CamCoS 3

CamCoS 3

09 –10 May 2014
University of Cambridge

Venue

English Faculty Building

Sidgwick Site,
9 West Road, Cambridge, CB3 9DP

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Welcome to CamCoS 3!

The third Cambridge Comparative Syntax Conference (CamCoS 3) is the follow-up to the previously successful CamCoS conferences. Again, CamCoS is a two-day event. The first day is a general comparative generative syntax conference while the second day features invited speakers presenting work in a special area. This year, the topic is **variation in the morphophonological, morphosyntactic and morphosemantic domains**.

Variation in morphological domains

In relation to the themed session, the central question we would like to address is to what extent it is possible to provide a formal account of cross-linguistic variation in the domain of morphology. More specifically, to the extent that there is a deeper basis to the classic morphological types proposed by 19th and early 20th century philologists and anthropologist-linguists (principally, the Schlegels, Humboldt, Schleicher and Sapir), can they be captured in a principled and explanatory manner? In other words, is it possible to think of morphology in parametric terms?

Venues

On **Friday**, 9 May 2014, and **Saturday**, 10 May 2014, the conference will be held in the **English Faculty Building**, 9 West Road, Cambridge CB3 9DP.

On **Thursday**, 8 May 2013, members of the Rethinking Comparative Syntax project (ReCoS) and members of the linguistics department will present their own research on issues in comparative syntax. These talks are be held in the **Old Library** in Darwin College, Silver Street, Cambridge, CB3 9EU, southwest from the city centre.

This programme

This booklet includes the full conference programme (first half-day, days 1 and 2), as well as abstracts for the presentations.

Visit our website, `https://recos-dtal.mml.cam.ac.uk/conference/camcos-3-folder`, for more information.

Funding and sponsors

ReCoS is funded by the European Research Council Advanced Grant No. 269752 "Rethinking Comparative Syntax". We would like to thank Cambridge University Press for a wine reception on Thursday. Recent Cambridge University Press publications will be on display on Friday and Saturday.
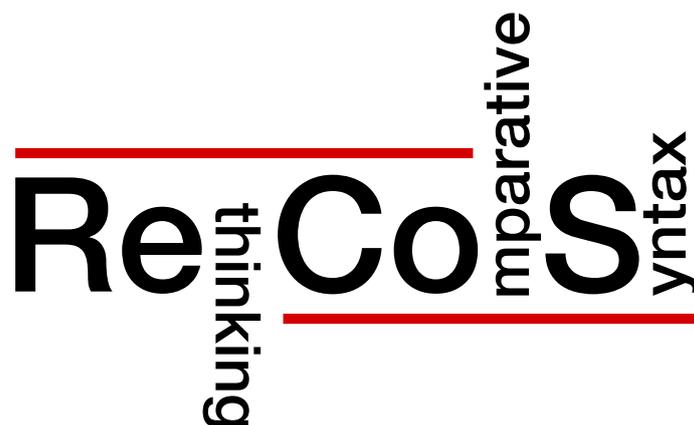
Thursday, 8 May 2014 — Introductory Talks

Venue: Old Library, Darwin College

Time	Speaker	Title
14:00 - 14:45	Ian Roberts	*The ReCoS project: An introduction*
14:45 - 15:30	Theresa Biberauer and Freddy Hu	*Chinese particles revisited: Implications for the typology of syntactic categories*
15:30 - 16:00		**Coffee break**
16:00 - 16:45	David Willis	*Variation and change in modals and negative concord in Welsh dialect syntax*
16:45 - 17:30	Georg Höhn	*Of articles, person markers and anchoring: some initial thoughts*
17:30 - 18:00		**Refreshment break**
18:00 - 18:45	Anders Holmberg	*Principled compounding*
18:45 - 19:30		Discussion

Friday, 9 May 2014 — CamCoS 3 day 1

Venue: English Faculty Building, GR-06/07

Time	Speaker, Affiliation	Title
8:15 - 9.00	Registration and coffee	
9:00 - 9:40	Ricardo Etxepare (IKER UMR5478)	*The Microparameter in Basque Participial Clauses*
9:40 - 10:20	Anna Pineda (Universitat Autònoma de Barcelona)	*English-like Applicatives in Romance and Basque*
10:20 - 10:40	Coffee break	
10:40 - 11:20	Pilar Barbosa (University of Minho)	*pro as minimal NP*
11:20 - 12:00	Sonia Cyrino (University of Campinas) and Maria Teresa Espinal (Universitat Autònoma de Barcelona)	*On the Morphosyntax of bare nominals in Brazilian Portuguese, Catalan and Spanish*
12:00 - 12:40	Adriana Fasanella (Universitat Autònoma de Barcelona)	*Distributional configuration of morphs results in fusional and agglutinative patterns*
12:40 - 14:00	Lunch break	
14:00 - 14:40	Mara Frascarelli (University of Rome 3) and Ángel L. Jiménez-Fernández (University of Seville)	*Is there any room for discourse in imperatives?*
14:40 - 15:20	Steve Nicolle (Canada Institute of Linguistics)	*Obligatory and optional left-dislocation topics in eastern Bantu languages*
15:20 - 15:40	Coffee break	
15:40 - 16:20	Júlia Bácskai-Atkári (University of Potsdam)	*Comparative Deletion and Comparative Clause Formation Cross-Linguistically*
16:20 - 17:00	Adriana Fasanella and Jordi Fortuny (Universitat Autònoma de Barcelona)	*Morphological parameters and syntactic bootstrapping*
17:00 - 17:30	Refreshment break, with wine sponsored by Cambridge University Press	
17:30 - 18:30	Speed session	
	Tonjes Veenstra (ZAS Berlin)	*An African perspective on clause typing and embedded questions*
	Seid Tvica (University of Amsterdam)	*There will always be number!*
	Sameerah Saeed (Newcastle University)	*Place Domain Adpositions: A Comparative Study*
	Trang Phan (University of Ghent)	*Is there a null D in articleless languages?*

Saturday, 10 May 2014

Venue: English Faculty Building, GR-06/07

Time	Speaker, Affiliation	Title
8:30 - 9:00		**Coffee**
9:00 - 10:00	Phil Branigan (Memorial University of Newfoundland)	*Cavalier head-movement and verbal morphology in Slavic and Algonquian grammars and the structure of parametric variation*
10:00 - 11:00	Dunstan Brown (University of York; joint work with Marina Chumakina, University of Surrey)	*Rethinking adposition agreement: the Archi postposition eq'en*
11:00 - 11:30		**Coffee break**
11:30 - 12:30	Nigel Duffield (Konan University)	*'Shake Can Well...(What?)': Multifunctionality, Semantic Syntax, and the Right Periphery in Vietnamese Questions*
12:30 - 14:00		**Lunch break**
14:00 - 15:00	Iris Berent (Northeastern University)	*Phonological reduplication: rules rule*
15:00 - 16:00	Hagit Borer (Queen Mary University of London)	*Categorizing Roots*
16:00 - 16:30		**Coffee break**
16:30 - 17:30	Daniel Harbour (Queen Mary University of London)	*Phi-sec: person > number*
17:30 - 18:30		Discussion

Abstracts

In the following pages, you can find abstracts of the talks for the general session and the invited talks.

Comparative Deletion and Comparative Clause Formation Cross-Linguistically

Julia Bacskai-Atkari
(University of Potsdam)

My talk argues that the phenomenon of Comparative Deletion (CD), as attested in (Standard) English, is the result of various factors that may or may not operate in a given language, and hence languages/language varieties where these factors are absent do not exhibit Comparative Deletion. I will demonstrate that deletion is not directly related to information structural properties but is tied to an overtness requirement on certain left-peripheral elements, and that information structure in English plays a role only in the realisation of lower copies.

CD traditionally refers to the obligatory absence of a non-contrastive lexical AP (or NP) from the comparative subclause (cf. Bresnan 1973). This is illustrated in (1):

(1)   a. Mary is taller than ~~[x-tall]~~ Liz is ~~[x-tall]~~.
      b. The desk is longer than ~~[x-wide]~~ the office is **[x-wide]**.

I will argue that CD is not an operation targeting GIVEN, non-contrastive APs such as *tall* in (1a) and leaving non-GIVEN, contrastive APs such as *wide* in (1b) intact; rather, deletion takes place in a [Spec,CP] position in both cases. As is known, the quantified degree expression (QP) moves to a [Spec,CP] position in the comparative subclause via regular (relative) operator movement, required by the comparative operator given as *x* above (cf. Chomsky 1977, Kennedy and Merchant 2000), which results in there being two copies of the QP in the subclause, as indicated in (1). The higher copy of the QP is eliminated irrespectively of the information structural properties of the lexical AP. The reason for this deletion is that overt lexical phrases are licensed in an operator position only if the operator itself is overt. On the other hand, the overt realisation of a lower copy is enforced only if it is contrastive, which is the case in (1b) but not in (1a). The Standard English pattern is hence contingent upon three factors, namely that the operator is zero, that the operator is not extractable, and that the overt realisation of contrastive lower copies is licensed. Hence the expectation is that languages/dialects lacking any of these conditions do not show the Comparative Deletion pattern given in (1); I will demonstrate that this expectation is indeed borne out.

First, there are languages that allow overt comparative operators and certain speakers of English also allow *how* in comparatives like (2):

(2)   a. % Mary is taller than **how tall** Liz is.
      b. % The desk is longer than **how wide** the office is.

A similar pattern is attested in Dutch for *hoe* 'how' (with considerable variation in the acceptability), in Czech for *jak* 'how' and in Hungarian for *amilyen* 'how' and *amennyire* 'how much'. In all of these cases, the string of an overt operator and an overt lexical AP is allowed in the [Spec,CP]: the overtness requirement is satisfied by the presence of an overt operator and hence deletion is not required. In such configurations, information structure plays no role since the lexical AP is licensed irrespectively of whether it is contrastive or not.

Second, there are languages that have extractable comparative operators and thus allow for the stranding of the AP; I will show that the difference between extractable and non-extractable operators lies in their positions within the quantified degree expression containing the AP. While the overt operators *how*, *hoe* (Dutch) and *amilyen* (Hungarian) are non-extractable, the operators *jak* (Czech) and *amennyire* (Hungarian) are. The examples in (3) show the possible positions for the AP in Czech:

(3)   a. Marie je vyšší, než **jak** ??**vysoký** je **vysoký** Karel #**vysoký**.
         Mary is taller than how   tall   is   tall   Charles tall
         'Mary is taller than Charles.'
      b. Ten stůl je delší, než **jak** ??**široká** je #**široká** ta kancelář **široká**.

that desk is longer than how wide is wide that office wide
'The desk is longer than the office is wide.'

While it is possible for the AP to move together with the operator to [Spec,CP], it is not the preferred option: rather, the AP is preferably located in a position that is associated with certain information structural properties: this is a clause-internal position for non-contrastive elements (such as *vysoký*) and a clause-final (stress) position for contrastive ones (such as *široká*). If there is a mismatch between the position and the information structural status of the AP, the result is infelicitous. A similar phenomenon can be observed in Hungarian with respect to the availability of the preverbal (focus) position only for contrastive APs.

In sum, if the operator is separable, information structure may determine the preferred position of the AP (if there are multiple available positions) but it does not impose restrictions on whether the AP can be overtly realised. Note that separable operators need not be overt; German, for instance, has an extractable zero operator:

(4) a. $^?$Maria ist größer als Michael **groß** ist.
         Mary is taller than Michael tall is
         'Mary is taller than Michael.'

     b. Der   Tisch ist länger als das   Büro **breit** ist.
         the.MASC table is longer than the.NEUT office wide is
         'The table is longer than the office is wide.'

Dutch and Estonian show similar behaviour; in these cases, the (remnant) AP can be realised overtly in its base position irrespectively of whether it is contrastive or not (unlike in English) since it is not a lower copy of a movement chain.

Third, there are languages that have zero, non-extractable operators (just as English) but they do not allow the realisation of the lower copy of a movement chain even if the AP is contrastive: this holds for Czech and Polish predicative comparatives with zero operators. The following Polish sentences were judged as ungrammatical by most speakers:

(5) a. *Maria jest wyższa niż Karol   jest **wysoki**.
          Mary is taller than Charles is tall
         'Mary is taller than Charles.'

     b. *$^{/??}$ Stół jest dłuższy niż biuro jest **szerokie**.
          desk is longer than office is wide
         'The desk is longer than the office is wide.'

I will show that the unavailability of lower copies in comparatives follows from a more general property of movement chains in these languages, which is related to the difference between multiple *wh*-fronting languages (Czech, Polish) and ones that do not allow overt multiple *wh*-fronting (English).

Cross-linguistic variation regarding comparative clause formation is hence derivable from differences in morphophonological properties (the overtness of the operator), syntactic structure (the position and the extractability of the operator) and the syntax–prosody interface (the realisation of lower copies).Seen in this light, the properties of English comparatives are derivable from general properties of the language and therefore Comparative Deletion is merely an epiphenomenal result of their interaction: a difference in these more general properties leads to different configurations in other languages/varieties in a systemic way.

References

Bresnan, Joan (1973) The Syntax of the Comparative Clause Construction in English. *Linguistic Inquiry* 4. 275–343.

Chomsky, Noam (1977) On WH-movement. In: Peter W. Culicover et al. (eds.) *Formal Syntax*. New York: Academic Press. 71–132.

Kennedy, Christopher and Jason Merchant (2000) Attributive Comparative Deletion. *Natural Language & Linguistic Theory* 18. 89–146.

pro as a minimal NP

Pilar Barbosa, University of Minho

1. In recent years, there has been a return to Perlmutter's (l971) insight that the implicit subject in the Null Subject Languages (NSL) is a fully specified pronoun that is deleted in PF (cf. Holmberg 2005 and Roberts 2010). This view has been motivated by the observation that the classic GB theory of *pro* according to which *pro* is a minimally specified nominal whose features are supplied by Infl is incompatible with the approach to feature theory developed in the Minimalist Program. In this framework, the φ-features in T are assumed to be uninterpretable, hence unvalued. This raises a problem for the idea that subject *pro* is inherently unspecified for φ-features. Concomitantly, recent theories of the nature of pronouns have posited a phonologically null NP as a complement of D in every pronoun. Elbourne (2005), in particular, argues that non E-type pronouns are determiners that take a kind of default null NP, the meaning of which is 'entitiy' or 'individual', translated as [λx: $x \in D_e$. $x \in D_e$] (a property that is trivially true of any individual in the domain). Elbourne raises the question whether this null noun would be available in other places too, not just as the complement of pronouns. Here, we wish to suggest that *pro* is an instantiation of this item.

2. It is possible to isolate at least four typological patterns of NSL: **1.** Languages with rich subject agreement morphology (*consistent* NSLs), such as Italian. **2.** Languages that have agreement and referential null subjects whose distribution is restricted (*partial* NSLs), such as Hebrew, Finnish, Russian, Brazilian Portuguese (BP). **3.** Languages that lack agreement, such as Chinese or Japanese, which allow for any argument to be dropped (*discourse pro*-drop languages). **4.** Languages that only have impersonal and expletive NSs (semi *pro*-drop): a range of Creoles, Icelandic. One key property that distinguishes Types 2, 3 and 4 NSLs from Type 1 NSLs (Holmberg 2005) is that in the former a plain (3Person) NS can have a generic interpretation equivalent to English 'one'; Type 1 NSLs, by contrast, must resort to some overt strategy in order to convey this reading. One way to capture this difference is to posit that the head bearing agreement features in Type 1 languages has a [+D] specification and interpretable φ-features (the pronominal-Agr hypothesis of Barbosa 1995, Alexiadou and Anagnostopoulou l998, Ordoñez and Treviño l998, a.o.). Assuming that the person features 1, 2, 3, are to be decomposed into combinations of the more primitive features [±1], [±2] (Noyer 1992), the feature composition of 3rd person is [-1, -2]. If this feature make-up is what gets interpreted, then the prediction is that 3rd person agreement in a consistent NSL will always entail exclusion of the speaker and the addressee; this is why some overt strategy must be used in order to convey the generic inclusive reading. On the other hand, the fact that Types 2, 3 and 4 of NSL pattern together in this respect suggests a common approach. Among the analyses that have been proposed in the literature on discourse *pro*-drop is the hypothesis that it reduces to *null-NP anaphora* (Tomioka 2003). Tomioka observes that all of the languages that allow discourse *pro*-drop allow (robust) bare NP arguments (cf. also Boskovic for a similar generalization based on Slavik). He shows that the interpretation of full-fledged NPs in Japanese is derived from one basic meaning, property anaphora (type <e,t>) ant that their differences are the result of two independently needed semantic operations: Existential Closure and Type Shifting to an individual. He argues that the semantic tools used to interpret full NPs are used to interpret *pro* in Japanese and proposes that what underlies discourse *pro*-drop is the fact that languages (almost) universally allow phonologically null NP anaphora. In a language that lacks determiners, this operation will give rise to phonologically unrealized arguments. In languages in which DPs are necessarily projected, a remnant D will always show up and so this process will never give rise to a silent argument.

Barbosa (2010) proposes to extend this approach to Type 2 NSLs. In effect, Finnish, Russian and Marathi lack articles, and BP as well as Hebrew allow bare nouns in argument

position (cf. Doron 2003, Schmidt & Munn l999). All of these languages have (definite) object drop.

Vainnikka and Levy (l999:648) discuss data from Finnish that indicate that the definite null subject (NS) raises to a high position in the clause whereas the impersonal, non-anaphoric NS must stay inside the *v*P. Under the hypothesis that the NS is a minimally specified nominal, the correlation between the two different positions and the available readings would follow from the different configurations that serve as input to semantics: when the null NP (a property) stays inside the *v*P, the variable it introduces is bound under Existential Closure yielding the impersonal interpretation; when it raises to preverbal position, type-shifting to an individual (*iota*) applies.

In impersonal, non-anaphoric NS constructions, BP and Finnish show singular verbal agreement whereas Russian and Hebrew show plural agreement. Crucially, in the cases in which the non-anaphoric NS is syntactically singular, it is not semantically singular, given that it may be used to refer to a plural entity. Semantic number neutrality is a stable crosslinguistic property of *semantic incorporation* (Van Geenhoven 1996, Dayal 2003, Farkas and Swart 2003, Chung and Ladusaw 2004). There are different approaches to semantic incorporation, but all of them share the basic insight that semantically incorporated nouns denote properties that combine with the verbal predicate so that the relevant variable of the predicate is restricted by the property in question. This operation doesn't saturate the predicate, hence the variable ends up bound by event level Existential Closure. In view of the properties of the 3PSG non-anaphoric NS in Finnish and BP — restriction to post-verbal position; number neutrality — we suggest that the minimal NP in post-verbal position is semantically incorporated. Since the NP lacks a restriction, the effect of combining it with the verbal predicate is nearly semantically vacuous: what we get is a predicate that is restricted to apply to human beings. The semantic incorporation analysis extends to the non-anaphoric plural NS in Russian and Hebrew,

When the minimal NP raises to preverbal position, type-shifting to an individual (*iota*) applies and the anaphorically anchored reading obtains. Holmberg and Nikane (2002) show that the position that hosts the definite NS in Finnish can host other categories besides subjects and is associated with topics. Modesto argues that the null subject in BP occupies a topic position; thus, it is conceivable that iota type-shifting is associated with topicality. We claim that covert iota type-shifting is available to the preverbal NS in the languages that lack articles and in BP, a topic prominent language. In Hebrew, type-shifting to an individual is contingent upon the presence of person agreement and hence is unavailable in the present tense, which lacks person agreement and licenses impersonal NSs only. Curiously, the pattern of subject drop found in Hebrew present tense is that of Type 4 languages. Cape-Verdian creole and Papiamentu have bare nouns (cf. Baptista and Guéron 2009) in argument position. Icelandic lacks an indefinite article. We propose that the semi *pro*-drop languages (CVC, Icelandic) lack the resources required for iota to apply.

Coming back to the consistent NSLs, one longstanding problem with the pronominal-Agr hypothesis has been the status of the argument, first merge, subject position. Positing an *ec* in Spec-*v*P is required in a theory that assumes that theta-roles are assigned configurationally (Chomsky l995). Now suppose that the *ec* in question is our minimally specified NP, and that what characterizes the consistent NSLs is that T merges with a D head bearing interpretable φ-features. When D binds the variable introduced by the null NP subject, we get the pronominal interpretation characteristic of subject *pro* in Type 1 NSLs. Variable binding by D is insured by the principle of Full Interpretation (the null NP is not of the right type to combine with the VP unless the variable it introduces is bound by D). This allows us to reduce *pro* to [$_{NP}$ e] quite generally.

Iris Berent (Northeastern University)

Language universals: a view from phonology

All accounts of cross-linguistic universals and variation must be rooted in a cognitive theory of the language faculty. At the heart of the generative tradition are two hypotheses: (a) the grammar encompasses a set of algebraic rules; and (b) some rules are shared across languages. Both hypotheses have been rejected by most cotemporary psycholinguistic models in favor of an associative, domain-general alternative. Here, I address the challenge using the unlikely case of phonology. I will first present experimental evidence from spoken and signed languages, suggesting that phonological generalizations rely on algebraic rules, endowed with the principled capacity for discrete infinity—a capacity typically reserved for syntax alone. I will then move to ask whether some phonological rules are shared across languages. Using the case of sonority restrictions, I will demonstrate that speakers of different languages converge on similar preferences concerning syllable structure, these preferences are dissociable from sensorimotor pressures, they are present in the absence of relevant lexical evidence, they are active close to birth and their computation engages Broca's area.

Phil Branigan (Memorial University) - *Cavalier head-movement and verbal morphology in Slavic and Algonquian grammars and the structure of parametric variation*

Word formation in both Slavic and Algonquian languages involves rich prefixation patterns, which display similar grammatical characteristics. I show that in both language families, the morphosyntactic derivations of prefixed verb forms include two types of operations which violate the Head Movement Constraint. One is multiple head-movement; the other, long head-movement. In Russian (Slavic), the interaction of these *'cavalier'* head-movement operations explains Pesetsky's (1979) 'bracketing paradox', among other things. In Innu-aimûn (Algonquian), the generation of large verb clusters is a result.

Slavic and Algonquian grammars differ in the extent to which cavalier head-movement pervades the grammatical system: in Russian, it occurs primarily in the sentential *mittelfeld* (between *v* and the left periphery); in Innu-aimûn, it occurs in almost every syntactic domain. This difference raises the question how children determine the range of cavalier head-movement in their language from the PLD. I discuss how a parametrised formulation of the HMC enables the LAD to constrain such movement more in Slavic and less in Algonquian.

Dunstan Brown (York University; joint work with Marina Chumakina) -
*Rethinking adposition agreement: the Archi postposition **eq'en***

Agreement on adpositions is well-known, but typologically uncommon, as indicated by Bakker's (2013) study of person marking. For the familiar instances, it is relatively easy to define the syntactic domain of agreement: for type 1 agreement, the domain is a prepositional phrase (PP); for type 2, it is an NP which has a whole PP as its dependent. Agreeing adpositions of type 1 are observed in genetically and areally diverse languages, including Breton, Hebrew, Hindi, Savosavo (Papuan), Tehuelche (Chon), Turkish. Less is known about type 2. We wish to draw attention to a third pattern, where the agreement controller is outside both the adpositional phrase and the NP, but within its immediate clause. We call this phenomenon 'middle-distance agreement' by analogy with long-distance agreement, i.e. agreement outside the clause. The Daghestanian language Archi presents an example of this phenomenon:

(1) *goroχči*   *b-aqˤa*   *haˤtər-če-qˤa-k*   ***e‹b›q'en***

    rolling.stone(III)[SG.ABS]   III.SG-come.PFV   river(IV)-SG.OBL-INTER-LAT   **‹III.SG›up.to**

    'The rolling stone went up to the river.'

(2)   *zari*   *q'onq'*   *okłni*
     1sg.erg   book(iv)[sg.abs]   [iv.sg]read.pfv
     ja-b   *maq'al-li-ra-k*   ***eq'en***
     this-iii.sg   chapter(iii)-sg.obl-cont-lat   [iv.sg]up.to
     'I read the book up to this chapter.'

In (1) the postposition governs the lative and heads a phrase 'up to the river', an adjunct of the verb 'come', but agrees (by means of an infix) with the absolutive 'rolling stone'. The phrase *haˤtərčeqˤak ebq'en* forms a syntactic constituent: nothing can be inserted between the postposition and its governee, and the whole phrase can be fronted. But the controller (a gender III noun) is external to this constituent. In (2) the postposition also governs the lative and heads a phrase 'up to this chapter', but its controller is the gender IV noun *q'onq'* 'book', the object of the verb (and therefore in the absolutive case). We present a number of arguments to show that *eq'en* is a postposition, including discussion of contrasting converb uses.

While other cases of agreement of an adposition with an external argument have been found, as far as we know 'middle-distance agreement' is a fairly rare phenomenon. It is not, however, surprising to find it in Archi. Daghestanian languages are also famous for long-distance agreement (LDA). As with LDA, middle-distance agreement is lexically defined (in Archi only one postposition exhibits it), and it is grounded in the pervasive mechanism which requires agreement with the absolutive. It also has implications for the relationship between syntax and morphology. The other postpositions of Archi do not inflect and yet may appear in similar structures. If one adopts a defaults-based inferential-realizational approach to morphology, then it is straightforward to specify for the morphology of postpositions that, by default, they do not inflect, whereas the syntax can still make

use of the pervasive mechanism of agreement with the absolutive. The majority of Archi postpositions are just morphologically insensitive to the distinctions made by syntax.

On the morphosyntax of bare nominals in Brazilian Portuguese, Catalan and Spanish

Sonia Cyrino   *Maria Teresa Espinal*
University of Campinas   *Universitat Autònoma de Barcelona*

The problem. The syntax of Romance languages presents an interesting puzzle when we consider the distribution of bare count nominal (BNs). It has been pointed out in the literature that Brazilian Portuguese (BrP) allows BNs to freely occur with all kinds of verbs (Müller 2002, Müller & Oliveira 2004, Munn & Schmitt 2005, Lopes 2006, among others). However, it is necessary to look at the different argument structures of the various classes of verbs in order to fully understand in what sense BrP differs from other Romance languages.

Aim. In this paper, we account for the special distribution of BNs in BrP in comparison to other Romance languages. We postulate that BNs in this language come in two shapes. Real BNs, by which we mean bare count nouns not specified for number and definiteness, correspond to NPs that can only occur as objects of a reduced class of predicates (namely, those that express a HAVE-relation) and are interpreted as property-type expressions. Other BNs can be definite and, although not morphophonologically specified for number, they are DPs with null Determiners morphosyntactically specified for Number features and are interpreted as entity-type expressions. We base our analysis on the distribution and meaning of BNs, by comparing BrP with other Romance languages, mainly (Old and Modern) French on the one hand, and Spanish and Catalan on the other.

Core facts and challenges. BrP is especially interesting to study in relation to the topic of BNs because it poses several challenges, both at an empirical and at a theoretical level: the apparent optionality of the determiner, the variation in number realization within the nominal domain (and, by extension, the variation in subject-verb number agreement), the occurrence of BNs in all argument positions, and the meaning that is to be associated with these BNs depending on the type of predicate they combine with. See (1) and the BrP / Spanish contrast in (2).

(1) a. Os   brasileiros   são trabalhadores.   (Müller 2002:280, ex.(2))
       the.PL Brazilian.PL are   hardworking.PL
       'Brazilians are hardworking.'
   b. Brasileiros   são trabalhadores.   (Müller 2002:280, ex.(5))
       Brazilian.PL are   hardworking.PL
   c. Os   brasileiro é   trabalhador.
       the.PL Brazilian is   hardworking.SG
   d. Os   brasileiro são trabalhadores.
       the.PL Brazilian   are   hardworking.PL
   e. *O brasileiros   é   trabalhadores.
       the Brazilian.PL is hardworking.PL

(2) a. Maria *teve*   carro.   a'. María *tenia coche.*
       Maria   had   car
       'Maria had a car.'
   b. João *cantava*   madrigal.   b'. *Juan *cantaba* madrigal.
       João   sang   madrigal.
       'João sang madrigals'.'
   c. *Vai cair* livro   no   chão.   c'. *Va a caer* libro en el piso.
       go   fall book   on.the   floor
       'The book is going to fall on the floor.'
   d. João *limpava*   banheiro.   d'. *Juan *limpiaba* baño.
       João   cleaned   bathroom
       'João cleaned the bathroom.'
   e. Brasileiro *é*   trabalhador.   e'. *Brasileño *es* trabajador.

Brazilian is hardworking
'Brazilians are hardworking.'

Theoretical framework. We assume the syntactic theory of argument structure developed by Hale & Keyser (2002) and Mateu (2002). We follow Dobrovie-Sorin *et al.* (2006) and Espinal & McNally's (2007, 2011) findings according to which BNs in Catalan, Romanian, and Spanish can only occur in object position of a restricted class of predicates that denotes a HAVE-relation, which excludes DO unergatives, unaccusatives and transitives. Following Delfitto & Shroten (1991), Bouchard (2002), Déprez (2005) and Dobrovie-Sorin (2012), among others, we assume a distinction between a Number projection, (interpretable and uninterpretable) morphosyntactic Num features, and morphophonological number.

Analysis. We examine the structure (and meaning) of BNs and we discuss how they correlate with different argument structures of various classes of verbs. We claim that BNs correspond to NPs or full DPs depending on the argument structure of the verb. HAVE-predicates are the only ones that may combine with NPs in syntactic object position. We compare the distribution of BNs in Spanish and BrP. We also show a parallel between BrP null objects and Catalan clitic *en* (they both have nominal status, similar to common nouns), a behaviour that must be distinguished from the BrP pronoun *ele* and the Catalan accusative third person clitic *el/la.*

Our arguments in support of an analysis of BNs not occurring with HAVE-predicates in BrP rely on a full DP structure with a null D specified for an [iNum] feature. Together with Munn and Schmitt (2005), we propose that BrP allows null Ds, but, differently from them, we propose that Number is morphosyntactically specified on Ds in the language. We examine the internal structure of the DP in minimalist terms and propose a DP-internal Inverse Agree relation that consists on a checking operation of uninterpretable Num features and operates top-down (cf. Biberauer & Roberts 2011, Biberauer & Zeijlstra 2012). We relate the loss of number marking on nouns with the presence of uninterpretable Number features that need to be checked. The proposed structure is in (3) and the derivation in (4) for the DPs is in (1a-d).

(3) $[_{DP}\ D_{[iNUM]}\ [_{NumP}\ Num_{[iNUM]}\ [_{nP}\ n_{[uNUM]}\ [_{NP}\ N]]]]$

(4) a. $[_{DP}\ os/\varnothing_{[iNUM]}\ [_{NumP}\ Num_{[iNUM]}\ [_{nP}\ n_{[uNUM]}\ [_{NP}\ brasileiro]\ ]]]$

b. $[_{DP}\ os/\varnothing_{[iNUM]}\ [_{NumP}\ Num_{[iNUM]}\ [_{nP}\ brasileiro_{[iNUM]}\ [_{NP}\ \text{brasileiro}]\ ]]]$

The Num head is specified by a [iNUM] feature shared between D and Num. That is, the feature [iNUM] is an inherent syntactic feature of D and Num, no matter whether D is overt or covert. In (4b), the root *brasileiro* is moved to *n* to value a Gender feature (not represented here), and the [uNUM] feature of *n* is checked by a matching [iNum] feature. This analysis supports our proposal that variation on morphophonological number realization on the noun (*brasileiros, brasileiro*) is postsyntactic, and that, in spite of the superficial variation, the syntactic structure from which (4b) can be derived is (4a). Our syntactic analysis predicts the ungrammaticality of (1e) (Cyrino & Espinal 2013).

Selected references

Biberauer, T. & I. Roberts. 2011. Negative words and related expressions: a new perspective on some familiar puzzles. In *The Evolution of Negation: Beyond the Jespersen Cycle*, eds. Pierre Larrivée and Richard Ingham, 23-59. Berlin: Mouton de Gruyter. **Biberauer, T. & H. Zeijlstra. 2012.** Negative concord in Afrikaans: filling a typological gap. *Journal of Semantics* 29: 345–371. **Cyrino, S. & M.T. Espinal. 2013.** Bare Nominals in Brazilian Portuguese: more on the DP/NP analysis Accepted for publication in *Natural Language & Linguistic Theory.* **Espinal, M. T. & L. McNally. 2011.** Bare nominals and incorporating verbs in Catalan and Spanish. *Journal of Linguistics* 47: 87-128. **Müller, A. 2002.** The semantics of generic quantification in Brazilian Portuguese. *Probus* 14: 279-298. **Munn, A. & C. Schmitt. 2005.** Number and indefinites. *Lingua* 115: 821-855.

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Where does (sentence) meaning come from?

> '*A central assumption in generative grammar research on the relationship between syntax and the lexicon is that syntax is a projection of the lexicon. The structure of sentences is a reflection of the lexical properties of the individual lexical items they contain.*'
>
> Huang (1997:45)

For more than thirty years, since the publication of *Lectures on Government and Binding* (Chomsky 1981), generative research has been informed by the Projection Principle, by which syntax is construed as a 'projection of lexical properties.' In subsequent Minimalist approaches (e.g. Chomsky 1993, 1995, 2000), this restriction is tightened up further through the requirement that syntactic computations operate exclusively with the lexical items introduced in the initial array (numeration), without reference to any node labels or other extraneous symbols (e.g., theta-roles, indices, movement traces, levels of representation) that might contribute to sentence meaning. This does not, of course, exclude reference to abstract formal features—indeed, these are crucial to most Minimalist analyses—but it requires that such features are ultimately drawn from the lexicon: they are themselves lexical entries, alongside contentful, arbitrary lexical items. Whatever the theoretical advantages of this approach for delivering an extremely spare Minimalist syntax, it should be clear that this massively increases lexical complexity, leading to a multiplicity of different abstract features attaching to what are, intuitively speaking, the same lexical items. Grammatical theory is a zero-sum game: if the syntax does little or no semantic work, the burden necessarily falls on lexical specification.

The importance of the Projection Principle cannot be overstated, since it largely predetermines the answers given to most of the significant ontological questions that generativists have asked themselves over the last few decades. These include the existence or otherwise of a universal base (UBH), the locus of syntactic parameters, the choice between derivational and representational models, and the relevance of morphology to narrow syntax, as well as questions about the physical extent of syntactic analysis (the right-edge problem). If—leaving aside the effects of scope and constituency—all grammatical meaning inheres in and projects from the lexicon, then syntax can be construed as the radically spare, un-parameterized, thoroughly derivational, computational procedure that informs current generative models. Moreover, if syntax is just the projection of lexical properties, it might be supposed that *everything* that projects from the lexicon—all uttered material, up to and including clause-peripheral discourse particles—necessarily enters into the syntactic computation.

But what if it ain't so? What if we have fundamentally misconstrued the syntax-lexicon relationship? In this talk, I'll consider an antithetical alternative: that the lexicon—or at least, a theoretically interesting subpart of it—is better viewed as a projection of syntactic meaning. Anti-Projection. Words as filters, exponents of syntactic configurations, acquiring their meaning in virtue of their syntactic position. Lexical, rather than syntactic, Minimalism: *cf.* Marantz (2005), Borer (2007). I will argue that this reversal offers more than a novel perspective on the syntax of familiar inflectional languages: it is the only reasonable and empirically adequate way to treat multi-functional morphemes in isolating languages like Vietnamese.

In contrast to inflectional languages, Vietnamese does not differentiate subtle grammatical contrasts in the lexicon: instead, it disposes of a set of radically-underspecified 'multifunctional' items, whose semantics are determined in part—and in some instances exhaustively—by their position in phrase-structure. A clear example of this multifunctionality is offered by the modal auxiliary *được* (also *phải, nên*), which is variously interpreted as a deontic, epistemic or abilitative modal—even as a non-modal (*realis*), aspectual, particle—depending on its structural position. This is illustrated in (0); see Duffield (1999), Phan & Duffield (in prep.)

0. a. Ông Quang *được* mua cái nhà.
        PRN Q.   CAN buy CL house
        'Quang was allowed to buy a house.'

    b. Ông Quang mua *được* cái nhà.
        PRN Q.   buy CAN CL house
        'Quang bought a house.'

    c. Ông Quang mua cái nhà *được*.
        PRN Q.   buy CL house CAN
        'Quang is able to buy a house/Quang may possibly buy a house.'

Through an examination of these and other functional morphemes in Vietnamese, with particular focus on two particles—*không/thế*—on the right edge of interrogatives, I will try to make a case for Anti-Projection/Lexical Minimalism, and consider its corollaries for the other larger questions mentioned above, including the physical boundaries of syntax—whether uttered elements can be 'extra-syntactic'. Finally, I will speculate on whether such a fundamental principle might itself serve as a locus of grammatical parameterization.

References
Chomsky, N., 1981. Lectures on Government and Binding: The Pisa Lectures. Foris, Dordrecht.
Chomsky, N., 1993. A Minimalist Program for Linguistic Theory, in: Hale, K., Keyser, S.J. (Eds.), The View from Building 20: Essays in honor of Sylvain Bromberger. MIT Press, Cambridge, MA.
Chomsky, N., 1995. The Minimalist Program. MIT Press, Cambridge, Massachusetts.
Chomsky, N., 1999. Derivation by Phrase. MIT.
Chomsky, N., 2007. Approaching UG from below, in: Sauerland, U., Gärtner, H.-M. (Eds.), Interfaces + Recursion = Language? Chomsky's Minimalism and the View from Syntax-Semantics,. Mouton de Gruyter, Berlin, pp. 1-29.
Borer, H., 2005. In Name Only: Structuring Sense. Oxford University Press, Oxford.
Duffield, N., 1999. Final Modals, Adverbs and Antisymmetry in Vietnamese. Revue québécoise de linguistique 27, 92-129.
Phan, T., 2013. Syntax of Vietnamese Aspect, School of English. University of Sheffield, England.

The Microparameter in Basque Participial Periphrases
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Several apparently unconnected properties of participial periphrastic constructions in Basque systematically distinguish central and eastern varieties. Those properties can be summarized as follows: (i) eastern varieties possess optional dative agreement (1); (ii) only eastern varieties allow wh- and focal operators to immediately precede the auxiliary; central varieties always have the lexical verb in between the auxiliary and the focus/wh-phrase (2,a,b); (iii) eastern varieties naturally allow, but central ones don't, orders of the type *modal+participial complement* (3). The participial complement can in those cases be richer in structure than in the orders *participial complement+modal*, universally available in Basque (see Etxepare and Uribe-Etxebarria, 2009); (iv) only eastern varieties allow orders in which the participial complement and the auxiliary are separated by something else, typically an additive marker of the *even/also* sort, or evidential adverbs (4); (v) only central dialects accept dummy *egin* "do" (Haddican, 2007) in verb-focus constructions (5); (vi) only eastern varieties have distinct non-finite transitive and intransitive auxiliaries, unlike central ones, in which only a general purpose one exists (*izan* "be/have") (6); (vii) Eastern dialects allow for post-auxiliary, participle internal negation (not an instance of constituent negation, see Etxepare and Uribe-Etxebarria, 2009) (7). Finally, Eastern dialects require simple unergative verbs to combine with *be*, instead of *have*, unlike in central/western dialects (8). Outside the domain of periphrastic constructions proper, only eastern varieties have participial relatives (9). I will claim that those differences can be reduced to a single morphosyntactic parameter, consisting in the fact that eastern copulas must be "synthetic verbs" (De Rijk, 2008) not auxiliaries, the latter being the only option in central dialects. Synthetic verbs are finite verbs which, unlike auxiliaries, possess a lexical root. The class of synthetic verbs in Basque is composed of a handful of very common verbs, including the equivalents of the romance locative copulas (cf. Spanish *estar*). In eastern dialects, this class would include the transitive and intransitive copulas. As a first step in the argument, let me note that the immediate adjacency of focus/wh-phrase and finite forms is generally possible in Basque in the case of synthetic verbs (10), and in identificational predications (11), for which it has been claimed that the copula may be a contentful verb (Zaring, 1996, on Welsh). It is also well known that synthetic verbs do not accept dummy *do* in Basque. The reason is simple: synthetic verbs are characterized by the fact that the verbal root raises to T; and as shown by Haddican (2007) dummy *do* is inserted as a way to save stray aspectual morphology, when the lexical verb cannot raise to Aspect and beyond. If eastern auxiliaries are synthetic verbs we easily explain this otherwise intriguing lexical gap in the Basque dialectal continuum. This hypothesis complies well with the fact that only eastern dialects have distinct lexical forms for intransitive (*izan*) and transitive (*ukan*) non-finite auxiliaries. We can capitalize on the lexical status of eastern copulas to account for the rest of the distinguishing properties of those varieties: on the one hand, lexical copulas do not trigger ordinary predicate fronting (Haddican, 2004), the syntactic process whereby verbal predicates in Basque periphrases raise to a higher polarity phrase immediately preceding the auxiliary in unmarked affirmative sentences, yielding the rigid order OVAux. Other things, such as focus particles or evidential adverbs, may intervene (see 4). Then, the lexical status of the copula in eastern varieties also has an effect in the type of complement it can take: lexical verbs, unlike auxiliaries, can take complements of different complexity (Wurmbrandt, 2004). Those complements will be able to host at least some clausal functional structure, such as negation, and allow for

wh-operator movement, which accounts for the existence of participial relatives. Pairs such as (2a,b), nevertheless, available in all dialects, raise the following question: if auxiliaries in eastern varieties are synthetic verbs, why do they seem to optionally allow predicate fronting? The existence of participial relatives provides us with a clue for a parsimonious analysis of this alternation: the structure of the eastern interrogative/focal cases resembling western configurations is actually the output of clausal pied-piping (12a), an independently attested phenomenon in Basque. The optionality is thus related to the syntactic complexity of the participial: if it contains a C-layer, it allows pied-piping; if it doesn't, the wh-p./focus directly raises to the higher clause (12b). The same option can also account for apparent optional dative agreement: the presence of C, a Phase, will block Agree from the auxiliary probe; its absence potentially allows Agree to apply. The auxiliary alternation in (8a,b), on the other hand, is reminiscent of Laka's (2006) discussion of ergative splits in the context of progressive periphrases (biclausal constructions). I will argue that Eastern participials project a case licensing head F. F licenses one of the arguments of a transitive verb, typically the object. In the case of transitive predicates, this will force the subject to raise outside the participial clause, ending up in a local relation with the higher T (see Rezac et al., 2014 for T as the locus for ergative case/agreement). An exception arises in the context of unergatives if incorporation of the bare noun (*dantza*) to V allows it to dispense with case (Baker, 1988). In that case, the case feature in the participial is available for the second argument (the subject), which does not raise and surfaces as absolutive (13a,b). Concentrating on perfect periphrases, I show that the microparameter distinguishing E and C varieties can be viewed as the transition point in a diachronic process whereby biclausal periphrases became monoclausal in Basque (Mounole, 2011). This process was accomplished in western/central areas, but did not fully affect eastern varieties.

(1)   Liburu bat   eman dut/dakot   gizon horri (E/*C) **[E=Eastern ; C=Central]**
        Book   one-abs given aux(tr)/(dirt) man that-dat
        "I gave a book to that man"

(2)   a. Nor/XABIER etorri da (E/C)   b. Nor/ XABIER da etorri (?) (E/*C)
           who/Xabier   come is   who/Xabier is come
        "Who came?/XABIER came"

(3)   Behar du garaiz   etorri (E/*C)   (4) Errabia batek hartu ere/bezala du (E/*C)
        must aux on-time come   rage   one-erg taken also/like   has
        "She must come on time"   "She has also/apparently been overcome by rage"

(5)   Erori egin da (C/*E)   (6)   Erosi   nahi ukhan du (E/*C)
        Fall done is   buy-partc want had   has
        "She FELL"   "He wanted to buy it"

(7)   JON da [ez etorri] (E/*C)   (8)   a. Dantzatu du (C/*E)
        Jon is not come   danced   has
        "It is JON who did not come"   "He/she danced"

(9)   Jonek   erosi   liburua (E/*C)   b. Dantzatu da (E/*C)
        Jon-erg bought book-D   danced   is
        "The book that Jon bought"   "He/she danced"

(10)   Nor dator? (General)   (11)   Nor da hori? (General)
        Who comes   Who is this

(12)   a. [$_{CP}$ [$_{CP}$ nor etorri]$_i$ C^0 [$_{TP}$ da t$_i$]]?   b. [$_{CP}$ Nor$_i$ C^0 [$_{TP}$ da [$_{AspP}$ t$_i$ etorri]]?

(13) a.[$_{TP}$ DP T$_{AUX}$… [$_{vP}$(DP) v V+N]]   b. [$_{TP}$ T…V$_{BE}$ [$_{PartP}$ DP F^0 [$_{vP}$ (DP) v V+N]]
        ___/ (Ergative Case/Agreement)   _____/ (Absolutive agreement)

Distributional configuration of morphs results in fusional and agglutinative patterns
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The aim of this study is to argue that the distributional configuration of morphs, jointly with a learning constraint independently motivated for acquisition on how the learner builds morphological paradigms, are responsibles for the appearance of fusional and agglutinative patterns diachronically.

Given the representation of morphological knowledge in paradigms and their acquisition as put forward in Pinker (1984), the following constraint, active during the process of language acquisition, operating as a simplifying complexity device (Chomsky 2005, Roberts 2007), is proposed:

Minimise Paradigms Constraint (MPC). The learner hypothesises just one general paradigm when affixes in cells show a systematic syntagmatic relationship.

A more informal way of reformulating the MPC is stating that the learner prefers to hypothesise the fewest possible paradigms when affixes show a concrete pattern detected by the Language Acquisition Device, that of being in a *systematic syntagmatic relationship*. Two morphs show that configuration when they always appear adjacently, one cannot appear without the other and no other material can appear in between. In Pinker's original model, this distributional configuration between morphs on cells is not taken into consideration (although it is recognised that the learner must keep track of these relationships in order to avoid some potential errors). Therefore, according to Pinker's original proposal, if the learner encounters a specific paradigm (with the stem, X, included) like the one in (a), he builds, after extracting the phonetic material in common, the following two agglutinative general paradigms (b), (c). However, once we introduced the modification in Pinker's model in order to capture the effects of the MPC, when the learner encounters two morphs that show a systematic syntagmatic relationship through a paradigm like the one in (a), he builds just one general paradigm, that is, he takes all affixal information in cells and let it the same as a general paradigm (d).[1]

(a)		(b)	(c)		(d)
Xab		b	a		ab
Xac		c			ac
Xad		d			ad
Xae		e			ae
Xaf		f			af

We argue that, due to the effects of the MPC, two relevant predictions about the degree of fusion (Sapir 1921) in verbal morphology can be made. *Prediction 1* states that when some morphs show a systematic syntagmatic relationship in a paradigm and consequently the learner builds just one general paradigm for all the affixes, these affixes will (eventually) show a fusional pattern in subsequent intances of the language. The logic behind prediction 1 is that, once affixes are put together in the same paradigm, they will begin to show inconsistencies among forms, suffer morphophonological erosion and finally fusionalisation, due to the systematic contiguity of pieces (all these cases will be exemplified). For that reason, where on a first stage there are two different affixes instantiating two morphemes, in subsequent stages of the language there will be just one fusionalised morph, though the semantic distinctions it encodes were mantained, given the successive analyses of learners. *Prediction 2* states that when two morphs do no show such a systematic relationship and consequently the learner builds as many general paradigms as needed, the affixes will show an agglutinative pattern in subsequent intances of the language. Prediction 2 captures the observation that potentially discontiguity between morphs block morphophonological erosion and favours agglutination.

The logic behind this proposal is that the learner's analysis during language acquisition can influence the I-language that he will end up acquiring. If learners' analyses of a given generation are consistent, their (modified

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[1] If the learner encounters a paradigm containing morphs that do not show such a systematic syntagmatic relationship, Pinker's model applies as usual.

with respect to the previous one) language will serve as input to the following generation of learners, who will acquire an already modified language. The dynamics of this process of diachronic change motivated by acquisitional factors is also assumed, for instance, in Roberts (2007)' explanation of parametric change.

In order to illustrate the emergence of fusional patterns we will focus on Latin verbal paradigms and their Romance counterparts in Catalan, Spanish, Italian and French. We will argue that, because of some independent changes in the Latin passive voice system, two morphs, the Tense-Aspectual-Mood (TAM) marker and the personal desinence, became always adjacent in Latin and, as an effect of the MPC, verbal paradigms underwent an important fusionalisation, observable in different degrees of completion in Romance. We will pay attention to morphological paradigms of the present (IND and SUBJ), imperfect (IND and SUBJ) and perfect (IND) tenses in all conjugations in order to show the increasing difficulty in distinguishing TAM markers from personal desinences as two different units in Romance languages (whereas in Latin the TAM morph and the personal desinence are always perfectly distinguishable). Some relevant data is showed below, for Latin (e) and Italian (f) 1st conjugation paradigms:

(e)

Amo	Amem	Amabam	Amarem	Amavi
Amas	Ames	Amabas	Amares	Amavisti
Amat	Amet	Amabat	Amaret	Amavit
Amamus	Amemus	Amabamus	Amaremus	Amavimus
Amatis	Ametis	Amabatis	Amaretis	Amavistis
Amant	Ament	Amabant	Amarent	Amaverunt/ere

(f)

Amo	Ami	Amavo	Amassi	Amai
Ami	Ami	Amavi	Amassi	Amasti
Ama	Ami	Amava	Amasse	Amò
Amiamo	Amiamo	Amavamo	Amassimo	Amamo
Amate	Amiate	Amavate	Amaste	Amaste
Amano	Amino	Amavamo	Amassero	Amarono

Regarding agglutinative patterns, we will pay attention to the structure of verbal complexes in Bantu languages. We will argue that the agglutinative nature of Bantu morphs is due to the non-adjacency of mandatory elements, as it can be observed in the traditional schema of the full structure of the verbal pieces in Bantu languages, as in Meeussen (1967):

(g) (preinitial) initial (postinitial) (preradical) radical (prefinal) final (postfinal)

Given that distribution, the MPC cannot be used by the learner in these contexts and the agglutinative patterns are derived. We will concentrate on data in Chichewa from Mchombo (2001) and other Bantu languages. In the same line of argumentation, we will also discuss some Turkish data (Korn 1997).

This study argues that constraints active during language acquisition can (diachronically) shape the format of linguisitic structures. A constraint active during language acquisition affecting how the learner builds up morphological paradigm representations independetly motivated given computational reasons is proposed: the MPC. The effects of the MPC in the successive analises consistently made by learners can predict the degree of fusion in (verbal) morphology, that is, whether the relevant morphs will be fusional (as will be exemplified with Romance languages) or agglutinative (as will be exemplified with Chichewa and Turkish). This approach can be considered a step forward in predicting how morphological change happens inasmuch as it establishes specific morphological contexts where the learner's analises are going to change input representations. Also, as far as the author is aware, this is the first attempt in the literature to relate the use of distributional properties, which we do know are extensevely managed by language learners (Redington et al. 1998), with the discovery of concrete semantic aspects of morphs, namely, if they encode only one semantic distinction (agglutination) or more (fusionalisation).

Selected References. Chomsky (2005) Three Factors in Language Design. *Linguistic Inquiry*; **Korn** (1997) *Turkish*. Routledge; **Mchombo** (2001) Chichewa (Bantu). *The Handbook of Morphology*. Oxford University Press; **Meeussen** (1967) Bantu grammatical reconstructions. *Africana linguistica*; **Pinker** (1984) *Language Learnability and Language Development*. Harvard University Press; **Redington et al.** (1998) Distributional information: A powerful cue for acquiring syntactic categories. *Cognitive Science*; **Roberts** (2007) *Diachronic Syntax*. Oxford University Press; **Sapir** (1921) *Language*. Harcourt, Brace and World.

Morphological parameters and syntactic bootstrapping

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The objective of our study is to develop a model of morphophonological analysis that enables the learner to infer high-order properties of the target language. Our first step is to express in a parametric way part of the mechanism of data analysis used by the Language Acquisition Device (LAD) in order to attain a morphological analysis of its Primary Linguistic Data (PLD). The second step is to explore how these morphological analyses can be used by the learner to deduce classical patterns of morphosyntactic variation. With this approach we show a path to link morphological parameters and the acquisition of syntax.

The starting intuition is that all languages share the same class of grammatical features but differ as to how they realize them morphophonologically (Cinque 1999). We consider the minimal morphological category, which we will call *morph* or *head*, as a primitive of the proposed procedure, which can be detected on the PLD:

(1)   *Morph.* A linguistic form α, viewed as a string of phonemes, is a morph or head iff it is meaningful and does not contain any meaningful non-empty proper substring.

The two parameters to be set by the mechanism of data analysis under consideration are related to the basic operations that the learner has to entertain in order to acquire morphology, namely, to isolate minimal meaningful pieces and to assign them consistent meanings (Clark 2001):

(2)   a.   A head is *bound* if it is phonologically dependent of other heads and *unbound* otherwise.
        b.   A head is *synthetic* if it conveys more than one morpheme and *non-synthetic* if it conveys only one morpheme.

Property (2-a) is fixed by the learner by inspecting the string of heads. Whether a head is bound or not is arguably determined on the basis of phonological cues in the acoustic signal, such as pauses. Language-specific cues may also play a role, such as word level stress patterns, phonotactic regularities and allophonic variation. Property (2-b) is fixed by inspecting how a head is related to grammatical categories provided by Universal Grammar (UG), henceforth *morphemes*. More precisely, the mechanism should inspect how a head is related to morphemes, whether it conveys a sole morpheme or more. Here not only mechanisms of speech segmentation are involved, but the set of grammatical categories provided by UG must also be taken into consideration.

We call the morphophonological analysis mechanism we want to explore *Chunking Procedure*, understood as follows:

(3)   *Chunking Procedure.* Given a head H, the learner determines whether H is [+bound] or [-bound] and whether it is [+synthetic] or [-synthetic].

Once this morphological analysis is attained, we investigate the existence of bootstrapping mechanisms that use its results to specify higher order syntactic properties of the target language, namely those properties that traditional parameters range over. We capitalize on the observation that there exist general correlations between abstract syntactic patterns and the morphophonological analysis obtained by the Chunking Procedure. We shall directly formulate these correlations as bootstrapping mechanisms:

(4)   *Bootstrapping mechanisms triggered by the Chunking Procedure*
        a.   Once the learner has determined that there is a [+bound] head instantiating a feature F, then he can infer that the maximal projection instantiating F in the target language has a free distribution, and can be omitted.

b. Once the learner has determined that there is a [+bound] head conveying *case* or *number* on pronouns, then he can infer that any argument of the verb can be omitted in the target language.

c. Once the learner has determined that there is a [-bound] or a [+bound, -synthetic] head expressing *path*, then he can infer that multiple constructions that are related with the separate lexicalization of this head are available in the target language.

We shall sketch how the Chunking Procedure may be used to shed light on the problem of how the LAD infers syntactic properties of the target language from a morphophonological analysis in three selected case studies.

A. Baker's (1996) so-called Polysynthesis Parameter. Assume that, given an amount of linguistic input, the Chunking Procedure has determined that there is a [+bound] head H_1 that instantiates a particular θ-role θ_1. The LAD should be able to determine on independent grounds whether H_1 is an incorporated noun or an affix agreeing with a DP; if H_1 can also appear without being incorporated and as a fragment, then it will be a noun, whereas if H_1 is always bound (i.e., it cannot appear freely or as a fragment), then it will be an affix. Consider now the latter situation, in which H_1 is an affix agreeing with a maximal projection. In virtue of the bootstrapping mechanism (4-a), it follows that the maximal projection which the affix agrees with can be omitted and has a relatively free distribution.

B. Neeleman & Szendrői (2007)'s strong prediction on radical pro-drop. Assume the LAD has detected in the linguistic input that there is a head H_1 instantiating the category of *case* or *number* analyzed as [+bound] with respect to pronouns. At this moment, the LAD follows the bootstrapping mechanism formulated in (4-b) and infers that the target language allows radical pro-drop, in which case verbal arguments and possessors can be omitted.

C. Satellite-framed languages and related constructions (Talmy 1985). Assume that the Chunking Procedure has detected a H_1 expressing solely *path*; then there are two subcases: H_1 is [-bound] if the target language is a strong satellite-framed language, like English, or H_1 is [+bound, -synthetic] if the target language is a weak satellite-framed language, like Latin. In both cases, given the bootstrapping mechanism defined in (4-c), the LAD infers the availability of the relevant set of constructions (complex directed motions, unselected objects, complex effected objects, etc.).

This approach makes not only synchronic predictions but also diachronic predictions: since we assume that syntactic variation is contingent upon fundamental morphological properties, it is possible to test the validity of the approach examining whether morphology and syntactic patterns correlate in the expected way along diachronic patterns of change. We will focus on the case of Latin and subsequent Romance languages, which underwent some morphological changes that enabled an important syntactic change, namely, the move from satellite-framed to verb-framed constructions.

This study suggest that Greenberg's problem (what the nature and format of permissible linguistic variation is) may be reduced to Plato's problem (how natural languages are learned). By using this methodology, linguistic variation is examined in the very same terms as those used by the LAD when analyzing the PLD and, consequently, morphosyntactic variation is constrained by mechanisms of data analysis active during the process of language acquisition.

References: Baker (1996) *The polysynthesis Parameter*; Clark (2001) Morphology in language acquisition, The *Handbook of Morphology*; Chomsky (2005) Three factors in language Design, *Linguistic Inquiry*; Cinque (1999) *Adverbs and Functional Heads*; Neeleman & Szendrői (2007) Radical pro-drop and the morphology of pronouns, *Linguistic Inquiry*; Talmy (1985) Lexicalization patterns: Semantic structure in lexical forms, *Language typology and syntactic description*.

<div align="center">

Is there any room for discourse in imperatives?
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</div>

1. Introduction and goal. A number of recent works have examined the internal composition and extent of the phrasal hierarchies in the left periphery of different clause types, mainly concentrating on the distinction between root, 'root-like' subordinates and (diverse) embedded clauses (cf., among others, Haegeman 2002; Heycock 2006). Some works have also focused on the projection of discourse categories, leading to a clause-related distinction for (different types of) Foci, Contrast and Topics, also based on semantic and prosodic interface considerations (cf. Âmbar 1999, Haegeman 2004, 2012; Bianchi & Frascarelli 2010; Bianchi 2012). The data examined generally concern declarative or interrogative clauses, while no such study was ever proposed for imperative clauses.

This paper intends to provide a contribution in this direction, confident that such a 'multifactorial investigation' can shed light on the imperative interpretation and improve our understanding of discourse-related categories in Italian, Spanish and English.

2. Describing the picture: The association of Topics and Foci with imperatives. Assuming Frascarelli & Hinterhölzl's (2007) interface distinction between Aboutness-Shift (AS-)Topics, Contrastive (C-)Topics and Familiar/Given (G-)Topics, it appears that the semantic and discourse properties of AS-Topics can hardly associate with the imperative mood, as shown by examples (1a-b) from Italian, where (1b) involves an AS-Topic in the left periphery:

(1) a. *Basta giocare: vai subito a finire i compiti!*
         'Stop playing: go and finish your homework immediately!'
     b. **Basta giocare: i compiti, vai subito a finirli*!
         '*Stop playing: your homework, go and finish it immediately!'

If we follow Kempchinsky's suggestion (2009) that imperatives have a semantic operator in Finiteness, which is interpreted as 'anyone else except the speaker', their incompatibility with AS-Topics can be explained by the fact that this operator must take scope over the proposition. As argued in Bianchi & Frascarelli (2010), an AS-Topic constitutes a speech act on its own (an 'initiating speech act', cf. Krifka 2001), introduced by a dedicated speech act operator and (possibly) conjoined to the speech act expressed by the following sentence. Hence, though they might *in principle* be associated with an imperative, a sentence like (1b) cannot be interpreted because two instructions cannot be successfully managed in the same complex speech act. On the other hand, C-Topics (2B) and G-Topics (3) seem to be allowed (both in Italian and Spanish), showing that they can be interpreted in the scope of operators:

(2) A. *Dove posso mettere questi fiori?* ('Where can I put these flowers?')
     B. a. *Le rose, mettile nel vaso, il girasole lascialo sul tavolo*.
         b. *Las rosas ponlas en el jarrón, el girasol déjalo sobre la mesa*.
         (lit. the roses put-them in the vase, the sunflower leave-it on the table)
(3) a. *La palla tirala*./ *Tirala, la palla*.
     b. *La pelota tírala*./ *Tírala, la pelota*. (lit. the ball throw-it/throw-it the ball)

In this respect, English appears to provide some cross-linguistic differences. Cormany (2013) argues that non-contrastive topics are not allowed in English and, in general, left-peripheral arguments are often unacceptable (from Jensen 2007):

(4) a. *Your essay, leave in my pigeon hole this afternoon.   b. *The weapons leave behind.

However, this is not absolute. Sentences (5a–c), from Haegeman (2012:120), obtain acceptable results, and the context clearly induces a C-Topic interpretation for the fronted constituents. Thus C-Topics (though not G-Topics) are fronted in imperatives:

(5) a. The tie give to Bob, the aftershave give to Don.
     b. Anything you don't eat put back in the fridge.

This is expected given Bianchi & Frascarelli's idea that English G-Topics are just destressed.

As for foci, a Mirative Focus (MF) totally 'clashes' with the imperative mood (compare declarative (6a) with (6b) from Italian), while Contrastive Focus (CF) seems to be unproblematic (both in Italian/Spanish and in English) as long as the focused element remains in situ, as in (7). The crucial observation is that MF is argued to be connected with a root 'evaluative' force (a "proposal to negotiate a shared evaluation", cf. Bianchi 2012), while Correction can be associated with any kind of clause.

(6)   a. Wow! DUE BOTTIGLIE abbiamo bevuto! (Wow: TWO BOTTLES OF WINE we drank!)
       b. *Wow! DUE BOTTIGLIE bevi immediatamente! (Wow: TWO BOTTLES drink now!)
(7)   Bevi L'ACQUA, non il vino! / ¡Bébete EL AGUA, no el vino! (Drink WATER, not wine!)

> **Generalization**: The realization of discourse-related categories seems to suggest a non-root analysis for imperative clauses, despite their apparent matrix character.

3. The proposal. Cormany (2013) proposes that in imperatives V raises to Fin and the 'subject' to spec-FinP. Jensen (2007), on the other hand, concludes that imperatives lack a CP domain altogether. We think that the data examined lead toward a different solution.

Our working hypothesis is that imperative is a mood, not an independent illocutionary force, and this mood (and its associated non-finite morphological form) is the consequence of a 'hidden' illocutionary force that is activated in a matrix 'silent clause'. In other words, we resume and revisit Ross' (1970) original 'performative hypothesis' and propose that imperatives are in fact subordinate clauses, thereby explaining why they lack an independent ForceP projection when they merge with the matrix silent performative V.

In the present framework, the relevant 'silent subordination' implies the existence of a 'silent speech act' that is encoded in a specific projection, the Illocutionary Phrase, also including featural information about speaker and hearer. The imperative mood is activated via an Agree relation with Fin° where an imperative operator is located.

This proposal can explain the relevant data since the inactivation of an independent Force will rule out AS-Topics and MF, though still allowing for C-Topics, G-Topics and Contrast. It also accounts for a number of cases in which an imperative form is not associated in fact with an imperative mood, but with a different interpretive feature (creating minimality effects). This is for instance the case of an imperative form associated with Information Focus, as in *La palla, prendila tu*/*La pelota cógela tú* ('The ball, you take it'). Intonational evidence will be provided, examining the different discourse-related categories associated with true and 'disguised' imperatives, comparing Italian, Spanish and English on both spoken corpora and elicited sentences.

References

Bianchi, V. 2012. Focus Fronting and the syntax-semantics interface. Ms. U. Siena. **Bianchi, V. & M. Frascarelli.** 2010. Is topic a root phenomenon? *Iberia* 2:43-88. **Cormany, E.** 2013. A preference analysis of imperatives connecting syntax, semantics and pragmatics. PhD U.Cornell. **Frascarelli, M. & R. Hinterhölzl.** 2007. Types of Topic in German and Italian. In Schwabe K. & S. Winkler (eds) *On Information Structure, Meaning and Form*. Benjamins, 87-116. **Haegeman, L.** 2002. Anchoring to Speaker, adverbial clauses and the structure of CP. *Georgetown University Working Papers in Theoretical Linguistics* 2:117–180. **Haegeman, L.** 2004. Topicalization, CLLD and the left periphery. In ZAS Papers in Linguistics 35: 157–192. **Haegeman, L.** 2012. *Adverbial clauses, main clause phenomena, and the composition of the left periphery*. OUP. **Heycock, C.** 2006. Embedded Root Phenomena. In Everaert M. & H. van Riemsdijk (eds) *The Blackwell Companion to Syntax*, 174–209. Basic Blackwel. **Jensen, B.** 2007. In favour of a truncated imperative clause structure: evidence from adverbs, *Working Papers in Scandinavian Syntax* 80, 163-185. **Kempchinsky, P.** 2009. What can the subjunctive disjoint reference effect tell us about the subjunctive? *Lingua* 119:1788-1810. **Krifka, M.** 2001. Quantifying into question acts, *Natural Language Semantics* 9:1–40. **Ross, J. R.** 1970. On Declarative Sentences. In Jacobs R. & P.S. Rosenbaum (eds.) *Readings in English Transformational Grammar*. Waltham, MA.

Daniel Harbour (QMUL) - *Phi-sec: Person > Number*

This talk is about looking for syntactic understanding in nonsyntactic places. The traditional view of person and number features is that they denote first order predicates, combined via conjunction. For instance, the first person singular is any x satisfying "x is not a plurality & x contains the speaker". However, this approach leads to well known problems of both under- and overgeneration (Zwicky 1977, Noyer 1992, Harley and Ritter 2002). In recent and ongoing work (Harbour 2012, 2013), I have argued that semantics, morphology, and typology are all better served if we understand person and number features as actions on the domains that variables range over: featural treatments of hitherto recalcitrant numbers become available, the theory generates only attested (systems of) persons and numbers, and both sets of features emerge as largely semantically and morphologically uniform.

The syntactic impact of this approach arises via the order of composition between person and number. It is very easy to show that theory just outlined delivers the right results only if person composes before number (the reserve order both under- and overgenerates): for first singular, say, inserting the speaker in x then making sure that it is as small as possible is not the same as making sure x is as small as possible and then inserting the speaker, as the latter can deliver me-and-you as a potential referent of "I".

Assuming a transparent interface between syntax and semantics, this means that person is lower in the tree than number. Surprising as this may be, it interacts straightforwardly with a simple approach to linearisation and thereby delivers some nontrivial properties of agreement position and discontinuities. These can be illustrated with prefixal versus suffixal agreement in Classical Hebrew and with double split agreement in Yimas (building on Trommer 2002, Harbour 2007, 2008).

Sinhala Object Scrambling Revisited

Sujeewa Hettiarachchi

Overview: The prevailing assumption in the scarce Sinhala syntax literature is that the OSV word order in Sinhala (1b) is syntactically derived from its canonical SOV word order (1a) by constituent scrambling (Chandralal, 2010; Gair, 1998; Kanduboda, 2011; Kariyakarawana, 1998; Kishimoto 2005; Sumangala, 1992; Tamaoka et.al, 2011, among others).

(1)   a.   sarat   kawiyak   liyuwa.   **[Focus Set: TP, VP Object]**
           Sarath.$_{NOM}$ poem.$_{ACC}$ write-$_{PAST-A}$
           Sarath wrote a poem.
      b.   kawiyak$_i$ sarath t_i iyuwe.   **[Focus Set: Object]**

This study provides a systematic analysis of so-called object scrambling in Sinhala OSV word order (1b), which has not received any formal treatment in generative syntax. A goal is to analyze Sinhala and determine its place in the typology of human languages as characterized by a Minimalist theory of principles and parameters. Using diagnostics standard in scrambling research, including (radical) reconstruction, binding relations, Weak Crossover (WCO) effects, scopal ambiguity and parasitic gaps (Bošković, 2004; Dayal, 1994; Karimi, 2005; Mahajan, 1990; Miyagawa, 2006 & 2009 and Neeleman & Reinhart, 1998; Saito, 2004 & 2006), I argue that: (i) the OSV word order in Sinhala is derived through syntactic movement (contra Bošković, 2004; Bošković & Takahashi, 1998 for Japanese) (ii) it is uniformly an A-bar movement operation (contra Mahajan, 1990; Miyagawa, 2009) and (iii) the movement of the object results in clear semantic effects as the fronted object is obligatorily associated with a topic or focus interpretation (contra Bošković, 2004; Bošković & Takahashi, 1998; Saito, 1985 & 2006). Based on these semantic/syntactic properties, the study concludes that topic/focus driven A-bar movement (Rizzi, 1997 & 2003) can readily account for the OSV word order in Sinhala without appealing to 'scrambling,' a cross-linguistic phenomenon that has remained problematic for different theoretical approaches.

Data & Observations: So-called object scrambling, illustrated in (1b), exhibits at least five important properties in Sinhala. *First*, a scrambled object neither feeds nor bleeds binding. For instance, the anaphor embedded in the subject remains unbound in both (2a) and scrambled (2b):

(2)   a.   *thamange$_i$ malli   sunilwə$_i$ taumedi   dækka.
            self's   brother.$_{NOM}$ Sunil-$_{ACC}$ town-in   see-$_{PAST}$
            * Self's$_i$ brother saw Sunil$_i$ in town.'
      b.   *sunilwə$_j$ thamange$_i$ malli t$_j$ taumedi   dækka.

Second, (3a) and (3b) are equally grammatical, implying that Principle A is satisfied at LF through reconstruction, a property generally associated with A-bar movement:

(3)   a.   demawpiyo$_i$ thamange$_i$ lamaitə   adarei.
            parents.$_{NOM}$ self's-$_{GEN}$ children.$_{ACC}$ love
            'Parents$_i$ love their$_i$ children.'
      b.   thamange$_i$ lamaitə$_j$ demawpiyo$_i$ t$_j$ adarei.

Third, Sinhala object scrambling can license parasitic gaps.
(4)   parənə karekə   sara   [t_i hadanne nætuwa] t_i wikunuwa.
        old   car.$_{ACC}$ Sara.$_{NOM}$ repairing   without   sell-$_{PAST}$
        'The old car, Sara sold without repairing.'

Fourth, similar to other SOV languages (Karimi, 2005), object scrambling in Sinhala does not trigger WCO effects: (5a) shows that wh-in-situ in Sinhala triggers WCO effects due to LF wh-movement (Kariyakarawana, 1998), but object scrambling in the same clause in (5b) does not.

(5) a. *eya-ge$_i$ amma katə$_i$ də adare?
         he-$_{GEN}$ mother.$_{NOM}$ who-$_{DAT}$ Q love-$_{PAST-E}$
         *Who$_i$ does his$_i$ mother love t$_i$?

      b. katə$_i$ də eya-ge$_i$ amma *t$_i$* adare?

Finally, the application of Neeleman & Reinhart' (1998) *focus rule* shows that the scrambled (1b) has a different focus set from the canonical word order in (1a). Thus, (1a), with neutral intonation on the object, can be the answer to any question targeting the *Object* (What did Sarat write?), *VP* (What did Sarat do?) or the entire *TP* (What happened?). But in contrast, the scrambled (1b) can only answer a question targeting the object (What did Sarat write?), which has now been scrambled to a clause initial position.

Analysis: Based on a variety of empirical evidence, Chou & Hettiarachchi (2013) conclude that the subject in Sinhala volitive constructions (1a) undergoes case-driven A-movement to Spec-TP. If their analysis is on the right track, the landing site of the scrambled object in (1b) must be a position higher than TP. This prediction is borne out given that object scrambling in (1b) exhibits A-bar properties: (i) object scrambling does not feed binding relations (2b), (ii) scrambling allows reconstruction (3b) and (iii) the scrambled object can license a parasitic gap (4) (Mahajan, 1990). Even though the absence of WCO effects (5b) is generally assumed to be a property associated with A-movement (e.g., Mahajan, 1990), even in English some instances of A-bar movement do not trigger WCO effects (Lasnik & Stowell, 1991: 691): *This book$_i$, I expect [its author] to buy e$_i$.* Also, notice that scrambling in (1b) is neither optional nor semantically vacuous (contra Bošković, 2004; Bošković & Takahashi, 1998; Saito, 1985 & 2006 for Japanese): scrambled (1b) has a different focus set from (1a). To account for these empirical observations, I adopt Rizzi's (1991, 1997 & 2004) split CP hypothesis and argue that in Sinhala, object scrambling is triggered by topic/focus features in the CP domain: Topic/Focus heads in the CP drive the movement of the object into their Spec. The topic/focus distinction for the scrambled object is also indicated by contrasting verbal morphology, as illustrated in (6).

(6) a. kawiyak$_i$ sarath *t$_i$* liyuw**e**.   b. kawiyak$_i$ sarath *t$_i$* liyuw**a**.
        poem.$_{ACC}$ Sarath.$_{NOM}$ write-$_{PAST-E}$ poem.$_{ACC}$ Sarath.$_{NOM}$ write-$_{PAST-A}$
        It was a poem that Sarath wrote.   A poem, Sarath wrote.

The –*e* affix on the verb (6a) denotes a focus interpretation for the scrambled object. By contrast, the –*a* affix (6b) denotes a topic interpretation for the scrambled object, the only interpretation possible in -*a* constructions.

Selected References: Bošković, Z. (2004). Topicalization, focalization, lexical insertion, and scrambling. *Linguistic Inquiry* 35(4), 613–638. **Karimi, S. (2005)**. *A Minimalist approach to scrambling: Evidence from Persian*. Berlin: Mouton de Gruyter. **Mahajan, A. (1990)**. *The A/A-bar distinction and movement theory*. Doctoral dissertation, MIT, Cambridge, Mass. **Miyagawa, S. (2009)**. *Why agree? Why move? Unifying agreement-based and discourse configurational languages*. Linguistic Inquiry Monograph 54. MIT Press, Cambridge, MA. **Neeleman, A. & Reinhart, T. (1998)**. *Scrambling and the PF-interface. In the projection of arguments: Lexical and compositional factors*, eds. M. Butt and W. Geuder, 309-353. Chicago: CSLI Publications.

Obligatory and optional left-dislocation of topics in eastern Bantu languages and the impossibility of VSO

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The Bantu languages of eastern and southern Africa are typologically very similar and have similar information structural properties, characterised by left-dislocation of topics and very frequent use of topic-comment sentence articulation. There are, however, differences between these languages regarding the behaviour of topic and focus expressions. This paper will demonstrate that these information structural differences are grammatically significant.

In some eastern and southern Bantu languages, the preverbal domain is restricted to topics; that is, focused referents may not occur preverbally (Zerbian 2006; Van der Wal 2009; Van der Wal, in preparation; Yoneda 2011). Additionally, in certain languages topics must be expressed in preverbal position, and a topic occurring in any other position is considered not just pragmatically infelicitous but ungrammatical. This is the case in Fuliiru [DJ63] (Van Otterloo 2011) and Jita [EJ25] (Pyle & Robinson, in press). In these languages, topics are left-dislocated; this is illustrated in (1) by the insertion of *bhuri rusiku* 'every day' between the topic *wamembe* 'hyena' and the verb, and in (2) by the insertion of the clause *ikyanya ali mubalamuka* 'the time he is returning from a trip' between the topic *yîba* 'her husband' and the verb:

1) Eyo   mw=ibhara wamembe bhuri rusiku :aa-jaga   mu=mugunda gwaye
   DEM LOC=forest hyena   every day   3SG.IPFV-go LOC=field   his
   'There in the forest, Hyena, every day he went to his field.' (Jita)

2) Yîba   ikyanya a-li   mu=balamuka a-li   mu=yija
   her.husband time   3SG-be PROG=travel 3SG-be PROG=come

   a-ba-gul-ira   amakânju bombi.
   3SG-3PL-buy-APPL   dresses   both
   'Her husband, the time he is returning from a trip, he is coming having bought dresses for both of them.' (Fuliiru)

In other eastern Bantu languages, topics in certain discourse contexts may occur in postverbal position. In Digo [E73] (Nicolle 2013) the position of topics is sensitive to the distinction between switch topics and continued topics in specific discourse contexts. When the topic changes between one clause and the next, the new topic is a switch topic; when there is no change of topic from the previous clause, this is a continued topic. All switch topics, as well as continued topics occurring at at places of discontinuity in a text (such as at the start of a new thematic unit), must be preverbal. However, continued topics in Digo are right-dislocated when there is no discourse discontinuity. In the following example, there is no change of topic and no discontinuity (note the use of the consecutive tense indicating a sequential action within a single thematic unit), and so the continued topic *mutu yuyu* 'this person' is right-dislocated:

3) Lakini a-chi-nyamala   mutu   yuyu wala ka-ya-gomba   na   mutu.
   but   3SG-CONS-be.silent person DEM   nor   3SG.NEG-PST-speak with person
   'But he stayed silent this person, neither did he speak with anyone.'

In Jita and Fuliiru, in contrast, even when the topic has not changed and there is no discourse-level discontinuity, topics must be left-dislocated. In the following Jita example, a left-dislocated continued topic occurs mid-way through a paragraph at a place with no apparent discontinuity:

4) Woori omumura oyo a-ta-chandaga na ku-fwima
   now   man   DEM 3SG-NEG-like with INF-hunt
   'Now this man did not like to hunt.'

In all of these languages, "the preverbal position *indicates* the topical status of the referents occurring there" (Van der Wal, in preparation; original emphasis); that is, any preverbal NP will be interpreted as a topic. Only in Jita and Fuliiru, however, is the preverbal position the obligatory location of topics, such that a NP in any other position cannot be a topic; in Digo, although preverbal NPs are topics, not all topics are preverbal.

I will demonstrate that despite these differences, information structure makes VSO constituent order impossible in these languages. If S is a topic, it is left-dilocated obligatorily in Jita and Fuliiru and optionally in Digo. In Digo, if S is a right-dislocated topic, then it must be outside of the clause nucleus. If the object is part of the focus it will occur after V in the clause nucleus, and so S will occur to the right of VO, giving the order VOS. On the other hand, if the object is also a topic it will be left-dislocated, giving the order OVS. Therefore VSO is impossible if S is a topic. If, on the other hand, S is not a topic, the only time it occurs after V in these languages is in a presentational sentence, since focusing of S in sentences with identificational articulation occurs in cleft constructions in Digo and Jita (Nicolle 2013: 241-242; Pyle & Robinson in press) and preverbally with a focus copula in Fuliiru (Van Otterloo 2011: 344-346). Presentational sentences require intransitive verbs such as *appear, come, emerge* and so VSO is impossible if S is not a topic. Since S must either be a topic or not be a topic, and the order VSO cannot occur in either case, the order VSO is ruled out because of information structural reasons.

References

Nicolle, Steve. (2013). *A Grammar of Digo (a Bantu language of Kenya and Tanzania)*. Dallas: SIL International.

Pyle, Allison & Holly Robinson. (In press). Jita narrative discourse. To appear in *SIL Language and Culture Documentation and Description*. Dallas: SIL International.

Van der Wal, Jenneke. (2009). *Word order and information structure in Makhuwa-Enahara*. Utrecht: LOT.

Van der Wal, Jenneke. (In preparation). Information structure, (inter)subjectivity and objectification.

Van Otterloo, Roger. (2011). *The Kifuliiru Language, Vol.2: A descriptive grammar*. Dallas: SIL International.

Yoneda, Nobuko. (2011). Word order in Matengo (N13): Topicality and informational roles. *Lingua* 121: 754-771.

Zerbian, Sabine. (2006). *Expression of Information Structure in Northern Sotho*. PhD Thesis: Humboldt University, Berlin.

Is there a null D in articleless languages?

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The paper pays attention to the way the two articleless languages, Vietnamese and Chinese, express definiteness to see whether Vietnamese nominals can exhibit anything new that we haven't already known from Chinese, and whether the DP-hypothesis can be extended to Vietnamese. Taking Cheng & Sybmesa (1999, 2005) as the point of departure, the main focus of this study is on the different interpretations of three types of nominals in Vietnamese and Chinese: (i) bare NPs, (ii) NPs made up of a classifier and a noun (Cl-NPs), and (iii) NPs comprising of a numeral, a classifier and a noun (Num-Cl-NPs). While Chinese preverbal bare nouns can be definite, the Vietnamese counterpart cannot be definite, as illustrated in (1). While Cl-NPs and Num-Cl-NPs cannot be definite in Chinese, they can certainly receive definite interpretation in Vietnamese, as shown in (2) and (3). In order to accommodate the cross-linguistic variation, we have come up with a more articulated nominal structure and propose that even article-less languages need a DP projection (though this kind of D may be null). This implies that contra Cheng & Sybesma, there is no structural parameters between article languages and classifier languages, i.e., they all share the same underlying structure, and the cross-linguistic variation lies in the size of the lexical elements. The proposed analysis argues against the no-DP approach (Boskovic 2009), and in favour of the syntactic underspecified approach (Ramchand & Svenonius 2008) to the variation in the expression of definite nominals across languages.

Examples:

Chinese	*Vietnamese*

(1a) Gou ai chi rou
    Dog love eat meat
'The dogs/ Dogs love to eat meat.'
        (Cheng & Sybesma 2005: 261)
	(1b) Chó thích ăn thịt
	    Dog like eat meat
	'*The dogs/ Dogs love to eat meat.'
	        (Trinh 2011: 12)

(2a) ?Ta kan-wan-le bu dianying
 	
    He watch-finished-PERF CL movie
 	
'He finished watching a/*the movie.'
	(2b) Anh-ấy xem xong bộ phim rồi
	
	    He watch finish CL movie already
	
	'He finished watching *a/the movie.'

(3a) Wo xiang jian liang ge xiaohai
    I want see two CL kid
'I would like to see two/*the two kids.'
	(3b) Tôi muốn gặp hai đứa nhỏ
	    I want meet two CL small
	'I would like to see two/the two kids.'

References: Boskovic, Z (2009). "More on the no-DP analysis of article-less languages". Studia Linguistica 2: 187-204. **Cheng, L. & Sybesma, R. (1999).** "Bare and not-so-bare nouns and the structure of NP". Linguistic Inquiry, 30(4), 509-542. **Cheng, L & Sybesma, R. (2005).** "Classifiers in four varieties of Chinese". <u>In</u>: Cinque, G. & Kayne, R. (eds.) *The Oxford Handbook of Comparative Syntax*, pp. 259-292. New York: Oxford University Press. **Ramchand, G., & Svenonius, P. (2008).** "Mapping a parochical lexicon onto a universal Semantics". <u>In</u>: Biberauer, M. (Ed.). *Limits of Syntactic Variation*, pp. 219-245. Amsterdam: John Benjamins. **Trinh, T. (2011).** "Nominal Reference in Two Classifier Languages". <u>In</u>: Reich, I. et al (eds.), *Proceedings of Sinn und Bedeutung 15*, pp 1-16. Saarbrucken: Universaar – Saarland University Press.

English-like Applicatives in Romance and Basque

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I. Goal: The aim of the talk is to provide an exhaustive account of Dative/Accusative alternations in several Romance languages (especially Spanish, Catalan, Asturian and Italian), as well as in Basque. The relevant cases include verbs of communicative transfer (*telefonar* 'phone', *escriure* 'write', *contestar* 'answer'), verbs of transfer of possession (*robar* 'steal', *pagar* 'pay'), verbs of violent contact (*pegar* 'hit', *disparar* 'shoot'), verbs of contact in a broad sense (*seguir* 'follow', *succeir* 'succeed'), and verbs of social interaction (*servir* 'serve', *pregar* 'pray'). Most of them display interesting variation from a diachronic point of view, too. They can all be grouped into a single and broader semantic class, those of verbs expressing transfer processes, by virtue of which the recipient ends up in possession or in contact of what has been transferred, being something material or immaterial.

II. State of affairs: Taking the example of *phone*-verbs (examples (a) from Spanish and (b) from Catalan), when expressing the recipient two options arise: conservative dialects preserve dative case-marked complement (1), whereas innovative dialects opt for an accusative case-marked complement (2) –note that this holds for full DPs as well as for clitics:

(1) a. *Juan {llamó/telefoneó} [$_{DAT}$ a su hija] → Juan le {llama/telefonea}*

   b. *En Joan {truca/telefona} [$_{DAT}$ a la seva filla] → En Joan li {truca/telefona}*
   John phoned [$_{DAT}$ to his daughter] → John phoned [$_{DAT}$ her]

(2) a. *Juan {llama/telefonea} [$_{ACC}$ a$_{DOM}$ su hija] → Juan la {llama/telefonea}*
   b. *En Joan {truca/telefona} [$_{ACC}$ la seva filla] → En Joan la {truca/telefona}*
   John phoned [$_{ACC}$ his daughter] → John phoned [$_{ACC}$ her]

In Catalan the pattern in (1)-(2) constitutes an irrefutable case of Dat/Acc variation for which no explanatory account has been proposed (only some descriptive (and partial) mentions of the phenomenon exist). However, in Spanish this has been misunderstood (there exist huge contradictions in prescriptive grammars and dictionaries), due to the existence of differential object marking (DOM) in the realm of lexical DPs and due to case confusing phenomena (*loísmo, laísmo, leísmo*) in the realm of clitics. However, that this phenomenon is not to be reduced to *loísmo/laísmo* is shown by its pervasive appearance in literary works and press and, crucially, by the existence of passive structures, which clearly indicates that these complements are something else than a standard IO with accusative-marking.

III. Proposal: We will argue that no structural differences can be found between dative complements (1) and accusative complements (2): both are Goals, though those in (2) are Differently Marked Goals, or, in other words, they are instances of Differential Indirect Object Marking or DIOM (following Bilous's (2011) proposal for some verbs in French and Ukrainian). As we will show, several pieces of evidence support the view that accusative-marked complements in (2) are Goals: their semantics and theta-role; non-availability of secondary predication; *me-lui* restriction with analytic causatives (Sáez 2009, Ormazabal & Romero); the cross-linguistic behavior of the relevant verbs (Blume 1998, Troberg 2008, Bilous 2011).

IV. Analysis: We consider that those originally dative-taking unergatives, like *phone*-verbs, display DIOM, which consists of Acc-marking a structural IO. Then, inspired by Torrego's (2010) and Saez's (2009) proposals, we will argue that verbs in (1) and (2) are hidden

transitives: indeed, they can be decomposed into a light verb + a noun: *telefonar* 'phone' – *fer una telefonada* 'make a phone call'. This way, following Hale & Keyser's (2002) account, the Cognate Theme *telefonada* 'phone call' conflates into the verb and gives rise to the final verb *telefonar* 'phone'. Thus, when it comes to the expression of the Goal (the one receiving the phone call), we work with a hidden ditransitive structure ('make [THEME a phone call] [GOAL somebody]'). So, whether the Goal appears with accusative or dative case marking, there will be a Low Applicative head relating the (Cognate) Theme and the Goal, following Pylkkänen's (2002) account for cross-linguistic ditransitive structures.

Then, the difference in case assignment follows if we assume, on the one hand, that varieties using dative-marked complements (1) bear a current Romance Applicative head, which assigns inherent dative case to its specifier (to the Goal), as in current Romance ditr. constructions (3) (Catalan examples). On the other hand, the behaviour of dialects using accusative-marked complements 2) can be explained by positing a defective Applicative head (following Richardson's (2007) account for some Slavic alternations) or, rather, a English-like Applicative head, which assigns inherent accusative case to its complement, as in current English ditr. constructions or double object constructions (84).

(3) a. *El Joan (li) donà un llibre a la Maria*   (4) a. *John gave Mary the book*
    John (cl$_{DAT}$) gave [$_{ACC}$ a book] [$_{DAT}$ to Mary]

    b. *El Joan telefonà* [$_{DAT}$ a la Maria]   b. *Joan telefonà la Maria*
    John phoned [$_{DAT}$ to Mary]   John phoned [$_{ACC}$ Mary]

Once the Theme (*the book* in (4a) or the Cognate Theme *telefonada* 'phone call' in (4b)) gets the inherent accusative case from the Applicative head, the Goal (*Mary* in (5a), *la Maria* in (5b)) must go up and check for structural accusative case. From there, it will be able to passivize –this is one of the structural consequences we will account for in our talk:

(5) a. *Mary was given the book*   b. *La Maria fou telefonada*
                                      Mary   was phoned

V. Extensions: The same account holds for similar patterns found with the very same verbs in other Romance varieties such as Asturian (6) or Italian Southern dialects (7)-(8), as well as in Basque (9) –again regardless of the clitic / DP status of the complement:

(6) a. $^{?}$*Telefonée-y*   b. *Telefonéelu, telefonéela*
    I phoned-[$_{DAT}$ him]   I phoned-[$_{ACC}$ him], I phoned-[$_{ACC}$ her]
                                           (Julio Viejo, p.c.)

(7) a. *'Ngə so' təlefonátə*   b. *La so' təlefonátə*
    I phoned [$_{DAT}$ her]   I phoned [$_{ACC}$ her]
                                          (Andriani 2011: 50-51)

(8) *Telefonarono lo zio*
    They phoned [$_{ACC}$ the uncle]
                                 (Gadda, cited by Academia della Crusca)

(9) *Joni telefonoz deitzen diot nik*   b. *Jon telefonoz deitzen dut nik*
    I phone [$_{DAT}$ John]   I phone [$_{ABS}$ John]

Likewise, we will argue that the High vs. Low Applicative head distinction is responsible for several cases of diachronic variation with the relevant verbs, e. g. Catalan *help*-verbs and *pray*-verbs used to take a dative complement, although nowadays only the most conservative dialects preserve it, while the rest use a standard transitive pattern with accusative case.

References: ANDRIANI 2011: *DOM, Clitic Doubling and Argument Structure in Barese*. Ms, Leiden U. **BILOUS** 2011: *Transitivité et marquage d'objet différentiel*. PhD Diss, U. Toronto. **BLUME** 1998: «A contrastive analysis of interaction verbs with dative complements», *Linguistics* 36:2, 253-280.

HALE & KEYSER 2002: *Prolegomenon to a Theory of Argument Structure*. Cambridge, MIT. **PYLKKÄNEN** 2002: *Introducing Arguments*. PhD Diss, MIT. **RICHARDSON** 2007: *Case and Aspect in Slavic*. Oxford, OUP. **SÁEZ** 2009: «Applicative phrases hosting accusative clitics», *In Little words*. Washington, Georgetown U. Press, 61-73. **TORREGO** 2010: «Variability in the Case Patterns of Causative Formation in Romance and Its Implications», *Linguistic Inquiry* 41:3, 445-470. **TROBERG** (2008). *Dynamic two-place indirect verbs in French*. PhD Diss, U. of Toronto.

Place Domain Adpositions: A Comparative Study

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Goal: In this talk I will discuss the internal syntax of spatial adpositions used in the place domain in English and Kurdish. I will show that English and Kurdish show distinct realisations of the functional heads involved in a place P projection.

Background and observation: (i) In the literature on place-denoting adpositions, several hypotheses have been proposed for their internal syntactic structure, identifying various functional projections (e.g. Svenonius 2010, Terzi 2010). These analyses are all based on the cartographic approach to phrase structure (see Cinque 1999, Cinque and Rizzi 2008).

Svenonius (2010) decomposes an English P such as *in front of* into three functional heads, each of which has a definite semantic function. These are Loc, AxPart and K. The semantic function of Loc is to map regions into vector spaces. AxPart is a function from the set of points occupied by the Ground object in space to other regions or axes of the Ground such as its top, bottom, front, sides, edges, proximity, etc. (Svenonius 2010). As to the functional head K, Svenonius (2010) assumes that K is the element that returns the set of points occupied by the Ground and he refers to this set of points as eigenplace, following Wunderlich (1991). While I agree with Svenonius (2010) in terms of the functional sequence these heads maintain across languages, I assume slightly different semantic functions for them, Loc and K in particular.

(ii) Based on form, Kurdish adpositions can be said to fall into three classes: simple, compound and discontinuous. The third class, discontinuous adpositions, provides a challenge for Svenonius' (2010) model. This class involves simple or compound Ps followed by DPs which end with a bound morpheme, *-da, -əwə* or *-ra*.

(1) lə-naw   bax-əkə=da   bu-m
    at-inside park-DEF=?   be-PST.1SG
    'I was in the park.'

In (1), *lə* lexicalises Loc and *naw* lexicalizes AxPart, but it is less clear what *-da* could be said to lexicalize in Svenonius (2010). In the literature on Kurdish adpositions, *-da* (along with *-əwə* and *-ra*) has not been analysed satisfactorily (hence the '?' in the gloss).

Proposals: (i) I suggest that elements such as *in/on/at* relate Figures to a specific space with reference to a Ground, and refer to them as Place Relaters, hence the functional head PlaceRel.[1] For instance, *in* relates a Figure to an inner space of the Ground, while *on* relates it to a surface space, and so on. Another function of PlaceRel is introducing a Figure through its Spec into the locative relationship (cf. Svenonius' (2010) little *p*). The specific space to which a Figure is related represents the AxPart, which is suggested by the semantic property of the Place Relater and forms a part-whole relationship with a Ground. Sometimes part of the space is lexicalised such as the case of *inside*, where the exact inner part is not spelled out but part of it is, which is *side*. In Kurdish, the inner space and the surface spaces are lexicalized as in *naw* 'inner side' in *lənaw* 'at/in' and *sər* 'top' in *ləsər* 'on/above'. As to the K element, following Romeu (2013), I assume that K has a possessive function. It just defines the possessive construction or the part-whole relationship that holds between AxPart elements and the Ground. In English, it is lexicalised by *of* and in Kurdish by the ezafe marker *-i,* both of which are used in possessive constructions quite generally.

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[1] The terms Figure and Ground are adopted from Talmy (1975). The Figure is the entity whose location is determined, and the Ground is the entity or the location with reference to which a Figure's location is defined.

(ii) Morphologically, I analyse *-da, -əwə* and *-ra* as semi-clitics. In terms of their grammatical categories, although they follow DP complements in PPs, they are not to be considered postpositions. However, based on their semantic properties, I assume that *-da, -əwə* and *-ra* are location-denoting elements. Therefore, it is tempting to assume that they are phonological realisation of the PLACE element in Terzi (2010). They, thus, define the region occupied by the Ground. One piece of evidence in favour of this assumption comes from the syntactic and semantic structure of *peda*, which is a non-locative element made up of *pe* (the absolute form of *bə* 'by/with') and *-da*. The literal meaning of this element is 'by the place of'. Here obviously *bə* is responsible for the 'by' meaning which entails a path notion, while *-da* can be said to denote the spatial notion of the place occupied by an unknown Ground. Having separate morphological realisations of AxPart and PLACE in Kurdish, I modify Svenonius' (2010) model and introduce a PLACE element into it, located between the KP and the DP Ground, and heading an XP projection. Under this assumption, and based on the fact that *-əwə, -da* and *-ra* are attached to the end of the DP Ground, the DP Ground in Kurdish undergoes movement to Spec-XP, giving the order DP-PLACE. Although PLACE is phonologically null in many languages, it is lexicalised in certain languages, such as Ainu, Tairora and Tucanoan language Barasano (see Cinque 2010 for illustrative examples). Thus, Kurdish is another language which spells out this category.

Outcome: A revised minimal structure of Svenonius' (2010) model of place P projection would include the following elements in English and Kurdish:

(2) a. [PlaceRel [AxPart [K [DP$_{Ground}$]]]]   English
     b. [PlaceRel [AxPart [K [PLACE [DP$_{Ground}$]]]]]   Kurdish

This structure has several advantages. First, PlaceRel makes the right prediction that elements such as English *in/on/at* or Kurdish *lə* 'at/in' relate Figures to a specific space or subpart with reference to a Ground. AxPart defines that space or subpart of the DP Ground. K defines the possessive or part-whole relationship between AxPart and Grounds and hosts possessive markers, such as *of* in English and *-i* in Kurdish. Finally, in (2b) PLACE defines the region occupied by the DP Ground and is lexicalised by the elements *-əwə, -da* and *-ra*. In Kurdish, the DP Ground moves to the specifier of an XP to give the required order. In case of English PP structures, I kept it more in line with Svenonius (2010) since PLACE is null there and excluding it is acceptable.

Selected references: ● Cinque, G. 1999. *Adverbs and Functional Heads: A Cross-linguistic Perspective.* New York: Oxford University Press. Cinque, G. and L. Rizzi. 2008. 'The cartography of syntactic structures'. *Studies in Linguistics* 2: 42-58. ● Cinque, G. 2010. 'Mapping spatial PPs: an introduction'. In G. Cinque and L. Rizzi (eds) *Mapping Spatial PPs: The Cartography of Syntactic Structures Vol. 6.* New York: Oxford University Press. 3-25. ● Kayne, R. S. 1994. *The Antisymmetry of Syntax.* MA: MIT. ● Romeu, J. 2013. 'The nanosyntax of path'. *Handout from the 23rd Colloquium on Generative Grammar.* May 9, 2013. ● Svenonius, P. 2010. 'Spatial P in English', In G. Cinque and L. Rizzi (eds) *Mapping Spatial PPs: The Cartography of Syntactic Structures Vol. 6.* New York: Oxford University Press. 127-160. ● Talmy, L. 1975. 'Semantics and syntax of motion'. In J. P. Kimball (ed.) *Syntax and Semantics Vol. 4.* New York: Academic Press. 181-238. ● Terzi, A. 2010. 'Locative prepositions and place'. In G. Cinque and L. Rizzi (eds) *Mapping Spatial PPs: The Cartography of Syntactic Structures Vol.* 6. New York: Oxford University Press. 196-224. ● Wunderlich, D. 1991. 'How do prepositional phrases fit into compositional syntax and semantics?'. *Linguistics* 29: 591-621.

There will always be number!

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The goal: It is a well-attested fact that natural languages show a great deal of variation with respect to the properties of personal pronouns. While the morphological properties of pronominal features (i.e. person, number) have been explored to a great extent (cf. Greenberg 1963; Cysouw 2003; Harley and Ritter 2002, and others), and while the full range of possibilities for person and number has been sketched out providing insights as to the maximum set of features that a natural language could employ, (cf. Harley and Ritter 2002), the questions remain (i) is there a set of pronominal features that all languages *must* incorporate? and (ii) what kind of features would such a set contain? This naturally leads to the central goal of this inquiry, which is to determine the most minimal pronominal system possible on the basis of the hitherto documented facts. Ultimately the outcome of this inquiry provides the necessary empirical basis for the development of a coherent theory of the nature of linguistic knowledge underlying the wide range of morphological realizations of pronominal features that we find in natural languages.

Previous claims: The outcome of this inquiry has consequences for a range of other issues. For example, in the literature the questions pertaining to the most minimal pronominal system have been raised on several different occasions in which they are framed within the issue of whether or not the number feature is universally present in the systems of free pronouns. For instance, Everett (2005) claims that the pronominal inventory of Pirahã does not make number distinctions, challenging Greenberg's universal 42: 'All languages have pronominal categories involving at least three persons and two numbers' (Greenberg 1963:96). Furthermore, the 'no number' claim was (tacitly) assumed by Harley and Ritter for the development of a system which predicts languages that do not exhibit number features (2002:501–2). In contrast, the most minimal pronominal system has also been assumed to make the number distinctions *only* in the first person (Ingram 1978; Cysouw 2003). Thus, there are conflicting views as to the lower boundary on feature systems. In this paper we show that number *must* be within the lower boundary despite its morphological absence in some languages, confirming Greenberg's intuitions.

The features of the most minimal pronominal system have also been tied to the morpho-syntactic realization of agreement features (cf. Koeneman and Zeijlstra, to appear). Arguing for the strong version of the so-called *Rich Agreement Hypothesis* Koeneman and Zeijlstra claim that subject-verb agreement features are generated as a separate syntactic projection if and only if the agreement features in the verbal paradigm reflect at least those features found in the most minimal pronominal system. They argue that the subject-verb agreement projection is an instantiation of grammaticalized argumenthood, comparable to projections such as tense and aspect. Thus, the correctness of their proposal depends on what is the most minimal system, which for empirical reasons they take to be Greenberg's formulation.

The Data: In this paper we provide the results of a crosslinguistic survey which sought to determine the most minimal set of features that all languages must incorporate in their pronominal systems. The data are mostly drawn from 'Free Personal Pronoun System database' Smith 2013, an online database documenting free pronouns in 456 languages. The survey reveals two important observations. **First**, languages which lack

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person or number features in their paradigms of free pronouns systematically compensate for this by realizing the missing features in the agreement morphology, suggesting that the grammar *does* encode the pronominal features that appear absent at first sight. For example, only verbs in languages like Winnebago in (1) and Wāmbule in (2) mark the person and number features that are missing in the free pronouns. **Second**, languages which have been reported to lack morphological number features in both free pronouns and agreement paradigms, such as Classical Chinese (cf. Norman 1988:120), implicitly specify the number feature by constraining particular pronouns to referents which have specified number. For instance, Classical Chinese has a set of singular pronouns which must be linked to singular referents. First person pronouns *yú, yǔ, yí, zhèn* and the second person pronoun *rǔ* cannot be linked to plural referents (Meisterernst 2012). This suggests that the singular-plural distinction must be present in the system, even though the language altogether lacks plural pronouns.

Importantly, the two observations come unexpectedly only for those theories which do *not* take number to be a part of the minimal set of pronominal features (e.g. Harley and Ritter 2002). Indeed, there are systems with extensive morphological gaps, e.g. lacking plural altogether. However, all languages that have been hitherto investigated include pronouns specified for a specifc number indicating that the implicit knowledge of other number features must be present, despite the fact that they are morphologically absent.

Analysis: There are two ways of analyzing languages which exhibit particular pronominal features only on the verb, such as Winnebago and Wāmbule. (i) the pronominal features are spread out over multiple syntactic nodes, e.g. some of the φ–features surfacing only in the 'impoverished' free pronouns (FP), while others only in the affix on the verb at I^0, illustrated in (3). (ii) free pronouns are underlyingly specified for all three pronominal features [speaker], [participant] and [plural] but that some feature(s) are not phonologically realized, illustrated in (4). Unlike the analysis in (3) where all features are semantic (i.e. interpretable), in (4) the features on the verb are formal (i.e. uninterpretable), which are checked as a result of the subject-verb Agree operation.

The analysis in (4) is comparable to the standard *pro*-drop analysis in the sense that the semantic features of the subject are morphologically unrealized. However, unlike *pro*-drop, what we see in languages like Wāmbule is that only particular pronominal features (but not all) are dropped resulting in homophonous forms of pronouns for subjects of varying φ–feature specifications. What this suggests is that a *pro*-drop analysis in principle is able to account for the analysis in (4), without additional theoretical machinery. In contrast the split-semantics in (3) requires additional stipulations to account for the counter-intuitive nature of the semantic features of *one* pronominal argument realized on multiple syntactic nodes, making it less desirable.

(1) *Winnebago*
 a. nee ha- šgác
    1/2 1.SG- play
    'I play'
 b. nee ra- šgác
    1/2 2.SG- play
    'You play'

(2) *Wāmbule*
 a. uṅgu hep   i   bi -l jāː -ø   -me
    1   cooked.grain your SOC -LOC eat -1.SG -RES
    'I eat rice at your place'
 b. Un im bī -l cāmdo pā -sī cāb -du -m
    2 that SOC -LOC game do -INF can -2.SG -RES
    'You.SG can play with that [boy].'

(3) $[_{IP}$ FP$_{\left[\substack{\text{speaker} \\ \text{particip.}}\right]}$ $[_{I'}$ $I^0_{[\text{plural}]}$ $[_{vP}$ ... $]$ $]$ $]$

(4) $[_{IP}$ FP$_{\left[\substack{\text{speaker} \\ \text{particip.} \\ \text{plural}}\right]}$ $[_{I'}$ $I^0_{[\text{plural}]}$ $[_{vP}$ ... $]$ $]$ $]$

References: Cysouw, M. (2003). *The paradigmatic structure of person marking.* Oxford: Oxford University Press Oxford. ♦ Everett, D. (2005). Cultural constraints on grammar and cognition in Pirahã. *Current anthropology* 464:621–46. ♦ Greenberg, J. H. (1963). Some universals of grammar with

2

particular reference to the order of meaningful elements. *Universals of language* 2:73–113. ♦ Harley, H. and Ritter, E. (2002). Person and number in pronouns: A feature-geometric analysis. *Language* 78:482–526. ♦ Ingram, D. (1978). Typology and universals of personal pronouns. *Universals of human language* 3:213–248. ♦ Koeneman, O. and Zeijlstra, H. (2014). One law for the rich and another for the poor: The rich agreement hypothesis rehabilitated. To appear in *Linguistic Inquiry*. ♦ Norman, J. (1988). *Chinese.* Cambridge: Cambridge University Press. ♦ Meisterernst, B. (2012). Number in Chinese: a diachronic study of Zhū from Han to Wei Jin Nanbeichao. Plurality and Classifiers across Languages in China 255:143–182 ♦ Smith, N. (2013, December). *Free personal pronoun system database.* Retrieved from `http://languagelink.let.uu.nl/fpps/index.php?mode=search`

3

An African perspective on clause typing and embedded questions.

Tonjes Veenstra (ZAS Berlin), Laura J. Downing (Göteborg University) & Marleen van de Vate

Karttunen (1977: 39) considers 'indirect alternative and yes/no questions and single and multiple wh-questions as belonging to the same syntactic category.' The Clause Typing Hypothesis (Cheng 1997) essentially states that the clause type/force of a sentence is determined in overt syntax. We show that both claims cannot be upheld. The evidence comes from the syntax and semantics of embedded questions in Bantu languages (Tumbuka), and Benue-Congo languages (Igbo). We show that in these languages embedded questions are syntactically different from root questions, and that embedded questions are not syntactically marked as questions, but realized as relative constructions instead.

In Tumbuka, two different syntactic constructions are used to form indirect questions, a, so-called, *kuti-*construction (1a) or a relative construction (1b):

(1)   a.   *Mwanakazi wa-ku-zizwa kuti Mary wa-ka-cita vici mayiro.*
                1.woman 1SBJ-PRES-wonder that M 1SBJ-PST-do what 6.yesterday
      b.   *Mwanakazi wa-ku-zizwa ico Mary wa-ka-cita mayiro.*
                1.woman 1SBJ-PRES-wonder 7.REL M 1SBJ-PST-do yesterday
                BOTH: 'The woman wonders what Mary did yesterday.'

The *kuti-*construction embeds a root question; the relative construction is not possible with root questions. This gives the apparent mismatch between the syntax and semantics of the relative construction. This raises two research questions: (A) Is there a difference in interpretation between the two constructions? (B) Why can relative constructions be interpreted as embedded questions?

Semantic approaches to embedded questions predict an asymmetry in the interpretation and distribution of these two constructions. To answer (A), we investigate two semantic distinctions that could potentially set apart the two embedded question strategies of Tumbuka: Extensional vs. Intensional distinction (in the sense of Groenendijk & Stokhof 1984), and Concealed Questions (Nathan 2005, Frana 2010). We predict that: (a) if the extensional/intensional split plays a role in Tumbuka, only intensional verbs like *kuzizwa* (='to wonder') are able to embed the *kuti-*construction, and (b) if the relative construction corresponds to a concealed question, only extensional verbs like *kumanya* (='to know') should be able to embed the relative construction. These expectations are not borne out, however, as illustrated in (2a-b) and (1a-b):

(2) a.   *kuti-construction*
        Musepuka wa-ka-manya kuti aŵo ŵa-ka-mu-pa vi-wangwa m-baani.
        1.boy 1SBJ-PST know that 2.REL 2SBJ-PST 1OBJ-give 8-present COP-2.who
    b.   *relative construction*
        Musepuka wa-ka-ŵa-manya aŵo ŵa-ka-mu-pa vi-wangwa.
        1.boy 1SBJ-PST-2OBJ-know 2.REL 2SBJ-PST-1OBJ-give 8-presents
        BOTH: 'The boy knew who gave him presents.'

To answer (B), we argue that it is the semantic selectional criteria of the embedding verb that allows a relative clause to be interpreted as an embedded question. Furthermore, we will demonstrate that the relative constructions are not headless relatives, but one with a covert pivot. The question word interpretation of this pivot is due it being in the scope of the question-embedding predicate, thereby turning the whole relative construction into an embedded question.

Cross-linguistically, we show the same strategy occurs in Igbo, the only difference being that in this language the pivot is overt. Like Tumbuka, the embedded constituent is not formally marked as a question, and the question semantics comes from the matrix predicate.

Cheng, Lisa (1997) On the typology of wh-questions. New York: Garland.

Frana, Ilaria (2010) Copular questions and concealed questions. Proceedings of Sinn und Bedeutung 14. Vienna.

Groenendijk, Jeroen, & Martin Stokhof (1984) Studies on the semantics of questions and the pragmatics of answers. Department of Philosophy, University of Amsterdam: PhD. Thesis.

Hamblin, C.L. (1973) Questions in Montague English. Foundations of Language 10, 41–53.

Karttunen, Lauri (1977) Syntax and semantics of questions. Linguistics and Philosophy 1, 3-44.

Nathan, Lance (2005) Concealed questions: two new proposals. WCCFL 24, 290-298. Somerville, MA: Cascadilla Proceedings Project.

Rooth, M. (1992) A Theory of Focus Interpretation, Natural Language Semantics 1, 75–116.
Uwalaka, Sr. M. Angela (1991) Wh-movement in Igbo. UCL Working Papers in Linguistics 3, 185-209.