

‘Syntactic ergativity’ in Dyirbal and Balinese*

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1. Introduction

Morphological ergativity is found in about 25% of the world’s languages (Dixon 1994). In these languages, intransitive subjects (S) and direct objects (O) are treated alike with respect to case and agreement morphology. Transitive subjects (A) are treated differently.¹ An example is Dido (Tsez), a Northeast Caucasian language (Polinsky and Potsdam 2001):

- (1) a. *Ziya b-ik’i-s.*
cow.III.ABS III-go-PST.EVID
‘The cow left.’
b. *Eniy-ā ziya b-išer-si.*
mother-ERG cow.III.ABS III-feed-PST.EVID
‘Mother fed the cow.’

In morphologically ergative languages, an unmarked case (absolutive) is typically used for S and O, whereas a marked case (ergative) is used for A. The verb often agrees with the argument in the unmarked case.²

In very few of these languages, the ergative pattern is also attested in clause combining. In Dyirbal (Pama-Nyungan, Dixon 1972, 1994), for example, the argument that is omitted in the second conjunct of a coordination is S or O, rather than S or A:

- (2) a. *Nguma banaga-n’u.*
father return-NONFUT
‘Father returned.’
b. *Nguma yabu-ngu bura-n.*
father mother-ERG see-NONFUT
‘Mother saw father.’
c. *Nguma yabu-ngu bura-n banaga-n’u.*
father mother-ERG see-NONFUT return-NONFUT
‘Mother saw father and he returned.’

- d. *Nguma banaga-nʷu yabu-ngu bura-n.*
father return-NONFUT mother-ERG see-NONFUT
'Father returned and mother saw him.'

In (2c), S is omitted, getting its interpretation from O in the first conjunct. In (2d), O is left out, being coreferent with S in the first conjunct. The translations show that this is impossible in languages like English, as all arguments are obligatorily overt. In practically all languages, an argument in the second conjunct is generally omitted if it is in S- or A-function, that is, the nominative, and it can only receive its interpretation from S or A in the first conjunct. These languages are called syntactically accusative, whereas languages like Dyirbal are called syntactically ergative. The syntax of the latter operates on an S/O-pivot, which means that it treats S and O as one category in clause combining. This suggests that O is structurally higher than A, which means that the syntax of Dyirbal and a few other morphologically ergative languages fundamentally differs from the rest of the world's languages.

In this paper I will show that the syntax of languages like Dyirbal is not that deviant at all. Syntactically ergative constructions are also found in languages like Balinese, which is not morphologically ergative. I will argue that Balinese syntax has certain nonconfigurational properties and that what looks like a syntactically ergative construction is not real syntactic ergativity: it represents discourse prominence objects. Interestingly, languages like Dyirbal, too, display properties which are typical of nonconfigurational languages. I will propose to analyze Dyirbal as a language with pronominal arguments, concluding that syntactically ergative constructions are in fact instances of discourse ergativity.

In Section 2, I will give a brief overview of previous attempts to explain syntactic ergativity. Section 3 shows that Balinese has constructions similar to the syntactically ergative constructions in Dyirbal. Section 4 deals with nonconfigurational properties of both Balinese and Dyirbal. In Section 5, I will present my analysis of these languages and show how syntactic ergativity can be explained in terms of discourse ergativity. Section 6 concludes the paper.

2. Previous analyses

If one assumes that only the structurally highest argument of the second conjunct can be phonologically empty, the syntax of languages like Dyirbal must be fundamentally different from the syntax of languages like English. It is suggested that in English, S and A end up in a structurally higher position than O, whereas in Dyirbal, S and O are higher than A. Various researchers have been addressing this problem since the seventies. Marantz (1984), for example, argues that in a deep ergative language like Dyirbal, theta-roles are reversed: the internal role is assigned

to the specifier of V, whereas the external role is assigned to its complement. This would result in the structure in (3):

- (3) Marantz (1984)
 [o [V A]]

It is not difficult to see that this account runs into problems if binding asymmetries are to be explained in terms of c-command. Although the syntax of Dyirbal is one of the most deeply ergative in the world, it does not have reflexives in A-function being bound by an antecedent in O-function (see Section 4). Probably, in no language is the equivalent of **Himself washes John*, with *himself* binding *John*, grammatical (Dixon 1994: 139).

Murasugi (1992) offers an alternative analysis which accounts for both syntactic ergativity and binding asymmetries. She assumes that base-generation of O and A is similar in all languages, with O in the complement and A in the specifier of V. This partly explains why reflexive binding is the same cross-linguistically, although more needs to be said about it if conditions on binding are to hold after A-movement. Movement in order to check case and phi-features is different in ergative languages. Accusative and ergative case are checked in a TRANSITIVITY projection (TrP), whereas nominative and absolutive case are checked in the structurally higher tense projection (TP):

- (4) Murasugi (1992)
 [Spec [T [Spec [Tr [A [V o]]]]]]
 NOM ACC
 ABS ERG

The advantage of a system like this is that the morphologically marked cases are grouped together in the Tr-head and that the unmarked cases can be considered as one class, possibly representing absence of case. A major disadvantage is that all languages with ergative case marking are predicted to be syntactically ergative as well, because O always moves to the highest projection. This clearly is much too strong a prediction, as most morphologically ergative languages are syntactically accusative.

Bobaljik (1993) assumes that both accusative and absolutive case are checked in Agr2P, whereas nominative and ergative case are checked in the higher Agr1P. This analysis prevents O from ever being higher than A, so it excludes the possibility of syntactic ergativity:

- (5) Bobaljik (1993)
 [Spec [Agr1 [Spec [Agr2 [A [V o]]]]]]
 NOM ACC
 ERG ABS

In this analysis, morphologically marked and unmarked cases are mixed up. My proposal will be compatible with Bobaljik’s analysis, but I will argue that the locus

of ergative/absolute is outside Agr1P. With Bobaljik, I assume that syntactic ergativity does not exist. In the next section I will therefore investigate ‘syntactically ergative’ constructions in Balinese, a language which cannot be taken to be morphologically ergative.

3. Syntactic ergativity in Balinese

Balinese (Western Malayo-Polynesian) is a language without overt case and agreement. Verbs come in two forms: bare forms, which trigger OVA order (6a), and forms with a nasal prefix (N-V), which surface in AVO-constructions (6b) (Artawa and Blake 1997, Artawa 1998, Wechsler and Arka 1998):³

- (6) a. *Nyoman lempag tiang.*
 Nyoman hit I
 ‘I hit Nyoman.’
- b. *Tiang ng-lempag Nyoman.*
 I N-hit Nyoman
 ‘I hit Nyoman.’

Both constructions can be used in clause combining operations. The preverbal constituent turns out to be the structurally highest argument in the clause, which can function as a pivot. When the first conjunct of a coordination is an OVA-construction like (6a), the omitted argument in the second conjunct will be coreferent with O (7a). When an AVO-construction like (6b) is the first conjunct, however, the omitted argument will be coreferent with A (7b):

- (7) a. *Ia opak tiang lantas ng-eling.*
 3SG scold I then N-cry
 ‘I scolded her/him, then (s)he cried.’
- b. *Tiang ng-opak ia lantas ng-eling.*
 I N-scold 3SG then N-cry
 ‘I scolded her/him and then cried.’

These data show that the syntax of languages like Balinese is hybrid: bare verbs yield syntactically ergative constructions, whereas verbs with a nasal prefix yield syntactic accusativity. Additional evidence comes from control and raising: O is the argument that is controlled (8b) or raised (10) in constructions with an embedded bare V. In constructions with an embedded N-V, A is controlled (8c) or raised (11). Naturally, S is the controlled (8a) or raised (9) argument when the embedded predicate is intransitive:⁴

- (8) a. *Tiang edot teka.*
 I want come
 ‘I want to come.’

- b. *Tiang edot* [*periksa dokter*].
I want examine doctor
‘I want to be examined by a doctor.’
- c. *Tiang edot* [*meriksa dokter*].
I want N.examine doctor
‘I want to examine a doctor.’
- (9) a. *Ngenah ia mobog*.
seem 3 lie
‘It seems that (s)he is lying.’
- b. *Ia ngenah mobog*.
‘(S)he seems to be lying.’
- (10) a. *Ngenah sajan* [*kapelihan-ne engkebang ci*].
seem much mistake-3POSS hide 2
- b. *Kapelihan-ne ngenah sajan* [*engkebang ci*].
mistake-3POSS seem much hide 2
- c. [?]**Ci ngenah sajan* [*kapelihan-ne engkebang*].
2 seem much mistake-3POSS hide
‘It is very apparent that you are hiding his/her wrongdoing.’
- (11) a. *Ngenah sajan* [*ci ng-engkebang kapelihan-ne*].
seem much 2 N-hide mistake-3POSS
- b. [?]**Kapelihan-ne ngenah sajan* [*ci ng-engkebang*].
mistake-3POSS seem much 2 N-hide
- c. *Ci ngenah sajan* [*ngengkebang kapelihan-ne*].
2 seem much N-hide mistake-3POSS
‘It is very apparent that you are hiding his/her wrongdoing.’

In the next section I will argue that apart from the syntactically ergative constructions, Balinese resembles Dyirbal in having properties which are also found in nonconfigurational languages.

4. Nonconfigurational properties in Balinese and Dyirbal

In many languages, all verbal arguments are cross-referenced by clitics or affixes on the verb. These languages are called polysynthetic or pronominal argument (PA) languages (Baker 1990, 1996, 2002, to appear; Jelinek 1984, to appear). The main characteristics are rich agreement, free constituent order and the possibility of dropping NPs.⁵ These are explained by the nature of the agreement on the verb: the affixes (or clitics) are like pronominal arguments which are in argument positions. Outside the argument structure, they can but need not be doubled by NPs which are clitic left-dislocated. This means that a verbal complex alone can function as a complete sentence and that NPs are only there to establish new referents or to avoid ambiguity. The real arguments are in fixed positions attached to the main predicate,

so they cannot be separated from the predicate by adverbials.

The idea of analyzing Balinese and Dyirbal as languages with pronominal arguments is a controversial one: neither one of them has overt agreement on the verb. However, if we are prepared to assume null clitics or affixes, which are independently argued for by Baker (2001:5–7, 2002), a number of striking similarities between Balinese/Dyirbal and languages with pronominal arguments are explained.⁶

To begin with, Dyirbal has a remarkably flexible word order, suggesting that NPs are adjuncts, like in polysynthetic languages. They are frequently left out, which yields an arbitrary interpretation in many cases. This is only to be expected if there is no overt agreement-affix or clitic telling you what the phi-features of a certain argument are. If NPs are indeed in adjunct positions, we can explain the absence of reflexive/reciprocal pronouns: being in adjunct position, they could never be bound by their corresponding (empty) pronominal affix/clitic. Instead, the verb carries a reflexive/reciprocal affix which functions as a detransitivizer:

- (12) a. *Bala yugu bangul yara-ngu buyban.*
 IV stick I.ERG man-ERG hide
 ‘The man hides the stick.’
 b. *Bayi yara buyba-yiri-nu.*
 I man hide-REFL-T
 ‘The man hides himself.’

Nouns in Dyirbal are normally accompanied by a noun classifier (*bala* and *bangul* in (12a), *bayi* in (12b)). This is not a determiner, but an element indicating to which class (masculine, feminine, inanimate) the noun belongs. In a polysynthetic or PA-language, all NPs are necessarily referential because they are clitic left-dislocated. Lexically quantified NPs yielding a nonreferential interpretation do not exist. In Dyirbal, no quantifiers are found, nor does the language possess (in)definite articles. This can be a consequence of the fact that NPs in Dyirbal bind argumental pronouns.

Turning to Balinese, we can see that word order is rather strict in this language. The verb and the argument it precedes are almost inseparable, only the argument which precedes the verb can also be postverbal.⁷ Interestingly, Balinese has definiteness markers. Absence of such a marker seems to express indefiniteness, but this is only possible in the postverbal NP:⁸

- (13) a. *I Wayan gugut cicing/*cicinge ento.*
 ART Wayan bite dog /dog that
 ‘A dog/*that dog bit Wayan.’
 b. *Tiuk-e jemak!*
 knife-DEF take
 ‘Take the knife!’
 c. *Nyemak tiuk!*
 N-take knife
 ‘Take a knife!’

The preverbal NP obviously cannot be indefinite, and a highly topical NP is probably not allowed to appear postverbally. We may conclude from this that the preverbal argument has to be referential, as it can never be indefinite.⁹ Although Balinese seems to differ from Dyirbal in many ways, the preverbal argument clearly behaves like a left-dislocated NP. The syntax of reflexive elements confirms this. The reflexive anaphor *awak* ‘self’ may refer to different persons (14a,b). However, this is only possible when it appears as the postverbal argument. In constructions with bare V, where the object is forced in preverbal position, *awak* has to be accompanied by a possessive pronoun (14c,d).

- (14) a. *Cai nebek awak.*
 2SG N-stab self
 ‘You stabbed yourself.’
 b. *Ia ngantung awak.*
 3SG N-hang self
 ‘S/he hanged herself/himself.’
 c. **Awak pelihang cai.*
 self blame 2SG
 ‘You blamed yourself.’
 d. *Awak cai-ne pelihang cai.*
 self 2SG-POSS blame 2SG
 ‘You blamed yourself.’

If we assume that the preverbal anaphor is in dislocated position, we can account for this. Because it has to be fully referential, a possessive pronoun has to be added. Note that, like in Dyirbal, reflexives in A-function with an O-antecedent do not seem to exist in Balinese either. This suggests that A is always base-generated in a higher position than O.

5. Towards an analysis

Balinese: O-topic versus A-topic

I propose that Balinese syntax shares properties with polysynthetic/PA-languages, although only partly. One argument, the preverbal one, is in clitic left-dislocated position. In sentences with bare V, this argument is O. In sentences with N-V, A is the dislocated argument. The preverbal argument has to be referential because it binds an empty pronominal argument. This implies base-generation of an empty pronoun, either in O-function in the complement or in A-function in the specifier of the verb:

- (15) a. A [V Ø]
 b. Ø [V o]

Two different analyses are possible. Jelinek assumes that pronominal affixes/clitics are arguments, which are affixed or cliticized. In Baker's approach, the arguments themselves are empty but they are licensed by agreement-affixes on the verb. For the present proposal, it is not important to make a choice between these two ideas, because we do not see any morphological reflex of either the argument or the affix.

In the structure with bare V, an NP is merged as an adjunct to the structure, from where it binds the empty O-argument. In structures with N-V, an NP is merged in a similar way, binding an empty A-argument. To obtain the attested main word orders, we have to assume that the verb, together with the cliticized empty argument (or the verb alone, if the argument is represented by an agreement affix), moves to a higher projection. I take this to be a topic-projection (TopP), to which the preverbal NP is adjoined. The presence or absence of the nasal prefix might be a reflex of two kinds of Top (A-Top and O-Top). The syntactic trees in (16) show how the two main word orders can be derived. Empty arguments have cliticized to the verb, so an approach along the lines of Jelinek's theory is represented here.

Dyirbal: O more topical than A

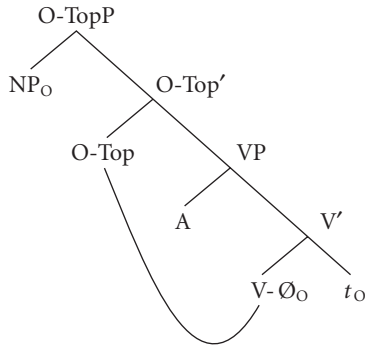
Let us now turn to a possible analysis for languages like Dyirbal. Both arguments may be base-generated as empty elements which attach to the verb, or which are cross-referenced by (empty) agreement-affixes. These empty elements are doubled by NPs which are adjoined to topic/focus projections. Because virtually every constituent order is possible, and new data are extremely difficult to get, we cannot make any prediction on the ordering of these two projections. But clause combining suggests that the main topic is the highest element in the second conjunct or the embedded sentence. The question is why intransitive subjects and direct objects (S and O) tend to be more topical than transitive subjects (A). Ergative case marking provides an answer to this question. Considering the fact that only third person arguments follow the ergative system, the person/animacy hierarchy proposed by Silverstein (1976) lies at the basis of the answer. This hierarchy, represented in (17a), is paralleled by a semantic role hierarchy (17b). Cross-linguistically, low animate agents and high animate patients will lead to more morphological marking than high animate agents and low animate patients:

- (17) a. Pronoun 1st/2nd > Pronoun 3rd > Proper Noun 3rd > Human 3rd >
 Animate 3rd > Inanimate 3rd
 b. Agent > Patient

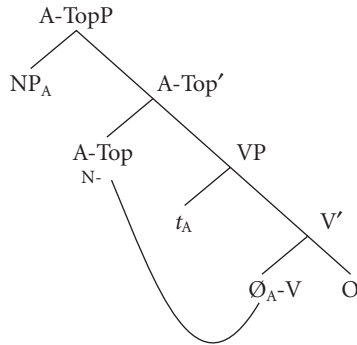
If Dyirbal considers all third person arguments to be low animate, these will naturally be unmarked in O-function, whereas they receive morphological marking in A-function. This is exactly what happens in an ergative pattern (cf. (1)). Clause combining shows that 'syntactic ergativity' is actually based on

(16) Balinese:

a. OVA-order



b. AVO-order



topicality of third person arguments, which are naturally in O-function. As in Balinese, 'syntactic ergativity' is in fact discourse ergativity, because it is based on discourse prominence of the object NP, which is an adjunct.¹⁰ In Dyirbal, and in the closely related Wargamay (Dixon 1981), even first and second person pronouns participate in this behaviour, although their forms display an accusative pattern. This suggests that discourse behaviour is based on grammatical function/semantic role, rather than on formal properties like case marking. However, this is not always the case. In Yidin^y (Dixon 1977), for example, 'syntactically ergative' behaviour is only attested in sentences with nouns, whereas pronouns trigger syntactically accusative behaviour. Du Bois (1987:844) suggests that 1st and 2nd person pronouns are neuter with respect to information structure because they are always GIVEN. Explaining these different types of behaviour lies outside the scope of this paper.

6. Conclusions and perspectives

In this paper I have argued that explaining syntactic ergativity as attested in Dyrbal is problematic if the ergative principle is considered to be deeply rooted in syntax. However, data from Balinese illustrate that the same phenomenon occurs in languages without overt case and agreement. The preverbal NP in Balinese seems to be clitic left-dislocated, just like all NPs in Dyrbal. If we assume that these NPs are doubles of empty argumental elements, which prevent any NP from appearing in argument position, we can account for properties found in both languages which also occur in polysynthetic/pronominal argument languages. The syntactic configuration reflects discourse structure, rather than argument structure. If objects tend to be the main topic, 'syntactically ergative' constructions arise when clauses are combined. This happens in every Dyrbal clause, but it is optional in Balinese. As they are based on discourse properties, these constructions are in fact instances of discourse ergativity.

The most interesting idea that follows from this proposal is that the ergative case pattern only emerges in adjunct positions. This could be an explanation for the relative scarcity of ergative case marking: many languages do not have pronominal arguments so they do not need to allow any argument-doubles in adjunct positions at all. The ergative pattern does not occur in these languages. On the other hand it implies that many, and maybe all ergative languages have pronominal arguments. The rich agreement, relatively free ordering of constituents and the absence of determiners and quantifiers found in many of these languages indeed suggests that this is true.

Contrary to the theories developed by Jelinek and Baker, my proposal allows languages to have one NP in argument position and one pronominal argument which is optionally doubled by an adjunct-NP. More research on languages with a system of voice marking similar to the one in Balinese will be needed to investigate this possibility.

Many languages may allow for 'syntactically ergative' constructions, like Balinese does, but only few require them in every instance of clause combining, as seems to be the case in Dyrbal. Why this should be so remains unclear.

Notes

* I would like to thank Norbert Corver, Chris Reintges, an anonymous reviewer and Peter Austin for reading an earlier version of this paper and for providing useful comments.

1. In the literature on ergativity it is common to use the labels S, O and A rather than the terms 'subject' and 'object'. I will use the same labels, even when referring to word order.

2. I consider nominatives (S or A) and absolutes (S or O) to be caseless, because they do not carry any case affix in most languages. They will be omitted in the glosses from now on.
3. In Austronesian linguistics, the occurrence of these two types of predicate is regarded as a voice alternation (objective/agentive voice). The cited authors do not consider the Balinese OVA-sentences to be passive constructions: the verb is not marked for passive and the A-argument is not oblique, like in 'real' passive constructions, which also occur in Balinese.
4. S occurs with either a bare or a nasal prefix-verb. With a few exceptions, bare intransitives look like unaccusative predicates (*teka* 'come', *ulung* 'fall'), and nasalized in transitives may represent unergatives (*ng-langi* 'swim', *ng-igel* 'dance') (Artawa & Blake 1997).
5. Note that agreement is a confusing term in the literature on nonconfigurationality. Baker considers the affixes/clitics to be instances of agreement, but Jelinek assumes that these are the actual arguments. I will briefly touch on it in Section 5.
6. Baker argues that agreement can sometimes be optional in non-polysynthetic languages, whereas in polysynthetic languages, absence of an agreement marker implies zero agreement, rather than total absence of agreement. This is because of the argumental status of the agreement affixes. Although he assumes that zero agreement exists in languages with agreeing forms, he does not say anything about languages without any overtly agreeing form.
7. Whereas Artawa (1998) and Artawa and Blake (1999) claim that adverbs cannot appear between the verb and the argument it directly precedes, Wechsler and Arka (1998) contains examples which contradict this. I will leave the issue open as it is not important for the present proposal.
8. With the term 'postverbal argument' I am only referring to the argument that obligatorily follows the verb, excluding the preverbal argument which optionally appears in sentence-final position.
9. Note that non-referential *wh*-elements do appear preverbally, as is the case in true polysynthetic languages as well. In stead of binding a pronominal argument, these elements are arguments which are moved out of their base-position. The sentences I have at my disposal do not contradict my claim, as they contain no real quantifiers like 'no', 'most' and 'every' which render an NP non-referential. Collecting more data will be crucial in order to make the claim more stable.
10. Note that I am using the term 'discourse ergativity' in a different way than, for instance, Du Bois (1987) and Wouk (1996). Du Bois argues that discourse is organized ergatively in all languages, and in some of them this is reflected in the morphology of case and agreement (morphological ergativity). Wouk uses the term to refer to languages like Balinese, in which the objective voice is morphologically unmarked and statistically more frequent.

References

- Artawa, I. K. (1998) 'Ergativity and Balinese Syntax'. *Linguistic Studies of Indonesian and Other Languages in Indonesia (NUSA)* 42–44.
- Artawa, I. K. and Blake, B. J. (1997) 'Patient Primacy in Balinese'. *Studies in Language* 21, 483–408.
- Baker, M. C. (1990) 'Some Subject/Object Non-asymmetries in Mohawk and their Theoretical Implications'. *Natural Language & Linguistic Theory* 9, 537–576.
- Baker, M. C. (1996) *The Polysynthesis Parameter*. Oxford University Press, Oxford.
- Baker, M. C. (2002) 'Agreement and Dislocation: New Evidence from Mapudungun'. Paper presented at NELS 33, Cambridge, MA, November 8.

- Baker, M. C. (to appear) 'On Zero Agreement and Polysynthesis'. Ms., to appear in the proceedings of 'The Role of Agreement in Argument Structure', workshop held at Utrecht University on August 31/September 1, 2001. Also available as Baker (2002) at <http://ling.rutgers.edu/people/faculty/baker.html>.
- Bobaljik, J. D. (1993) 'On Ergativity and Ergative Unergatives'. In C. Phillips, ed., *MIT working papers in linguistics 22: Papers on case and agreement II*. MIT, Cambridge, MA, 45–88.
- Dixon, R. M. W. (1972) *The Dyirbal Language of North Queensland*. Cambridge University Press, Cambridge.
- Dixon, R. M. W. (1977) *A Grammar of Yidin'*. Cambridge University Press, Cambridge.
- Dixon, R. M. W. (1981) 'Wargamay'. In R. M. W. Dixon and B. J. Blake, eds., *Handbook of Australian Languages: Volume II*. Benjamins, Amsterdam, 1–146.
- Dixon, R. M. W. (1994) *Ergativity*. Cambridge University Press, Cambridge.
- Du Bois, J. W. (1987) 'The discourse basis of ergativity'. *Language* 63, 805–855.
- Jelinek, E. (1984) 'Empty Categories, Case and Configurationality'. *Natural Language & Linguistic Theory* 2, 39–76.
- Jelinek, E. (to appear) 'The Pronominal Argument Parameter'. Ms., to appear in the proceedings of 'The Role of Agreement in Argument Structure', workshop held at Utrecht University on August 31/September 1, 2001.
- Marantz, A. (1984) *On the Nature of Grammatical Relations*. MIT Press, Cambridge, MA.
- Murasugi, K. (1992) *Crossing and Nested Paths; NP Movement in Accusative and Ergative Languages*. Diss. MIT, Cambridge, MA.
- Polinsky, M. and Potsdam, E. (2001) 'Long-distance Agreement and Topic in Tsez'. *Natural Language & Linguistic Theory* 19, 583–646.
- Silverstein, M. (1976) 'Hierarchy of Features and Ergativity'. R. M. W. Dixon, ed., *Grammatical categories in Australian languages*. Australian Institute of Aboriginal Studies, Canberra, 112–171.
- Wechsler, S. and Arka, I. W. (1998) 'Syntactic Ergativity in Balinese'. *Natural Language & Linguistic Theory* 16, 387–441.
- Wouk, F. (1996) 'Voice in Indonesian Discourse and Its Implications for Theories of the Development of Ergativity'. *Studies in Language* 20, 361–410.