

Discontinuous noun phrases in Yucatec Maya¹

STAVROS SKOPETEAS, ELISABETH VERHOEVEN, and GISBERT FANSELOW

Bielefeld University, Humboldt University Berlin, University of Potsdam

Abstract

The possibility of discontinuous noun phrases is a source of cross-linguistic variation depending on a complex interaction of typological factors relating to the structure of nominal projections as well as to the available hosts for noun phrase constituents in the clause structure. Yucatec Maya allows the extraction of extended nominal projections (possessors and adjuncts), but it disallows extraction of constituents out of the Left Branch of a nominal structure. The latter may be separated from the head noun in constructions of apparent discontinuity that involve multiple DPs filling the same argument slot. A comparison to cross-linguistic facts reveals that particular properties of this pattern can be predicted by the properties of nominals (emergence of DP structure) and the information structural possibilities that are available through a rich left-periphery with designated positions for topics and foci. However, micro-variation within Mayan shows that the available differences cannot be unambiguously traced back to parametric differences of the syntactic structure.

Keywords

discontinuous noun phrases, possessor extraction, split topicalization, focus movement, left dislocation

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1 PRELIMINARIES

The confrontation with data from a language of a different family and linguistic area often is an excellent testing ground for a syntactic model developed primarily with data from a small set of languages. In the present paper, we will examine how well models developed for discontinuous noun phrases such as German (1) fare in the analysis of an apparently similar construction in Yucatec Maya, exemplified in (2).

(1) Bücher hat sie viele gelesen.

books has she many read

‘She has read many books.’

(2) k’áanche’-o’b=e’ ts’o’k u man-ik óox-p’éel pèedróoh=i’.

chair-PL=D3 TERM A.3 buy-INCMPL three-CL.IN Pedro=LOC₂

‘Pedro bought three chairs.’

To the best of our knowledge, no in-depth study of constructions such as (2) has been published so far for Yucatec Maya, nor for any other Mayan language. The Yucatec Maya data confirm the view that discontinuous noun phrases come with at least two different derivational histories, one involving the displacement of some part of a noun phrase, the other involving the generation of two syntactically independent noun phrases. The elaborate left periphery of Yucatec Maya makes the distinction of these types, and the identification of their properties, particularly easy. The subextraction of possessors turns out to be an instance of standard phrasal movement, while Left Branch Extraction is absent from Yucatec Maya, in line with the predictions of Bošković (2005).

Section 2 outlines the constituent structure of Yucatec Maya with emphasis on the content of the functional projections in the left periphery, and on the noun phrase structure. Section 3 deals in detail with the leftward displacement of possessor phrases, but also touches the issue of the extraposition of possessors, definite partitives, and relative clauses, and of the displacement of PPs. When the displaced possessor occupies a focus position, it turns out to have undergone A-bar-movement. When it sits in a topic slot, it is base-generated there.

Section 4 presents the possible patterns of apparent noun phrase discontinuity involving topic adjunction to the left of the focus position. We demonstrate that this construction confronts us with a structure in which two noun phrases syntactically independent of each other are semantically related to the same argument slot of the verb, so that, in a strict sense, no real discontinuity is present. Section 5 then deals with sentences in which a noun appears in the focus position, having stranded numerals or adjectives when it was moved to the left periphery. In the concluding section, we discuss the interaction of discontinuity with incorporation and verb-initiality.

2 SYNTAX OF YUCATEC MAYA

2.1 *Clause structure*

The canonical word order in Yucatec Maya is VOS; see (3a) (Norman and Campbell 1978: 144, Lehmann 1990: 44, 1998: 28, Bohnemeyer 1998, Skopeteas & Verhoeven 2005, 2009a). The lexical verb is preceded by an aspectual-modal auxiliary hosting a ‘set A’ clitic, which bears φ -features that are valued by the external argument, i.e., the subject of transitive verbs or the subject of intransitive verbs in the incomplete status. The lexical verbs in (3a) and (3c) bear a status marker ‘completive’ which is selected by the

auxiliary. The lexical verb bears a ‘set B person’ suffix (zero in the 3rd person) that cross-references the object of transitive verbs in (3a) and (3c) or the subject of intransitives in the completive/subjunctive status in (3b). Crucially, adverbs and PPs follow the subject, as illustrated for adjuncts in (3a) and complement PPs with intransitives and ditransitives in (3b-c).

(3) (a) T=u hàant-ah òon pèdróoh ho’lhe’ak.

PFV=A.3 eat:TRR-CMPL[B.3] avocado Pedro yesterday

‘Pedro ate avocado yesterday.’

(b) H tu’b màariáah ti’ pèdróoh.

PFV forget[B.3] Maria LOC Pedro

‘Maria forgot Pedro.’

(c) T=u ts’a’-ah wàah màariáah ti’ pèdróoh.

PFV=A.3 give-CMPL[B.3] tortilla Maria LOC Pedro

‘Maria gave tortilla to Pedro.’

The order of PPs is flexible, but the preferred option, illustrated in (3c), corresponds to the expected linearization for ascending V-projections (cf. English in Janke & Neeleman 2012: 157).

(4) (a) Pèdróoh=e’ táan u tsikbal yo’sal ch’íich’-o’b yéetel màariáah.

Pedro=D3 PROG A.3 discuss for bird-PL with Maria

‘Pedro speaks about birds with Maria.’ (preferred)

(b) Pèdróoh=e’ táan u tsikbal yéetel màariáah yo’sal ch’íich’-o’b.

Pedro=D3 PROG A.3 discuss with Maria for bird-PL

‘Pedro speaks about birds with Maria.’ (acceptable)

String-adjacency between V and O is the preferred option but is not obligatory, as illustrated with an intervening adverb in (5b). Furthermore, the string-adjacency between V and O is violated by the VSO order that also occurs in Yucatec Maya (Bohnemeyer 2009, Skopeteas & Verhoeven 2005). The possibility of fronting subjects within the postverbal domain, under particular configurations of animacy, definiteness and weight, is reported for all Mayan languages with basic VOS order (Aissen 1992: 44, Norman & Campbell 1978: 144, Coon 2016: 543 for an overview).

(5) (a) Pèedròoh=e' t=u hàant-ah hun-p'éel chiináah ho'lhe'ak.

Pedro=D3 PFV=A.1SG eat-CMPL one-CL.IN orange yesterday

‘Pedro ate one orange yesterday.’ (preferred)

(b) Pèedròoh=e' t=u hàant-ah ho'lhe'ak hun-p'éel chiináah.

Pedro=D3 PFV=A.1SG eat-CMPL yesterday one-CL.IN orange

‘Pedro ate one orange yesterday.’ (acceptable)

The fact that verbs and direct objects precede subjects, oblique complements and adjuncts indicate they are raised to functional projections above the thematic layer of the clause (vP). We assume that the lexical verb undergoes V° -movement to the head position of an AspP, in which it checks its aspectual properties (status marker), while the object constituent moves to the specifier position of a functional projection in which objects check for case, namely AgrOP (Chomsky 1991: 69); see (6).² We use the label *T* for the initial auxiliary, in order to facilitate the mapping to cross-linguistic assumptions about syntactic projections (see Henderson 2012: 8 on K'iche'); note, however, that the exact semantics of the auxiliaries in Yucatec Maya are precisely accounted for through the assumption of *Asp* and *Mood* heads instead (Gutiérrez-Bravo 2017: 6). These structural assumptions correspond to the canonical order.

(6) [TP T° [AspP V° [AgrOP Obj [vP Sbj [VP [VP tV [tObj]] XP]]]]]

The left periphery contains a position that has quantificational properties and is used for narrow focus or *wh*- elements, see (7).

(7) [CP [FP XP₁ [F' ...t_i...]]]

òon k=u hàant-ik pèedròoh.

avocado IPFV=A.3 eat:TRR-INCMPL Pedro

‘Pedro is eating AVOCADO.’

Narrow foci and *wh*-expressions in interrogatives, relative clauses and exclamatives are obligatorily left-adjacent to the predicate and mutually exclude each other (see Tonhauser 2003a; Gutiérrez Bravo 2015: 57). There is no empirical evidence for establishing differences between these categories; there are no word order differences between focus and relative *wh*- expressions that could support an analysis of these *wh*-expressions as specifiers of a higher functional projection within the CP layer. Hence, we assume that these elements land into a single position, the specifier of a functional projection, spec,FP, in which either *wh*- or focus features are valued. Elements in the spec,FP must correspond to a clausal constituent and cannot co-occur with any (pronominal or lexical) element in their position in situ (Aissen 1992 on Tzotzil; Verhoeven & Skopeteas 2015 on Yucatec Maya).

If the preverbal focus/*wh*- constituent is a subject of a transitive verb, an extrafocal inflection of the verb appears, the so-called ‘agent-focus’ construction, which is characteristic for Mayan languages (Bricker 1979, Lehmann 1990, 2003: 29, Bohnemeyer 1998: 190f., Tonhauser 2003a; 2007, Gutiérrez Bravo 2015: 51, Stiebels 2006, Verhoeven & Skopeteas 2015). The properties of this construction in Yucatec Maya are (a) the drop of the aspectual auxiliary and (b) a special morphological form of the verb in the

perfective aspect; vgl. (8) and (7). This construction does not arise with fronted subjects of unergatives. Hence, it is not really related to agents, as suggested by the established terminology.

- (8) Pèdróoh hàant òon.
 Pedro eat:TRR(SUBJ) avocado
 ‘PEDRO ate (an) avocado.’

Frame setters and topics may be adjoined to the left of the CP; see (6). Left-adjoined phrases are clearly different from focus phrases: a. the former *must* and the latter *cannot* be enclosed by an enclitic, b. the former *do not* and the latter *do* trigger the agent-focus form of the verb; compare (9) with (8). Left-adjoined elements always precede foci and may be used recursively, giving rise to sequences of topics, while foci are necessarily unique. Adjoined elements can correlate with a co-referent free pronoun within the FP (Skopeteas & Verhoeven 2009b; Verhoeven & Skopeteas 2015). Hence, we assume that these elements are left-adjoined to the CP and are not extracted by movement, unlike foci; i.e., their relation to the core clause is a semantic one.

- (9) [CP XP_j [CP [FP ... (pro)_j ...]]]
- (a) Pèdróoh=e’ t=u hàant-ah òon.
 Pedro=D3 PFV=A.3 eat:TRR-CMPL avocado
 ‘Pedro ate (an) avocado.’
- (b) òon=e’ t=u hàant-ah pèdróoh.
 avocado=D3 PFV=A.3 eat:TRR-CMPL Pedro
 ‘As for avocados, Pedro ate (one/some).’

One argument for this view relates to an asymmetry in the reconstruction of binding relations between extracted constituents in the FocP and adjoined left peripheral

constituents. Yucatec Mayan subjects backwards bind into objects (Bohnenmeyer 2009), i.e., subjects asymmetrically c-command object in VOS; see (10a). The binding possibilities do not change with objects in the pre-predicate position, which is evidence that this position is linked to the trace in situ through an \bar{A} -chain; see (10b). However, these binding possibilities do not apply for adjoined topics; see (10c). The possessor of the object constituent cannot be bound by a quantified subject, which indicates that this patient constituent is not linked to a trace in situ which would be bound by the c-commanding subject. It is crucial that the binding asymmetries are tested with quantified subjects; a version of (10c) with a definite subject (e.g., *le kolnáal=o* ‘the farmer=D2’) can be co-indexed with the left-adjoined object in a context in which the subject is the discourse topic (accidental coreference).

(10) (a) Binding into the thematic core

k=u kol-ik u_{i/j} kòol káadah hun-túul kolnáalj.
 IPFV=A.3 cut-INCMPL A.3 milpa every one-CL.AN farmer
 ‘Every farmer clears his milpa.’

(b) Binding into the spec,FP

chen u_{i/j} kòol k=u kol-ik káadah hun-túul kolnáalj.
 just A.3 milpa IPFV=A.3 cut-INCMPL every one-CL.AN farmer
 ‘It is just his milpa that every farmer clears.’

(c) Binding into left adjoined constituents

u_i/*j kool-e' k=u kol-ik káadah hun-túul kolnáalj.

A.3 milpa=D3 IPFV=A.3 cut-INCMPL every one-CLAN farmer

‘As concerns his milpa, every farmer clears it.’

Aissen (1992: 47) assumes that two classes of left-peripheral topics appear in Mayan languages: external topics that are base-generated in the left periphery and internal topics that originate in the thematic layer of the clause and move to the left periphery. Some evidence for internal topics in Yucatec Maya is presented in Gutiérrez-Bravo & Monforte y Madera (2008) and Gutiérrez-Bravo (2011). This hypothesis mainly accounts for the pragmatic properties of subjects of transitive verbs that may appear in the left-periphery without requiring a contextual trigger. However, there is no compelling evidence that these left peripheral constituents result from movement, which leaves open the possibility that SVO is base-generated in this language.³

2.2 *Nominal projections*

The pronominal domain is strictly ordered: D > Q > A > N. There are no deviations from this order; e.g., it is not possible for adjectives to scramble over the quantifiers or for adjectives/quantifiers to appear before the definite article. We assume that this order directly reflects distinct layers of nominal projections; see (11).

(11) [DP D [QP Q [AP A [nP]]]]

Definite phrases are introduced by the definite article *le* ‘DEF’; see (12). This determiner obligatorily triggers a deictic enclitic, see *=o* ‘D2’ in (12), encoding a relation to the deictic center (*a* ‘D1’ for proximal location to the deictic center; *o* ‘D2’ for distal location to the deictic center; *e* ‘D3’ for unspecified deictic properties) and appears on the right edge of the DP. The head of the QP is occupied by numerals, e.g., *óox-* ‘three-’

or quantifiers, e.g., *ya'b* ‘many’, which follow the determiner and precede adjectives; compare (12a-b). The elements occurring as heads of AP are restricted in Mayan languages (Coon 2016): there is only a limited number of root adjectives and in some Mayan languages adjectives strictly select an NP, which disallows recursive embedding of APs, i.e., they only allow for a single prenominal adjective (Dayley 1985: 195 on Tzutujil, England 2004: 134 on Mam; Brown 1979: 105 on Pocompchi). Speakers of Yucatec Maya accept DPs with more than one prenominal adjective; see (12c). However, there are only a few root adjectives that may be used as prenominal attributes.

(12) (a) *t=in w-il-ah le óox-p'éel mehen nah-o'b=o'*.

PFV=A.1SG Ø-see-CMPL DEF three-CL.IN small house-PL=D2

‘I saw the three small houses.’

(b) **t=in w-il-ah le mehen óox-p'éel nah-o'b=o'*.

PFV=A.1SG Ø-see-CMPL DEF small three-CL.IN house-PL=D2

(int.) ‘I saw the three small houses’

(c) *t=in man-ah hun-p'éel ko'h bòox k'áanche'*.

PFV=A.1SG buy-CMPL one-CL.IN expensive black chair

‘I bought an expensive black chair.’

DPs with possessor phrases have a structure parallel to vP (see discussion of Tzutujil examples in Abney 1987: 31, Aissen 1996: 454ff. on Tzotzil; Coon 2008 on Chol). In Yucatec Maya, possessor DPs follow the noun and are not case-marked; the head noun is accompanied by a set A person marker, whose ϕ -features are valued by the embedded DP (possessor); see (13a). Possessor clitics precede the head N, i.e., they follow quantifiers; see (13b). Possessed NPs are unspecified for definiteness, but an (optional) definite or indefinite determiner is possible (Lehmann 2003: 94f.), which indicates that the

projection containing the possessor clitic is below the D-layer. The possessor DP must follow the N-head (but see pied-piping and inversion below). The set-A clitic and the postnominal position of the possessor establish a parallel structure between N-projections with possessors on the one side and V-projections with subjects on the other, which is captured by the assumption of an *nP*; see (13).

(13) [DP [_{nP} NP [_{DP} possessor]]]

(a) u na' huàan.

A.3 mother Juan

'Juan's mother'

(b) le hun-p'éeł in k'àan=o'

DEF one-CL.IN A.1SG hammock=D2

'a hammock of mine' (Lehmann 2003: 95)

Relative clauses follow the head noun. The type of relative clauses in (14) does not have an overt relative pronoun and displays the same morphological properties with focus constructions: the aspect/mood auxiliary and the set-A marker are dropped when the agent constituent is relativized (Bricker 1979, Bohnemeyer 1998, Tonhauser 2003a; see Gutiérrez Bravo 2015 for further types of relative clause in Yucatec Maya). Thus, relative clauses are syntactic entities of the FP layer. The left-peripheral configurations for foci and topics are excluded in relative clauses.

(14) [_{nP} [_{nP} N] [_{FP} *op* F']]

.... le pèek' [chi'-ik-en ka'ch]=o'.

DEF dog bite-INCMPL-B.1SG formerly=D2

'... the dog that bit me formerly.' (Stolz et al. 2012:144)

Apart from the attributive adjectives in (12a)/(12c), there is a class of predicative adjectives that always follow the noun. All lexical roots can be used as predicates in Yucatec Maya (cf. the *omni-predicativity hypothesis* in Vapnarsky 2013). Stative predicates appear without aspect-mood inflection and with a ‘set B’ person marker that is zero in the third person.⁴ I.e., postnominal adjectives are identical to 3rd person predicates that form a relative clause, and can be analyzed as such (Bohnenmeyer 1998: 232).

Prenominal and postnominal adjectives contrast with respect to the use of the plural suffix *-tak* ‘ADJ.PL’.⁵ This suffix may optionally appear with predicates; see (15a). It is obligatory with postnominal adjectives with plural DPs, but is ungrammatical with prenominal adjectives; see (15b-c).

- (15) (a) [TP *chak(-tak)* [DP *le k’áanche’-o’b=o’*]].
 red-ADJ.PL[B.3SG] DEF chair-PL=D2
 ‘The chairs are red.’
- (b) *t=in man-ah* [AP *chak(*-tak)* [nP *k’áanche’-o’b.*]]
 PFV=A.1SG buy-CMPL red-ADJ.PL chair-PL
 ‘I bought red chairs.’
- (c) *t=in man-ah* [nP *k’áanche’-o’b* [FP *chak*(-tak)*]].
 PFV=A.1SG buy-CMPL chair-PL red-ADJ.PL[B.3SG]
 ‘I bought red chairs.’

Hence, postnominal adjectives have the same behavior as predicates in a relative clause (see also semantic tests for the predicative properties of postnominal experiential adjectives in Verhoeven 2007: 157). Thus, postnominal adjectives in Mayan differ from postnominal adjectives in Romance languages that are accounted for through the head movement of the N (see Cinque 1994 on Italian).

DP-subconstituents that are in focus or bear a *wh*-feature can pied-pipe the dominating maximal projection (Lehmann 2003: 29, Gutiérrez Bravo 2015: 61) when they go to Spec, FP, as illustrated in (16). The Q head in (16a) bears a *<wh>* feature that is attracted to spec,FP; movement does not apply to the head Q (i.e., the feature bearing unit) but to the QP that contains this head and its complement. Similarly, the *<wh>* feature of the embedded DP in (16b) leads to movement of the encompassing DP to the spec,FP. The same phenomenon applies to focus on DP specifiers and postverbal adjectives; see (16c-d). Hence, feature-movement is determined by some convergence principle to the effect that the entire extended projection that encompasses the feature-bearing entity is attracted to the spec,FP.

(16) (a) [hay-p'éeł<wh> [k'áanche'-o'b]] ts'o'k u man-ik pèedróoh?

how.many-CL.IN chair-PL TERM A.3 buy-INCMPL Pedro

'How many chairs did Pedro buy?'

(b) [u na' [máax]<wh>] ts'o'k a w-il-ik?

A.3 mother who TERM A.2 Ø-see-INCMPL

'Whose mother have you seen?'

(c) {How many books has Pedro read?}

[óox-p'éeł<foc> / ya'bkach<foc> [áanalte'-o'b]] ts'o'k u xok-ik.

three-CL.IN many book-PL TERM A.3 read-INCMPL

'Pedro has read THREE/MANY books.'

(d) {What kind of hats did Pedro buy?}

pàablóoh=e' [p'óok-o'b [hach nùuk-tak-o'b]<foc>] t=u man-ah.

Pablo=D3 hat-PL very big-ADJ.PL-PL PFV=3 buy-CMPL

'Pablo bought VERY BIG hats.'

3 DISPLACED POSSESSORS AND RELATED CATEGORIES

3.1 *Movement vs. base generation*

Apart from the pied piping construction just introduced, DPs can also come to be linearized in a discontinuous fashion in various ways in Yucatec Maya. Turning to possessive phrases first, we observe that a possessor subconstituent can occur in the pre-predicate position, while the possessed head remains in situ; see *wh*-movement in (17a), and focus movement in (17b) (for similar examples from Tzotzil, cf. Aissen 1987: 13f.).

- (17) (a) máax_i ts'o'k a w-il-ik u_i na'?
- who TERM A.2 Ø-see-INCMPL A.3 mother
- 'Whose mother did you see?'

- (b) {I did not see both the mother of Pedro and the mother of Juan...}
- chen pèdróoh_i t=in w-il-ah u_i na'.
- only Pedro PFV=A.1SG Ø-see-CMPL A.3 mother
- '... I saw only PEDRO's mother.'

Possessors can also be left-adjoined, see (18). The evidence that the left peripheral constituent in (18) is adjoined comes from the right-edge enclitic =*e*' 'D3' (see Section 2). Native speakers accept this example as well-formed but prefer the version with the nominal head in the pre-predicate position in this context; see (18b).

- (18) {Do you have any news from Pedro?}

- (a) pèdróoh_i=e' t=in w-il-ah u_i suku'n.
- Pedro=D3 PFV=A.1SG Ø-see-CMPL A.3 elder.brother

(b) pèdróoh_i=e' u_i suku'n t=in w-il-ah.

Pedro=D3 A.3 elder.brother PFV=A.1SG Ø-see-CMPL

‘As for Pedro, I saw his elder brother.’

Possessor extraction is reported for several further Mayan languages. Examples of the construction in (18b) with a topical possessor and a focal noun have been reported for Tzutujil (Dayley 1985: 327), Pocomchi (Brown 1979:141), Itzá Maya (Hofling 2000: 208), and also for Yucatec Maya (Lehmann 2003: 39); examples with a focal possessor DP and an in situ N such as (17b) have been reported for Tzotzil (Aissen 1996: 456), Chol (Coon 2009: 166), and K'iche' (Broadwell 2005: 6).

Ā-movement of the possessor phrase to the focus position is expected to observe barriers for extraction. As a starting point, we assume the constraint on Extraction Domains, as stated by Huang (1982).

(19) *Constraint on Extraction Domains* (CED; Huang 1982)

Only properly governed constituents (i.e., complements) allow for material to be extracted out of them, while specifiers or adjuncts do not do so.

Aissen (1983: 178, 1996: 460f.) confirms the predictions of the CED in possessor extraction in Tzotzil: extraction is possible out of DPs that are properly governed, i.e., objects of transitives and subjects of unaccusatives and not out of adjuncts or subjects of transitive/unergative verbs (Aissen 1996: 460f. on Tzotzil; Coon 2010b: 227 on Chol).

The Yucatec Mayan examples presented above confirm that possessor extraction out of objects of transitive verbs is possible. However, extraction of the possessor DP is not possible out of adjuncts, which is straightforwardly explained by the CED; see (20).

- (20) *máax táan a xiimbal y-éetel u suku'n?
 who PROG A.2 walk Ø-and/with A.3 elder.brother
 'With the brother of whom are you walking?'

The discontinuous option with left adjunction is, as expected, not sensitive to this constraint, as shown in (21) for possessive constructions with a left-adjoined possessor. The contrast between (20) and (21) offers additional support for the hypothesis stated in section 2: phrases in the immediately preverbal focus position have undergone A-bar-movement, while topics are base-generated at the left periphery of the clause.

- (21) {Do you have any news from Pedro?}
 pèedróoh_i=e' h xiimbal-nah-en y-éetel u_i suku'n.
 Pedro=D3 PFV walk-CMPL-B.1SG Ø-with/and A.3 elder.brother
 'As for Pedro, I walked with his elder brother.'

Yucatec Maya differs from Tzotzil in that it allows for possessor extraction out of specifiers. It is possible to extract a subconstituent of the subject of a transitive verb, which is rejected in Tzotzil (Aissen 1996: 460) and Chol (Coon 2010b: 227); see (22). Furthermore, examples (23a-b) show that subextraction out of the subject of unergatives is possible. This holds independently of agreement; see set-A agreement (incompletive aspect) in (23a) and set-B agreement (completive aspect) (23b). Assuming that split intransitivity correlates with a thematic difference, this data leads to the conclusion that Yucatec Maya does not display a subject/object asymmetry in subextraction (the grammaticality of possessor extraction with unergatives/unaccusatives is also reported for K'iche', Broadwell 2005: 20; extraction out of subjects of transitives is also possible in Tseltal, Polian 2013: 231).

(22) (a) máax hàant òon u na'?

who eat:TRR(SUBJ)(B.3SG) avocado A.3 mother

‘The mother of whom eats avocado?’

(b) máax il-ech u na'?

who see(SUBJ)-B.2SG A.3 mother

‘The mother of whom saw you?’

(c) chen pèedróoh il-en u na'.

only Pedro see(SUBJ)-B.1SG A.3 mother

‘Only Pedro’s mother saw me.’

(23) (a) Subject of intransitive verb (set A cross-reference marker)

máax táan u hàan-al u na'?

who PROG A.3 eat-INCMPL A.3 mother

‘The mother of whom is eating?’

(b) Subject of intransitive verb (set B cross-reference marker)

máax hàan u na'?

who eat(CMPL)(B.3SG) A.3 mother

‘The mother of whom ate?’

Yucatec Mayan is not the only language that does not fulfil the predictions of the subject island condition. Possessor extraction out of subjects/objects but not out of adjuncts is reported for Italian (Longobardi 1991: 74), Indonesian and Javanese (Jeoung 2016: 7), and XPs can be extracted from subjects in German, too. The key to an understanding seems to be that subjects appearing in relatively low positions in the clause (e.g., specifier of vP) are more likely to be transparent than subjects in higher positions (such as, e.g., specifier of TP). Furthermore, subject island effects are strong in those

languages only in which the direct object and the verb must be string-adjacent (cf. Haider & Szucsich in press), which is not the case for Yucatec Maya; see (5).

Hence, the absence of a subject/object asymmetry in subextraction is in line with the fact that adverbs may intervene between verbs and objects. However, this property does not explain the difference between Yucatec Maya and Tzotzil/Chol, since adverbs may intervene between V and object DPs in all these languages (Aissen 1992: 12 reports that adverbs may precede or follow the object in Tzotzil; in Chol, temporal adverbs may intervene between the V and object DPs (see Coon 2010a: §4.3).

As introduced in section 2, the movement of the subject of a transitive verb triggers a particular inflectional form of the verb (agent focus). Interestingly, this inflectional form also appears with possessors extracted out of subjects of transitive verbs; see (24). This data indicates that the thematic properties of the encompassing DP are visible in these constructions.

- (24) (a) máax hàant òon u na'?
- who eat:TRR(SUBJ)(B.3SG) avocado A.3 mother
- ‘The mother of whom ate avocado?’
- (b) máax il-ech u na'?
- who see(SUBJ)-B.2SG A.3 mother
- ‘The mother of whom saw you?’
- (c) chen pèdróoh il-en u na'.
- only Pedro see(SUBJ)-B.1SG A.3 mother
- ‘Only Pedro’s mother saw me.’

A simple way of capturing such data is to assume that agent focus morphology is chosen whenever an element in the preverbal focus position has a binding relation with a

trace in the transitive subject position (irrespective of whether the trace is further embedded there or not). The choice of agent focus agreement for a raised possessor of an agent is not really surprising. Agreement mismatches are reported for several languages indicating that agreement may be influenced by features of several layers of the nominal structure. For instance, agreement with X can refer to properties of the possessor of X in certain languages such as Maithili (Stump & Yadav 1988, Bickel, Bisang & Yādava 1999), Tseltal (Shklovsky 2012), or control structures in Yucatec Maya (Verhoeven 2007: 275).

3.2 *Cyclic Movement out of DP?*

Under certain assumptions, the subextraction of a possessor comes about by successive cyclic movement (from specifier-to-specifier): it moves first to the specifier position of the DP and from there to the left peripheral specifier position of a functional projection FP (Szabolcsi 1994: 181). This assumption must be substantiated by evidence that the DP may move to spec,DP as has been shown for several languages (Longobardi 1991 on Italian; Szabolcsi 1994: 181 on Hungarian; Horrocks & Stavrou 1987 on Greek; Aissen 1996 on Tzotzil).

(25) [CP [FP DP₁ [TP ... [DP <DP₁> [D' [NP N <DP₁>]]]] ...]]]

Several Mesoamerican languages provide evidence that possessor phrases may be hosted by a specifier position at the left edge of the D-layer under particular conditions. The construction at issue is a particular instance of pied-piping, known as ‘pied-piping and inversion’ (see Smith Stark 1988 for Mesoamerican languages; Grinevald Craig 1977: 15 on Jacaltec; England 1983: 252 on Mam, etc.): when a *wh*- possessor is pied piped to the specifier of the FP, the basic order ‘possessed > possessor’ is inverted to ‘possessor > possessed’. In Yucatec Maya, this type of inversion is optional; see (26)

(Lehmann 2003: 40f.; Tonhauser 2003b, §2; Gutiérrez Bravo 2015: 61). The marked linearization is accompanied by an inflectional change, which is reminiscent of the agent focus construction; the agreement marker is dropped and the head noun must appear in a particular inflectional form, suffixed with *-il* ‘REL’; see (26b).⁶ This inflectional form is rejected in the linearization possessed-possessor; see (26a).

- (26) (a) u na’(*-il) máax il-ech?
 A.3 mother(-REL) who see(SUBJ)-B.2SG
 ‘The mother of whom saw you?’ (well-formed; preferred option)
- (b) máax na’*(-il) il-ech?
 who mother-REL see(SUBJ)-B.2SG
 ‘The mother of whom saw you?’

This construction provides evidence for a specifier position at the outer layer of the extended projection of the noun (see Aissen 1996: 464). In Yucatec Maya, this construction shows particular inflectional properties. The fact that possessors may move to a specifier position at the left edge of the DP opens the possibility of accounting for the instances of discontinuity in terms of successive cyclic movement as sketched in (25). Furthermore, if movement to the spec,FP *must* be mediated by spec,DP, then the cyclic movement account promises an explanation why extraction is possible for possessor DPs but not for adjectives and quantifiers, since the former but not the latter may appear in the spec,DP.

However, only a subset of the constituents that can be extracted to the spec,FP in Yucatec Maya are eligible for this type of inversion. Crucially, inversion is only possible with *wh*-possessors and not with focused possessors; see (27). This difference is not

reflected in the discontinuous options, i.e., the possibility of fronting focused possessors in (22c).

- (27) (a) u na' pèedróoh il-en.
 A.3 mother Pedro see(SUBJ)-B.1SG
 'It is Pedro's mother who saw me.'
- (b) *pèedróoh na'-il il-en.
 Pedro mother-REL see(SUBJ)-B.1SG
 (int.) 'It is PEDRO's mother who saw me.'

Second, inversion in Yucatec Maya is obligatorily accompanied by the suffixation of *-il* to the head noun; see (26b). Crucially, this morphological form is not grammatical in the discontinuous option; compare (28a-b). Hence, the morphological facts indicate that the discontinuous option is not derived from the inverted linearization but from the basic version.

- (28) (a) máax il-ech u na'?'
 who see(SUBJ)-B.2SG A.3 mother
 'The mother of whom saw you?'
- (b) *máax il-ech na'-il?
 who see(SUBJ)-B.2SG mother-REL
 'The mother of whom saw you?'

In conclusion, assuming that the discontinuous patterns evolve through successive cyclic movement of a possessor DP through the escape hatch of the DP is not supported by the morphological facts and by the fact that inversion is not licit for a subset of the discontinuous options, namely for focused DPs.

3.3 *Extraposition*

The possibility of adverbs intervening between DP subconstituents at the right edge of the clause proper is evidence that a part of the DP can be extraposed to the right. This test reveals a left/right asymmetry within the projection of nouns. Possessors and postnominal adjectives can be separated from the host noun by a temporal adverb; see (29a-b). This is not possible for heads on the left branch of the nominal projection; see illustration by a numeral in (29c).

- (29) (a) t=in w-il-ah u na' ho'lhe'ak pèdróoh.
 PFV=A.1SG Ø-see-CMPL A.3 mother yesterday Pedro
 'I saw the mother of Pedro yesterday.'
- (b) Màariáah=e' t=u kaxt-ah k'áanche'-o'b ho'lhe'ak chak-tak.
 Maria=D3 PFV=A.3 search-CMPL chair-PL yesterday red-NR
 'Maria searched for red chairs yesterday.'
- (c) *Màariáah=e' t=u kaxt-ah k'áanche'(-o'b) ho'lhe'ak
 Maria=D3 PFV=A.3 search-CMPL chair-PL yesterday
 óox-p'él(=i').
 three-CL.IN=LOC₂
 (int.) 'Maria searched for three chairs yesterday.'

The locus of adjunction can be tested through CP-final clitics. These clitics follow external topics, precede non-restrictive relative clauses and CP complements and right-dislocated material, i.e., they are placed at the edge of a CP boundary (Skopeteas 2010). Crucially, the examples in (29) turn to be ungrammatical, if we insert a clitic at the right edge of the adverb; the judgment illustrated in (30) for possessors also holds true for

postnominal adjectives. Thus, we conclude that the facts in (29) involve adjunction to a lower layer, presumably the TP.

(30) *[t=in w-il-ah u na' ho'lhe'ak=e']_{CP} pèedròoh.

PFV=A.1SG Ø-see-CMPL A.3 mother yesterday=D3 Pedro

(int.) 'I saw the mother yesterday, namely Pedro's (mother).'

An intervening adverb must not separate elements to the left of the noun from a constituent containing the noun, as shown by (31). Such examples would be grammatical if the temporal adverb *ho'lhe'ak* was placed clause-finally. Apparently, XPs forming part of the extended projection of the noun cannot be moved rightwards out of this extended projection (NP, AP, and NumP cannot be extraposed from DP), while complements, adjuncts and specifiers of the noun can do so. Extraposition seems to affect full referential XPs only, a constraint that is in line with what we find in other languages.

(31) (a) *t=in w-il-ah le óox-p'éeel ho'lhe'ak mehen nah-o'b=o'.

PFV=A.1SG Ø-see-CMPL DEF three-CL.IN yesterday small house-PL=D2

(int.) 'I saw the three small houses yesterday.'

(b) *t=in w-il-ah le óox-p'éeel mehen ho'lhe'ak nah-o'b=o'.

PFV=A.1SG Ø-see-CMPL DEF three-CL.IN small yesterday house-PL=D2

(int.) 'I saw the three small houses yesterday.'

When the possessor is extraposed from DP, the remnant DP can undergo movement to the preverbal focus position, as shown in (32). The acceptability of the construction is predicted, because, as we saw above, there is reconstruction for binding from the Spec,FP position. The trace left by the extraction of the possessor in the DP thus continues to be properly bound by its antecedent even if the DP has undergone further operator movement.

(32) {It was not the son and the daughter of Pedro, who saw me...}

chen u y-àal il-en pèedròoh.

only A.3 Ø-son see(SUBJ)-B.1SG Pedro

‘Only the SON of Pedro saw me.’

In contrast, left adjunction of the possessed nominal is rejected independently of the placement of the possessor DP; see (33b). The left adjoined phrase is directly generated at the left edge of the CP, so that there is no reconstruction for binding into CP proper. Even if the topics were to contain a movement trace corresponding to the possessor, the latter could not bind it due to the lack of reconstruction.

(33) (a) *u_i na’=e’ huàani táan u xok-ik hun-p’éel áanalte’.

A.3 mother=D3 Juan PROG A.3 read-INCMPPL one-CL.IN book

‘The mother of Juan is reading a book.’

(b) *u_i na’=e’ t=in w-il-ah huàani y-éetel

A.3 mother=D3 PFV=A.3 Ø-see-INCMPPL Juan Ø-and

u_i suku’n=e’ t=in w-il-ah pèedròohi.

A.3 elder.brother=D3 PFV=A.3 Ø-see-INCMPPL Pedro

‘I saw Juan’s mother and I saw Pedro’s elder brother.’

It is not only possessors and relative clauses that can be detached from DP by movement. There are two further relevant constructions of this type: partitive DPs and adjunct PPs embedded in DP constituents. Partitive DPs are formed by definite phrases following the quantifier. The partitive DP is a full DP with a determiner following the quantifier, which governs an empty nominal head; see (34b). The syntactic relation between the partitive phrase and the head nominal is spelt out neither by agreement on the head nominal nor by case.

(34) (a) t=in man-ah óox-p'éel áanalte'-o'b.

PFV=A.1SG buy-CMPL three-CL.IN book-PL

'I bought three books.'

(b) t=in man-ah óox-p'éel le áanalte'-o'b=o'.

PFV=A.1SG buy-CMPL three-CL.IN DEF book-PL=D2

'I bought three of those books.'

Interestingly, it is possible to separate quantifiers from partitive DPs; see (35b), but not from their nP-complements (35a). How can this contrast be explained?

(35) (a) *hay-p'éel ts'o'k a man-ik áanalte'-o'b(=i)?

how.many-CL.IN TERM A.2 buy-INCMPL book-PL=LOC

(int.) 'How many books did you buy?'

(b) hay-p'éel ts'o'k a man-ik le áanalte'-o'b=o'?

how.many-CL.IN TERM A.2 buy-INCMPL DEF book-PL=D2

'How many of those books did you buy?'

The ungrammaticality of (35a) suggests that Yucatec Maya does not allow Left Branch Extraction of the type described, e.g., for Slavic languages (Bošković 2005). Indeed, adjectives and numerals cannot normally be placed into the focus position either; see (36).

(36) (a) {– Did you buy a cheap table and cheap chairs? – I bought a cheap table...}

*... chen ba'l=e' (ko'-)ko'h(-tak) ts'o'k in

only thing=D3 RDP-expensive-ADJ.PL TERM A.1SG

man-ik k'áanche'-o'b(=i).

buy-INCMPL chair-PL=D3

'...but I bought EXPENSIVE chairs.'

(b) *óox-p'éel ts'o'k u man-ik k'áanche'-o'b pèedróoh(=i').

three-CL.IN TERM A.3 buy-INCMPL chair-PL Pedro=LOC₂

'Pedro bought THREE chairs.'

It is thus safe to assume that the heads of the extended projection of the noun cannot move leftwards - Yucatec Mayan does not allow Left Branch Extraction. Recall that the same elements cannot be extraposed to the right; see (29c). In the model proposed by Bošković (2005), this comes as no surprise, because Yucatec Mayan possesses determiners and allows for multiple adjectives in front of the noun, thereby fulfilling two of the criteria that rule out Left Branch Extraction in this model.

Consequently, grammatical (35b) cannot involve the movement of a head to the preverbal focus position. Rather, what appears there must be a complete maximal projection. For this to be possible, *hay-p'éel* must have undergone remnant movement. First, *le áanalte'o'b=o'* was moved out of the quantified DP in a process of extraposition to the right, which is responsible for the separation of the quantifier and the partitive DP. Then, the remnant DP [*hay-p'éel t*] containing the trace of the partitive goes to the preverbal focus position, yielding (35b). Recall that Spec,FP allows reconstruction of binding, so that the trace of the partitive DP is still properly bound when carried along to the focus position.⁷

In general, PP adjunction within DPs is not productive in Mayan languages. The corresponding native construction is a possessive phrase. Native speakers accept embedded PPs, but we should take this data with caution, since this construction might have been borrowed from Spanish. To the extent that these possibilities of extraction are judged with reference to the native syntax, this data is informative for the structural

possibilities of Yucatec Maya. Embedded PPs can be adjoined to the right of the head N, see (37).

(37) ts'o'k u hóok'-ol hun-p'éel áanalte' yóok'sal ch'íich'-o'b.

TERM A.3 exit-INCMPL one-CL.IN book for bird-PL

‘A book about birds appeared.’

Discontinuous options with either the head nominal or the embedded PP in the pre-predicate position are possible. Hence, PP adjuncts have the same possibilities as possessor DPs: it is possible to extract the PP or the nominal head to the spec,FP; see (38a-b). The latter option is again an instance of remnant movement following extraposition of the PP, an option exemplified in (39).

(38) (a) yóok'sal ba'x ts'o'k a man-ik hun-p'éel áanalte'?

for what TERM A.2 buy-INCMPL one-CL.IN book

‘About what have you bought a book?’

(b) ka'p'éel áanalte'-o'b túun ho's-al

two-CL.IN book-PL PROG:A.3 exit:CAUS:PASS-INCMPL

yóok'sal ch'íich'-o'b.

for bird-PL

‘TWO BOOKS appear about birds.’

(39) pèedróoh=e' t=u xok-ah hun-p'éel áanalte' ho'lhe'ak

Pedro=D3 PFV=A.3 read-CMPL one-CL.IN book yesterday

yóok'sal ch'íich'-o'b.

for bird-PL

‘Pedro read a book about birds yesterday.’

In this section, we have discussed various instances of subextraction dependencies in Yucatec Maya. Possessors, definite partitives and PPs can leave DPs by movement and land in various positions, viz. a focus position preceding the verb and an extraposition slot within the clause proper. Because of the reconstruction potential of the specifier of FP, there are also constructions involving remnant movement. In line with its overall properties, Yucatec Maya does not allow Left Branch Extraction.

4 APPARENT DISCONTINUITIES INVOLVING THE TOPIC POSITION

As has been established in section 3, only the highest of the projections in the extended projection of a noun, i.e. the DP itself, can be moved rightwards in Yucatec Maya, as in other languages. Matters appear to be different in the left periphery, however. Data such as (40) may lead to the impression that nP has been preposed, with the numeral projection being stranded as in (40b), or moved to the focus position, as in (40a).

(40) [CP nP [CP Op [FP ... [QP [nP *pro*]. . .]

(a) k'áanche'-o'b=e' óox-p'éel ts'o'k u man-ik pèedróoh*(=i').
 chair-PL=D3 three-CL.IN TERM A.3 buy-INCMPL Pedro=LOC₂
 'Pedro bought three chairs.'

(b) k'áanche'-o'b=e' ts'o'k u man-ik óox-p'éel pèedróoh*(=i').
 chair-PL=D3 TERM A.3 buy-INCMPL three-CL.IN Pedro=LOC₂
 'Pedro bought three chairs.'

In fact, (40a) is much preferred over (40b) by native speakers. As in most other languages of the world, such 'split topicalizations' or 'inverted discontinuous NPs' arise in Yucatec Maya when the two expressions related to the same argument place of the predicate have different pragmatic functions, one being topical, the other being focal. In the absence of

any prosodic or morphological focus marking, foci and topics preferentially go to their respective positions. For this reason, (40a) is more in line with the pragmatic preconditions for discontinuity, and therefore preferred.

In the following, we will argue that the proper analysis of (40) involves two independent DPs, one generated as a left adjoined topic, the other generated within the clause proper. They are unrelated in terms of syntax, but have a semantic/pragmatic connection. However, we will identify quite similar structures involving movement to Spec,FP in section 5.

Split topicalizations/discontinuous noun phrases in Indo-European languages have been the topic of an intense debate in the last decades, a discussion that has been summarized in a lucid way in Ott (2011). There is a research tradition assuming that the noun or a phrase containing it has moved leftward out of the DP in discontinuous constructions, while the other tradition assumes that the discontinuous construction involves two full maximal projections that are generated independently of each other - they are mostly semantically linked to the same argument.

In Yucatec Maya we find various types of morphological evidence for the latter approach. Consider the contrasts in (41) and (42).

- (41) (a) *hay-p'éel ts'o'k u man-ik k'áanche'-o'b pèedróoh(=i')?
 how.many-CL.IN TERM A.3 buy-INCMPL chair-PL Pedro
 (int.) 'How many chairs did Pedro buy?'

- (b) k'áanche'-o'b=e' hay-p'éel ts'o'k u man-ik
 chair-PL=D3 how.many-CL.IN TERM A.3 buy-INCMPL
 pèedróoh*(=i')?
 Pedro=LOC₂
 'How many chairs has Pedro bought?'

(42) {– Did you buy a cheap table and cheap chairs? – I bought a cheap table... }

- (a) *...chen ba'l=e' (ko'-)ko'h(-tak) ts'o'k in man-ik
 only thing=D3 RDP-expensive-ADJ.PL TERM A.1SG buy-INCMPL
 k'áanche'-o'b(=i').
 chair-PL=D3
 '...however, I bought EXPENSIVE chairs.'
- (b) ...chen ba'l=e' k'áanche'-o'b=e' (*ko'-)ko'h(-tak) ts'o'k
 only thing=D3 chair-PL=D3 RDP-expensive-ADJ.PL TERM
 in man-ik*(=i').
 A.1SG buy-INCMPL=LOC₂
 '...however, I bought EXPENSIVE chairs.'

In the grammatical cases, the nominal head must appear as a left-adjoined topic phrase, and not within the clause proper. But note there is a further important difference: the grammatical sentences must come with the clause-final enclitic *=i'*.

Before proceeding, a discussion of the clause-final enclitic is due. This enclitic is, in its principal use, a locative anaphor that is obligatory whenever the local complement of a verb is not lexically realized within the clause. Example (43a) illustrates the existential verb *yàan* 'EXIST' that licenses a locative complement. When the complement is not lexically realized as in (43b), the locative enclitic obligatorily appears, presumably filling

the slot for a locative constituent. This enclitic belongs to a class of enclitics that must surface at the right edge of the CP in Yucatec Maya (Skopeteas 2010). When the locative phrase is realized in an extra-clausal position as in (43c), the enclitic is obligatory. However, when the locative phrase is realized in the focus position, the version with the enclitic is only possible with a reference to a place that should be identifiable in the context; see (43d). These examples indicate that Yucatec Maya has a constraint against locative complement drop: the enclitic *=i'* obligatorily fills the slot of a locative complement if the latter is not lexically realized within the clausal layer that is defined by the FP. The fact that the enclitic must have a locative reference when the complement is moved to the spec,FP shows that the pre-predicate constituent relates to a trace within the thematic layer of the clause through an \bar{A} -dependency. The obligatoriness of the enclitic in (43c) implies that left-adjoined locative phrases do not relate to a gap *in situ*.

(43) (a) *yàan hun-p'éel mèsáah ichil hun-p'éel nah.*
 EXIST one-CL.IN table inside one-CL.IN house
 'There is a table inside a house.'

(b) {What is there inside a house?}
yàan hun-p'éel mèsáah(=i').*
 EXIST one-CL.IN table=LOC₂
 'There is a table.'

(c) {What is there inside a house?}
ichil le nah=o' yàan hun-p'éel mèsáah(=i').*
 inside DEF house=LOC₂ EXIST one-CL.IN table=LOC₂
 'Inside the house, there is a table.'

(d) tu'x yàan hun-p'éel mèesáah(=i')?

where EXIST one-CL.IN table=LOC₂

'Where is there a table (there)?'

The same enclitic occurs when an nP is not overtly expressed in a DP. In (44a), an elliptical DP occurs within the thematic layer of the clause, while the elliptical DP in (44b) occurs in the pre-predicate position. In either case, the enclitic =i' appears at the right edge of the CP.

(44) {Did Pedro see any chairs?}

(a) pèdróoh=e' t=u y-il-ah ya'b chak-tak*(=i').

Pedro=D3 PFV=A.3 Ø-see-CMPL many red-NR.PL=LOC₂

'Pedro saw many red (thereof).'

(b) pèdróoh=e' ya'b chak-tak t=u y-il-ah*(=i').

Pedro=D3 many red-NR.PL PFV=A.3 Ø-see-CMPL=LOC₂

'Pedro saw MANY red (thereof).'

If the nP is available within the clause, either in situ or in the pre-predicate position, the version with the enclitic is only possible in a reading that involves a locative adjunct that is identifiable in the context. For instance, the versions of (45a-b) with an enclitic are felicitous in the context of the question "What did Pedro read in the bookstore?".

(45) (a) pèdróoh=e' t=u xok-ah ya'bkach áanalte'-o'b(=i').

Pedro=D3 PFV=A.3 read-CMPL many book-PL=LOC₂

'Pedro has read many books (there).'

(b) pèdróoh=e' ya'bkach áanalte'-o'b t=u xok-ah(=i').

Pedro=D3 many book-PL PFV=A.3 read-CMPL=LOC₂

'Pedro has read MANY BOOKS (there).'

The enclitic is obligatory when the modifier is part of a noun phrase with an elided nominal head.⁸ Basically, two analyses are available for this constellation. The use of the locative marker with elliptical noun phrases, i.e. with a partitive interpretation,⁹ is reminiscent of the use of partitive clitics such *ne* in Italian, *en* in French, etc. with noun phrases that lack an overt head. For sentences such as (46), a standard analysis appears to be that *en* is generated below the numeral within the direct object DP, and then undergoes sub-extraction to the clitic position. The compatibility of *en* with a stranded adjective suggests that *en* corresponds to an nP. Such nP-pronouns can either derive their interpretation from context, or from a left adjoined constituent, as in (46)-(47).

(46) (de gravures flamandes,) j' en ai acheté trois.
of engravings Flemish 1SG *en* have bought three
'I have bought three (of the Flemish engravings).'

(47) Parmi mes copains, il y' en a plusieurs vieux
among my friends, 3SG here *en* have many old
'Among my friends, there are many old ones.'

It is tempting to assume that French *en* and Yucatec Maya *=i'* have, basically, the same analysis when used with a partitive interpretation. The left-peripheral topic would then bind the *=i'* and *en* in the same way. For French and Italian, the movement analysis for the clitic derives some support from the fact that the construction is fine for direct objects and unaccusative subjects only, i.e., its derivation appears characterized by a CED effect. In Yucatec Maya, *=i'* shows up with transitive subjects as well, but we have already seen that all types of subjects are transparent for extraction here, so that a CED effect on *=i'* would not be expected at all (similar facts are reported for Czech in Saez 1991).¹⁰

(48) kolnáal=e' óox-túul il-en=i'.
 farmer=D3 three-CL.AN see(SUBJ)-B.1SG=LOC₂

‘Concerning farmers, three (of them) saw me.’

With this background, we now return to the occurrence of the enclitic =i' ‘LOC₂’ in discontinuous noun phrases. The enclitic is obligatory if the head is left adjoined and the modifier appears in situ or in the preverbal position, as in (49a-b).

(49) (a) áanalte'-o'b=e', pèdróoh=e' ts'o'k u xok-ik ya'bkach*(=i').
 book-PL=D3 Pedro=D3 TERM A.3 read-INCMPL many=LOC₂

‘As for books, Pedro has read many of them.’

(b) áanalte'-o'b=e' ya'bkach ts'o'k u xok-ik pèdróoh*(=i').
 book-PL=D3 many TERM A.3 read-INCMPL Pedro=LOC₂

‘As for books, Pedro has read many of them.’

This data shows that the sentences with a left adjoined nP pattern with the sentences with an elided nP. In both cases, a locative enclitic appears in the clause with an anaphoric relation to an antecedent outside the FP layer. Assuming that the enclitic is an anaphor, we may understand the examples in (49) through a partitive paraphrase of the kind ‘books... many of them’.

The clitic data thus supports the view that the two parts of the ‘discontinuous’ construction are actually two DPs independent of each other. In particular, the left-adjoined phrase has not been extracted from the DP in the clause proper. If this view is correct, we expect to find sentences in which the nominal part of the right DP is not elided. This expectation is indeed fulfilled, as (50) shows. For the ‘discontinuous’ construction to be well-formed, it seems as if the extension of the left-adjoined nominal must be a superset of the noun phrase in the focus position (which is always the case if, as in the

case of an elliptical noun, there are no referential restrictions at all on left adjoined constituents).

- (50) còoches-o'b-e' leeti'-e' chen Toyotas k=u man-ik.
 car-PL=D3 this=D3 only Toyota:PL IPFV=A.3 buy-INCMPL

‘As for cars, he only buys Toyotas.’

The data presented so far involved pairs of nominal phrases containing material that could not be arranged into a single DP, viz. the locative affix signaling nominal ellipsis and a second noun. It would certainly be possible to accommodate such differences through additional assumptions (see the discussion of “regeneration” effects in van Riemsdijk 1989), but the straightforward implication of this data is that the discontinuous option is not derived from a continuous noun phrase with the same material in situ. A further mismatch of this type is *determiner overlap*. The left-adjoined head as well as the alleged remnant modifier may display their own determiner, while the corresponding continuous noun phrase with two determiners is not well-formed; see (51a- b).

- (51) (a) hun-p'éeel k'áanche'=e' t=in w-il-ah hun-p'éeel bòox=i'.
 one-CL.IN chair=D3 PFV=A.1SG Ø-see-CMPL one-CL.IN black=LOC2

‘A chair, I have seen a black one.’

- (b) *...hun-p'éeel bòox hun-p'éeel k'áanche'....

one-CL.IN black one-CL.IN table

Disagreement facts lend further support to the postulation of two DPs independent of each other. The second conjunct in (52a) displays a left dislocated noun phrase in plural. The remnant numeral cannot modify a plural noun, i.e., (52b) is not a possible noun phrase.

- (52) (a) k'áanche'-o'b=e' óox-p'éel t=in man-ah=i',
 chair-PL=D3 three-CL.IN PFV=A.1 buy-CMPL=LOC2
 mèsáah-o'b=e' hun-p'éel t=in man-ah=i'.
 table-PL=D3 one-CL.IN PFV=A.1 buy-CMPL=LOC2
 'I bought three chairs and I bought one table.'
- (b) *...hun-p'éel mèsáah-o'b...
 one-CL.IN table-PL

Similarly, the plural suffix *-o'b* appears once in the nominal projection (and is optional in the presence of plural quantifiers/numerals). With discontinuous noun phrases, it is possible to find examples with a pluralized topic and a pluralized remnant which cannot be traced back to a continuous nominal projection; see (53b).

- (53) (a) {Did two girls hit you?}
 xch'úuppàalal-o'b=e' k=u hats'-ik-en óox-túul-o'b=i'.
 girl-PL=D3 IPFV=A.3 hit-INCMPPL-B.1SG three-PL=LOC2
 'THREE girls hit me.'
- (b) *...le óox-túul-o'b xch'úuppàalal-o'b=e'...
 DEF three-CL.AN-PL girl-PL=D3

Recall from above that there are no subject condition effects on extraction in Yucatec Maya, while adjuncts are islands for movement. If the discontinuous noun phrases are not generated by a movement process, as suggested by the mismatches we have presented, they should not be sensitive to adjunct island effects. The contrast between (54a) and (54b) thus offers additional support for an analysis of discontinuous noun phrases without movement.

(54) (a) {Do you have any news from Pedro?}

pèedròoh_i=e' h ximbalnah-en y-éetel ui suku'n.

Pedro=D3 PFV walk-B.1SG Ø-with/and A.3 elder.brother

'As for Pedro, I walked with his elder brother.'

(b) {Felipe is a colonel and is accompanied by soldiers. How many soldiers does he walk with?}

waach-o'b=o' felipéeh=e' y-éetel óox-túul k=u máan=i'.

soldier-PL=D2 Felipe=D3 Ø-with/and three-CL.AN IPFV=A.3 pass=LOC₂

'Felipe is walking around with THREE soldiers.'

One prediction of an analysis of discontinuous noun phrases in terms of two independently generated maximal projections appears to be unfulfilled, however. Under this analysis, there should be no syntactic constraints on the actual composition of either of the two parts of the discontinuous construction. In contrast to this expectation, left-adjoined phrase with quantifiers (55) or adjectives (56) are rejected.

(55) {What did Pedro buy three pieces of?}

(a) *óox-p'éel=e' k'áanche'-o'b ts'o'k u man-ik pèedròoh(=i').

three=D3 chair-PL TERM A.3 buy-INCMPL Pedro=LOC₂

(int.) 'Pedro has bought three CHAIRS.'

(b) *óox-p'éel=e' ts'o'k u man-ik k'áanche'-o'b pèedròoh(=i').

three=D3 TERM A.3 buy-INCMPL chair-PL Pedro=LOC₂

(int.) 'Pedro has bought three chairs.'

(56) {What did you buy red pieces of and what did you buy black pieces of?}

*chak(-tak)=e' t=in man-ah k'áanche'-o'b=e',

red-ADJ.PL=D3 PFV=A.1 buy-CMPL chair-PL=D3

chen ba'l=e' box(-tak)=e' mèsásah-o'b t=in man-ah*(=i').

only thing=D3 black-ADJ.PL=D3 table-PL PFV=A.1SG buy-CMPL=LOC2

(int.) 'I bought red CHAIRS but black TABLES.'

One way of dealing with this difficulty could lie in assuming that discontinuous noun phrases are not formed by pairs of two DPs, but rather by pairs of a DP (sitting in the clause proper) and a left-adjoined nP, cf. Ott (2011) for a similar proposal. (55)-(56) would thus be ruled out because the left-peripheral phrases are too large. However, the determiner doubling data in (51) can hardly be reconciled with this structural solution. Instead, a semantic characterization seems possible. The adjoined expression is predicational, while the elliptical DP in situ is argumental. In particular, the topic material is a non-referential expression that serves as a frame setter determining the conditions under which the assertion of the utterance is true (Ott 2011). Therefore, (55)-(56) would still be blocked, while (51) fits the model insofar as it is possible to treat the doubled indefinite determiner as a mere expletive, lacking semantic content and allowing the DP to still be interpreted referentially. In this spirit, the judgments above relate to the difficulty to establish predicational relations in particular configurations, and not to constraints on the (projections of) particular categories. With appropriate contextual manipulations, it is possible to obtain left-dislocated modifiers; see, e.g., (57a-b).

(57) (a) {Did you buy two black chairs?}

bóox-tak=e' óox-p'éel ts'o'k in man-ik=i'.

black-ADJ.PL=D3 three-CL.IN TERM A.1 buy-INCMP=LOC₂

‘Concerning black ones, I bought three.’

(b) {Did Pedro kill three pumas? No, Pedro killed two.}

óox-túul=e' Pàablo kíin-s-eh.

three-CL.AN=D3 Pablo die-CAUS-SUBJ

‘It is Pablo who killed three (pumas).’

In this section, we have shown that the second type of construction in which a DP could be claimed to be split up is only an apparent case of discontinuity. Yucatec Maya tolerates non-referential topics in the left peripheral position that define a set of entities relative to which the assertion has to be evaluated. When the argumental expression to which this topic is related comes with an elliptical noun (as it mostly does), the impression of the discontinuity of a single DP arises in a construction that in reality involves two independent nominal projections.

5 NOUNS IN THE FOCUS POSITION

While (real or apparent) discontinuous noun phrases usually arise in a pragmatic context in which the left part is the (contrastive) topic and the right part the focus (the only situation considered in Ott 2011), other contexts have been shown to license discontinuity as well (cf., e.g, Féry et al 2007), in particular, the left part of a discontinuous construction can be the focus and the right element can belong to the given information:

- (58) (a) {What did she buy?}
 Bücher hat sie ein paar gekauft
 books has she a few bought
 ‘She has bought some BOOKS.’
- (b) {Does he have many friends?}
 Nein, Feinde hat er viele
 No enemies has he many
 ‘No, he has many ENEMIES.’

Féry et al (2007) and Fanselow (2013) have pointed out that there are certain morphological differences between the topic-focus and the focus-given types of discontinuity, and Fanselow (2013) argues for a syntactic difference bringing about both the morphological and pragmatic facts: the topic-left type involves two independent DPs (as discussed above), while the focus-left type comes about by moving nP out of DP.

The clear distinction between topic and focus positions in Yucatec Maya allows us to study the impact of information structure on properties of discontinuous constructions in quite a direct way. As shown by (59), an adjective-noun combination can be placed into the focus position, stranding a quantifier in the postverbal domain. Note that the nature of the preverbal slot for *ma'lob áanalte'o'b* is identified by the lack of a topic marker to its right.

- (59) leeti'=e' ma'lob áanalte'-o'b ts'o'k u xok-ik ya'bkach=i'.
 this=D3 good book-PL TERM A.3 read-INCMPL many=LOC2
 ‘He read many GOOD BOOKS.’

When a subject is split up in such a way that the left element is a (contrastive) focus, we expect the construction to show agent focus properties. The dialogue in (60) is in line with this prediction.

(60) A: {Did three boys hit you?}

B: Ma. xch'úuppàal-o'b hats'-ik-en óox-túul=i'.

NEG girl-PL hit-INCMPL-B.1SG three-CL.AN=LOC₂

'No, Three GIRLS hit me.'

Given that the focus position is arguably filled by a movement process, the placement of an nP there should not come with the properties that suggested the generation of two independent DPs in the discontinuous topic-focus construction. Indeed, determiner overlap is impossible when nP is a focus, in contrast to what we found in split topicalization; compare (51).

(61) *hun-p'éel k'áanche' t=in w-il-ah hun-p'éel bòox=i'.

one-CL.IN chair PFV=1SG Ø-see-CMPL one-CL.IN black=LOC₂

(int.) 'A CHAIR, I have seen a black one.'

Disagreement facts as discussed in the previous section also cannot be observed for the placement of an nP into the focus position. The fronted noun can bear plural morphology when sitting in the focus position, as shown in (62a), but only when the numeral left behind is itself semantically plural. In case the numeral is 'one' as in (62b), the nP cannot bear plural morphology, it must be in the singular (B vs. B'), in contrast to what we have observed with the placement of the noun in the topic position), in which case disagreement is tolerated; see also (52a).

(62) (a) A: {Did you buy three chairs?}

B: Ma'! mèsáah-o'b t=in man-ah óox-p'éel=i'.

NEG table-PL PFV=A.1 buy-CMPL three-CL.IN=LOC₂

(b) A: {Did you buy one chair?}

B: *Ma'! mèsáah-o'b t=in man-ah hun-p'éel=i'.

NEG table-PL PFV=A.1 buy-CMPL three-CL.IN=LOC₂

B': Ma'! mèsáah t=in man-ah hun-p'éel=i'.

NEG table PFV=A.1 buy-CMPL one-CL.IN=LOC₂

(63) A: {How many tables did you buy?}

B: Mèsáah-o'b=e' t=in man-ah hun-p'éel=i'.

table-PL=D₃ PFV=A.1 buy-CMPL one-CL.IN=LOC₂

Examples (61)-(63) thus lend strong support to the view that the differences in the information structure status of the noun in the discontinuous construction go hand in hand with a difference in derivation: in the topic-focus constellation, the two parts of the constructions are full maximal projections generated independently of each other, while the focus has been extracted from a DP stranded in situ in the focus-given construction.

There is, however, a complication: the focus-given construction also requires the presence of the locative clitic =i'; cf. the contrast in (64).

(64) {A: Are three boys hitting you?}

B: Ma. xch'úuppàal-o'b túun hats'-ik-en óox-túul-o'b*(=i').

NEG girl-PL PROG hit-INCMPL-B.2SG three-CL.AN-PL=LOC₂

'No, Three GIRLS are hitting me.'

The clitic is indicative of a DP with an empty nominal head. Its presence in (64) is surprising because the noun linked to the numeral is present in FP. Given we have seen

above that phrases in Spec,FP are visible for the determination of the placement of the locative version of $=i'$, we would expect the same to hold in the case of the partitive version, in contrast to the data in (64). If $=i'$ is a licenser for an empty nP (as in one of the two alternative analyses envisaged in Section 4), one wonders why it would have to be present when the empty nP is a trace rather than *pro*, and why the movement antecedent could not itself license its gap. If $=i'$ is subextracted from DP, as in the second alternative, the constellation in (64) appears even more miraculous, because $=i'$ and *xchúuppaalo'b* would have had to originate their movement in the very same position.

The Yucatec Mayan data with nPs in the focus position thus present us with a dilemma discontinuous NPs are notorious for: we have evidence that movement must play a role in their derivation, but further data, viz. (64), militate against the idea that the nP has been extracted out of the DP.

In the generative literature, there are two attempts of dealing with this dilemma. Fanselow & Ćavar (2001) analyse pertinent facts in terms of the copy-and-deletion theory of movement, assuming that discontinuous DPs are formed by copying a DP Σ from position A to position B. In contrast to normal movement, in which the phonological matrix of Σ is kept in A but eradicated in B, there is partial deletion Σ both in positions A and B. As the authors note, constructions in which the same position (e.g., nP) is filled by different lexical material in A and B (compare German (65) and Yucatec Maya (50)) cannot be analysed in such a model because nP cannot be filled twice in Σ . They claim that structures such as (65) are marginal (which may be correct for German), and we have observed that they are confined to independently generated topics in Yucatec Maya.

(65) Raubvögel sahen wir nur Bussarde.

bird_of_prej saw 1PL only buzzards

‘As for birds of prey, we only saw buzzards.’

Now, however, we are confronted with a situation in which the clitic =i’ and the lexical nP compete for the same slot in ALL instances of the construction, so the problem cannot be put aside. However, the conditions of resumption differ across languages and we know of several constructions in Swedish, Libanese Arabic or Vata that involve pro-forms and display evidence for movement at the same time (see an overview in McCloskey 2006). Phenomena of this type lend themselves to a copy-and-deletion account of movement (see McCloskey 2006: 110): (a) constraints on movement apply to the derivational step of copying a structure to a functional projection for feature-checking reasons; (b) the derivational step of deleting those copies that are not in a spec-head relation with the corresponding projection may be constrained by factors that are independent from movement, which offers a natural explanation for the fact that pro-forms appear in syntactic positions in which we would expect a gap.

Fanselow (1988) and Ott (2011) assume that discontinuous noun phrases *always* involve the generation of two independent maximal projections. Fanselow proposes that these are directly merged to the verbal projections, while Ott begins his derivation with a constellation in which the two maximal nominal projections are merged to each other. In both versions of the approach, the empty nP in one of the two projections must be licensed. This is why the clitic is obligatory.

The two versions of (apparently) discontinuous noun phrases in Yucatec Maya thus both involve two independent projections. Where do their differences come from, then? In the topic construction, one of the two projections is generated outside the FP. Material

outside FP is, apparently, syntactically invisible (recall, e.g., the lack of reconstruction effects), so there is no reason for why the two DPs should harmonize with respect to determiners and agreement.

The situation is different when both projections are part of the FP. We can then expect them to be subject to an agreement requirement if they are to be linked thematically, so number mismatches are not to be expected. Furthermore, the pragmatic interpretive options of frame setting available for external topics cannot be applied within the clause proper, so that one part of the discontinuous construction must *bind* a pronominal in the other part in order to be identifiable semantically. The mechanism can be envisaged as comparable to clitic-doubling constructions for arguments. Binding is subject to syntactic constraints – the category binding $=i'$ can only be an nP itself (or an AP dominating an nP), but not a larger category such as a NumP or a DP. If correct, this assumption explains why there is no nominal doubling and no determiner doubling in the focus construction.

6 CONCLUDING REMARKS

Yucatec Maya turns out to be an unspectacular language with respect to the non-contiguous serialization of constituents related to the same argument slot. As in many other languages, there is subextraction of possessors and (definite) partitive phrases, either by movement to the specifier of a Focus projection or by extraposition (also affecting relative clauses). Arguably, the language also allows the subextraction of PPs. The categories that are affected in such a way are arguments, specifiers, and adjuncts of the nominal projection. Yucatec Maya seems to disallow Left Branch Extraction – not a surprising fact given the presence of overt determiners (see Bošković 2005).

For the type of discontinuity that is often covered by the term SPLIT TOPICALIZATION, Yucatec Maya may also appear unspectacular, but its elaborate left periphery allows us much sharper insights into the mechanisms of the formation of that construction than we can get it by analyzing less articulated languages such as German. Quite independent of the precise constellation with respect to information structure, SPLIT TOPICALIZATION always involves the generation of two independent maximal nominal projections. We have attributed the differences between the topic-focus and the focus-given subtypes to the fact that left peripheral topics occupy a position outside the clause proper. There, they can be fit into the assertion by interpretive strategies of a pragmatic nature that are unavailable within FP and which are responsible for the observation that the ‘syntactic connectivity’ between the two parts of the construction is much looser in the topic than in the focus case.

We know of no other Mayan language that patterns with Yucatec Maya with respect to discontinuity. We often see the extraction of possessors described in section 3, as illustrated by (66) for Tzotzil and (67) for Chol.

(66) Tzotzil

Buch’u av-il-be s-tot?

who A.2-see-IO A.3-father

‘Whose father did you see?’ (Aissen 1987: 14)

(67) Chol

Maxki tyi yajl-i i-plato?

who PFV die-INTR A.3-plate

‘Whose plate fell?’ (Coon 2009: 166)

However, structures corresponding to those discussed in section 4 and 5 have not been reported in the literature for any other Mayan language. It seems clear that split constructions with a left-peripheral noun are unacceptable in Chol (Jessica Coon, acknowledging the judgments to Nicolás Arcos Lopez p.c.) and in K'iche' (Leah Velleman, p.c.). In contrast, Chol and Tzotzil allow Left Branch Extraction that we found impossible in Yucatec Maya; see (68) and (69) and detailed discussion in Aissen (1987: 253–261) reporting that this construction occurs more frequently with absolutive arguments in the corpus and is more readily accepted for absolutives than for ergatives in grammaticality judgments.

(68) Chol

Ux-p'ej tsa' k-mañ-ä alaxax.
 three-CL.ROUND PFV A.1-buy-TRR orange

'I bought three oranges.' (Jessica Coon, Nicolás Arcos Lopez, p.c.)

(69) Tzotzil

?ox-vo? ?i-s-mil-ik viniketik li jsoktometik-e.
 three-CL.AN CMPL-A.3-kill-PL man:PL DEF Chiapaneco:PL-CLT

'The Chiapanecos killed three men.' (Aissen 1987: 260)

Summing up, the comparison between Mayan languages reveals that: some Mayan languages (Yucatec Maya) allow for SPLIT TOPICALIZATION, while other languages (Chol, Tzotzil) do not do so; some Mayan languages (Chol, Tzotzil) allow for LEFT BRANCH EXTRACTION, while other languages (Yucatec Maya) do not do so; languages of both groups allow for POSSESSOR EXTRACTION. The nominal structure of these languages is *prima facie* very similar: bare referential noun phrases are possible, while definite and indefinite determiners occur frequently (see, e.g., Chol in Coon 2010b: 207–211, Tzotzil

in Aissen 1987: 3–5). Besides, all these languages allow for bare referential noun phrases, i.e., an overt D head is not necessary. It may well be that the development of DP structure is an emerging phenomenon in Mayan languages. In this view, the constraint on Left Branch Extraction in Yucatec Maya indicates that nominal projections of this language are a step further in the emergence of DP structure.

Let us conclude by putting our results into a broader crosslinguistic perspective. Yucatec Maya allows noun incorporation into the verb (Lehmann & Verhoeven 2005), but not of the Classifier type introduced by Rosen (1989), i.e., there can be no modifier numeral or quantifier in the object position linked to the incorporated noun (Gutiérrez Bravo 2002: 146). Putting it differently, no ‘noun phrase discontinuity’ can arise in Yucatec Maya in the context of incorporation (Gutiérrez Bravo 2002: 146). In this respect, Yucatec Maya resembles Chukchee that has discontinuous noun phrases and allows noun incorporation, but only of the Compound type (Spencer 1995). In contrast, there is a Classifier type (Rosen 1989) of noun incorporation in many polysynthetic languages such as Mohawk, in which an incorporated noun can be modified by an adjective or a numeral in object position, so that a constellation quite similar to discontinuous noun phrases arises. This type of polysynthetic languages lack discontinuous noun phrases according to Baker (1996) (although counterexamples are attested, e.g., Kiowa).

Yucatec Maya is not only exceptional to a certain degree among Mayan languages, but also among V-initial languages in general. Some V-initial languages allow for split topicalization and Left Branch Extraction (Malagasy, Panare). However, many V-initial languages confine noun phrase discontinuity to Left Branch Extraction while lacking split topicalization (Chamorro, Niuean, Pnar, Tagalog, Yagua are cases in point), or they show no discontinuity at all (as the Celtic languages). In that respect, they differ from SVO and

SOV languages, in which Left Branch Extraction typically presupposes the existence of split topicalization; cf. Fanselow & Féry (in prep.) for details on the cross-linguistic facts. Again, Chol and Tzotzil confirm the cross-linguistic expectations.

The patterns of discontinuity found for Yucatec Maya are somewhat unusual for a V-initial language. Another language showing exactly the same patterns is Hungarian, a language with a very similar ‘discourse configurational’ organization: there is no Left Branch Extraction, as shown in (70b) testing extraction of the quantifier in the topic position (particle-verb order) and the focus position (verb-particle order). Nouns may appear in the topic position with a quantifier in the focus position, as shown in (70c), in which case the quantifier in the focus slot is an elliptical DP and bears accusative case, which is not possible in continuous DPs; compare (70a).

(70) Hungarian¹¹

- (a) Három(*-at) szék-et meg-vett Mari.
 three-ACC chair-ACC PFV-buy.PST.3SG Mary[NOM]
 ‘Mary bought three chairs.’
- (b) *Hárm(-at) meg-vett /vett meg Mari szék-et.
 three-ACC PFV-buy.3SG.PST buy.3SG.PST PFV Mary[NOM] chair-ACC
 (int.) ‘Mary bought three chairs.’
- (c) Szék-et hárm-at vett meg/*meg-vett Mari.
 chair-ACC three-ACC buy.3SG.PSTPFV PFV-buy.3SG.PST Mary[NOM]
 ‘Mary bought three chairs.’

Hungarian nominal structures are DPs (É Kiss 2004: 151–157), which is in line with the fact that Left Branch Extraction is rejected. Hungarian shares with Mayan languages an articulated left periphery with a left peripheral topic projection and an immediately

preverbal focus projection (compare Hungarian in É. Kiss 1998 and Mayan in Aissen 1992). A crucial property that Hungarian and Yucatec Maya have in common is that narrow focus can only be expressed *ex situ* (see É. Kiss 1998 on Hungarian; Verhoeven & Skopeteas 2015 on Yucatec Maya). This property may account for the fact that both constituents of split topicalization appear preferably in the left peripheral positions. There are no detailed prosodic studies for Chol and Tzotzil, but a salient difference of Yucatec Maya within the language family is that it is one of the few Mayan languages (along with Uspantek) displaying lexical tones, which substantially restricts the use of tonal events to spell out discourse features (see Kügler & Skopeteas 2007 on the absence of prosodic reflexes of contrastive focus on the realization of lexical tones).

This suggests that the availability of discourse options is quite important for the grammar of discontinuous noun phrases, as one should expect given the fact that this construction appears when noun phrase constituents come with distinct discourse features. A division of labor between prosody and syntax is certainly the lowest level of granularity for understanding cross-linguistic differences. It became clear through the considerations so far that the possibility of splitting particular constituents depends on the complex interaction between the syntactic properties of these constituents and the properties of the available landing sites for their constituents. Prosody may play a role for the choice of construction within the range of available structural options. The construction with two constituents in distinct left peripheral positions in Hungarian and Yucatec Maya, contrasts on the one side with Chol (68) and Tzotzil (69) in which the non-focal part of the DP remains *in situ* and on the other side with languages with focus *in situ*, such as Bulgarian (Giusti & Dimitrova-Vulchanova 1996: 134) or Italian

(Longobardi 1991), in which the remnant quantifier in split topicalization appears in the postverbal domain.

REFERENCES

- Abney, Steven Paul. 1987. *The English noun phrase in its sentential aspect*. Ph.D. dissertation, MIT.
- Aissen, Judith. 1987. *Tzotzil clause structure*. Dordrecht: Reidel.
- Aissen, Judith. 1992. Topic and focus in Mayan. *Language* 68, 43–80.
- Aissen, Judith. 1996. Pied-piping, abstract agreement, and functional projections in Tzotzil. *Natural Language & Linguistic Theory* 14, 447–491.
- Baker, Mark C. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark C. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.
- Bickel, Balthasar, Walter Bisang & Yogendra P. Yādava. 1999. Face vs. empathy: the social foundations of Maithili verb agreement. *Linguistics* 37, 481–518.
- Bohnenmeyer, Jürgen. 1998. *Time relations in discourse: Evidence from a comparative approach to Yukatek Maya*. Ph.D. dissertation, Katholieke Universiteit Brabant.
- Bohnenmeyer, Jürgen. 2009. Linking without grammatical relations in Yucatec: alignment, extraction, and control. In Johannes Helmbrecht, Yoko Nishina, Yong-Min Shin, Stavros Skopeteas & Elisabeth Verhoeven (eds.), *Form and Function in Language Research*, 185–214. Berlin: Mouton de Gruyter.
- Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59(1), 1–45.
- Bricker, Victoria R. 1979. Wh-questions, relativization, and clefting in Yucatec Maya. In Laura Martin (ed.), *Papers in Mayan Linguistics*, 107–136. Columbia, Miss.: Lucas Brothers.

- Brown, Linda Kay. 1979. *Word formation in Pocomchi (Mayan)*. Ph.D. dissertation, Stanford University.
- Broadwell, George Aaron. 2005. Pied-piping and optimal order in K'iche'. Ms. Rutgers.
- Chomsky, Noam. 1991. Some notes on economy of derivation and representation. In Robert Freidin (ed.), *Principles and parameters in comparative grammar*, 417–457. Cambridge: The MIT Press.
- Cinque, Guglielmo. 1994. Evidence for partial N-movement in the Romance DP. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi & Rita Zanuttini (eds.), *Paths towards Universal Grammar: Studies in honor of Richard Kayne*, 85–110. Washington: Georgetown University Press.
- Coon, Jessica. 2008. When ergative = genitive: Nominals and split ergativity. In Natasha Abner & Jason Bishop (eds.), *Proceedings of the 27th West Coast Conference on Formal Linguistics*, 99–107. Somerville MA: Cascadilla Proceedings Project.
- Coon, Jessica. 2009. Interrogative possessors and the problem of pied-piping in Chol. *Linguistic Inquiry* 40(1), 165–175.
- Coon, Jessica. 2010a. VOS as predicate fronting in Chol. *Lingua* 2, 354–478.
- Coon, Jessica. 2010b. *Complementation in Chol (Mayan): A theory of split ergativity*. Ph.D. dissertation, MIT.
- Coon, Jessica. 2016. Mayan morphosyntax. *Language and Linguistic Compass* 10(10), 515–550.
- Dayley, Jon P. 1985. *Tzutujil grammar*. Berkeley: University of California Press.

- E. Kiss, Katalin. 1998. Identificational focus versus information focus. *Language* 74, 245–273.
- E. Kiss, Katalin. 2004. *The syntax of Hungarian*. Cambridge: Cambridge University Press.
- England, Nora C. 1983. *A grammar of Mam, a Mayan language*. Austin: University of Texas Press.
- England, Nora C. 2004. Adjectives in Mam. In R. M. W. Dixon & Alexandra Y. Aikhenvald (eds.), *Adjective classes: A cross-linguistic typology*, 125–146. Oxford: Oxford University Press.
- Fanselow, Gisbert. 1988. Aufspaltung von NPn und das Problem der "freien" Wortstellung. *Linguistische Berichte* 114, 91–113.
- Fanselow, Gisbert. 2013. Morphological mismatches in discontinuous noun phrases. In Holden Härtl (ed.), *Interfaces of morphology: A Festschrift for Susan Olsen*, 11–25. Berlin: De Gruyter.
- Fanselow, Gisbert & Damir Ćavar. 2002. Distributed deletion. In Artemis Alexiadou (ed.), *Theoretical approaches to Universals*, 64–109. Amsterdam: Benjamins.
- Fanselow, Gisbert & Caroline Féry. (in prep.). Prosodic and morphosyntactic aspects of discontinuous noun phrases: A comparative perspective. Ms., University of Potsdam.
- Féry, Caroline, Alla Paslawska & Gisbert Fanselow. 2007. Discontinuous constructions in Ukrainian. *Journal of Slavic Linguistics* 15(1), 3–48.
- Giusti, Giuliana & Mila Dimitrova-Vulchanova. 1996. Quantified noun phrase structure in Bulgarian. *Formal Approaches to Slavic Linguistics* 3, 123–144.
- Grinevald Craig, Colette. 1977. *Jacaltec: The structure of Jacaltec*. Austin: University of Texas Press.

- Gutiérrez Bravo, Rodrigo. 2002. Formas verbales incorporadas transitivas en maya yucateco. In Paulette Levy (ed.), *Del cora al maya yucateco: estudios lingüísticos sobre algunas lenguas indígenas mexicanas*, 131–178. Mexico: UNAM.
- Gutiérrez Bravo, Rodrigo. 2011. External and internal topics in Yucatec Maya. In Rodrigo Gutiérrez Bravo, Line Mikkelsen & Eric Potsdam (eds.), *Representing language: Linguistic essays in honour of Judith Aissen*, 105–119. Lexington: Linguistics Research Center.
- Gutiérrez Bravo, Rodrigo. 2015. *Las cláusulas relativas en maya yucateco*. México, D.F.: El Colegio de México.
- Gutiérrez Bravo, Rodrigo. 2017. Cleft and focus in Yucatec Maya. *Cuadernos de Lingüística de El Colegio de México* 4, 5–47.
- Gutiérrez-Bravo, Rodrigo & Jorge Monforte y Madera. 2008. La alternancia sujeto inicial/verbo inicial y la teoría de la optimidad. In Rodrigo Gutiérrez Bravo y E. Herrera Zendejas (eds.), *Teoría de la optimidad: estudios de sintaxis y fonología*, 61–90. Mexico D.F.: El Colegio de México.
- Haider, Hubert & Luka Szucsich. (in press). Scrambling and V-positioning in Slavic languages - exceptionally VO or regular T3? In Roland Hinterhölzl, Kristine Bentzen, Augustin Speyer & Luka Szucsich (eds.), *The German middle field in a comparative and diachronic perspective*. Berlin: Mouton de Gruyter.
- Henderson, Robert. 2012. Morphological alternations at the Intonational Phrase edge: The case of K'ichee'. *Natural Language and Linguistic Theory* 30(3), 741–787.
- Hofling, Charles Andrew. 1991. *Itzá Maya texts: With a grammatical overview*. Salt Lake City: University of Utah Press.

- Hofling, Charles Andrew. 2000. *Itz'aj Maya grammar* (with Félix Fernando Tesucún). Salt Lake City: University of Utah Press.
- Horrocks, Geoffrey & Melita Stavrou. 1987. Bounding theory and Greek syntax: evidence for *wh*-movement in NP. *Journal of Linguistics* 23, 79–108.
- Huang, Cheng-Teh James. 1982. *Logical relations in Chinese and the theory of grammar*. Ph.D. dissertation, MIT.
- Janke, Vikki & Ad Neeleman. 2012. Ascending and descending VPs in English. *Linguistic enquiry* 43(2), 151–190.
- Jeoung, Helen. 2016. Possessor extraction in Indonesian type languages. *Proceedings of the Linguistic Society of America* 1, 1–35.
- Kügler, Frank & Stavros Skopeteas. 2007. On the universality of prosodic reflexes of contrast: the case of Yucatec Maya. *16th International Congress of Phonetic Sciences, 6–10 August 2007, Saarbrücken, Germany*, 1025–1028.
- Lehmann, Christian. 1990. Yucatekisch. *Zeitschrift für Sprachwissenschaft* 9(1/2): 28–51.
- Lehmann, Christian. 2003. *Possession in Yucatec Maya*, 2nd edn. ASSIDUE (Arbeitspapiere des Seminars für Sprachwissenschaft der Universität Erfurt), Nr. 10. Erfurt: Seminar für Sprachwissenschaft der Universität.
- Lehmann, Christian & Elisabeth Verhoeven. 2005. Noun incorporation and participation: A typological study on participant association with particular reference to Yucatec Maya. In Christian Lehmann (ed.), *Typological studies in participation*, 105 – 188. Berlin: Akademie.

- Longobardi, Giuseppe. 1991. Extraction from NP and the proper notion of head government. In Alessandra Giorgi & Giuseppe Longobardi (ed.), *The syntax of noun phrases*, 57–112. Cambridge: Cambridge University Press.
- McCloskey, James. 2006. Resumption. In Martin Everaert & Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax*, 94–117. Oxford: Blackwell.
- Mithun, Marianne. 1984. The evolution of noun incorporation. *Language* 60(4), 847–894.
- Norman, William M. & Lyle Campbell. 1978. Toward a proto-Mayan syntax: A comparative perspective on grammar. In Nora C. England (ed.), *Papers in Mayan Linguistics*, vol. 2, 136–155. Columbia: University of Missouri.
- Ott, Denis Christopher. 2011. *Local instability: The syntax of topic splits*. Ph.D. dissertation, Harvard University.
- Polian, Gilles. 2013. *Gramática del tseltal de Oxchuc*. Mexico D.F.: Centro de Investigaciones y Estudios Superiores en Antropología Social.
- Riemsdijk, Henk van. 1989. Movement and regeneration. In Paola Beninca (ed.), *Dialectal variation and the theory of grammar*, 105–136. Dordrecht: Foris.
- Rosen, Sara Thomas. 1989. Two types of noun incorporation: a lexical analysis. *Language* 65(2), 294–317.
- Saez, Luis Á. 1991. Quantitative clitics in Romance and Slavic. *Anuario del Seminario de Filología Vasca “Julio de Urquijo” (ASJU)* 25(3), 713–735.
- Shklovsky, Kirill. 2012. Person-case effects in Tseltal. *The Linguistic Review* 29(3), 439–490.

- Skopeteas, Stavros. 2010. Syntax-phonology interface and clitic placement in Mayan languages. In Vincenç Torrens, Linda Escobar, Anna Gavarró & Juncal Gutiérrez (eds.), *Movement and clitics*, 307–331. Newcastle: Cambridge Scholars Publishing.
- Skopeteas, Stavros & Elisabeth Verhoeven. 2005. Postverbal argument order in Yucatec Maya. *Sprachtypologie und Universalienforschung* 53(1), 71–79.
- Skopeteas, Stavros & Verhoeven, Elisabeth. 2009a. Distinctness effects on VOS order: evidence from Yucatec Maya. In H. Avelino, J. Coon & E. Norcliffe (eds.), *New perspectives in Mayan linguistics*, 157–173. Cambridge, MA: MIT.
- Skopeteas, Stavros & Elisabeth Verhoeven. 2009b. The interaction between topicalization and structural constraints: Evidence from Yucatec Maya. *Linguistic Review* 26, 239-259.
- Stolz, Christel, Stolz, Thomas & Elisabeth Verhoeven. 2012. *Maya yucateco de X-hazil Sur, Quintana Roo*. México D.F.: El Colegio de México.
- Smith Stark, Thomas C. 1988. "Pied piping" con Inversion en Preguntas Parciales. Manuscript, Colegio de Mexico, Mexico City.
- Spencer, Andrew. 1995. Incorporation in Chukchi. *Language* 71(3), 439–489.
- Szabolcsi, Anna. 1994. The noun phrase. In Ferenc Kiefer & Katalin É.Kiss (eds.), *Syntax and semantics: The syntactic structure of Hungarian*, 179–274. Academic Press: San Diego.
- Stiebels, Barbara. 2006. Agent focus in Mayan languages. *Natural Language & Linguistic Theory* 24, 501–570.
- Stump, Gregory T. & Yadav Ramawatar. 1988. Maithili verb agreement and the control agreement principle. *Papers from the Annual Regional Meeting of the Chicago Linguistic Society* 24(2), 304–321.

- Tonhauser, Judith. 2003a. F-constructions in Yucatec Maya. In Jan Anderssen, Paula Menéndez-Benito & Adam Werle (eds.), *The Proceedings of SULA 2*, 203–223. Vancouver, BC: GLSA, University of Massachusetts, Amherst.
- Tonhauser, Judith. 2003b. On the syntax and semantics of content questions in Yucatec Maya. In Juan Castillo (ed.), *Proceedings of the 6th Workshop on American Indian Languages (WAIL)*, 106–121. Santa Barbara: Santa Barbara Papers in Linguistics.
- Tonhauser, Judith. 2007. Agent focus and voice in Yucatec Maya. *Proceedings of the 39th Meeting of the Chicago Linguistic Society*.
- Vapnarsky, Valentina. 2013. Is Yucatec Maya an omnipredicative language? Predication, the copula, and focus constructions. *Language Typology and Universals* 66(1), 40–86.
- Verhoeven, Elisabeth. 2007. *Experiential constructions in Yucatec Maya*. Amsterdam: Benjamins.
- Verhoeven, Elisabeth & Stavros Skopeteas. 2015. Focus in Yucatec Maya. *International Journal of American Linguistics* 81(1), 1–40.

FOOTNOTES

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ABBREVIATIONS: A: person affix, class A; ACC: accusative; AN: animate; AOR: aorist; B: person affix, class B; CAUS: causative; CL.AN: class animate; CL.IN: class inanimates; CLT: clitic; CMPL: completive; D1: deictic clitic 1 (proximal); D2: deictic clitic 2 (distal); D3: deictic clitic 3 (neutral); DEF: definite; EXIST: existential; F: feminine; IN: inanimate; INCMPL: incomplete; INTR: intransitive; IO: indirect object; IPFV: imperfective; LOC: locative preposition; LOC₂: locative enclitic; M: masculine; N: neuter; NEG: negation; NOM: nominative; PART: partitive; PASS: passive; PFV: perfective; PL: plural; PROG: progressive; PST: past; Q: question particle; RDP: reduplication; REL: relationalizer; SG: singular; SUBJ: subjunctive status; TERM: terminative; TRR: transitivizer; ∅: zero.

² An alternative analysis would be a VP-raising account, which has been proposed for VOS in Chol (Coon 2010a). A difficulty for the VP raising account is the fact that adverbs may intervene between verbs and objects; see (5b). Furthermore, direct objects may undergo focus/wh- movement, i.e., the (raised) VP is not an island for extraction. Finally, the crucial facts about DP objects that motivate the VP-raising account in Chol do not apply to Yucatec Maya.

³ The possibility of base-generated subjects does not interfere with the phenomena examined in this article. Possessor extraction (Section 3) targets the focus position. Split-topicalization (Section 4) applies to subjects (among else), involving a subconstituent of the subject DP in the focus position and a topicalized subconstituent behaving like an external topic.

⁴ Beyond adjectives, stative predicates comprise several derived verb forms, e.g., gerundives, resultatives, etc. (see Verhoeven 2007: 121f. and references therein).

- ⁵ This suffix is cognate to plural morphemes in several Mayan languages: cf. *-tak* as plural suffix for inanimate nouns and predicative adjectives in Itzá (Hofling 1991: 15, 2000: 179); plural marker *-tik* in Tzotzil (Aissen 1983); plural morpheme *taqe* with nouns and *-taq* with stative predicates in Pocomchi (Brown 1979: 104f.), etc.
- ⁶ The same morphological pattern appears with alienable nouns, e.g., *máax áanalte'-il* 'who book-REL'.
- ⁷ In principle, it should also be possible to move the partitive DP to the pre-predicate position, but that option seems excluded by independent constraints: definite DPs are not possible in the focus position, see Verhoeven and Skopeteas 2015 for further details).
- ⁸ It does not occur when the numeral is a predicate, e.g. *ka'-t'úul in w-lits'in* (two-CL.AN A.1.SG Ø-younger_sibling) 'my brothers are two'. This shows that the elliptical DP is not a predicative expression.
- ⁹ Cf. also partitive interpretation of the same enclitic with numeral classifiers and elided nominals in Itzá Maya in Hofling (2000: 145).
- ¹⁰ An alternative view is that partitive constructions involve an empty pronominal *pro* that needs to be licensed, with the locative enclitics in Romance and Slavic/Yucatec Maya fulfilling that function in possibly different ways (Saez 1991). The relation between the DP and the clitic would not be created by movement in this approach.
- ¹¹ Gábor Müller, Kriszta Szendrői (p.c.).