

- a. m-elo'=dua=i [ man-dundu PRO ] kandi'-mu.  
 AV-want=still=3ABS AV-drink little.sibling-2GEN  
 'Your little sibling still wants to drink.' Sikki et al. (1987, 811)





example (48), in which first-person absolutive agreement is realized as the suffix *-u* rather than the typical enclitic *a'*.

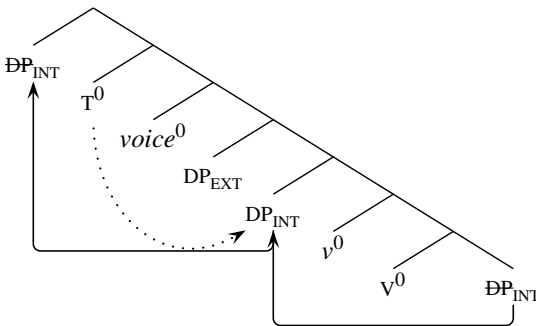
(48) *Absolutive Clitics: Allomorphy Conditioned by C*

Bulang, *indoi=a'*                      *mai, **anna'-u***                      *m-ala ma'-issang=i*  
 moon PV.shine.on=1ABS to.me that-1ABS.IRR AV-can AF-know=3ACC  
*alawe-u.*  
 self-1GEN

‘Moon, shine on me, that I might know myself.’                      Bulang, by Sulkep Liaco

This pattern of allomorphy suggests that absolutive agreement is hosted by a head that is syntactically local to  $C^0$ . From this result, we can conclude that this agreement must sit in a head that stands between  $ASP^0$  and  $C^0$ . The natural candidate for a head in this position is  $T^0$ . And endowing this head with the feature  $[+EPP]$ , we arrive at a theory on which the pivot reaches its final position as the result of two distinct steps in PV and LV: one step of object shift that takes it out of the VP but positions it beneath the EXT, and then a second step, linked to this pattern of agreement, that places it in an A-position above all other arguments in the clause. Taking this head to assign abstract Absolutive Case, this analysis comes to resemble that which has been proposed for ergative languages which show High Absolutive syntax (Bittner and Hale 1996b, a; Legate 2006; Coon et al. 2014; Brown 2016; Ershova 2019). As a result, I refer to it as the Two-Step Theory of High Absolutive Syntax. It is shown in tree (49).

(49) *The Two-Step Theory of High Absolutive Syntax*



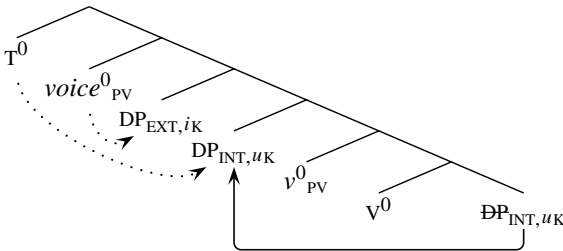
**3.5 Activity and case-licensing**

With these pieces in place, we can now turn to the question of locality: if Object Shift does not place the INT above the EXT, how is it possible for the INT to interact with  $T^0$  and raise to SPEC,TP in PV? I propose that the answer lies in the notion of Activity (Chomsky 2001). Following much work on classical Case Theory, I assume that all nominals are subject to a requirement for Case-Licensing that can be satisfied in the syntax by the establishment of an Agree relation with a C-commanding functional head

(Vergnaud 1977; Chomsky 1980, 1981, 2001; Schütze 1993). Taking morphological agreement as evidence for Case-Licensing (Raposo 1987), we arrive at a picture of Case-Licensing that is familiar from work on High Absolutive languages further afield (Bittner and Hale 1996b, a; Coon et al. 2014): one on which the absolutive argument interacts with  $T^0$  and raises to SPEC,TP because it is the highest Active argument in the *voiceP* by the time that  $T^0$  probes.

In PV, there are two instances of agreement:  $T^0$  agrees with the INT and *voice*<sup>0</sup><sub>PV</sub> agrees with the EXT. In this context, I argue that the INT is Case-Licensed by  $T^0$  and the EXT is Case-Licensed by *voice*<sup>0</sup><sub>PV</sub>. Representing Case-Licensing with a dotted arrow, the resultant state of affairs is shown in tree (50).

(50) *Patient Voice: Licensing*



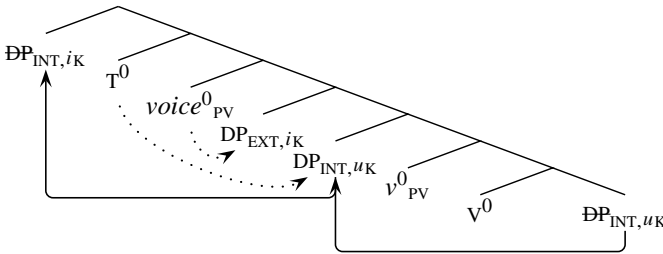
With these patterns of Case-Licensing in place, the puzzle of locality can be resolved. As the EXT is Case-Licensed within the *voiceP*, it is Inactive by the time that  $T^0$  is merged. At the derivational stage where  $T^0$  probes its C-command domain, the highest unlicensed argument in the *voiceP* is the INT. Assuming that only unlicensed arguments are visible to Case-Assigning probes, or Active in the sense of Chomsky 2001, it follows that the probe on  $T^0$  will not be able to target the EXT, even though it is highest in the *voiceP*. It follows as a result that this probe will be able to interact with the INT and attract it to SPEC,TP without incurring a violation of Locality (Guilfoyle et al. 1992; Ershova 2019).

Generalizing across the other voice frames in the language, I propose that the same logic guides the choice of the pivot throughout the language. On this view, the pivot is invariably the highest unlicensed argument in the *voiceP* at the derivational stage where  $T^0$  probes. Given the logic of Activity, the result is the following: no matter its intermediate position in the *voiceP*, the pivot will invariably enter into an agreement relationship with  $T^0$ , be Case-Licensed by that head, and then undergo a step of A-movement to SPEC,TP.

The following tree shows how this analysis derives the syntax of PV. Starting at the level of the *vP*, we can see that the INT undergoes a step of Object Shift to SPEC,*vP*, which is triggered by the feature [+EPP] on the  $v^0_{PV}$ . This process places the INT beneath the base position of the EXT. To allow this argument to interact with  $T^0$  and raise to SPEC,TP, it is important that it remain unlicensed until the derivational stage where  $T^0$  is merged. As a result, I propose that in PV the INT is not Case-Licensed in the *vP*: in other words, the  $v^0_{PV}$  is unable to assign structural Accusative Case (Guilfoyle et al. 1992; Bittner and Hale 1996b, a). Moving up to the *voiceP*, the *voice*<sup>0</sup><sub>PV</sub> bears a phi-probe and searches its C-command domain for the highest unlicensed argument therein. Finding

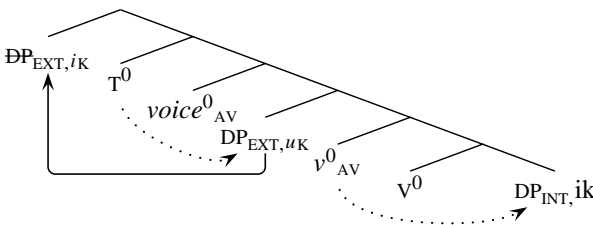
the EXT, it triggers ergative agreement and Case-Licenses that argument in-situ. This step of agreement renders the EXT Inactive. Finally, once  $T^0$  is merged, it probes its C-command domain and finds the INT as the highest Active argument in the *voiceP*. It triggers absolutive agreement with that argument, Case-Licenses it, and triggers a step of covert movement to SPEC,TP. The surface word order, which is V-EXT-INT, arises as the result of a process of head-movement that places the verb in *voice*<sup>0</sup>.

(51) *Patient Voice: Licensing and Movement*



The following tree shows how the analysis derives the syntax of AV. Starting at the level of the *vP*, we can see that the INT does not undergo Object Shift to SPEC,*vP*. This is because the  $v^0_{AV}$  does not bear the feature [+EPP]. Nevertheless, I propose that the  $v^0_{AV}$  is able to Case-License the INT. This move has two effects. First, it allows the EXT to interact with  $T^0$  and raise to SPEC,TP without yielding a problem of Case-Licensing within the *vP*. Second, it provides the means to capture the split that we have seen in the system of AV: the affixes that allow for the presence of an INT contain a  $v^0_{AV}$  which assigns abstract Accusative Case (31). Moving up to the *voiceP*, the  $voice^0_{AV}$  does not bear a phi-probe, and as a result, it is unable to Case-License the EXT. This failure to license the EXT renders that argument the highest Active argument in the *voiceP*. Once  $T^0$  is merged, it probes its C-command domain, finds the EXT, triggers absolutive agreement with that argument, Case-Licenses it, and triggers a step of covert movement to SPEC,TP. The word order, again V-EXT-INT, arises again as the result of head-movement of the verb to *voice*<sup>0</sup>.

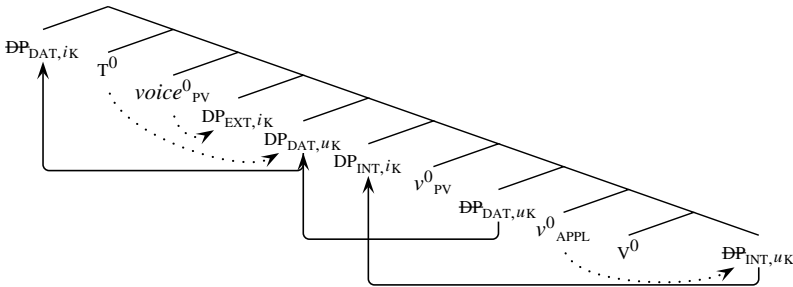
(52) *Agent Voice: Licensing and Movement*



Finally, the tree in (53) shows the syntax of LV. Starting at the level of the *vP*, we can see that there is a GOAL that is introduced above the base position of the INT by  $v^0_{APPL}$ . I assume that  $v^0_{APPL}$  is able to Case-License the INT with structural Accusative Case (Adger and Harbour 2007). The GOAL then undergoes a step of Object Shift to SPEC,*vP*, which is triggered by the feature [+EPP] on the  $v^0_{PV}$ ; in clauses where both

the GOAL and the INT are definite, I assume that the INT undergoes Object Shift as well and tucks in to a lower specifier of  $v^0$  (Rackowski 2002). The process of Object Shift places the GOAL beneath the base position of the EXT, and as a result, the GOAL must remain unlicensed until the derivational stage where  $T^0$  is merged. This is made possible by the fact that the  $v^0_{PV}$  does not assign it structural Accusative Case. Moving up to the *voiceP*, the  $voice^0_{PV}$  once again Case-Licenses the EXT, rendering it Inactive, and by the time that  $T^0$  probes, the highest Active argument in the *voiceP* is the GOAL.  $T^0$  triggers absolutive agreement with this argument, Case-Licenses it, and triggers a step of covert movement to SPEC,TP.

(53) *Locative Voice: Licensing and Movement*



On this analysis, the syntactic and distributional differences between AV, PV, and LV follow from three syntactic parameters: the possibility for Object Shift, the availability of abstract Accusative Case, and the availability of abstract Ergative Case. These differences, in turn, follow from the featural content of the functional heads that make up the voice system:  $v^0_{PV}$  can trigger Object Shift while  $v^0_{AV}$  cannot,  $v^0_{APPL}$  and  $v^0_{AV}$  can assign abstract Accusative Case but  $v^0_{PV}$  cannot, and  $voice^0_{PV}$  can assign abstract Ergative Case but  $voice^0_{AV}$  cannot. Their effect is to determine the possibility of a definite INT and to position a single argument to raise to the position of the pivot, by rendering it the highest unlicensed argument in the *voiceP*. The properties of this analysis are summarized in table (3.5).

(54) *The Two-Step Analysis: Summary*

| VOICE | OBJECT SHIFT | ACC CASE | ERG CASE | PIVOT |
|-------|--------------|----------|----------|-------|
| AV    | ✗            | ✓        | ✗        | EXT   |
| PV    | ✓            | ✗        | ✓        | INT   |
| LV    | ✓            | ✓        | ✓        | GOAL  |

### 4 The agent focus construction

The Two-Step Theory of the Mandar voice system builds on previous approaches of the voice systems of other languages of Western Austronesia, in that it adopts an Argument Structure Analysis of the voice system (Aldridge 2004), takes the pivot to raise to an A-position as the result of a Case-Licensing relationship with  $T^0$  (Guilfoyle et al. 1992; Rackowski 2002), and links the alternation between AV and PV to the

need for Object Shift (Rackowski 2002; Aldridge 2004). It is a first success of this theory, then, that it is able to reduce the syntax of the unfamiliar voice system of the language to the sum of a set of analytical pieces developed for languages which are morphologically distinct from those of South Sulawesi. And this success, in turn, reinforces the value of those pieces to our broader understanding of the typology of the voice systems of the region.

The principal value of the Two-Step Theory, however, lies in the solution that it provides to a puzzle that arises in contexts where the demands of Case-Licensing, Object Shift, and Extraction conflict. This is one which emerges in a configuration that has been the subject of some study in other languages of Western Austronesia, and in particular, Tagalog (Adams and Manaster-Ramer 1988; Rackowski 2002; Latrouite 2012; Sabbagh 2016) (see also Erlewine 2016a). As we have seen, Mandar imposes a Subjects-Only Extraction Constraint on WH-movement, focus-fronting, relativization, and A-raising. A common and unsurprising result of this constraint is that the use of PV is ruled out in clauses that launch movement of the EXT. When the INT is definite in this context, however, the Two-Step Theory yields a set of predictions that are not shared with other approaches to the voice system. First, it predicts that the INT must undergo Object Shift, necessitating the use of a  $v^0$  that bears the feature [+EPP]. Second, it predicts that the INT must receive abstract Accusative Case, as it cannot be Case-Licensed by  $T^0$ . On the system developed here, this pair of requirements cannot be resolved simultaneously by either the  $v^0_{PV}$  or the  $v^0_{AV}$ : the  $v^0_{PV}$  triggers Object Shift but cannot Case-License the INT, while the  $v^0_{AV}$  can Case-License the INT but cannot trigger Object Shift. As a result, the Two-Step Theory predicts that the language must employ a construction which recruits the  $voice^0_{AV}$ , to allow the EXT to raise to the position of the pivot, but nevertheless employs a distinct  $v^0$  which can trigger Object Shift and Case-License the INT in the  $\nu P$ .

When we turn to the relevant configuration in Mandar, we find that this is exactly what occurs. In clauses where the EXT is extracted and the INT is definite, the language employs a verbal form whose morphology is superficially similar to that of AV. When we look past this morphological parallel, however, we will find that it is syntactically distinct. The shape of this construction is shown in (55).

(55) *The Agent Focus Construction*

|            |   |              |       |          |     |
|------------|---|--------------|-------|----------|-----|
| <u>Apa</u> | [ | mam-bokko=i  | _____ | i=Kaco'  | ] ? |
| what       |   | AF-bite=3ACC |       | PRS=NAME |     |

‘What bit Kaco’?’

The appearance of a construction with these properties in this context in Mandar is part of a broader pattern in the Western Austronesian region, and one which extends to High Absolute systems outside of this area. From a morphological perspective, the construction in (55) has exact parallels in the languages of the South Sulawesi Subfamily and their neighbors, which all employ a verbal form that recruits AV-like morphology and shows a pattern of accusative agreement with the INT in this context (Martens 1988; Friberg 1991; Mead 1998, 2002; Zobel 2002; Jukes 2006). Abstracting away from the presence of agreement, many Philippine-type languages have also long

been recognized to employ a very similar construction in the same context: one which bears AV-like morphology but allows for patterns of differential object marking (DOM) on the INT which are much more constrained in finite matrix AV clauses (Adams and Manaster-Ramer 1988; Rackowski 2002; Latrouite 2012; Sabbagh 2016; Erlewine 2016a). Tagalog, for instance, employs a construction in this context which allows the INT to be marked with the DOM marker *sa* (56).

(56) *A Similar Construction in Tagalog*

Sino ang s<um>ampal **sa** akin?  
 who ABS ??-slap SA 1SG.OBL

‘Who is the one that slapped me?’ Rackowski (2002, 92) (reglossed)

Setting our sights further afield, a morphologically similar verbal form has been noted to appear in a very similar context in Mayan languages of the Q’anjob’alan subfamily. This verbal form is known as the Agent Focus, and much like the Mandar construction in (55), it is built with the morphology that appears in clauses where the EXT is absolutive and it implicates an exceptional pattern of agreement with the INT (Smith-Stark 1978; Larsen and Norman 1979; Dayley 1981; Ordóñez 1995; Stiebels 2006; Coon et al. 2014; Erlewine 2016b; Aissen 2017; Coon et al. 2021). As we will see, the Two-Step Theory predicts- and the facts of the language suggest- that the Mandar construction in (55) shows a syntax which is similar to that which has been proposed for the Agent Focus in a particular strand of research on the languages of that subfamily (Coon et al. 2014, 2021). To underscore this parallel, I will refer to the Mandar form as Agent Focus as well.

#### 4.1 Extraction, object shift, and case-licensing

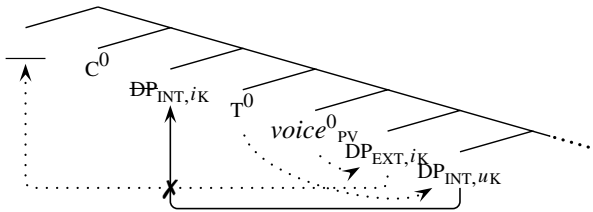
The starting point of this investigation is the Subjects-Only Extraction Constraint. In Mandar, we have seen that this rules out WH-movement, focus-fronting, and relativization of all arguments except the pivot. The result of this constraint is that it is impossible to extract the PV EXT, the AV INT, the LV EXT, the LV INT, the applied argument in CV, and most obliques. The constraint is shown with the PV EXT in (57).

(57) *The Locality Constraint*

- a. **Na**-itai=o.  
 PV.3ERG-look.for=2ABS  
 ‘He’s looking for you.’ JT: 4.9.21, 29
- b. Innai [ **na**-itai \_\_\_\_ ]?  
 who PV.3ERG-look.for  
 ‘Who is he looking for?’ JT: 4.9.21, 30
- c. \*Innai [ **na**-itai=a’ \_\_\_\_ ]?  
 who PV.3ERG-look.for=1ABS  
 Intended: ‘Who’s looking for me?’ JT: 4.9.21, 31

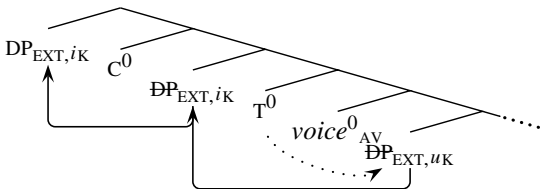
Following Aldridge (2004), I take this constraint to follow from a restriction that holds over the  $\bar{A}$ -probe that drives these operations: it targets only the closest DP in its C-command domain. This proposal continues the logic of the standard theory of the Ergative Extraction Constraint in High Absolutive languages (Campana 1992; Murasugi 1992; Ordóñez 1995; Bittner and Hale 1996b, a), and it is widely adopted in work in Austronesian and beyond (Coon et al. 2014, 2021; Erlewine and Lim 2022; Branan and Erlewine 2022). Its basic result is schematized in (58).

(58) *The Subjects-Only Extraction Constraint*



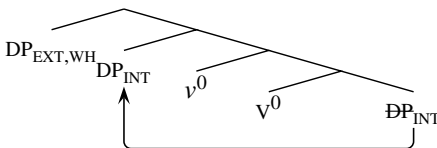
The result of this restriction is that it is not possible to employ PV in clauses where the EXT undergoes extraction. In clauses of that type, rather, we expect that the verb must merge with the  $voice^0_{AV}$ . This is because the raising of the EXT to SPEC,TP is forced by a property of that head. As we have seen, the  $voice^0_{AV}$  fails to Case-License the EXT (52). This renders it the highest unlicensed argument within the  $voice^0_{PV}$ , and as a result, the argument that is targeted by  $T^0$  at the derivational stage where it probes.

(59) *Extraction of the EXT passes through Spec,TP*



This constraint raises two theoretical challenges in contexts where the INT is definite. In that context, it is obligatory for the INT to undergo Object Shift. As a result, we predict that the language must employ a  $v^0$  that bears the feature [+EPP], as in (84).

(60) *Extraction of the EXT plus a Definite INT: Object Shift*

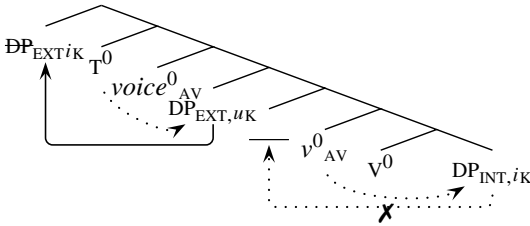


A priori, we expect this requirement to rule out the use of the  $v^0_{AV}$  in contexts where the EXT is extracted and the INT is definite. This is because that  $v^0$  does not bear the feature [+EPP] and, as a result, it is unable to trigger Object Shift. In clauses that



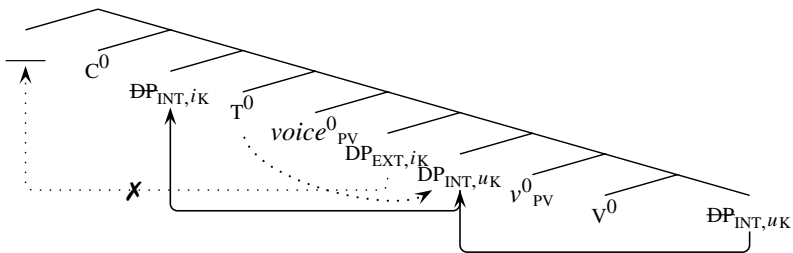
contain this  $v^0$ , moreover, there is no way for the INT to escape the VP by interacting with higher probes in the clause, such as  $T^0$ . This follows from the pattern of selection that was established in Sect. 3.1: the  $v^0_{AV}$  is invariably selected by the  $voice^0_{AV}$ , and this head does not Case-License the EXT. As a result, in clauses that contain the  $v^0_{AV}$ , the EXT will always serve as the highest Active argument in the  $voiceP$ , and in the resultant configuration, it is not possible for a probe outside of the  $voiceP$  to interact with the INT. The resultant problem of Object Shift is shown in (61).

(61)  $v^0_{av} + voice^0_{av}$ : No Object Shift for the INT



This logic leads us to predict that the  $v^0_{AV}$  cannot be employed in contexts where the EXT is extracted and the INT is definite. As a possible resolution, we might imagine that the language should turn to the  $v^0_{PV}$  instead, as this head bears the feature [+EPP] and would therefore resolve the requirement of Object Shift. But looking ahead in the derivation, it quickly becomes clear that the result will fare no better. This is obvious in a derivation in which the  $v^0_{PV}$  is selected by the  $voice^0_{PV}$ , which fails to set up the locality-compliant configuration in (58). This is because the  $voice^0_{PV}$  Case-Licenses the EXT and renders it Inactive, forcing  $T^0$  to attract the INT to SPEC,TP. In this configuration, it is impossible for the  $\bar{A}$ -probe on  $C^0$  to attract the EXT. The resultant problem of Locality is shown in (62).

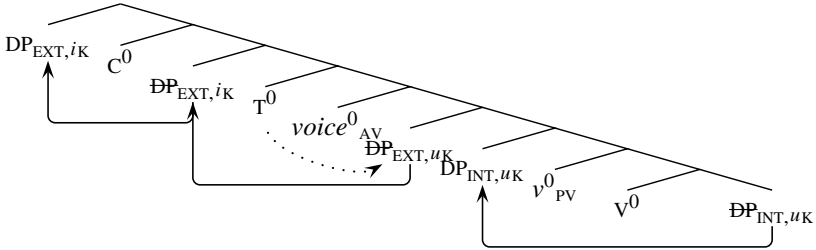
(62)  $v^0_{pv} + voice^0_{pv}$ : No Extraction of the EXT



Forcing this derivation into compliance with the Subjects-Only Extraction Constraint, moreover, creates a separate problem in the domain of Case-Licensing. To see why, consider a parallel derivation in which the  $v^0_{PV}$  is exceptionally selected by the  $voice^0_{AV}$ . This derivation would avoid the problem of locality, as in the presence of the  $voice^0_{AV}$ , the EXT would not be Case-Licensed in the  $voiceP$  and would thus interact with  $T^0$  and raise to a position from which it could interact with  $C^0$ . But in allowing the EXT to interact with  $T^0$ , this derivation would render it impossible for that head to interact with and Case-License the INT. In other words, introducing the head that allows

extraction of the EXT eliminates the canonical pathway to Case-Licensing that rescues the INT when it must undergo Object Shift. The resultant problem of Case-Licensing is shown in (63).

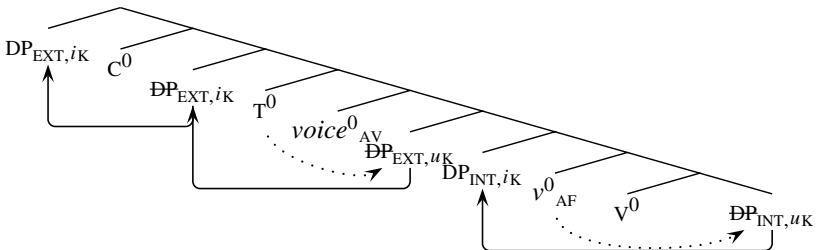
(63)  $v^0_{PV} + voice^0_{AV}$ : No Case-Licensing for the INT



### 4.2 The agent focus construction

The Two-Step Theory, then, delivers a clear prediction about the syntax of clauses in which the EXT is extracted and the INT is definite. When the EXT is to be extracted, the language must employ the  $voice^0_{AV}$ , as this is the head that positions the EXT to interact with  $T^0$ , raise to SPEC,TP, and arrive at the requisite proximity to the probe on  $C^0$ . To allow for the presence of a definite INT in that context, moreover, the analysis predicts that the language must employ a  $v^0$  that does two things. First, it must allow the INT to undergo Object Shift to leave the VP in the absence of a relationship with  $T^0$ , unlike the  $v^0_{AV}$ . Second, it must allow the INT to be Case-Licensed in the absence of a relationship with  $T^0$ , unlike the  $v^0_{PV}$ . The  $v^0$  which is required in this context is one which bears the feature [+ EPP ] and assigns abstract Accusative Case. Its predicted behavior is presented in (64).

(64) *Extraction of the EXT plus a Definite INT: Object Shift plus Accusative Case*



These predictions are borne out. In contexts where the EXT is extracted and the INT is definite, Mandarin employs a distinct verbal form which is shown in (65). This is one which has two special properties: it hosts morphology which is similar to that of AV and shows DOM with the INT in the form of accusative agreement.

(65) *The Agent Focus Construction*

- a. *Innai* [ *ma*'-ita=i \_\_\_ mam-[p]anao ] ?  
 who AF-see=3ACC AV-steal

- ‘Who saw him steal?’ Pelenkahu et al. (1983, 87)
- b. I'o=kapang [ **mat**-timbe=i \_\_\_ kacci'-u ].  
 2SG=maybe AF-throw=3ACC mango-1GEN  
 ‘Maybe you threw out my mango.’ Sikki et al. (1987, 1132)
- c. Sappulo=de', tommuane [ **map**-polei=i \_\_\_ boyan-na ].  
 ten=they.say men AF-visit=3ACC house-3GEN  
 ‘They say they were ten, the men who visited his house.’ Sikki et al. (1987, 535)

The morphological shape of this construction is presented in (66). It is built from two components: a prefix *maN-* (recall that coda nasals denasalize before all non-nasal segments but /b d d̥ ʒ g/) and an accusative agreement enclitic that follows the verb. Abstracting away from the morphological shape of the prefix, a nearly identical form is employed in the same context in the other languages of the South Sulawesi subfamily (Campbell 1989; Friberg 1991, 1996; Strømme 1994; Matti 1994; Valkama 1995a, b; Jukes 2006; Laskowske 2016; Brodtkin 2021b) and in many languages of the Kaili-Pamona and Bungku-Tolaki subfamilies nearby (Martens 1988; Mead 1998, 2002; Zobel 2002).

(66) *The Agent Focus: Morphology*  
*maN-STEM=AGR<sub>ACC</sub>*

The AF prefix *maN-* is segmentally identical to one of the ten affixes that mark AV in Mandarin, and the accusative agreement enclitics are segmentally identical to the absolutive agreement enclitics that sit in T<sup>0</sup>. But despite these phonological similarities, it is clear that the AF prefix and the accusative enclitics are morphosyntactically distinct from their homophonous counterparts. The accusative enclitics, to begin, surface in a different linear position from the absolutive enclitics. This fact can be seen in clauses that contain preverbal material, such as clausal negation. The absolutive enclitics strictly follow the leftmost phonological phrase in the intonational phrase, as part of their general second-position behavior (67a), and I assume that they reach this position through a process of phonologically-driven postposing from the left edge of the intonational phrase (Halpern 1995; Harizanov 2014; Bennett et al. 2016; Brodtkin 2021c). The accusative enclitics, however, are strictly postverbal (67b). This suggests that they do not sit in T<sup>0</sup>.

(67) *Accusative Agreement: Verb-Adjacent*

- a. Ndap=pa=i mala u-pau.  
 Not=IPFV=3ABS AV.can PV.1ERG-say  
 ‘I can’t say it yet.’ Friberg and Jerniati (2000, 240)
- b. Innai=pa ndam **mam**-baca=i?  
 who=IPFV not AF-read=3ACC  
 ‘Who hasn’t read it yet?’ JT: 4.2.21, 98

Convergent evidence for this analysis comes from the interaction with aspect. As we have seen, the absolutive agreement enclitics form portmanteaux with aspect, and this pattern provides evidence that they sit in T<sup>0</sup> (47b). The accusative agreement

enclitics, however, do not enter into portmanteaux with aspect in the same way. In clauses where prosodic constraints should force the aspectual clitics to follow a verb in AF, it is impossible for portmanteaux to appear (68). This fact provides a second argument that the accusative agreement enclitics do not sit in  $T^0$ .

(68) *Accusative Agreement: No Portmanteaux with Aspect*

\*Sutradara peleng inna mang-gallogallo=**ma'** dite'e?  
 director film which AF-bother=PFV.1ACC now

Intended: 'Which film's director is bothering me now?' JT: 4.9.21, 308

Tightening the screws further, we can observe that the presence of accusative agreement is contingent on the presence of the particular affix *maN-*. This agreement cannot appear in the presence of any other voice prefix in the language, such as the CV prefix *si-* or canonical AV affixes like *ma'*-, *me-*, and *me'*- (69). As a result, many verbs show a morphological difference between AV and AF. In contexts where the AF form is required, the verbs which canonically take AV prefixes like *me-* surface with the prefix *maN-* (69c).

(69) *Accusative Agreement: Only with maN-*

a. **Me**-bokko=ada=mi asu-mmu.  
 AV-bite=maybe=PFV.3ABS dog-2GEN

'Your dog might bite.'

Sikki et al. (1987, 414)

b. \*Apa [ **me**-bokko=a' \_\_\_\_ ]?  
 what AV-bite=1ACC

Intended: 'What bit me?'

JT: 4.9.21, 104

c. Apa [ **mam**-bokko=a' \_\_\_\_ ]?  
 what AF-bite=1ACC

'What bit me?'

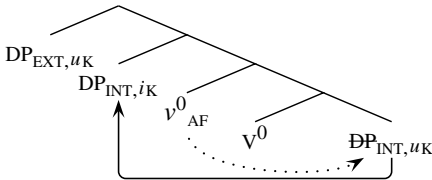
JT: 4.9.21, 105

This pattern suggests that accusative agreement originates in a head that surfaces in the AF portmanteau *maN-* but not the AV affixes *ma'*-, *me-*, and *me'*- (69). The natural candidate for this head is  $v^0$ . As the AF portmanteau is homophonous with one of the AV prefixes in the language, I propose that it can be syntactically decomposed into a combination of  $voice^0$  and  $v^0$  as well. And as the AF prefix *maN-* shares the initial segment *m-* with the other AV prefixes in the language, I assume that it contains the  $voice^0_{AV}$ . This morphological conclusion dovetails with one of the syntactic predictions of the Two-Step Theory that was established above: the AF construction must contain the  $voice^0_{AV}$  in order to position the EXT to raise to the position of the pivot and then extract. Pressing further, it also allows us to identify the head that is unique in the AF construction: it is a  $v^0$ , selected by  $voice^0_{AV}$ , which hosts accusative agreement and contributes all the segmental content of the AF prefix *maN-* beyond the segment *m-*. I will refer to this  $v^0$  as the  $v^0_{AF}$ .

### 4.3 The agent focus $v^0$

With the existence of the  $v^0_{AF}$  established, we can now turn to the syntax of AF. As we have seen, the Two-Step Theory predicts that the INT must be able to undergo Object Shift and must be Case-Licensed in the  $vP$  in the contexts where it is definite and the EXT is extracted. I propose that the  $v^0_{AF}$  allows both of these things to occur. On this analysis, this  $v^0$  bears the feature [+EPP] and assigns structural Accusative Case, as in (70).

(70) *Agent Focus: Object Shift plus Accusative Licensing*



Straightforward evidence for accusative Case-Licensing comes from the pattern of agreement. As we have seen, in the AF construction the INT triggers agreement in the form of the accusative enclitic on the verb (66). This agreement can be linked to the  $v^0_{AF}$ . On the assumption that overt agreement provides evidence for Case-Licensing (Raposo 1987), this pattern suggests that the  $v^0_{AF}$  does Case-License the INT.

Pressing further, we can find evidence for the occurrence of Object Shift in the distribution of a prosodic process that targets only constituents in the VP. This is Prosodic Incorporation, a process which targets focused constituents and groups them into a single minimal phonological phrase with the verb. This process has been observed in descriptive work on several other languages of the South Sulawesi subfamily (under the name of ‘Incorporation’; Campbell 1989; Laskowske 2016), and in Mandarin, its occurrence can be detected in two ways. First, it forces the deletion of a boundary tone which normally follows the verb and allows the verb to undergo various processes of reduction that are blocked at the right edge of the phonological phrase. Second, it has an effect on the linear position of second position clitics. The absolutive enclitics generally follow the verb in verb-initial clauses, but when a constituent undergoes Prosodic Incorporation, the absolutive clitics follow the sequence of verb and incorporate. This makes it possible to observe the application of this process in (71b), where it targets the adverb *dini* ‘here.’ I will represent its application with a hyphen.

(71) *Prosodic Incorporation*

- a. Jari, appe’=pa=i    ana’-na    Indo’ dini?  
 so    four=yet=3ABS child-3GEN mom here  
 ‘So you still have four children here?’    Friberg and Jerniati (2000, 201)
- b. Iye’, mas-sikola-**dini**=i.  
 yes AV-school-here=3ABS  
 ‘Yes, they’re in school HERE.’    Friberg and Jerniati (2000, 202)

The process of Prosodic Incorporation can target many types of phrasal constituents in the VP, such as manner adverbs (72a) and locative PPs (72b). But its application is

subject to a syntactic constraint: it cannot target material outside of the VP. As a result, cannot target TP-level adjuncts (73a) or the non-pivot EXT (73b).

(72) *Prosodic Incorporation: Able to Target VP-Internal Material*

- a. Peirranggi-**macoa**=i dolo' apa na-u-pa'ua-ng=0'o.  
 PV.hear-good=3ABS first what FUT- PV.1ERG- say-APPL=2ACC  
 'But listen WELL to what I'm about to tell you! Sikki et al. (1987, 1092)
- b. Ma-tindo-**di-ranjang**=banda'.  
 AV-sleep-in-bed=really.1ABS  
 'I really sleep in a BED.' Muthalib and Sangi (1991, 136)

(73) *Prosodic Incorporation: Unable to Target VP-External Material*

- a. \*Na-mamba-**marondong**=a'.  
 FUT-AV.go-tomorrow=1ABS  
 Intended: 'I'll go TOMORROW.' JT: 11.20.20, 265
- b. \*Na-bokko-**asu**=i.  
 PV.3ERG-bite-dog=3ABS  
 Intended: 'He was bitten by a DOG.' JT: 3.25.21, 85
- c. Na-mamba=a' **marondong**.  
 FUT-AV.go=1ABS tomorrow  
 'I'll go TOMORROW.' JT: 11.20.20, 264
- d. Na-bokko=i **asu**.  
 PV.3ERG-bite=3ABS dog  
 'He was bitten by a DOG.' JT: 3.25.21, 86

This constraint provides the means to diagnose the position of the INT in AF. In clauses which show AV, it is possible for the INT to undergo Prosodic Incorporation. This result is expected on the Two-Step Analysis, as the  $v^0_{AV}$  does not trigger Object Shift and thus allows the INT to remain in the VP. It can be seen in matrix clauses, such as (74a), and also in embedded contexts. One context of that type is a headless relative construction that surfaces beneath the existential predicate *diang* (74b).

(74) *Prosodic Incorporation: Able to Target the INT in AV*

- a. Ma'-pa-ke'de-**boyang**=a'  
 AV- CAUS-stand-house=1ABS  
 'I was building a HOUSE.' JT: 3.25.21, 150
- b. Diang [ me-ro-**dappang** mating ].  
 there.is AV-request-forgiveness from.you  
 'There's someone asking for FORGIVENESS from you.' JT: 3.1.21, 43

In AF, we find the reverse. In relative clauses whose verbs surface in AF, it is impossible for the INT to undergo Prosodic Incorporation. This constraint is shown in the examples in (75), which contains another headless relative clause beneath the existential predicate *diang*. That relative clause contains an INT that is a DP and a gap in the position of the EXT. The INT must follow the accusative agreement enclitic (75a). It cannot surface between the clitic and the verb (75b).

(75) *Prosodic Incorporation: Unable to Target the INT in AF*

- a. Diang [ ma'-itai=a' **yau** ].  
 there.is AF-look.for=1ACC 1SG  
 'There's someone looking for me. JT: 3.1.21, 48
- b. \*Diang [ ma'-ite-**yau**=a' ].  
 there.is AF-look.for-1SG=1ACC  
 Intended: 'There's someone looking for ME.' JT: 3.1.21, 49

This pattern does not follow from a general constraint against Prosodic Incorporation in AF, because it is possible for constituents other than the INT to undergo Prosodic Incorporation in the context above. This can be seen in example (76), which contains a similar headless relative that contains a verb in AF. In that context, the focused VP-internal directional adverb *dai'* can undergo Prosodic Incorporation and split the verb from accusative agreement.

(76) *Prosodic Incorporation: Possible for VP-Internal Constituents in AF*

- Diang manini [ map-pedondo-**dai'**=i ].  
 there.is later AF-try.to.reach-up=3ACC  
 'There will be one who tries to reach UP to it.' Muthalib and Sangi (1991, 451)

These observations suggest that the INT does indeed move out of the VP in the AF construction. This result is striking for two reasons. First, it provides explicit positional evidence for a process of Object Shift in the language, therefore supplementing the theoretical logic that led us to postulate this process on the basis of the Definiteness Effect. And second, it provides confirmation for the second prediction of the Two-Step Analysis: when the EXT is extracted and the INT is definite, the language employs a construction that allows the INT to be Case-Licensed and undergo Object Shift.

Connecting these patterns to the  $v^0_{AF}$ , we conclude that this head has the ability to assign abstract Accusative Case and trigger Object Shift, and in this respect, it is distinct from both the  $v^0_{AV}$  and  $v^0_{PV}$ . The features of the  $v^0_{AF}$ , and the differences between these  $v^0$ s, are tabled in (4.3).

*Three  $v^0$ s in Mandar*

| HEAD       | OBJECT SHIFT | ACC CASE |
|------------|--------------|----------|
| $v^0_{AF}$ | ✓            | ✓        |
| $v^0_{PV}$ | ✓            | ✗        |
| $v^0_{AV}$ | ✗            | ✓        |

**4.4 Agent focus and extraction**

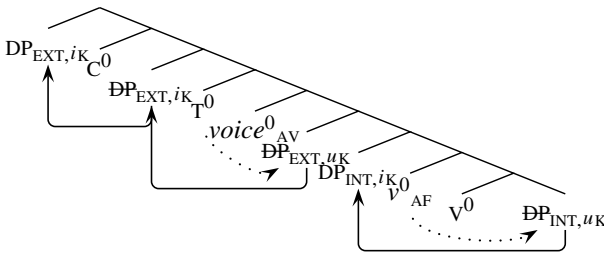
With its  $vP$ -level syntax in place, we can now see how the AF construction provides the means to resolve the tension that arises when the demands of the systems of Extraction, Object Shift, and Case-Licensing conflict. I propose that AF clauses like (77) show the syntax in (78). In this construction, the INT undergoes a step of Object Shift to SPEC, $vP$ ,

on a par with clauses that show PV (51). Unlike those clauses, however, it is the EXT which proceeds to interact with  $T^0$  and raise to SPEC,TP. As a result, that argument can be extracted in compliance with the Subjects-Only Extraction Constraint.

(77) *The Agent Focus Construction*

Apa [ mam-bokko=i \_\_\_ i=Kaco ] ?  
 what AF-bite=3ACC PRS=NAME  
 ‘What bit Kaco?’

(78) *The Syntax of Agent Focus*



On this analysis, the AF construction provides the means for the EXT to undergo  $\bar{A}$ -extraction in a manner that is fully compliant with the Subjects-Only Extraction Constraint. Despite the fact that the INT moves out of the VP and triggers a form of agreement that is similar to the agreement in  $T^0$ , I argue that it does not move above the EXT at any point in this derivation. This claim finds support from several different patterns in the language, and I will briefly review the most important of those here.

The first is an argument from Condition C. So far, we have seen when the INT is the pivot, it cannot be a pronoun that is coindexed with an R-expression in the EXT (18). The same is not true of AF. This is shown in (79), which is a clause where the verb surfaces in AF and the INT is a null pronoun. The EXT, which is focused, contains a possessor which is an R-expression. Here, it is possible for the INT to be coindexed with the R-expression in the EXT, despite the fact that this cannot occur when the INT is the pivot (19). On the assumption that  $\bar{A}$ -extraction of the EXT should reconstruct for Condition C, this suggests that the INT does not raise above the position from which the EXT is extracted in clauses that show AF.

(79) *Agent Focus: the INT can be coindexed with an R-Expression in the EXT*

Kindo'-na<sub>j</sub> i=Nina<sub>i</sub> [ **ma'**-ita=i \_\_\_ *pro*<sub>i,k</sub> ]  
 mom-3GEN PRS=NAME AF-see=3ACC  
 ‘Nina’s<sub>i</sub> mom<sub>j</sub> saw her<sub>i</sub>.’

JT: 4.9.21, 79

A similar argument can be made from the facts of variable binding. As we have seen, the INT can bind variables in the EXT when it is the pivot (27). In the AF construction, however, it cannot. This pattern is shown in example (80): when the INT is quantified in AF, it cannot bind a variable inside of an extracted EXT.



(80) *Agent Focus: the INT cannot bind a variable in the EXT*

Kindo'-na<sub>\*i,j</sub> [ **mas**-sajang=nasang<sub>i</sub>=i \_\_\_ sanaek<sub>i</sub> ]  
 mom-3GEN AF-love=every=3ACC child

'Her<sub>\*i,j</sub> mom<sub>k</sub> loves every kid<sub>i</sub>.'

JT: 4.9.21, 89

To this pair of diagnostics we can add a final fact about linear order. Although the pivot does not occupy a consistent linear position in Mandarin, it is often able to undergo an operation of leftward preposing that is not available to other arguments in the clause. In clauses that contain a preverbal auxiliary or negator, the pivot can optionally surface after that element and before the verb. This pattern is shown in example (81), which is a clause that contains preverbal negation. The pivot of that clause, which is the demonstrative *di'o* "that," surfaces after negation and before the verb. I refer to the process that places the pivot in this position as *Pivot Preposing*.

(81) *Pivot Preposing*

Ndat=to=i **di'o** tallat=tongan \_\_\_ o.  
 not=also=3ABS that drown=truly there

'That one didn't even really drown.'

Pelenkahu et al. (1983, 226)

Pivot preposing targets only the pivot. This is shown in the PV clause in (82), which contains a preverbal auxiliary. When a DP surfaces after this auxiliary, it can only be interpreted as the INT, not the non-pivot EXT. As a result, the process yields a diagnostic for pivot status: if an argument cannot be preposed, then it is not the pivot.

(82) *Pivot Preposing: Pivots Only*

Pura=i **i=Kaco'** na-paressu' \_\_\_ di'o bau o.  
 finished=3ABS PRS=NAME PV.3ERG-cook that fish there

'That fish was finished cooking Kaco'.

Impossible: 'Kaco' was finished cooking that fish.'

JT: 7.12.21, 186

Taking this diagnostic to AF, we find that it is impossible in that construction for the INT to undergo preposing (83). In AF clauses that contain a preverbal auxiliary, the INT must surface postverbally (83a). It cannot surface after the auxiliary (83b).

(83) *Agent Focus: The INT Cannot Undergo Pivot Preposing*

a. Innai [ pura mang-gallogallo=i \_\_\_ **i=Kaco'** ]?  
 who finished AF-bother=3ACC PRS=NAME

'Who's finished bothering Kaco'?'

JT: 4.9.21, 72

b. \*Innai [ pura **i=Kaco'** mang-gallogallo=i \_\_\_ ]?  
 who finished PRS=NAME AF-bother=3ACC

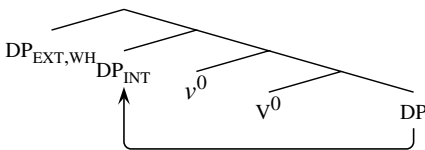
Intended: 'Who's finished bothering Kaco'?'

JT: 4.9.21, 71

What these observations collectively suggest is that the AF construction does not allow the INT to raise to the position of the pivot. And with this conclusion in tow, we can be reasonably certain that in AF clauses we are dealing with the syntax in (78): one on which the INT undergoes a step of Object Shift to SPEC, $vP$  and the EXT raises to SPEC,TP.

From this position, we can now turn to a derivation. Returning to the example in (77), consider the  $vP$  in (84). This  $vP$  contains two arguments: an EXT which is a WH-word and must undergo extraction, and an INT which is definite and must undergo Object Shift. Given the requirement for Object Shift, the language must employ a  $v^0$  that bears the feature [+EPP] to allow the step of movement in (84). This rules out the appearance of the  $v^0_{AV}$  and forces the presence of the  $v^0_{PV}$  or the  $v^0_{AF}$ .

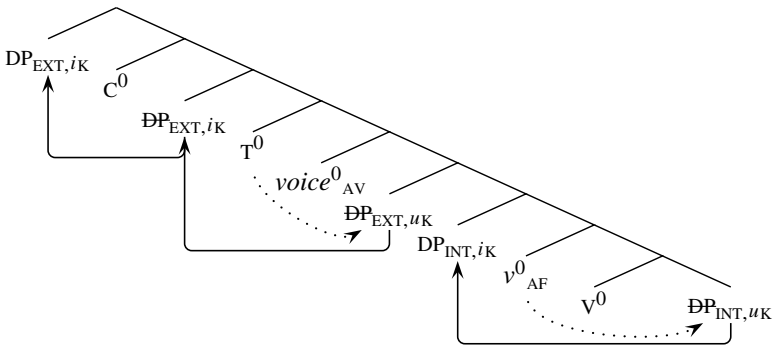
(84) *Extraction of the EXT plus a Definite INT: the  $vP$*



As we have seen, there is no way for the derivation in (84) to converge in the presence of the  $v^0_{PV}$ . If the  $v^0_{PV}$  is merged and selected by the  $voice^0_{PV}$ , we arrive at a problem of Locality, as the  $voice^0_{PV}$  Case-Licenses the EXT, renders it Inactive, and delivers a situation where the INT must interact with  $T^0$  and raise to SPEC,TP (62). In an analogous derivation where the  $v^0_{PV}$  is merged and then selected by the  $voice^0_{AV}$ , moreover, we run into a separate problem of Case-Licensing: as the  $voice^0_{AV}$  does not Case-License the EXT, that argument must interact with  $T^0$ , and this deprives the INT of the typical pathway to Case-Licensing that is available in clauses that contain the  $v^0_{PV}$  (63).

With this background established, we can now see how the AF construction resolves the tension between the systems of Extraction, Object Shift, and Case-Licensing. When the  $v^0_{AF}$  is merged in the derivation in (84), the three problems above do not arise. To begin, the  $v^0_{AF}$  bears the feature [+EPP] and therefore resolves the problem of Object Shift, unlike the  $v^0_{AV}$ . Moreover, the  $v^0_{AF}$  is able to assign abstract Accusative Case to the INT and therefore resolves the problem of Case-Licensing that emerges in contexts where the INT is unable to interact with  $T^0$ , unlike the  $v^0_{PV}$  (63). Finally, as a result of this property, it is possible for the  $v^0_{AF}$  to be selected by the  $voice^0_{AV}$ , which fails to Case-License the EXT and thus allows it to interact with  $T^0$  and raise to SPEC,TP, resolving the problem of Locality. The resultant derivation, repeated from (64)–(78), is presented in (85).

(85) *The Syntax of Agent Focus*



4.5 Agent focus as a last resort

These results cast the function of the AF construction into sharp relief: it provides the means to trigger Object Shift and Case-Licenses the INT in a different way when the use of PV is ruled out by the demands of the system of extraction.

Seen from this perspective, a generalization emerges around the distribution of the  $v^0_{AF}$ : this head is merged exclusively in the set of contexts where the INT must undergo Object Shift and cannot be Case-Licensed by any higher head. This description is met plainly in the  $\bar{A}$ -contexts above, where the Subjects-Only Extraction constraint demands that the EXT be the pivot in every clause where it extracts. But it is also met in a range of other contexts in the language that do not involve  $\bar{A}$ -extraction, and in those too, the  $v^0_{AF}$  can be found. To provide a single example from the A-domain, this  $v^0$  appears equally in contexts of Raising. Mandarin has a process of Raising to Pivot that targets the pivot of a non-finite clause. An example is shown in (86). Here, the DP *iKaco* surfaces after the non-thematic matrix predicate *masae* “long (of time).” It is thematically connected to the predicate of the following clause, which is non-finite and contains a gap in the position of the pivot.

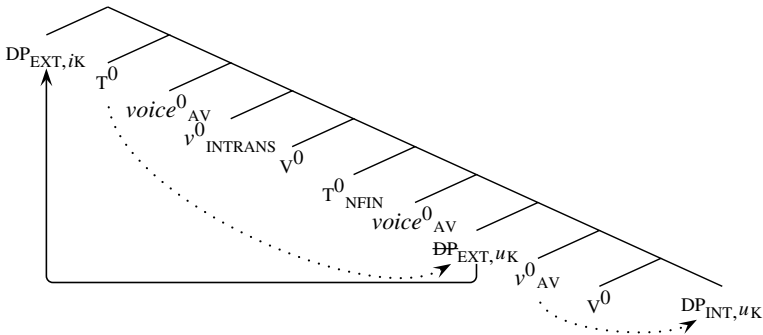
(86) *Raising to Pivot*

Sa' ma-sae=i i=Kaco' [ m-ottong \_\_\_ di=aya di=Ma'assar ].  
 Truly STAT-long=3ABS PRS=NAME AV-stay in=up in=PLACE

‘Kaco’ is truly long to have stayed in Makassar.’

(It was a long time that Kaco’ was in Makassar.) Sikki et al. (1987, 265)

I assume that Raising to Pivot shows a similar syntax to Raising to Subject in English. In clauses that show Raising, the highest unlicensed argument of a non-finite clause undergoes a step of movement into a higher clause as the result of an agreement relationship that it establishes with a Case-Licensing head therein. In (86), this Case-Licensing head is the matrix  $T^0$ . Setting word order aside, I take this clause to show the syntax in (87).

(87) *Raising to Pivot*

Like WH-movement, focus-fronting, and relativization, the process of Raising to Pivot is subject to a strict constraint on locality. It is possible for this process to target the EXT of an embedded clause when the embedded verb surfaces in AV, as in (88a). But it is impossible for it to target the EXT of an embedded clause whose verb surfaces in PV (88b).

(88) *Raising to Pivot: Targets only the Pivot*

- a. Pattu=ma' [ **man**-nawanawai \_\_\_ sara ma-lawu tarring].  
 difficult=PVF.1ABS AV-care thing STAT-round bamboo  
 'I am difficult to care about things that are round like bamboo.'  
 (It is difficult for me to care about them.) Muthalib and Sangi (1991, 466)
- b. \*Ma-siga=o [ **mu**-baca=i \_\_\_ di'o buku o ].  
 STAT-quick=2ABS PV.2ERG-read=3ABS that book there  
 Intended: 'You were quick to read that book.'  
 (It was quickly that you read it.) JT: 4.9.21, 43

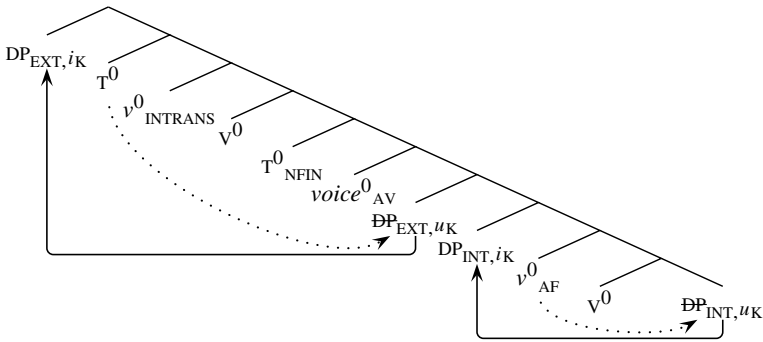
Raising to Pivot, therefore, provides the means to set up another configuration in which the use of PV is taken off the table. And when the EXT undergoes this process in a clause that contains a definite INT, the embedded verb surfaces in AF (89).

(89) *Raising of the EXT plus a Definite INT: AF*

Ma-siga=mi i=**Kaco**' [ **map**-paressu'=i \_\_\_ di'o bau o ].  
 STAT-fast=PFV.3ABS PRS=NAME AF-cook=3ACC that fish there

'Kaco' was quick to cook that fish.' (He cooked it quickly) JT: 7.12, 126

The embedded clause in (89) shows the syntax in (90), on which the EXT serves as the highest unlicensed argument in the *voice*P and the INT undergoes Object Shift and is Case-Licensed in the *v*P. Both of these processes are triggered by the  $v^0_{AF}$ .

(90) *Raising to Pivot and AF*

The broader distributional profile of the  $v^0_{AF}$ , then, suggests that it is not a head whose distribution depends in an intimate way on the presence of  $\bar{A}$ -extraction (as has been proposed of the morphosyntactically similar constructions in Mayan; Deal 2016; Coon et al. 2021). Rather, its appearance in contexts like (89) suggests that it has the distribution of a Last Resort (Safir 1993; Bošković 1997; Chomsky 2001). Specifically, I propose that it is a Secondary Licensor, in the terminology of Levin and Massam 1985. On this view, the  $v^0_{AF}$  is a head which is merged exclusively in the contexts in which the INT must undergo Object Shift but cannot be licensed in the typical High-Absolutive way of clauses where this occurs. In this respect, it is similar to the heads that are merged to rescue other types of arguments that would otherwise go without Case-Licensing, such as those which assign abstract Ergative Case (Bobaljik 1993), those which surface in contexts of Differential Object Marking (Kalin 2018), and those which repair violations of constraints like the PCC (Rezac 2011).

What is striking about this result is that, on the present analysis, it allows the Mandar  $v^0_{AF}$  to be understood as part of a broader class of Secondary Licensors that are employed in a consistent context in the ergative languages that show High Absolutive Syntax. There is a tradition of work on certain languages of the Mayan family, including those of the Q'anjob'alán subgroup, which takes them to be syntactically similar to Mandar, on the Two-Step Theory, in two respects (Coon et al. 2014, 2021; Royer et al. 2021; Royer 2022, to appear; Brodtkin and Royer to appear): first, they require the absolutive argument to raise to the A-position in the clause as the result of a Case-Licensing relationship with  $T^0$ , and second, they impose a locality constraint in the  $\bar{A}$ -domain that prohibits the extraction of the EXT in clauses of that type. This perspective opens up the possibility for a common prediction in the contexts where Mandar employs the AF construction, and in many languages of the Q'anjob'alán subfamily, this prediction is borne out. In the contexts where the EXT is extracted and the INT is a certain type of nominal, many languages of that subfamily employ a construction which shows the morphology of clauses in which the EXT is absolutive but shows an exceptional pattern of agreement with the INT. Coon et al. (2014) argue that this construction shows a syntax that is strikingly similar to that of the Mandar AF: in Q'anjob'al, one language of this type, they argue that it provides the means to Case-License the INT when it would be otherwise unable to receive abstract Case.

Seen from this perspective, a parallelism emerges between the  $v_{AF}^0$  in Mandar and the head that hosts the AF affixes in the languages of the Q'anjob'alan subfamily: in both cases, it provides a source of abstract Accusative Case for the INT in the contexts where the canonical pathway of High Absolutive Case-Licensing breaks down. And from this parallel, in turn, a number of deeper symmetries begin to unfold between the voice system of Mandar and the systems of alignment that recur in the languages of that area. It is a final success of the Two-Step Theory, then, that it leads us to connections between languages and constructions that, from different and earlier perspectives may have seemed to be fundamentally unlike.

## 5 Conclusion

This paper has investigated the clausal syntax of Mandar, a language of South Sulawesi, and shown that it can be readily understood through the combination of a set of theoretical proposals that have been developed in the ergative tradition of analysis of Philippine-type languages. In this language, I have argued that the alternation between AV and PV turns on the need for definiteness-related Object Shift out of the VP (Rackowski 2002; Aldridge 2004) and shown that the broader voice system serves to position a single argument to be Case-Licensed by  $T^0$  and thus raise to the highest A-position in the clause (Guilfoyle et al. 1992). The theory that emerges from the combination of these pieces, the Two-Step Theory of High Absolutive Syntax, makes it possible to understand a broad set of patterns in the language, some of which are familiar from other languages in the region and others which are not. And at the same time, this theory makes it possible to understand a pattern that emerges in contexts where the systems of Extraction, Case-Licensing, and Object Shift conflict, where Mandar employs a construction that allows the INT to undergo Object Shift and be Case-Licensed in the VP, in a break from the canonical pattern of High Absolutive Case-Licensing.

Looking beyond this particular language, much work is required to understand the ways in which other languages of this region respond to the particular tension that we have outlined and investigated above. But it is a promising first success of the Two-Step Theory that it provides the means to understand the response that surfaces in Mandar, and a striking result that it is ultimately similar to that which emerges in a similar context in certain High Absolutive languages further afield.

**Acknowledgements** Deep gratitude to Jupri Talib, my primary Mandar consultant, for his commitment and generosity with his knowledge of Mandar and his assistance and friendship throughout our times together in West Sulawesi. Special thanks to Sandy Chung for her guidance throughout this project, and to Edith Aldridge, Pranav Anand, Jessica Coon, Matt Pearson, Justin Royer, Ivy Sichel, Michelle Sheehan, Lisa Travis, Erik Zyman, and audiences at UC Santa Cruz, UC Berkeley, McGill University, AFLA 27, and AFLA 28 for valuable discussion around the ideas in this work. Thanks as well to three anonymous reviewers, and in particular, to the guest editor of this issue of JEAL, Mitcho Erlewine, for key feedback which led to substantial improvements in the paper. All errors are my own. This material is based upon work supported by the National Science Foundation under Grant No. 2018267201.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included

in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

- Abbott, B. 1999. Support for a unique theory of definiteness. *Semantics and Linguistic Theory* 9: 1–15.
- Adams, K.L., and A. Manaster-Ramer. 1988. Some questions of topic/focus choice in Tagalog. *Oceanic Linguistics* 27 (1/2): 79–101.
- Adger, D., and D. Harbour. 2007. Syntax and syncretisms of the person case constraint. *Syntax* 10 (1): 2–37.
- Adriani, N. 1893. *Sangireesche spraakkunst*. Leiden: Leiden University Press.
- Aissen, J. 2017. Correlates of ergativity in Mayan. In *The Oxford handbook of ergativity*, ed. J. Coon, D. Massam, and L. d. Travis, 737–758. Oxford: Oxford University Press.
- Aldridge, E. 2008. Phase-based account of extraction in Indonesian. *Lingua* 118 (10): 1440–1469.
- Aldridge, E. 2011. Antipassive in Austronesian alignment change. In *Grammatical change: Origins, nature, outcomes*, ed. D. Jonas, J. Whitman, and A. Garrett, 331–345. Oxford: Oxford University Press.
- Aldridge, E. 2012. Antipassive and ergativity in Tagalog. *Lingua* 122 (3): 192–203.
- Aldridge, E. C. 2004. *Ergativity and word order in Austronesian languages*. Ph. D. thesis, Cornell University.
- Arregi, K., and A. Nevins. 2014. A monoradical approach to some cases of disuppletion. *Theoretical Linguistics* 40 (3–4): 311–330.
- Assmann, A., D. Georgi, F. Heck, G. Müller, and P. Weisser. 2015. Ergatives move too early: On an instance of opacity in syntax. *Syntax* 18 (4): 343–387.
- Ayres, G. 1983. The antipassive “voice” in ixil. *International Journal of American Linguistics* 49 (1): 20–45.
- Baier, N.B. 2018. *Anti-agreement*. Ph. D. thesis, University of California, Berkeley.
- Baker, M. 1985. The mirror principle and morphosyntactic explanation. *Linguistic Inquiry* 16 (3): 373–415.
- Baker, M.C. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Béjar, S. 1999. Agreement alternations and functional licensing in Selayarese. In *Proceedings of the Sixth Meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. C. Kitto, 51–61. Toronto Working Papers in Linguistics.
- Bennett, R., E. Elfner, and J. McCloskey. 2016. Lightest to the right: An apparently anomalous displacement in Irish. *Linguistic Inquiry* 47 (2): 169–234.
- Bittner, M. 1987. On the semantics of the Greenlandic antipassive and related constructions. *International Journal of American Linguistics* 53 (2): 194–231.
- Bittner, M., and K. Hale. 1996. Ergativity: Toward a theory of a heterogeneous class. *Linguistic Inquiry* 27: 531–604.
- Bittner, M., and K. Hale. 1996. The structural determination of case and agreement. *Linguistic inquiry* 27: 1–68.
- Bloomfield, L. 1917. *Tagalog texts with grammatical analysis*. Chicago: University of Illinois.
- Blust, R. 2013. *The Austronesian Languages*. Canberra: Pacific Linguistics.
- Bobaljik, J. 1993. On ergativity and ergative unergatives. *MIT Working Papers in Linguistics* 19 (4588): 334–385.
- Bobaljik, J.D. 2012. *Universals in comparative morphology: Suppletion, superlatives, and the structure of words*. Cambridge: MIT Press.
- Bošković, Ž. 1997. *The syntax of nonfinite complementation*. Cambridge: MIT Press.
- Branan, K. and M.Y. Erlewine. 2022. A-probing for the closest dp. *Linguistic Inquiry*, 1–56.
- Brodkin, D. 2020. Pseudoclefts and Parameters in the Pacific. In *Syntax & Semantics at Santa Cruz*, vol. IV, ed. A. Hedding and M. Hoeks, 43–62. Santa Cruz: Linguistics Research Center. University of California.
- Brodkin, D. 2021a. Agreement and Anti-Agreement in South Sulawesi. In *Proceedings of NELS 51: The 51st Meeting of the North East Linguistics Society*, ed. A. Farinella and A. Hill.
- Brodkin, D. 2021b. Object Shift and Agent Extraction in Mandar. In *Proceedings of the Twenty-Seventh Meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. H. Hsieh and K. New. University of Western Ontario.

- Brodtkin, D. 2021c. Second Position Clitics and Prosodic Recursion. In *Supplemental Proceedings of the 2020 Annual Meeting on Phonology*, ed. R. B. et al., 12. Linguistic Society of America.
- Brodtkin, D. 2022a. Perception Verb Complements in Mandar. In *Syntax & Semantics at Santa Cruz*, vol. IV, ed. L. Balachandran and J. Duff, 17–34. Santa Cruz: Linguistics Research Center. University of California.
- Brodtkin, D. 2022b. Two Steps to High Absolutive Syntax. MA Thesis, University of California, Santa Cruz.
- Brodtkin, D. and J. Royer (To appear). Ergative Anaphors and High Absolutive syntax. In *Proceedings of the 39th West Coast Conference on Formal Linguistics*, ed. G. de la Cruz-Sánchez.
- Brown, C. 2016. Syntactic ergativity in Gitksan. In *Proceedings of the 21st annual Workshop on the Constituency of Languages of the Americas (WSCLA 21)*. UQAM Montreal, QC.
- Bye, P., and P. Svenonius. 2010. *Exponence, phonology and non-concatenative morphology*. Ms: CASTL, University of Tromsø.
- Campana, M. 1992. *A movement theory of ergativity*. Ph. D. thesis, McGill University, Quebec.
- Campbell, P. J. 1989. *Some aspects of Pitu Ulunna Salu grammar: A typological approach*. Ph. D. thesis, University of Texas at Arlington.
- Chang, H.Y. 2011. Triadic encoding in tsou. *Language and Linguistics* 12 (4): 799–843.
- Chen, V. 2017. *A Reexamination of the Philippine-Type Voice System and its Implications for Austronesian Primary-Level Subgrouping*. Ph. D. thesis, University of Hawai'i at Mānoa.
- Chen, V., and B. McDonnell. 2019. Western austronesian Voice. *Annual Review of Linguistics* 5: 173–195.
- Chomsky, N. 1980. On binding. *Linguistic Inquiry* 11 (1): 1–46.
- Chomsky, N. 1981. *Lectures on Government and Binding*, vol. 9. Dordrecht: Foris.
- Chomsky, N. 2001. Derivation by phase. In *Ken Hale: a life in language*, ed. M. Kenstowicz, 1–52. MIT Press.
- Chung, S. 1976a. An object-creating rule in Bahasa Indonesia. *Linguistic Inquiry* 7 (1): 41–87.
- Chung, S. 1976b. On the subject of two passives in Indonesian. In *Subject and Topic*, ed. C.N. Li and S.A. Thompson, 57–98. New York: Academic Press.
- Collins, C. 2005. A smuggling approach to the passive in English. *Syntax* 8 (2): 81–120.
- Coon, J. 2017. Two types of ergative agreement: Implications for case. In *A pesky set: Papers for David Pesetsky*, ed. C. Halpert, H. Kotek, and C. van Urk, 361–370. MIT Working Papers in Linguistics Cambridge, MA.
- Coon, J., N. Baier, and T. Levin. 2021. Mayan agent focus and the ergative extraction constraint: Facts and fictions revisited. *Language* 97 (2): 269–332.
- Coon, J., P.M. Pedro, and O. Preminger. 2014. The role of case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation* 14 (2): 179–242.
- Craig, C.G. 1979. The antipassive and jacalteco. *Papers in Mayan linguistics* 1: 139–164.
- Cumming, S., and F. Wouk. 1987. Is there 'discourse ergativity' in Austronesian languages? *Lingua* 71 (1–4): 271–296.
- Dayley, J.P. 1981. Voice and ergativity in Mayan languages. *Journal of Mayan Linguistics* 2: 3–82.
- De Guzman, V.P. 1988. Ergative analysis for Philippine languages: An analysis. *Studies in Austronesian Linguistics* 76: 323–346.
- Deal, A.R. 2016. Syntactic ergativity: Analysis and identification. *Annual Reviews* 2: 165–185.
- Diesing, M. 1992. *Indefinites*. Cambridge: MIT press.
- Douglas, J., R. Ranero, and M. Sheehan. 2017. Two kinds of syntactic ergativity in Mayan. *Proceedings of GLOW in Asia XI* 2: 41–56.
- Embick, D. 2010. *Localism versus Globalism in Morphology and Phonology*, vol. 60. Cambridge: MIT Press.
- Erlewine, M. 2016a. Subject marking on non-subjects in Sqliq Atayal. In *Proceedings of the Twentieth Meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. J. Sabbagh.
- Erlewine, M.Y. 2016b. Anti-locality and optimality in Kaqchikel Agent Focus. *Natural Language & Linguistic Theory* 34 (2): 429–479.
- Erlewine, M.Y. 2018. Extraction and licensing in Toba Batak. *Language* 94 (3): 662–697.
- Erlewine, M.Y., and T. Levin. 2021. Philippine clitic pronouns and the lower phase edge. *Linguistic Inquiry* 52 (2): 408–425.
- Erlewine, M. Y., T. Levin, and C. Van Urk. 2017. Ergativity and Austronesian-type voice systems. In *The Oxford handbook of ergativity*, 373–396. Oxford University Press.
- Erlewine, M. Y. and C. Lim. 2022. Bikol clefts and topics and the Austronesian extraction restriction. *To appear in Natural Language & Linguistic Theory*.



- Ershova, K. A. 2019. Syntactic ergativity in West Circassian. Ph. D. thesis, The University of Chicago.
- Finer, D. 1994. On the nature of two  $\bar{A}$ -positions in Selayarese. In *Studies on scrambling: Movement and non-movement approaches to free word-order phenomena*, ed. N. Corver and H. van Riemsdijk, 153–183. Berlin: Mouton de Gruyter.
- Finer, D. 1999. Cyclic clitics in Selayarese. In *The Proceedings of the sixth meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. C. Smallwood and C. Kitto, Volume 16. Holland Academic Graphics.
- Finer, D. and H. Basri. 2020. Clause truncation in South Sulawesi: Restructuring and nominalization. In *Proceedings of the Twenty-Sixth Meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. I. Paul. University of Western Ontario.
- Finer, D.L. 1997. Contrasting  $\bar{A}$ -dependencies in Selayarese. *Natural Language & Linguistic Theory* 15 (4): 677–728.
- Finer, D.L. 1998. Sulawesi relatives, V-raising, and the CP-complement hypothesis. *Canadian Journal of Linguistics/Revue canadienne de linguistique* 43 (3–4): 283–306.
- Friberg, B. 1991. Ergativity, focus and verb morphology in several South Sulawesi languages. *Vical* 2: 103–130.
- Friberg, B. 1996. Konjo's peripatetic person markers. *Pacific Linguistics Series A Occasional Papers* 84: 137–171.
- Friberg, B. and Jerniati. 2000. Mandar conversations. Unpublished; circulated by the Language Office of South Sulawesi (Balai Bahasa Sulawesi Selatan).
- Gerdts, D.B. 1988a. Antipassives and causatives in Ilokano: Evidence for an ergative analysis. In *Studies in Austronesian linguistics*, ed. R. McGinn, 295–321. Athens: Ohio University Press.
- Gerdts, D.B. 1988b. *Object and Absolutive in Halkomelem Salish*. Garland.
- Grimes, C.E., and B.D. Grimes. 1987. *Languages of South Sulawesi*. Research School of Pacific Studies: The Australian National University.
- Guilfoyle, E., H. Hung, and L. Travis. 1992. Spec of IP and Spec of VP: Two subjects in Austronesian languages. *Natural Language & Linguistic Theory* 10 (3): 375–414.
- Halpern, A. 1995. *On the placement and morphology of clitics*. Center for the Study of Language (CSLI).
- Harizanov, B. 2014. The role of prosody in the linearization of clitics: Evidence from Bulgarian and Macedonian. In *Formal Approaches to Slavic Linguistics* 22: 109–30.
- Harley, H. 2013. External arguments and the Mirror Principle: On the distinctness of Voice and v. *Lingua* 125: 34–57.
- Harley, H. 2017. The “bundling” hypothesis and the disparate functions of little v. *The Verbal Domain* 1: 3–28.
- Heaton, R. 2020. Antipassives in crosslinguistic perspective. *Annual Review of Linguistics* 6: 131–153.
- Hemmings, C. 2015. Kelabit Voice: Philippine-Type, Indonesian-Type or Something a Bit Different? *Transactions of the Philological Society* 113 (3): 383–405.
- Hemmings, C. 2016. *The Kelabit language: Austronesian voice and syntactic typology*. Ph. D. thesis, SOAS University of London.
- Himmelman, N.P. 1996. Person marking and grammatical relations in Sulawesi. *Papers in Austronesian Linguistics* 3: 115–136.
- Himmelman, N.P. 2005. The Austronesian languages of Asia and Madagascar: typological characteristics. In *The Austronesian languages of Asia and Madagascar*, ed. A. Adelaar and N. Himmelman, 110–181. London: Routledge.
- Hsieh, H. 2020. *Beyond Nominative: A Broader View of A'-Dependencies in Tagalog*. Ph. D. thesis, McGill University (Canada).
- Hung, H. 1988. *Derived verbs and nominals in Malagasy*. Unpublished ms.: McGill University.
- Jukes, A. 2006. *Makassarese (basa Mangkasara')*: A description of an Austronesian language of South Sulawesi. Ph. D. thesis, The University of Melbourne.
- Kalin, L. 2018. Licensing and differential object marking: The view from neo-aramaic. *Syntax* 21 (2): 112–159.
- Kaufman, D. 2008. South sulawesi pronominal clitics: Form, function and position. *Studies in Philippine Languages and Cultures* 17: 13–65.
- Keenan, E.L. 1976. Remarkable subjects in Malagasy. In *Subject and Topic*, ed. C.N. Li and S.A. Thompson, 247–301. Academic Press.
- Kroeger, P. 1993a. *Phrase structure and grammatical relations in Tagalog*. Ph. D. thesis, Stanford University.

- Kroeger, P.R. 1993b. Another look at subjecthood in Tagalog. *Philippine Journal of Linguistics* 24 (2): 1–16.
- Larsen, T.W., and W.M. Norman. 1979. *Correlates of Ergativity in Mayan Grammar*. Cambridge: Academic Press.
- Laskowske, D. 2016. Voice in Bugis: an RRG perspective. MA thesis, University of North Dakota.
- Latrouite, A. 2012. Differential object marking in Tagalog. In *Proceedings of the Eighteenth Meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. L. E. Clemens, G. Scontras, and M. Polinsky. Harvard University.
- Lebeaux, D. 1991. Relative clauses, licensing, and the nature of the derivation. In *Perspectives on phrase structure: Heads and licensing*, pp. 209–239. Brill.
- Lee, J.K.L. 2008. Transitivity, Valence and Voice in Mandar. *Studies in Philippine Languages and Cultures* 19: 55–66.
- Legate, J. A. 2006. Split absolutive. In *Ergativity*, 143–171. Dordrecht: Springer.
- Legate, J.A. 2008. Morphological and Abstract Case. *Linguistic Inquiry* 39 (1): 55–101.
- Legate, J.A. 2012. Types of ergativity. *Lingua* 122 (3): 181–191.
- Legate, J.A. 2014. *Voice and v: Lessons from Acehnese*, vol. 69. Cambridge: MIT Press.
- Legate, J. A. 2017. The locus of ergative case. In *The Oxford handbook of ergativity*, ed. J. Coon, D. Massam, and L. d. Travis, 135–158. Oxford University Press New York, NY.
- Levin, J. and D. Massam. 1985. Surface ergativity: Case/theta relations reexamined. In *Proceedings of the 45th Meeting of the North East Linguistic Society (NELS 15)*, ed. S. Berman, Volume 15.
- Liao, H.-c. 2004. *Transitivity and ergativity in Formosan and Philippine languages*. Ph. D. thesis, University of Hawai'i at Manoa.
- Marantz, A. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. *University of Pennsylvania working papers in linguistics* 4 (2): 14.
- Martens, M. 1988. Focus or ergativity? Pronoun sets in Uma. *Pacific Linguistics Series A Occasional Papers* 79: 263–277.
- Matthewson, L. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics* 70 (4): 369–415.
- Matti, D.F. 1994. Mamasa pronoun sets. *Studies in Sulawesi Linguistics* 3: 65–89.
- McDonnell, B. J. 2016. *Symmetrical voice constructions in Besemah: A usage-based approach*. Ph. D. thesis, University of California, Santa Barbara.
- McGinnis, M. 1998. *Locality in A-movement*. Ph. D. thesis, Massachusetts Institute of Technology.
- Mead, D. 2002. Proto-Celebic focus revisited. In *The history and typology of Western Austronesian voice systems*, ed. F. Wouk and M. Ross. Pacific Linguistics.
- Mead, D. E. 1998. *Proto-Bungku-Tolaki: Reconstruction of its phonology and aspects of its morphosyntax*. Ph. D. thesis, Rice University.
- Merchant, J. 2013. Voice and ellipsis. *Linguistic Inquiry* 44 (1): 77–108.
- Merchant, J. 2015. How much context is enough? Two cases of span-conditioned stem allomorphy. *Linguistic Inquiry* 46 (2): 273–303.
- Merchant, J. 2019. Roots don't select, categorial heads do: Lexical-selection of pps may vary by category. *The Linguistic Review* 36 (3): 325–341.
- Milsark, G. L. 1974. *Existential Sentences in English*. Ph. D. thesis, Massachusetts Institute of Technology.
- Mithun, M. 1994. The implications of ergativity for a Philippine voice system. In *Voice: Form and function*, ed. B. Fox and P. Hopper, 247–277. John Benjamins.
- Murasugi, K. G. 1992. *Crossing and nested paths—NP movement in accusative and ergative languages*. Ph. D. thesis, Massachusetts Institute of Technology.
- Muthalib, A. and M. Z. Sangi. 1991. *Puisi Kalindaqdaq Mandar*. Departemen Pendidikan dan Kebudayaan.
- Ndayiragije, J. 2006. The ergativity parameter: A view from antipassive. In *Ergativity*, 271–292. Dordrecht: Springer.
- Nie, Y. 2019. Raising applicatives and possessors in Tagalog. *Glossa: A Journal of General Linguistics* 4: 1–30.
- Nie, Y. 2020. *Licensing arguments*. Ph. D. thesis, New York University.
- Noyer, R. R. 1992. *Features, positions and affixes in autonomous morphological structure*. Ph. D. thesis, Massachusetts Institute of Technology.
- Ordóñez, F. 1995. The antipassive in Jacalteco: A last resort strategy. *Catalan Working Papers in Linguistics* 4: 329–343.
- Otsuka, Y. 2006. Syntactic ergativity in Tongan. In *Ergativity*, 79–107. Dordrecht: Springer.

- Ouhalla, J. 1993. Subject-extraction, negation and the antiagreement effect. *Natural Language & Linguistic Theory* 11 (3): 477–518.
- Paillé, M. 2021. Tucking-in and Pivot-Third Word Order. In H. Hsieh and K. New (Eds.), *Proceedings of the Twenty-Seventh Meeting of the Austronesian Formal Linguistics Association (AFLA)*. University of Western Ontario.
- Pater, J. 1999. Austronesian nasal substitution and other \*NC effects. In *The prosody-morphology interface*, ed. R. Kager, H. van der Hulst, and W. Zonneveld, 310–343. Cambridge University Press.
- Paul, I. and L. Travis. 2006. Ergativity in Austronesian languages. In *Ergativity*, 315–335. Springer.
- Paul, I. M. 2000. *Malagasy clause structure*. Ph. D. thesis, McGill University.
- Payne, T.E. 1982. Role and reference related subject properties and ergativity in Yup'ik Eskimo and Tagalog. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"* 6 (1): 75–106.
- Pearson, J. M. 2001. *The clause structure of Malagasy: A minimalist approach*. Ph. D. thesis, University of California, Los Angeles.
- Pearson, M. 1998. Rightward object shift and the syntax of adverbs. *UCLA Occasional Papers in Linguistics* 20: 34–49.
- Pearson, M. 2005. The Malagasy subject/topic as an  $\bar{a}$ -element. *Natural Language & Linguistic Theory* 23 (2): 381–457.
- Pelenkahu, R., A. Muthalib, and M.Z. Sangi. 1983. *Struktur Bahasa Mandar*. Departemen Pendidikan dan Kebudayaan: Pusat Pembinaan dan Pengembangan Bahasa.
- Polinsky, M. 2016. *Deconstructing ergativity: Two types of ergative languages and their features*. Oxford: Oxford University Press.
- Polinsky, M. 2017a. Antipassive. In *The Oxford handbook of ergativity*, ed. J. Coon, D. Massam, and L. d. Travis. New York: Oxford University Press.
- Polinsky, M. 2017b. Syntactic ergativity. In *The Wiley Blackwell Companion to Syntax*, 2nd ed., ed. M. Everaert and H. van Riemsdijk, 1–37. Wiley Online Library.
- Pylkkänen, L. 2008. *Introducing arguments*, vol. 49. Cambridge: MIT press.
- Rackowski, A. 2002. *The structure of Tagalog: Specificity, voice, and the distribution of arguments*. Ph. D. thesis, Massachusetts Institute of Technology.
- Rackowski, A., and N. Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36 (4): 565–599.
- Raposo, E. 1987. Case theory and Infl-to-Comp: The inflected infinitive in European Portuguese. *Linguistic Inquiry* 18 (1): 85–109.
- Reinhart, T. 1983. Coreference and bound anaphora: A restatement of the anaphora questions. *Linguistics and Philosophy* 6 (1): 47–88.
- Rezac, M. 2011. *Phi-features and the modular architecture of language*, vol. 81. Berlin: Springer Science & Business Media.
- Richards, N. 1993. *Tagalog and the typology of scrambling. Unpublished honors thesis*. Ithaca: Cornell University.
- Richards, N. 1996. Subjects in Tagalog and Icelandic. Voice in Austronesian. *NUSA Linguistic Studies of Indonesian and Other Languages in Indonesia* 39: 31–50.
- Richards, N. 2000. Another look at Tagalog subjects. In *Formal issues in Austronesian linguistics*, 105–116. Dordrecht: Springer.
- Riesberg, S. 2014. *Symmetrical voice and linking in Western Austronesian languages*. De Gruyter Mouton.
- Roberts, C. 2003. Uniqueness in definite noun phrases. *Linguistics and Philosophy* 26 (3): 287–350.
- Royer, J. 2022. *Elements of (in)definiteness and binding in Mayan*. Ph. D. thesis, McGill.
- Royer, J. (To appear). Binding and anti-cataphora in Mayan. *Linguistic Inquiry*.
- Royer, J., A. Farinella, and A. Hill. 2021. Object raising, binding, and coreference in Chuj. In *NELS 51: Proceedings of the Fifty-First Annual Meeting of the North East Linguistic Society*, pp. 191–204. GLSA Amherst, MA.
- Russell, B. 1905. On denoting. *Mind* 14 (56): 479–493.
- Sabbagh, J. 2016. Specificity and objecthood in Tagalog. *Journal of Linguistics* 52 (3): 639–688.
- Safir, K. 1993. Perception, selection, and structural economy. *Natural Language Semantics* 2 (1): 47–70.
- Schachter, P. 1976. The subject in Philippine languages: Topic, actor, actor-topic, or none of the above. In C. N. Li and S. A. Thompson (Eds.), *Subject and Topic*, Volume 491, pp. 518. Academic Press New York.

- Schachter, P. 1996. *The subject in Tagalog: Still none of the above*, vol. 15. Los Angeles: University of California.
- Schütze, C.T. 1993. Towards a minimalist account of quirky case and licensing in Icelandic. *MIT Working Papers in Linguistics* 19: 321–375.
- Shibatani, M. 1988. Voice in philippine languages. *Passive and Voice* 16: 85–142.
- Sikki, M., A. Muthalib, A.K. Mulya, and M.N. Haddade. 1987. *Kata Tugas Bahasa Mandar*. Departemen Pendidikan dan Kebudayaan: Pusat Pembinaan dan Pengembangan Bahasa.
- Smith-Stark, T. 1978. The Mayan antipassive: Some facts and fictions. *Papers in Mayan Linguistics* 2: 169–187.
- Spreng, B. 2006. Antipassive morphology and case assignment in Inuktitut. In *Ergativity*, pp. 247–270. Dordrecht: Springer.
- Spreng, B. 2013. Little v in inuktitut: Antipassive revisited. *Linguistica Atlantica* 23: 155–190.
- Starosta, S., A. Pawley, and L. A. Reid. 1982. The evolution of focus in Austronesian. In *Papers from the Third International Conference on Austronesian Linguistics, Vol. 2: Tracking the Travellers*. Pacific Linguistics.
- Stiebels, B. 2006. Agent focus in mayan languages. *Natural Language & Linguistic Theory* 24 (2): 501–570.
- Strømme, K.K. 1994. Person marking in the Mamuju language. *Studies in Sulawesi Linguistics* 3: 91–113.
- Svenonius, P. 2016. Spans and words. *Morphological Metatheory* 229: 201.
- Ting, C. 2022. N-bonding as a morphological ornament in Malagasy. In *Proceedings of the Twenty-Eighth Meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. T. Clark, J. Dussere, and C. Ting. University of Western Ontario.
- Trommer, J. 2010. The typology of portmanteau agreement. Talk presented at the DGfS-CNRS Summer School on Linguistic Typology.
- Valkama, K. 1995. Person marking in Duri. *Studies in Sulawesi Linguistics part IV: NUSA* 37: 47–95.
- Valkama, S. 1995. Notes on Duri transitivity. *Studies in Sulawesi Linguistics part IV: NUSA* 37: 2–45.
- van der Tuuk, H. N. 1864. *A Grammar of Toba-Batak*. Brill.
- Van Urk, C. 2015. *A uniform syntax for phrasal movement: A case study of Dinka Bor*. Ph. D. thesis, Massachusetts Institute of Technology.
- Vergnaud, J.-R. 1977. Letter to Noam Chomsky and Howard Lasnik on “Filters and Control”. In *Foundational Issues in Linguistic Theory. Essays in Honor of Jean-Roger Vergnaud*, ed. R. Freidin, C. P. Otero, and M. L. Z. Zubizarreta, 3–15. Cambridge, MA: MIT Press.
- Vigus, M. 2018. Antipassive constructions: Correlations of form and function across languages. *Linguistic Typology* 22 (3): 339–384.
- Wechsler, S., and I.W. Arka. 1998. Syntactic ergativity in Balinese: an argument structure based theory. *Natural Language & Linguistic Theory* 16 (2): 387–442.
- Williams, E. 2003. *Representation theory*. Cambridge: MIT Press.
- Wiltchko, M. 2006. On ‘Ergativity’ in Halkomelem Salish. In *Ergativity*, 197–227. Dordrecht: Springer.
- Woolford, E. 2016. Two types of portmanteau agreement: Syntactic and morphological. In *Optimality theoretic syntax, semantics, and pragmatics: From uni-to bidirectional optimization*, ed. G. Legendre, E. Zarakian, H. de Swart, and M.T. Putnam, 111–135. Oxford University Press.
- Wouk, F. and M. Ross eds. 2002. *The history and typology of Western Austronesian voice systems*. Pacific Linguistics.
- Yuan, M. 2018. Dimensions of ergativity in Inuit: Theory and microvariation. Ph. D. thesis, Massachusetts Institute of Technology.
- Zobel, E. 2002. The position of Chamorro and Palauan in the Austronesian family tree: Evidence from verb morphosyntax. In *The history and typology of Western Austronesian voice systems*, ed. F. Wouk and M. Ross, 405–434. Pacific Linguistics.
- Zyman, E. 2018. *On the driving force for syntactic movement*. Ph. D. thesis, University of California, Santa Cruz.