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When subjects frame the clause: discontinuous noun phrases as an iconic strategy for markingthetic constructions

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Abstract: This article builds on observations from several research areas which hitherto have been pursued relatively independently of one another, to argue that discontinuous nominal expressions are one of the attested strategies for marking a subtype of sentence focus constructions known as thetic constructions. This analysis can be applied to the type of discontinuity termed extraposition from subject NP/DP in languages with otherwise strongly configurational nominal expressions such as English. For these constructions, however, it cannot be ruled out that weight/length is an alternative or additional motivation. Evidence from several Australian languages, where discontinuous subjects usually just involve a semantic head and a modifier, can be used to show that this strategy is attested even where weight is not a plausible factor. Like other construction types that are associated with theticity crosslinguistically, discontinuous nominal expressions are saliently distinct from topic-comment (“categorical”) constructions and thus obey the principle of detopicalization identified by Lambrecht, Knud. 2000. When subjects behave like objects: An analysis of the merging of S and O in sentence-focus constructions across languages. *Studies in Language* 24(3). 611–682. The findings support the hypothesis that the principle of iconicity of distance, which ensures contiguity of the subconstituents of a phrase under most circumstances, will only be overridden if another principle motivates this violation. Such competing principles include highlighting a contrastive modifier and the distribution of weight, both discussed in previous literature. Here it will be argued that detopicalization can be added to this list since discontinuity prevents the assignment of topic status to the subject expression. Moreover, a construction where a discontinuous subject frames the entire clause is itself iconically motivated by the principle of informational integration which results in the unitary, non-bipartite nature of the construction generally associated with theticity.

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1 Introduction

Recent research on discontinuity of nominal expressions has brought to light increasing evidence that such discontinuous structures do not occur randomly in discourse.¹ Rather, speakers prefer contiguous phrasal constituents except in special circumstances. This is true even for languages which are widely held to exhibit a great deal of freedom of word order, such as many Australian languages: discourse studies have found discontinuous nominal expressions to be very rare in discourse (Croft 2007: 6; McGregor 1997: 92; Schultze-Berndt and Simard 2012: 1032), and this has been confirmed by a recent survey of comments on their frequency in a range of reference grammars of Australian languages (Louagie 2020: 158). Thus, speakers generally observe the principle of iconicity of distance, for nominal expressions as well as more generally.

The principle of iconicity of distance, first formulated by Behaghel (1932: 34–35), states that linguistic entities which belong together semantically (in the case of a nominal expression, because they jointly identify a single referent) will normally – i.e., most frequently – be found in immediate contiguity (e.g., Givón 2001: 281; Greenberg 1966 [1963]: 103; Haiman 1983: 782; Newmeyer 1992: 761–762; Rijkhoff 2002: 260). It is precisely this iconic principle that – in most cases – allows us to identify constituents without too much difficulty. In the domain of nominal expressions, it applies to relatively simple phrases such as combinations of entity noun and modifying property expression (e.g., *Monica bought a new bike*) as well as to more complex nominal expressions involving relative clauses or adpositional phrases functioning as complements or as modifiers, as in the contiguous Example (1a) compared with non-contiguous (1b).

¹ In line with Louagie and Reinöhl (Introduction to this special issue), the term *nominal expression* will be employed in this paper in a discourse-functional sense: a nominal expression functions as a unit in establishing or tracking reference or functioning as a predicate, regardless of its contiguous or non-contiguous structure. However, this definition excludes co-referential expressions distributed across different (prosodically clearly delineated) information units, e.g., when one nominal expression is linked to a coreferential expression as a dislocated topic or as an afterthought (on afterthoughts see also Section 4). These are standardly regarded as distinct (albeit coreferential) nominal expressions, can each be replaced by a pronoun, and in more rigidly “configurational” languages can be easily seen to require all obligatory components (e.g., determiners) characteristic of fully independent nominal expressions (cf. the discussion of (26) in Section 4).

- (1) a. *I gave [**a puppy [with cute floppy ears]**] to Mary yesterday.*
 b. *I gave Mary **a puppy** yesterday [**with cute floppy ears**].*
 (Takami 1999: 38)

While the term iconicity has been invoked in linguistics in numerous, and sometimes controversial ways (see e.g., Newmeyer 1992), iconicity of distance as just defined, the only type of iconicity relevant for this article, is widely accepted as a universal principle underlying language structure. This does not mean that deviations from it do not occur. However, if the principle has linguistic and cognitive reality, it is expected that such deviations will be due to a competing motivation that has the power to override it. Two competing principles that have been invoked to explain the discontinuity of the modifier in (1b) from the modified noun are the principle of ordering less important before more important information (Takami 1999) and the principle of presenting longer (“heavier”) (sub)constituents last (or first, depending on the language type). These principles are not mutually exclusive, and both have been argued to help sentence processing (see Section 3 for some discussion and references regarding the “heaviness” of modifiers in extraposition structures).

Another potential explanation for deviations from the principle of iconicity of distance is the exploitation of the corresponding structures for specific, less frequent information structure constellations. For example, discontinuous nominal expressions, in languages where they are permitted, are frequently associated with the existence of one contrastive and one given element in an argument focus construction, as illustrated for Serbo-Croatian in (2) and for the Australian language Wardaman in (3) (see also, e.g., Dahlstrom 1987; Kazenin 2009; Louagie and Reinöhl 2022; Reinholtz 1999; Rijkhoff 2002: 258; Schultze-Berndt and Simard 2012; Siewierska 1984; Skopeteas et al. 2020: 19–21).

- (2) Serbo-Croatian (Slavic, Indo-European)
Nova *je* *prodao* **kola.**²
 new is sold car
 ‘He sold the NEW car’
 (Bošković 2009: 188)

² Abbreviations for grammatical categories in glosses follow the Leipzig Glossing rules, with the exception of the following: EGO.EVID = speaker epistemic authority; EMPH = emphatic clitic; EXPL = expletive subject; NAR = narrative suffix; NCL = noun class; SM = subject marker; STAT = stative. The sign ‘>’ in bound pronominal forms indicates agent acting on patient. Capitalization in examples marks main accents.

- (3) Wardaman (unclassified)

Oni majad~majad yirr-men-di-ya **mayin.**
 only PL~NCL:big 1NSG.EXCL-get-PST-NAR vegetable.food
 ‘We only got BIG tubers.’
 (Merlan 1994: 241)

Placing only the element which contributes the contrastive interpretation (the modifiers in the examples) in a focus position signals the accessible nature of the remaining elements (the entity expressions in the examples), similarly to what is achieved by destressing in languages like English which do not allow discontinuous constituents of this type. The association of discontinuity with a specific information structure constellation can thus be governed by language-specific rules. The main motivation for discontinuity, in this case, can be seen not so much in the ease of processing but in signaling a specific, infrequent function by an infrequent structure.

In this article, it will be argued that the occurrence of discontinuous nominal expressions, specifically of subjects in intransitive clauses, can also be motivated by discourse requirements that are quite different from the ones illustrated in (2) and (3): discontinuity can serve as one of the strategies for marking “all-new” utterances of the type described as *thetic* (see Section 2.1). An initial example from Jaminjung-Ngaliwurrurru is given in (4).³

- (4) Jaminjung-Ngaliwurrurru (Mirndi; Australia)

Jajaman ga-ram **garrij!**
 wind 3SG-come:PRS cold
 ‘A cold wind is coming!’
 (MW, ES96_N02_Ngali.005)

This function of discontinuity has scarcely been noted in the literature. As will be argued in more detail in the following sections, the discontinuous structure is motivated in that it prevents the assignment of a topic-comment partition to the clause and thereby signals a deviation from the more usual configuration where the subject is also a topic. This motivation for discontinuity, moreover, in its own right and at a higher level of hierarchical structure, observes the principle of iconicity of distance, in that it reflects the monolithic, non-bipartite nature of *thetic* clauses.

The discussion in this article is grounded in a construction-based framework, where discontinuous nominal expressions and their contiguous counterparts can be analyzed as distinct constructions; in other words, the differences in form are directly mapped onto differences in function (Croft 2001: 191; McGregor 1997), in

³ Examples without citation are from the author’s own fieldwork; here the reference represents speakers’ initials and the file and line number under which these can be found in a corpus archived with the DoBeS archive (Schultze-Berndt et al. 2017).

this case, differences in information structure. This means that speakers choose between contrasting information packaging constructions – each with specific syntactic and prosodic characteristics – to fulfill specific communicative needs.

The article is structured as follows: Section 2 outlines the relevant assumptions about basic categories of information structure, with a focus on the distinction between a subtype of sentence focus constructions known as *thetic* on the one hand, and *topic-comment* or *categorical* constructions on the other (Section 2.1). Previous crosslinguistic research on the recurring syntactic correlates of this distinction will also be reviewed in this section (Section 2.2). Sections 3 and 4 each present a case study: Section 3 discusses discontinuous expressions in English known as *extraposition from subject*, which have received a range of conflicting analyses in the literature. It will be argued that these occur in discourse contexts that support their analysis as *thetic* constructions, and that discontinuity facilitates this interpretation in preventing the assignment of a *topic-comment* structure. In Section 4, evidence is provided for the use of discontinuous nominal expressions consisting of an entity nominal and a property nominal as a strategy for marking *theticity* in several Australian languages.⁴ Section 5 concludes the article.

A wider crosslinguistic study on the topic is currently hampered by the difficulty of accessing relevant data, due to the scarcity of relevant expressions in discourse, the limited availability of examples in reference grammars, and the lack of discourse context provided in many grammatical descriptions. The limited, and somewhat heterogeneous, empirical evidence discussed in this article is presented in the hope that, together with the plausibility of the discontinuity strategy as a correlate of *detopicalization* and thereby of *theticity*, it will inspire further research on this elusive phenomenon in other languages.

2 Thetic constructions in crosslinguistic perspective

2.1 Theticity defined

The argument presented in this article crucially relies on the assumption that information structure is a universal feature governing linguistic structure, that it is encoded in grammatical constructions, and that there are crosslinguistically

⁴ The two case studies, by necessity, are not fully comparable in that they concern typologically different languages and compare discontinuity of entire modifying phrases/clauses (for English) with discontinuity of single word adjectival modifiers (for the Australian languages). Moreover, discontinuity in English is easily recognized and widely discussed in the literature, whereas the distinction of discontinuity from the case of multiple nominal expressions in less configurational languages is less straightforward and will require some discussion (Section 4).

recurrent (though not necessarily universal) construction types encoding differences in information structure. None of these assumptions is entirely uncontroversial. A full discussion of all intricacies and debates surrounding information structure is well beyond the scope of this article, but the most relevant definitions and assumptions will be outlined in this section.

One notion, assumed across different approaches, is a partition of (a subset of) clauses into a (sentence) topic and a comment, where “topic is the entity that the speaker identifies, about which information ... is then given” (Krifka and Musan 2012: 27). Metaphorically speaking, the topic specifies an address (or “filing card”) in the common ground between speaker and addressee to which the information in the remainder of the utterance is to be added (e.g., Erteschik-Shir 1997: 17; Jacobs 2001; Krifka and Musan 2012: 27; Reinhart 1981). More specific criteria for topic status which will be assumed here are informational separation from the remainder of a clause in terms of prosodic phrasing (Jacobs 2001: 645) and, as a correlate, position at the left or right edge of a clause (e.g., Götze et al. 2007: 163–168; Li and Thompson 1976: 465; Prince 1997). Topics in this sense can be stacked, and the definition includes locative and temporal expressions (frame-setting topics), as well as individual-denoting expressions (aboutness topics). As argued by Klein (2008), most utterances are restricted in their truthful or felicitous application to a topic situation (termed “stage topic” by Erteschik-Shir 1997: 26–28), i.e., they encode a proposition that is true at a particular time and place for particular individuals, aspects of which can be made explicit in a sentence topic. The term topic will be employed here strictly in the sense of an overt sentence topic, rather than a topic situation. The subtype of topic relevant for this article is an aboutness topic corresponding to a core argument.

A topic-less clause only consists of a comment, which may or may not be a predication on an implicit referent (in the latter case, strictly speaking the term *comment* is misleading and *rheme* might be a more appropriate notion). The comment or rhematic part of an utterance either coincides with the focus of this utterance, or is further divided into a focus and background (Krifka and Musan 2012: 28). Again in line with much of the recent literature, the definition of focus assumed here is as the part of an utterance which fills a variable in, or replaces part of, the presupposition in a pragmatically structured proposition (Dik 1997: 327–338; Lambrecht 1994: 213). Alternative ways of capturing essentially the same insight are to describe the focused part of a sentence as the answer to an explicit or (more often) implicit question under discussion (Riester et al. 2018; Roberts 2012), and thus as evoking alternatives to this answer (see e.g., Dik 1997: 328; Krifka and Musan 2012: 10–11). This notion of focus is strictly distinct from the notion of information status (e.g., Lambrecht 1994: 109), i.e., the speaker’s assumptions

about the degree of activation versus “newness” of a referent in the mind of the addressee.

A special case of information structure is presented by sentence-focus utterances such as (5).

- (5) *There’s a knock on the door!*

In a sentence-focus utterance, the entire proposition is the variable, and the alternatives are alternative propositions, only constrained by plausibility in the extra-linguistic context.⁵ The discourse conditions for sentence focus are only met if the utterance does not evoke any pragmatic presupposition (Lambrecht 1994: 233), typically in an out-of-the-blue, all-new statement as in (5), or as a response to a question ‘What is happening?’. A sentence focus construction can be preceded by a frame-setting topic that makes the topic situation explicit; compare (5) and (6).

- (6) *At 8 o’clock there was a knock on the door!*

Thetic constructions are considered here as a subtype of sentence focus construction characterized by a maximal degree of informational integration, as further explained below. Theticity is thus understood as referring to a range of formally defined (language-specific) construction types, not to a ‘logical’ utterance type, despite the historical origin of the term in a more philosophical tradition (for discussion, see Kuroda 1972; Sasse 1987). Both the English example in (5) and the Hungarian example in (7) are typical sentence focus utterances of the thetic type, most felicitous as an answer to a general question such as ‘What’s going on?’

- (7) Hungarian (Uralic)
Jönnek a szomszédok.
 come:PRS DEF neighbor:PL
 ‘The NEIGHBORS are coming!’
 (Sasse 2006: 282)

Theticity in (7) is signaled by verb-subject (VS) constituent order, whereas in its English translation it is signaled by subject accenting (as indicated by capitalization), and in (5) it is signaled by a combination of VS order and the insertion of an expletive element (*there*). All of these marking strategies have been shown to be

⁵ It does not follow that the same discourse context – e.g., a description of a previously unseen scene – will always and under all circumstances trigger a sentence focus construction. Speakers can use a topic-comment structure instead of a sentence-focus structure and expect the hearer to accommodate the topic, i.e., treat it as if it was accessible (see e.g., Lambrecht 1994: 195–198 on the process of accommodation), and languages can vary in the relative frequency of different constructional strategies in discourse (Sasse 2006: 300).

crosslinguistically recurrent formal manifestations of theticity (see Section 2.2 for further discussion and references).

Thetic constructions contrast with categorical constructions which have a topic-comment structure (with an aboutness topic corresponding to an argument of the predicate, rather than a frame-setting topic). The distinction is explained by Sasse (1995) as follows:

Categorical utterances are said to be bipartite predications, involving a predication base, the entity about which the predication is made, and a predicate, which says something about the predication base. In other words, one of the arguments of the predicate is picked out as a “topic” in the literal sense, namely, an object about which something is asserted. Thetic utterances, on the other hand, are monomial predications (...); no argument is picked out as a predication base; the entire situation, including all of its participants, is asserted as a unitary whole. (Sasse 1995: 4–5)

It does not follow that all constructions fall under either the thetic or categorical type. Narrow focus constructions, for example, fall outside this dichotomy (Sasse 2006: 300; Lambrecht 2000). A less straightforward case is that of clefted “all-new” constructions such as (8), from colloquial spoken French. While these are regarded as thetic by Sasse (1987: 539), Wehr (2000) considers them bipartite structures where a new participant is introduced and serves as a topic within the same sentence. A similar analysis is proposed by (Lambrecht 1988) for syntactic amalgamates of the type *There was a farmer had a dog* in non-standard colloquial varieties of English.

- (8) French (Romance, Indo-European)
- | | | | | | | |
|------------|----------------|----------|-------------|------------|----------------------|--------------|
| <i>Il</i> | <i>y</i> | <i>a</i> | <i>Paul</i> | <i>qui</i> | <i>m'a</i> | <i>chipé</i> |
| 3SG | there | has | [name] | REL | 1SG.OBJ:have:3SG:PRS | chip:PTCP |
| <i>mon</i> | <i>couteau</i> | | | | | |
| 1SG:POSS | knife | | | | | |
- ‘PAUL has chipped my KNIFE’ (lit. ‘There’s PAUL who’s chipped my KNIFE’)
- (Wehr 2000: 261)

Following Wehr (2000), I do not consider (8) as thetic, but unlike Wehr, I consider it as an instance of sentence focus, albeit one with a bipartite structure. Thetic constructions, in contrast, are taken in this article to constitute a non-bipartite, informationally integrated subtype of sentence focus construction, and all claims made here are restricted to thetic constructions.

Typical thetic expressions only have a single argument (the subject); the question of whether transitive clauses can occur in a thetic construction is a matter of debate, as just discussed for (8) (see also Lambrecht 2000: 620–622). For the sake of the argument to be presented here, only intransitive clauses with a lexical subject will be considered;

the presence of a (non-pronominal) subject expression distinguishes thetic utterances from comment-only utterances with an implicit subject/topic.

A note is in order on verbs occurring in thetic constructions. Typical predicates in thetic clauses are predicates of appearance or existence, as will be apparent for both extraposition in English (Section 3) and discontinuous modifiers in thetic clauses in the Australian languages discussed in Section 4. However, other non-agentive predicates can occur in thetic clauses (*My CAR broke down*), as well as predicates encoding an expected activity of the subject referent (as in *The TELEPHONE's ringing*). In line with Sasse (1987: 525–526) and Lambrecht (2000: 623), I do not assume that thetic constructions, crosslinguistically speaking, impose rigid restrictions on the semantics of the predicates that appear in them (which does not rule out that such restrictions could apply in a specific language; I have not been able to systematically test for this in any of the Australian languages discussed in Section 4). Rather, the above types of predicate are recurrent in thetic expressions because they are the most likely to occur in utterances that do not evoke presuppositions in the hearer.

It follows from the above definitions that both existential and presentational clauses are prototypical thetic constructions: while their main function is to introduce a new participant into the discourse, they do not rely on any pragmatic presupposition to be evoked in the hearer, and they tend to involve a semantically non-informative predicate (a predicate of (dis)appearance or existence, or a predicate conveying an event inherently associated with the entity to be introduced, e.g., ‘rain falling’). They also tend to meet the formal criterion of informational integration. Most authors taking a semantic and/or crosslinguistic perspective on existential and presentational clauses agree with this analysis (cf. Bentley and Cruschina 2018; Leonetti 2008: 134; McNally 2011: 1833; Sasse 2006). As argued explicitly by Bentley and Cruschina (2018), a thetic status can be maintained for existential and presentational clauses regardless of whether an implicit “stage topic” – in the sense of Erteschik-Shir (1997: 241) – is assumed as part of their grammatical or semantic structure (see also Babby 1980; Francez 2007; McNally 1998). Indeed the claim about an absence of topics in thetic constructions only relates to overt sentence topics (and more narrowly, aboutness rather than frame-setting topics, as already stated above), and therefore does not rule out either implicit or explicit frame-setting topics. Thus, examples like (6) above are here analyzed as a combination of a frame-setting topic and a thetic construction (see also (30) in Section 4 for an example of this type in Gooniyandi).

Importantly, and in line with a principled distinction between information structure and information status (accessibility), focus is not coextensive with “discourse-new”. While it is often the case that a sentence focus construction introduces a new entity to the discourse world, as in (7) above, the speaker may likewise announce a newly arising event involving a referent that is accessible to

the hearer. A (constructed) example is (9) (with subject accenting), imagined as a conversation between colleagues sharing an office and both sitting at their computers (making the referent of *my computer* accessible to the hearer).

- (9) (*Why are you so upset?*)
 My COMPUTER stopped functioning!

Thetic constructions, thus, cannot be defined in terms of either the inaccessible (“new”) nature of their subjects, or lexical restrictions on their predicate. Rather, in a thetic utterance, the entire construction is in focus, i.e., it can be conceived of as an answer to a question under discussion such as ‘What happened?’, and thus does not have any partition in terms of information structure. The approach taken here (following Lambrecht 1994, 2000 and Sasse 1987, 2006) is that information structure is the *signifié* side of specific grammatical constructions which speakers choose according to the discourse context and the message to be conveyed (though see Belligh [2020] for a recent discussion of the problems of identifying such constructions in practice). In specific languages, such constructions may impose more or less strict restrictions on their fillers (e.g., they may be restricted to indefinite subjects, or unaccusative verbs). For the purposes of this article, the relevant distinctive characteristic of thetic constructions is their non-bipartite structure, as opposed to the bipartite structure of categorical (topic-comment) constructions. This distinction is expected to have crosslinguistically recurrent (though not necessarily identical) manifestations. Jacobs (2001: 646) describes this defining characteristic of constructions lacking a topic-comment structure as informational integration, stating that “the event is described at one fell swoop, without separating reference to an entity from what is said about the entity.” In some frameworks, informational integration is modeled by positing vP-internal subjects for such clauses (Bentley and Cruschina 2018). Thetic constructions, crosslinguistically, are characterized by linguistic (prosodic and/or syntactic) strategies for achieving this informationally integrated nature and for thereby distinguishing them from categorical, topic-comment constructions. Some of these characteristics will be reviewed in the following subsection, before arguing, in the remainder of the article, that discontinuity of nominal expressions should be recognized as one of these strategies.

2.2 Strategies for marking theticity crosslinguistically

Crosslinguistic research on information structure has uncovered a remarkably robust tendency for formally distinguishing thetic constructions from a default predicative construction with a topic-comment structure where the topic is also the subject. Importantly for the argument to be developed here, as well as maintaining

this formal distinction, thetic constructions tend to iconically reflect their monomial, integrated nature. The principle of clear formal distinguishability of thetic and categorical constructions, discussed in several important crosslinguistic investigations of thetic constructions (Kuroda 1992; Lambrecht 1994: 235, 2000; Lambrecht and Polinsky 1998; Sasse 1987, 1995: 4–5, 2006), is termed desubjectivization by Sasse (1987: 534) and detopicalization by Lambrecht (2000), and can be formulated as follows:

Sentence focus marking involves cancellation of those prosodic and/or morphosyntactic subject properties which are associated with the role of subjects as topic expressions in PF [predicate focus] sentences. (Lambrecht 2000: 624)

In contrast, formal overlap (constructional homonymy) of thetic constructions with other constructions – e.g., argument focus constructions – is crosslinguistically frequent (Kuroda 1972; Lambrecht 1994: 235, 2000: 628; Sasse 1987, 1995, 2006: 273–274). A well-known case in point is subject accenting in English, which can signal either sentence focus, or argument focus on the subject (for example, the English translation of (7) could also be uttered as an answer to the question ‘Who is coming?’).

The main construction types that have been identified in crosslinguistic research on thetic constructions (or more broadly on sentence focus constructions, as in Lambrecht 2000) are summarized in Table 1 and illustrated in Examples (11) to (15). A given language may exhibit more than one of these strategies, either coinciding in a single construction (e.g., VS order combined with lack of agreement, as in (13)), or by having multiple constructions. The language-specific choice of construction(s), moreover, partly depends on more general characteristics of the language in question (see further below). It is also relevant to point out here that in coherent discourse, topic-comment clauses with an overt topic constituent may be less frequent than comments on an implicit topic. This does not affect the point that the functional motivation for thetic constructions is to make them maximally different from topic-comment structures with a topical subject. In other words, the nature of the construction makes it impossible, or at least unlikely, for the hearer to assign it a topic-comment structure where the subject is an explicit sentence topic.

Starting with prosody, the presence of a prosodic phrase break between a topic and a comment is a straightforward iconic reflection of a bipartite (topic-comment) structure; consequently one would expect the absence of such a break in all thetic clauses, irrespective of other marking strategies. Subject accenting (illustrated in the English translation of (7) and in (9)) is a crosslinguistic correlate of thetic constructions because it clearly distinguishes clauses marked in this way from topic-comment (predicate focus) structures where the main prosodic prominence falls within the comment (its precise location being determined by language-

Table 1: Frequent structures found in categorical and thetic statements (based on Lambrecht 2000; Lambrecht and Polinsky 1998; Sasse 1987, 2006).

| | Topic-comment (categorical) | Sentence focus (thetic) |
|--|---|---|
| Prosody | Main accent on constituent within predicate Prosodic (phrasal) break between topic and comment | Accented subject Prosodic integration of entire clause |
| Constituency | External subject | Subject incorporation |
| Constituent order | S(X)V(X) | VS, XVS |
| Agreement | Subject-predicate agreement | No subject-predicate agreement |
| Case marking | Nominative/absolute case of subject | Non-canonical case of subject |
| Morphological marking of information structure | Topic marking Predicate focus marking | No information structure marking associated with phrasal constituents |
| Specialized constructions | None | Expletive subject |

specific principles); compare (9) (repeated from above) with its categorical counterpart in (10). Still, as already mentioned above, the subject-accenting strategy does not uniquely identify thetic clauses since alternatively the accented subject alone could be the focal constituent.

- (9') (*Why are you so upset?*)
 My COMPUTER stopped functioning!

- (10) (*What's wrong with your computer?*)
 My computer stopped FUNCTIONing!

Since topics – at least new or shifted topics – are crosslinguistically found in clause-initial position (see Section 2.1), the absence of a topic can be signaled by verb-initial order (thus in intransitive clauses, VS order). Indeed, at least in languages which do not have a verb-initial default order, VS order is frequently associated with thetic constructions (though again it may also serve to encode narrow argument focus on the subject). The contrast between a VS thetic construction and an SV topic-comment construction is illustrated in (11).

- (11) Modern Greek (Greek, Indo-European)
 a. [*Xtipise to tilefono.*]_{FOC}
 rang ART telephone
 (What happened?) ‘The PHONE rang.’

- b. [To *tilefono*]_{TOP} [xtipise.]_{FOC}
 ART telephone rang
 (What about the phone?) ‘The phone RANG.’
 (Sasse 1987: 536)

Languages which allow for subject incorporation can employ this structure as a strategy for simultaneously preventing the assignment of a topic-comment structure and signaling the integration of a semantic subject and predicate, as illustrated in (12).

- (12) Onondaga (Northern Iroquoian)
?o-nôhs-aték-ha.
 3SBJ-house-burn-STAT
 ‘The HOUSE is burning.’
 (Sasse 1987: 550)

Another strategy for distinguishing thetic clauses from topic-comment clauses is the suspension of normal subject-verb agreement, and/or the use of a non-canonical case for the subject. In (13), verb-subject order is combined with a neutral (locative class 16) subject agreement marker on the verb instead of class 2 agreement as in canonical (topic-comment) clauses.

- (13) Otjiherero (Central-Western Bantu)
P-è-yá òvá-éndà.
 SM16-PST-come 2-visitor
 ‘Visitors came.’/‘There came visitors.’
 (Marten and van der Wal 2014: 340)

In the absence of a differentiation between sentence focus and topic-comment clauses by means of constituent order, agreement or incorporation, dedicated topic or focus markers can serve to make the distinction. A well-known case is that of Japanese, where a topic (irrespective of its grammatical role) is marked by the topic marker *wa*, while a non-topical subject can only take the subject (nominative) marker *ga*. The use of the latter can either indicate narrow focus on the subject or else a non-differentiation of subject and predicate in terms of information structure, which applies to thetic and sentence focus constructions more broadly (e.g., Kuroda 1972; Shimojo 1995: 81–82; 249–250; Deguchi 2012).⁶

⁶ Deguchi (2012) claims that clauses with *wa*-marked contrastive nominal expressions belong to the thetic type, and conversely clauses with narrowly focused *ga*-marked nominal expressions belong to the categorical type. As indicated in Section 2.1, narrow focus is considered here to fall outside the thetic-categorical dichotomy. Contrastive topic constructions are most likely categorical, but nothing hinges on their analysis for the purposes of this article.

The final two examples illustrate expletive subject constructions as a specialized type of thetic construction. Example (14) illustrates the English existential *there*-construction, and (15) shows a presentational expletive subject construction in German which is widely accepted as thetic, e.g., by Sasse (1987: 530–531), Hellan and Beermann (2020: 96), and Lüdeling et al. (2016: Section 30.1.4). Again, what these strategies have in common is that they remove the (lexical) subject from its more typical topic position, following the principle of detopicalization. All of these clause types serve to introduce a new entity or event into the discourse universe.

(14) *There is a robin in the garden.*

(15) German (Germanic, Indo-European)

Es sitzen nur drei Person-en im Nacht-express.

EXPL sit:PRS:3PL only three person-PL in:DEF night-express

‘There are (lit. ‘sit’) only three people on the night express (train).’

(Hellan and Beermann 2020: 72)

This very brief overview of well-attested strategies for marking theticity should suffice to illustrate how – by very different means – these instantiate the principle of detopicalization as well as the principle of informational integration, in an iconic fashion: by preventing the default assignment of a topic-comment structure to the sentence in question, they signal the monolithic character of the structure and facilitate assignment of focus to the sentence as a whole (though, as shown above, this need not be the only interpretation available for a given construction). At the same time, these examples clearly demonstrate that the availability of the individual strategies depends on more general characteristics of a language. For example, suspension of subject-verb agreement is only available as a strategy in a language that has such agreement in the first place; subject incorporation requires the availability of incorporation structures more generally; the exploitation of constituent order differences, as opposed to a single constituent order with different accent placements, depends on the rigidity versus flexibility of syntax and information structure in a given language (Van Valin 1999), and special constructions, e.g., clefts or expletive subjects, will be employed if the language has both rigid syntax and constraints on accent placement (as e.g., in French; Van Valin 1999). Conversely, it is not uncommon for more than one type of sentence focus construction to coexist in the same language, with potentially different functions (Sasse 2006); for example, German allows for both subject accenting and an expletive construction.

From the perspective of recognizing different constructions as following the same principle of detopicalization, clauses where the subject is a discontinuous

nominal expression whose sub-constituents appear on either side of the predicate would seem an excellent further strategy for marking theticity, and equally iconically motivated: framing the predicate with two nominal elements is consistent with the monolithic character of a sentence focus expression, and moreover, a discontinuous constituent becomes an unlikely target for topic assignment. This is because the identification of a constituent as an overt sentence topic relies on the bipartition between topic and comment.

While such a strategy has not so far been described in crosslinguistic studies of theticity, it is argued in the remainder of this article that it is indeed attested, in different manifestations and in typologically and genealogically maximally distinct languages. I will first consider the case of extraposition from subject noun phrases in English (Section 3), followed by a discussion of the use of discontinuous nominal expressions in thetic clauses in several Australian languages (Section 4).

3 Extraposition in English revisited

The type of discontinuity known as extraposition from NP/DP has attracted considerable attention in the literature e.g., on English and German. I retain the established term extraposition here without intending to propose an analysis in terms of movement; the term should merely be taken to indicate that a modifier or complement is separated from its semantic head noun. The subtype of extraposition relevant here is extraposition from subject, where the predicate intervenes between the components of a discontinuous subject expression. In English, the extraposed element can be a clause, as in (16) and (23), or a prepositional phrase, as in (17), (18a), (19a), (20), (21), (22), and (25). Its function can be that of a modifier – a relative clause as in (16) or a modifying PP as in (17) – or complement (of a relational noun), as in (18) to (23). The relevant prosodic realization of all these examples is one with an unaccented verb (Göbbel 2013a, 2013b).

- (16) *At last, **a doctor** arrived **who actually knew what to do**.*
(BNC Written Books and Periodicals; CA8/95687980; 1987)
- (17) *... two days later **a letter** arrived **with a London postmark** ...*
(BNC Written Books and Periodicals; FS1/110802026; 1993)

The examples in (18) show that the choice of either construction is not predictable on the basis of any factor such as definiteness of the subject, length of the complement, or predicate. However, plausible discourse contexts for the two examples differ. The extraposed variant in (18a) announces the appearance of a review the previous day, whereas the contiguous variant in (18b) states about a specific

review – the sentence topic – that it appeared the previous day (see e.g., Lambrecht 1994: 167–168 on specific indefinite topics).

- (18) a. ***A review came out yesterday of this article.***
 b. ***A review of this article came out yesterday.***
 (Ross 1967: 301)

Few discourse studies exist that compare the frequency of extraposed and non-extraposed nominal subconstituents of the same type. The only study to date, Francis (2010: 61), which focuses on extraposition of relative clauses from subject in English as illustrated in (16), found that overall, only 15% of relative clauses were extraposed in a sample from the British component of the International Corpus of English (ICE-GB; cf. Nelson et al. 2002). Out of context, acceptability judgments also tend to be lower for extraposition than for the corresponding contiguous nominal expressions in English (Francis 2010) and German (Uszkoreit et al. 1998). One can therefore assume, at least tentatively, that despite the relative freedom of positioning clausal and PP modifiers or complements away from their head noun, complex nominal expressions in English are subject to the principle of iconicity of distance (everything else being equal).

Existing proposals for the analysis of extraposition differ on many levels, and it is beyond the scope of this article to attempt a full discussion of either the specific properties of each construction or the competing accounts. In the generative literature, extraposition has been analyzed both as the result of movement, and as a base-generated structure (for an overview of the conflicting accounts from a generative perspective, see Overfelt 2015). Much of this literature focuses on syntactic constraints on extraposition (Culicover and Rochemont 1990; Müller 1995; Ross 1967). Another prominent line of argumentation identifies a high complexity (or “syntactic weight”) of the modifier or complement, relative to the verb phrase, as one factor, or even the main factor, favoring discontinuity (e.g., De Kuthy 2002: 26; Francis 2010; Keizer 2007: 277–282; Rijkhoff 2002: 259).

However, neither syntactic constraints nor weight can account for speaker preferences in cases where both extraposition and contiguity are fully acceptable and natural (albeit in different contexts). Consider the constructed extraposed and non-extraposed examples with identical segmental material in (18) above and in (19).

- (19) a. ***The danger grew of a complete paralysis of the railways.***
 b. ***The danger of a complete paralysis of the railways grew.***
 (Kirkwood 1977: 55)

In one of the earliest accounts of the information structure characteristics of extraposition, Kirkwood (1977) analyses the difference between the examples in (19) as follows:

In [a] the speaker asserts the emergence of a situation of a certain kind at a given point in time; in [b] the speaker predicates of a particular situation, identifying knowledge of which on the part of the hearer is presumed. What I am suggesting is that the prepositional phrase in [a] gives further specification of an entity of a certain kind whose existence is being asserted, whereas in [b] the prepositional phrase supplies a description which is intended to enable the hearer to *identify* which particular entity the speaker is talking about. (Kirkwood 1977: 55–56; emphasis original)

In other words, in the extraposed version of (19), the speaker asserts the entire event of an increase in risk of the paralysis of the railways. In the contiguous version, *the danger of the complete paralysis of the railway* is the sentence topic – it may well be discourse-new, but it is the discourse referent about which an increase is predicated. Kirkwood (1977) goes on to explicitly argue that theticity is the information structure configuration applying in cases of extraposition such as (19a).

Numerous authors have since pointed to a difference in information structure motivating the choice of extraposition over contiguity, either directly or due to influencing the accentuation and phonological phrasing, so that extraposition emerges as a result of phonological optimization (Göbbel 2013a, 2013b). Most authors addressing the factor of information structure note that extraposition from subject is usually found in presentational clauses which introduce an entity to the discourse world or announce the occurrence of an event (Guéron 1980; Keizer 2007: 264–306; Kirkwood 1977). The construction is typical of the opening of news items such as (20), a context where it is necessary to convey a high density of information even in an out-of-the-blue context.

- (20) ***A hunt has begun for a bogus policeman who followed a driver along the A413 near Wendover in Buckinghamshire.***

(BNC Spoken TV News; KRM/78408913; 1985–1993)

Guéron's (1980) influential account (which references Kirkwood 1977) distinguishes two basic utterance types (at logical form). The first type – applied to non-extraposed clauses – is labelled Predication: the subject refers to an individual or entity (or a set of these) whose existence in the world of the discourse is presupposed, i.e., which functions as a topic; the VP describes a property of this topical subject (Guéron 1980: 653). Extraposition structures are a characteristic of the other type, labelled Presentation by Guéron (1980), since the clause in this case denotes, essentially, the appearance of the subject in the world of the discourse. These definitions of Presentation and Predication, in fact, map very well onto the definitions of thetic and categorical constructions, respectively (Section 2.1).

As a correlate of its presentational function, the subject in the extraposed construction is usually indefinite. This is because normally, in such all-new statements, the discontinuous nominal expression does not encode a uniquely

accessible referent. However, given the right context, an accessible referent can be part of a discontinuous expression, as also discussed in Section 2.1. forthetic clauses in general (cf. also Göbbel 2013a: 425; Keizer 2007: 272). For example, in (21) the appearance of pictures of a previously mentioned car is an all-new event, even if the referent of *a few pictures of it* is accessible, via the given referent of *it/the car*.

- (21) *The car is quite well known in the Citroen Car Club, so I am told, and **a few pictures** have appeared **of it**, including one of it lurking in the background on here.*

(Online Car forum; <https://autosHITE.com/topic/34224-trevor-the-shed-a-scruffy-16-bx/>)

The verb in a subject extraposition construction is typically a verb expressing existence, appearance or disappearance, although, as forthetic constructions in general (see Section 2.1), this is not a hard constraint. This is pointed out by Guéron (1980: 654), who shows that there are no strict lexical restrictions on the occurrence of extraposition, as had sometimes been claimed; rather, the discourse context of introducing a participant is crucial, and any verb that can be interpreted as introducing an entity into a discourse world is permitted. Both the preference for predicates of appearance and for indefinite subjects, and the violable nature of these constraints, have been confirmed for extraposition of relative clauses in English by Walker (2013), on the basis of experimental evidence.

Guéron's (1980) account is taken up by Keizer (2007: 296, 305), and supported with new corpus data. These clearly show that extraposition in presentational clauses is not restricted to verbs of appearance in the narrow sense. It is also found, for example, with the passive of predicates of creation as in (22); the relevant clause qualifies as a presentational statement in so far as no aspect of the reason for the inadequacy of the settlement is presupposed.

- (22) *It was an improvement on the payments of some unions but still inadequate in that **no specific provision** was made **for rent**.*

(Keizer 2007: 297–298, citing an example from the ICE-GB corpus)

The pair of examples in (23) and (24) illustrates both a difference in definiteness of the subject and a difference in predicate class that can favor the choice of either the extraposition construction or the contiguous construction. Example (23) features an indefinite subject and a predicate of existence. Here, a certain possibility (in context, a risk) is pointed out to the reader (introduced into the discourse world), which makes the extraposition construction a much more felicitous choice than the contiguous counterpart. Example (24), since it is a predicative copular construction (a specific possibility is ascribed the property of being real), cannot be interpreted as a presentational (or existential) clause, but has to be assigned a

topic-comment partition, despite a comparable length of the complement clauses in (23) and (24) (cf. the discussion in Keizer 2007: 272).

- (23) ***A possibility exists that the server materials could include inaccuracies or errors.***

(clause recurrently found in terms and conditions for online shops/services, e.g., <https://greenlivingglasgow.co.uk/terms>)

- (24) ***The possibility that the conducting filament is a mixture of micro-crystallines and dielectric is real.***

(Keizer 2007: 272; citing an example from the ICE-GB corpus)

A number of accounts, including those in Guéron (1980) and Keizer (2007), differ from Kirkwood's (1977) theticity analysis in not explicitly relating the presentational function of the extraposition from subject construction to an information structure category of sentence focus or theticity. Instead, only the subject – and sometimes only the extraposed sub-constituent (see e.g., Keizer 2007: 286; Francis 2010: 38) – is regarded as focal, rather than the entire clause.⁷ This analysis might be based on the assumption that only the newly introduced discourse participant is focal, or that only a moved (extraposed) subconstituent can be focal. In yet another research tradition, the assumption is that a rule of end focus operates indiscriminately in English, and that initial elements are topical. For example, Quirk et al. (1985: 1391) explicitly state that in (25) the passive and the discontinuous NP construction are combined in order to enable *no mention* to be “thematized” (their term) and *police* to be focused.

- (25) ***No mention is made in the report of the police.***

As argued in Section 2.1, however, existential and presentational constructions of all syntactic types can be regarded as typical thetic constructions, since they lack a topic-comment partition mapping onto their subject and predicate. This means that extraposition from subject in presentational function serves to indicate theticity.

This is not to claim that extraposition constructions cannot also convey other information structural values: as also pointed out in Section 1, extraposition from subject, with a salient primary accent only on the nominal or within the extraposed constituent, is also compatible with narrow/contrastive focus in English (Göbbel

⁷ Göbbel (2013b) does consider a theticity analysis for some cases of extraposition, but restricts it to examples with primary accent on the head nominal only, whereas he considers examples with a primary accent (also) within the extraposed constituent as focus on the extraposed constituent. He does not provide explicit criteria for identifying thetic clauses.

2013b) as well as crosslinguistically, and extraposition from object as in (1b) clearly does not indicate theticity (though it may have a preferred broad focus interpretation). Indeed, the account presented here is not incompatible with the claim that complexity (weight) also influences the choice of extraposed constructions, as has been widely argued, and shown on the basis of corpus data by Keizer (2007) and Francis (2010). Since no corpus or experimental study to date has directly targeted the relative influence of weight and information structure, the interaction of these factors remains an issue for further empirical research.

The claim made here is that clauses showing extraposition from subject in presentational function (as reinforced by discourse context, a lack of prosodic prominence in the verb phrase, as well as predicate type and indefiniteness of subject) should be regarded as thetic rather than be assigned narrow focus on the subject or on the extraposed constituent. An additional and more specific claim is that this strategy satisfies the crosslinguistic principle of detopicalization in that a discontinuous nominal expression is an unlikely candidate for the assignment of sentence topic status. The fact that the discontinuous subject, in effect, “frames” the predicate moreover serves the iconic principle of integration of the entire clause, observed in other strategies for marking sentence focus/theticity as discussed in Section 2.2 (see Section 5 for further discussion).

Identifying discontinuous nominal expressions involving “non-weighty” (single-word) subconstituents in thetic clauses would lend even stronger support to the existence of discontinuity as one of the attested strategies for marking theticity, since any influence of weight could be ruled out. Section 4 discusses such cases.

4 Discontinuous entity-modifier constructions in some Australian languages

In this section, I present evidence for the use of discontinuous nominal expressions in thetic clauses in languages which allow more freedom regarding the order and contiguity of parts of nominal expressions, specifically, from several Australian languages which allow for discontinuous expressions involving only a nominal (semantic) head and a modifier. The argumentation presented here builds on Schultze-Berndt and Simard’s (2012) in-depth analysis of discontinuous nominal expressions in the Mirndi language Jaminjung-Ngaliwurru, but adds evidence from additional languages.

Discontinuous nominal expressions have been described for many Australian languages, and have of course played a crucial role as evidence in views on non-

configurationality over the last decades, with analyses ranging from distinct noun phrases in apposition to each other (or to a bound or clitic pronoun), to single but discontinuous phrases; see Nordlinger (2014: 227–232, 237–241) and Louagie (2020: 114–120) for recent overviews of the debate. There is overwhelming evidence, first, that configurationality is not a single parameter, and second, that even those Australian languages with considerable freedom of constituent order in discourse mostly observe the principle of iconicity of distance outlined in Section 1, according to which linguistic elements in close semantic relationship will also exhibit formal contiguity. Applied to nominal expressions, this principle predicts that discontinuity will be rare, and that it will be exploited for specific pragmatic purposes.

A number of caveats are in order from the outset. First, despite the existence of areal features, the languages of Australia are very diverse, both genealogically and typologically, and one should therefore not be tempted to generalize prematurely regarding any of their characteristics, including the existence of discontinuous nominal expressions or indeed their use in thetic constructions. For example, in her survey of nominal expressions in 100 languages of Australia, Louagie (2020: 157) found that descriptions of 19 languages explicitly state that discontinuity of nouns and simple modifiers is impossible, and 32 descriptions do not provide any discussion or examples.

Second, claims about discontinuous noun phrases in Australian languages often do not provide prosodic information for the examples in question, and do not clearly distinguish between expressions that meet the definition of nominal expression (NE) given in Section 1 (an expression which functions as a unit in establishing or tracking reference) on the one hand, and multiple coreferential nominal expressions, on the other. The difference between the two types is more obvious in languages which have traditionally been classified as configurational, and where each referential expression shows the grammatical trappings of its phrasal status, for example in the form of adpositions or determiners, as in the English example in (26).

(26) *I shot [**a kangaroo**]_{NE} today, [**a big one.**]_{NE}*

The two nominal expressions *a kangaroo* and *a big one* in this afterthought construction are coreferential, but form two independent phrases syntactically, each with an indefinite article; moreover, the adjective *big* has to appear syntactically as the modifier of a “dummy” head, *one*. They do not function as a unit in information-structural terms; rather, the second NE elaborates on the first one, adding further focal information. There are also prosodic correlates of this syntactic and functional role: the second NE is preceded by a clear prosodic break, and it carries its own focal accent.

In a language with fewer constraints on the internal structure of a NE, an afterthought construction could be mistaken for a single discontinuous expression on the

basis of written examples. However, these can still be distinguished on the basis of their prosodic correlates, which leads McGregor (1997) to distinguish two types of discontinuous noun phrases in Gooniyandi. For Jaminjung-Ngaliwurru, Simard's in-depth investigation (Simard 2010: 314–316, 2014) found that afterthoughts – unlike other kinds of detached constituents, such as right-edge topics – are separated from the core of the clause by a final intonation unit contour and often a pause, and exhibit their own focal contour, starting with a pitch reset, a construction corresponding to McGregor's Type B discontinuity. The equivalent construction in Ngarinyman is illustrated in (27); the afterthought here follows a pause of 1.3 s.

- (27) Ngarinyman (Ngumpin-Yapa, Pama-Nyungan)
*MIRI ganyang \ 1.3 JIndagu. *
 upper.leg take:PST one
 'He took away a (turtle) leg, (just) one'
 (RB, ES99_V02_01.312)

The distribution of referential information over several nominal expressions occurring in multiple intonation units, as in (27), has been reported to be frequent in discourse in a number of Australian languages, or even obligatory in the case of multiple modifiers; see Hill (2018: 210–230) and Louagie (2020: 87) for recent discussion and references. It allows for an incremental building of a full description of a referent which may even be co-constructed by multiple speakers. In Hill's (2018: 216) words, referential information is contributed "in a sequence that zeroes in on the referent." Such constructions are neither considered thetic according to the definition in Section 2.1, nor are they considered as true cases of discontinuity for the purposes of this article.

Another construction which should be distinguished from discontinuous nominal expressions is secondary predicates – for discussion see e.g., De Kuthy (2002: 155–156), Schultze-Berndt and Simard (2012: 1028–1030) and Reinöhl (2020: 72–73). According to Singer (2006: 100), the property expression *yurrurt* 'cooked' in (28) functions as a secondary predicate providing additional information about the way the tortoises are lying, rather than as a modifier serving to restrict the reference within a nominal expression ('the cooked tortoises').

- (28) Mawng (Iwaidjan)
Mangili y-u-ng ja yurrurt.
 tortoise 3NCL(ma)-lie-PP NCL(ma) cooked
 'The tortoises were lying there cooked.'
 (Singer 2006: 100)

Disregarding afterthoughts and secondary predicate constructions (and also split topicalization constructions which are likewise best analyzed as involving distinct nominal expressions; cf. Skopeteas et al. 2020: 13–14), a true discontinuous

nominal expression thus meets two criteria: it occurs within a single prosodic unit (as a correlate of functioning as a unit in information structural terms), and its components jointly serve to establish or track reference.

For Jaminjung-Ngaliwurru, Schultze-Berndt and Simard (2012) found that true discontinuous NEs fall into two main formal and functional types. The first is an argument focus (narrow focus) construction of the type briefly discussed in Section 1, and fully comparable to the narrow focus constructions illustrated in (2) and (3). In this – crosslinguistically well attested – type, a modifier is responsible for the contrastive interpretation, while the entity-denoting noun is accessible (“given”); the contrastive element appears in first position, and is separated from the entity-denoting noun. The modifier is consistently prosodically prominent while the entity nominal is deaccented (Schultze-Berndt and Simard 2012: 1036–1038).

The other pattern is the thetic type, which in Jaminjung-Ngaliwurru conforms to the general prosodic pattern established for sentence focus utterances in this language by Simard (2010: 225–233), in that prosodic prominence is equally distributed among prosodic words. The preferred order within the discontinuous nominal expression is also different from the narrow focus type: The entity-denoting nominal appears preverbally, and the modifier postverbally. Typical examples of the thetic type are those in (29) and in (4) above.

- (29) Jaminjung-Ngaliwurru (Mirndi)
- a. *Burduj* *ba-jga* *gabardag!*
 go.up IMP-go quick
BURDaj *GA-ram=ngardi* **GUjugu!**
 wind 3SG-come.PRS=EGO.EVID big
Yaniny-ma!
 IRR:3SG>2SG-hit
 ‘Climb up quickly! A big wind is coming! It might hit you!’
 (Schultze-Berndt and Simard 2012: 1043)
- b. **Wirib** *bul* *ya-rum=ngunggu* **mulanggirng!**
 dog emerge IRR:3SG-come=2SG.OBL fierce
 ‘A fierce dog might come out to you!’
 (DR, ES15_N02_Ngali.001; not recorded)
- c. *Yina mawarn* *ga-ram.* **MAwarn=gun** *yina* *ga-yu*
 DIST cloud 3SG-come.PRS cloud=EMPH DIST 3SG-be.PRS
MUrrgun.
 three
 ‘There are clouds coming ... , there are three clouds!’
 (Schultze-Berndt and Simard 2012: 1044)

Example (29a) is a quotation within a personal narrative, alerting relatives to an approaching wind during the building of a shed. A typical way of warning someone of the presence of a dangerous dog is shown in (29b), from a staged

fictional conversation. Example (29c) illustrates an existential statement involving a verb of location/existence: the speaker points out the presence of clouds in the sky (which in the dry season is noteworthy).

As pointed out by Schultze-Berndt and Simard (2012: 1041), the contexts for spontaneous presentational or existential utterances only arise relatively infrequently during fieldwork, and discontinuous NEs of this type are difficult to elicit. Moreover, obviously, discontinuity is only an option if both an entity and its property are mentioned in the same clause; without the property expression, there would be no complex nominal expression with the potential to be discontinuous. Their low frequency and a widespread lack of attention to the discourse function of discontinuities – with exceptions such as McGregor (1997) – may explain why this function of discontinuous NEs has not been widely reported in descriptions of Australian languages. Consequently, examples are not easy to find in published texts or discussions of discontinuity in grammatical descriptions. A few examples that parallel the Jaminjung-Ngaliwurru annuntiative utterances in (4) and in (29), from unrelated languages all spoken in the northern Australian region, are shown in (30) to (32) below.

In his seminal article on the functions of noun phrase discontinuity, McGregor (1997: 94–97) discusses examples which he analyses as presenting all-new information, such as (30). However, he does not analyse them as sentence focus constructions, but rather assigns the first part of the discontinuous NE the status of theme and the second part, focal status (similarly to Quirk et al.’s analysis of Example (25) in Section 3), explicitly stating that the discontinuous structure enables the speaker to “assign the same NP to both grammatical relationships, theme and unmarked focus” (1997: 96). In the framework adopted in the present article (Section 2.1), the core of (30) is an existential clause (excluding the frame-setting topic ‘at Jubilee’ and the cook’s name which is added in a separate prosodic phrase as an afterthought) and therefore meets the definition of a non-bipartite expression which does not evoke any presuppositions, and qualifies as *thetic*.

- (30) Gooniyandi (Bunaban)
*Jubilee ma googoomani warangji **BOOLga**/ Bred Gedil /*
 [place.name] [...] cook he:sat old.man [name]
 ‘At Jubilee, there was an old cook, Fred Gedil.’
 (McGregor 1997: 95, original emphasis)

The remaining Examples (31) and (32) from Ngarinyman and Wagiman are very similar to (4) and (29a) from Jaminjung-Ngaliwurru in that they announce a newly arising weather phenomenon, with a property expression (‘big’) serving to characterize the phenomenon (wind or rain).

(31) Ngarinyman (Ngumpin-Yapa, Pama-Nyungan)

a. **Burruwib** *yanarni* **janggarni!**
 wind come:PRS big

‘A big wind is coming!’

b. **Yibu** *yanarniny* **barayi.**
 rain come:PRS big

‘A big rain is coming!’

(Eva Schultze-Berndt, Fieldnotes)

(32) Wagiman (unclassified)

Bolwon *ga-di-n* **buluman.**
 wind 3SG-come-PRS big

‘A big wind is coming!’

(Mark Harvey, Fieldnotes)

All of the examples of discontinuity in (29) to (32) have predicates denoting existence or appearance, as is typical forthetic utterances (see Section 2). They announce the appearance on the scene of an entity with a particular property, and therefore match both the annuntiative and the introductive function identified among the crosslinguistically frequent functions of specialized thetic constructions by Sasse (2006: 281–285). Since these are out-of-the-blue statements, the function of discontinuity clearly is not that of highlighting a contrastive function of either the property or entity expression, as is the case for the well-attested cases of discontinuity discussed in Section 1.

More tentatively, some transitive clauses could also be analyzed asthetic, e.g., if they feature a verb of possession (‘have’) in an existential function or interpretation. In Jaminjung-Ngaliwurru, examples of transitive clauses with unexpressed subjects and discontinuous objects are attested with the same prosodic and word order pattern found in the intransitive thetic discontinuous constructions. In cases such as (33), such expressions – in languages without a passive construction – could be seen as equivalents to passives in presentational clauses in English (as in (22) and (25) in Section 3). Example (33) begins the description of a new page in a book of unrelated pictures depicting unfamiliar referents. The prosodic contour of (33), as well as the order of entity nominal and property nominal, is the same as for the examples of discontinuous subjects in Jaminjung-Ngaliwurru in (4) and (29).

(33) Jaminjung-Ngaliwurru (Mirndi)

Nganthan *yinthu,* **YAAG** *gan-angu* **GUjugu!**
 what PROX fish 3SG>3SG-get/handle.PST big

‘What’s this one here – someone got a big fish/a big fish got caught!’

(IP, CS11_a103_01.045)

Discontinuous objects, however, also occur outside such specific contexts (see also McGregor 1997 for examples from Gooniyandi). Therefore, like for extraposition in English, no claim is made here that all instances of discontinuity in the Australian languages cited serve the same function of marking theticity. Indeed, as discussed by Schultze-Berndt and Simard (2012) for Jaminjung-Ngaliwurru, discontinuity may signal both sentence focus and contrastive argument focus in the same language (albeit with different constituent orders and prosodic contours). In addition, it is possible that discontinuity is introduced for prosodic reasons, or to indicate broad focus more generally. Clearly, more language-specific and crosslinguistic research is needed on the possible crosslinguistic functions of discontinuity.

Neither do I claim that discontinuity is the only strategy for marking theticity in these languages – this would be implausible, since it is only applicable in the case of complex nominal expressions. One would therefore expect that languages employing the discontinuity strategy also have other strategies at their disposal (as is common crosslinguistically; see Section 2.2). This is borne out for Jaminjung-Ngaliwurru, which also uses subject-accenting, as illustrated in (34a). This example is from reported speech within a narrative about a boat trip, and the (reported) speaker is pointing out the animals she notices from within the boat. As in the English translation equivalents, this sentence focus structure only differs from the contrasting topic-comment structure (34b) in its prosodic contour.

- (34) Jaminjung-Ngaliwurru (Mirndi)
- a. [YAAG *ngiya* *ga-ngga!*]_{FOC}
 fish PROX 3SG-go.PRS
 ‘A FISH is going along here!’
 (IP, ES08_A04_06.026)
 - b. [*Yaag*]_{TOP} [*NGIYA* *ga-ngga.*]_{FOC}
 ‘A/the fish is going (along) HERE.’
 (constructed)

The proposal put forward here is therefore that the functional motivation for one of the subtypes of discontinuous nominal expressions in Jaminjung-Ngaliwurru, and several other Australian languages, matches those identified for extraposition from subject of complement or attributive clauses or PPs in English, discussed in Section 3. In the attested examples of this subtype of discontinuity, a head noun and a modifier, in this order, are separated by the predicate of the clause, and the entire clause has a presentational function – for example, as a warning announcing the existence or appearance of an entity with a certain property. Unlike in the case of extraposition in English, syntactic weight can be ruled out as a factor for the preference for the discontinuous structure in the Australian examples

discussed in this section. This makes it all the more plausible that the main motivation for discontinuity comes from the principles of integration and detopicalization outlined in Section 2.2. This idea will be expanded upon in the concluding discussion.

5 Concluding discussion

In the preceding sections, I have argued that discontinuous nominal expressions – specifically, discontinuous subjects in intransitive clauses – can constitute a hitherto little described strategy for marking thetic constructions, defined in Section 2.1 as encompassing any informationally integrated subtype of sentence focus construction. Crosslinguistically, thetic constructions have been found to have a range of manifestations with one recurring property: they tend to be clearly distinct from topic-comment constructions (especially those with a subject as topic) in the same language (Section 2.2). More specifically, thetic constructions have formal properties which facilitate a syntactic analysis of the construction as non-bipartite, and which thereby prevent their interpretation as topic-comment structures (encompassing such diverse strategies as verb-first position, expletive subjects, suspension of subject-verb agreement, subject incorporation, and subject accenting). This tendency has been termed desubjectivization by Sasse (1987), and detopicalization by Lambrecht and Polinsky (1998) and Lambrecht (2000). Lambrecht (2000) shows that detopicalization is often achieved through “subjects behaving like objects” (i.e., like objects in a topic-comment construction) in terms of their grammatical properties, as in the strategies just listed and discussed in Section 2.2. The main argument in the present article is that “subjects framing the clause” – as discontinuous nominal expressions – is a further plausible and attested strategy for marking theticity, as it makes the subject referent an implausible target for topic assignment, and thus serves the principle of detopicalization. Moreover, framing the predicate with the discontinuous subject also iconically reflects the monolithic, unitary character of thetic constructions, and thus also serves the principle of informational integration as posited by Jacobs (2001). Thus I propose that the association of discontinuity and theticity does not merely serve a discriminatory purpose, but is itself iconically motivated.

Two case studies involving different types of discontinuous subjects in typologically different languages were discussed in support of this proposal. The first of these (Section 3) concerns the so-called extraposition from subject constructions in English, widely accepted to have a presentational function by those authors who have taken discourse function and information structure into account in their investigations. According to the definitions of focus and theticity employed in this

article, presentational constructions are *thetic*. Indeed, drawing on existing accounts, it could be shown that where a presentational (i.e., *thetic*) function is strongly suggested by e.g., an indefinite subject and a verb denoting appearance, an extraposition construction (with a prosodic correlate of deaccenting of the verb) can be preferable to a contiguous construction. Conversely, both constructions are sometimes possible for clauses with identical subjects and verbs, even if the subject expression includes heavy (i.e., lengthy) modifiers or complements, with the contiguous structure favoring a topic-comment reading and the extraposed structure a *thetic* (sentence focus) reading.

However, many accounts claim that weight (length) of the extraposed constituent relative to the verb phrase is also an important factor in the choice of this construction. This issue is addressed in the second case study (Section 4). A motivation in terms of weight does not apply if each of the subconstituents consists of a single, monomorphemic word. Discontinuous subjects composed of only an entity nominal and a property nominal are indeed attested in discourse contexts associated with *thetic* constructions in various Australian languages. For at least one of these languages (Jaminjung-Ngaliwurru), discontinuous *thetic* constructions were shown to differ from discontinuous subjects with a contrastive focus function both prosodically and in the order of entity nominal and property nominal (Schultze-Berndt and Simard 2012). This – admittedly preliminary – evidence strengthens the argument that information structure can be the main factor responsible for the choice of discontinuous expressions.

Just like any of the other strategies mentioned here, the exploitation of discontinuity to mark *theticity* is expected to be crosslinguistically recurrent, albeit not universal. Furthermore, the strategy of signaling *theticity* by discontinuous subjects – in any language – is by necessity restricted to multi-word nominal expressions, since single-word expressions cannot be discontinuous. Complex nominal expressions are not unusual in *thetic* utterances of the (not entirely clearly delimited) subtypes which Sasse (2006) terms *annuntiative* (statements out of the blue), *introductive* (text-opening) and *interruptive* (alerting the hearer to a new situation), because in introducing a new discourse referent (or an unexpected event involving a discourse-new entity), often a specific property *of* that referent is being pointed out. Still, this will not always be the case, and subject discontinuity is therefore likely to co-exist with one or more of the other strategies that have been found to be associated with *theticity*. This applies to English, and, as discussed briefly in Section 4, also to the Australian language Jaminjung-Ngaliwurru (and in all likelihood, to the other Australian languages mentioned in Section 4).

The use of subject discontinuity in *thetic* constructions can moreover be expected to be further constrained by language-specific restrictions on which subconstituents of nominal expressions can appear non-contiguously, as shown by

our case studies. In English, discontinuity within a nominal expression is only possible for clauses (relative clauses and complements of relational nouns) and prepositional phrases. In the Australian languages discussed in Section 4, on the other hand, discontinuity is also possible for property expressions functioning as modifiers. Such crosslinguistic differences are fully expected, as pointed out by Sasse (2006: 23): “Languages differ considerably in the degree of rigidity found in their syntactic organization. This has a strong influence on the manipulability and discourse-functional exploitability of their constructions.” The juxtaposition of languages like English and Jaminjung-Ngaliwurru shows that degrees of “rigidity” (or configurability) of syntactic structures indeed constrain the types of discontinuities found, but that discontinuity, as far as it is permitted, is employed for similar functions, in comparable discourse contexts. The discussion also suggests that unless these specific functions are called for, contiguity – the principle of iconic distance – is observed in languages of both types, constituting further evidence against the myth of unconstrained discontinuities in non-configurational languages.⁸

To conclude, it is proposed here that discontinuity of nominal expressions is a well-motivated strategy for marking theticity, despite not having been identified as such in the literature so far, and that it should be added to the list of crosslinguistically available strategies associated with the thetic type of sentence focus construction. Such a clear discourse motivation for discontinuity, paired with mounting evidence for the relatively low discourse frequency of discontinuous nominal expressions, is also further evidence for the claim that the principle of iconic distance – favoring “configurability” – applies crosslinguistically, even in languages with a greater degree of freedom of constituent order, and is only overridden when there is a stronger, alternative motivation.

Data sources

BNC: The British National Corpus, version 3 (BNC XML Edition). 2007. Distributed by Oxford University Computing Services on behalf of the BNC Consortium.

⁸ For example, in a subchapter entitled “Free word order: a case study” of a recent edition of a textbook on syntax (Tallerman 2020: 221–224), which features examples from the Australian languages Warlpiri and Kalkatungu, the author emphasizes that arguments can be “freely split up” and that “discontinuous phrases in these languages are by no means exceptional – quite the opposite, in fact”. For further discussion and references attesting to the continuing prevalence of a view of Australian languages as exhibiting unconstrained discontinuities, but also acknowledging more nuanced accounts, see Schultze-Berndt and Simard (2012: 1016–1017) and Louagie and Verstraete (2016: 25).

<http://www.natcorp.ox.ac.uk/> [examples of usage taken from the British National Corpus (BNC) were obtained under the terms of the BNC End User License. Copyright in the individual texts cited resides with the original IPR holders. For information and licensing conditions relating to the BNC, please see the website at <http://www.natcorp.ox.ac.uk>. BNC examples are cited with their document ID, sentence number, text genre, and year of publication. They were retrieved using Sketchengine (<https://www.sketchengine.eu>); cf. Kilgarriff, Adam; Vít Baisa, Jan Bušta, Miloš Jakubíček, Vojtěch Kovář, Jan Michelfeit, Pavel Rychlý, Vít Suchomel. 2014. The Sketch Engine: 10 years on. *Lexicography* 1. 7–36].

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