Mafioso Parameters and the Limits of Syntactic Variation

We build on recent work proposing non-UG-specified, emergent parameter hierarchies ([1]), arguing that a system of this kind not only addresses objections levelled against earlier formulations of parameters ([2], [3], [4]), but also potentially offers a suitably restrictive theory of the nature and limits of syntactic variation. Our focus is one aspect of the proposed parametric hierarchies, the so-called Mafioso Effect by which certain parametric options are simply ‘irresistible’.

Following [5], we assume acquisition to entail i.a. the determination of which features are grammaticalised (i.e. participate in Probe/Goal relations) in a given language, and how these formal features interact with movement diacritics. The ‘sequence’ in which these facts are established is guided by restricted UG-specified elements (e.g. the availability of a [uF]/[iF] distinction, a movement diacritic, and the operations Merge and Agree) and third-factor-imposed acquisition strategies, including a version of [6]’s Feature Economy/FE and [7]’s Input Generalization/IG. By the former, acquirers posit as few formal features as possible; by the latter, they assume the minimum number of distinct elements/operations compatible with the Primary Language Data/PLD, maximally generalising patterns in the input.

Consider (1), which illustrates a simplified word-order hierarchy where ^ signifies a ‘comp-to-spec-movement trigger’. Following [8], we assume that the UG-given feature ^ triggers movement, but crucially the movement-direction remains unspecified in UG. However, the theoretically possible option ‘^=LEFT/RIGHT’ on top of a movement-regulating hierarchy in (1) is in effect a Mafioso (macro)Parameter: ^=RIGHT will always be ruled out by the processing-influenced shape of the PLD, rendering a system in which ^=LEFT ‘irresistible’ (cf. [8] for a similar proposal).

Parameters that are not on the top of a hierarchy can also have this ‘mafioso’ property. Alongside the word-order case, we show how this holds for the negation hierarchy in (2) [9], the V-movement hierarchy in (3) [10], and the alignment hierarchy in (4) [11].

For (2), consider a partial Negative-Concord system, i.e. a system in which the sentential negation marker(s) are specified [uNEG], thus depending on the presence of an abstract negative operator to give a negative reading at LF, while negative indefinites are specified [iNEG], thus not requiring this operator. Such a system is theoretically possible, but is ruled out on PLD grounds as there is no unambiguous input leading to the postulation of this system-type and credible third-factor motivations (FE, IG, and the more general biases discussed in [12]) also work against it.

For (3), we show that the Y and N options under v/Aux-to-T lead to indistinguishable entities, since there is no surface difference between inflecting TMA particles (which are first-merged in the T-field) and auxiliaries (which are first-merged in v and attracted into the T-system, as seen in English). Although these are two theoretically different options, their indistinguishability shows the irrelevance of the choice.

The hierarchy in (4) relates to the apparent non-existence of syntactically ergative split-S languages. Building on [13] and [14], we propose that syntactic ergativity results where a v not only assigns theta-related ERG Case to its specifier, but also bears ^, triggering object movement past the subject. While unergative v can freely assign ERG (yielding a morphologically ergative split-S system), it cannot bear ^ because there is no XP available to move in such cases. We propose that this ‘mafioso’ effect actually constrains the order of parameters in the emergent hierarchy.

As such, “emergent” parameter hierarchies are restricted by a range of (interacting) first, second and third-factor considerations. In short, there will be parametric “offers that cannot be refused”.

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Towards a (Non-Syntactic) Theory of Variation

A central issue in biolinguistics concerns the locus and the nature of language variation. The relevant literature makes reference to three possible loci: (i) parameters that are part of the mental lexicon by being localized on functional heads (lexical parameters), (ii) parameters that are syntactic in that they pertain to narrow syntax variation (NS parameters), and (iii) parameters that are morphophonological variants; viewed as the product of the externalization process (PF ‘parameters’). The present proposal addresses arguments made against (iii) and argues in favor of viewing all (syntactic, lexical) ‘parameters’ as morphophonological points of variation by discussing some points of criticism against (iii) that were left unaddressed in previous literature.

From the three possible answers to the question about the locus of variation, the one recurrently explored in the present state of development of the biolinguistic enterprise is the third one: A number of recent proposals are formulated along these lines either from a theoretical (e.g., Kandybowicz 2009, Berwick & Chomsky 2011, Boeckx 2012) or from an empirical (e.g., Acedo Matellán 2010, Real Puigdollers 2011) point of view. At the same time though, the literature on variation involves recently formulated arguments against assuming that all points of variation are reducible to morphophonological decisions.

Two such arguments are offered in Roberts (2010b, 2011a) and concern (i) the absence of a non-stipulative way to rule out the existence of NS parameters, a claim that entails that NS parameters should be an option exploited as well, and (ii) the inability of PF ‘parameters’ to give rise to hierarchies. In a similar vein, some proposals advocate relocating variation to the lexicon: Biberauer (2011), for example, discusses the word-order/linearization parameter alongside constraints to its realizations (e.g., the Final-over-Final Constraint [FOFC]; Holmberg 2000) in defense of lexicocentric variation. Roberts (2010a) calls FOFC the ‘signature asymmetry’ that shows the word-order/linearization parameter to be a non-PF parameter.

This proposal revisits the above mentioned points in order to (i) show that none of them makes a convincing argument in favor of assuming NS/lexical parameters and (ii) lay out the basis for formulating an approach to variation that derives PF ‘parameters’ instead of assuming them as parts of the lexicon/NS. More specifically, the alleged inability of PF ‘parameters’ to give rise to hierarchies is a claim pursued in Roberts (2011a), but Roberts (2011b) makes reference to macroparameters and markedness which both entail the notion of hierarchy.

Crucially, Roberts (2011b) claims that markedness principles are “not grammatical principles but acquisition strategies” that derive from third factor biases. In other words, when relating Roberts (2011a) to Roberts (2011b), the following paradox arises: On the one hand, PF ‘parameters’ are unable to give rise to parametric hierarchies, but on the other hand, markedness and hierarchy should be present also in the case of PF ‘parameters’ because markedness and hierarchy are argued to be the results of acquisition strategies and not of grammar/NS operations. Assuming that markedness principles are really the result of acquisition strategies, one cannot then restrict markedness and macroparametric effects to what one may call ‘NS parameters’, because PF points of variation are also part of the acquisition task. So, PF ‘parameters’ are subject to the exact same acquisition strategies which give rise to the same hierarchy-entailing ‘macroparametric’ effects.

With respect to the first point and the absence of a non-stipulative way to rule out NS parameters, Roberts (2010a, b) does provide a way when he argues that ‘PF parameters’ are symmetrical and a parameter P is a non-PF one iff the realized variation defined by P contains a gap. The word-order parameter is claimed to be non-PF precisely because of FOFC; however, there is cross-linguistic evidence that the entire domain of predictions for this parameter is manifested (i.e. consistent head-initial/-final, (inverse) FOFC). Under these assumptions, first, word-order is a PF ‘parameter’, rather than the signature asymmetry that shows the opposite, because there is no gap in the realization of the domain of its predictions and, second, Roberts’s view of parametric variation makes available a criterion that defines PF ‘parameters’, hence it also makes available a way to (empirically) exclude NS parameters. In sum, the present proposal reviews arguments against mixed theories of variation and sketches out the basis for a (non-syntactic) theory to variation.
References


Boeckx, Cedric. 2012. Considerations pertaining to the nature of logodiversity, or How to construct a parametric space without parameters. Ms., ICREA & Universitat de Barcelona.


The Acquisition of Linguistic Variation: What is and what isn’t innate?

Work on word order variation within a traditional generative approach has mainly focused on variation across languages, typically accounted for by different parameter settings provided by UG. However, in order to arrive at a theory of linguistic variation and to identify innate constraints on possible variation, it is necessary to study aspects of language that cannot be innate. Focusing mainly on English and Scandinavian languages, this paper discusses a number of cases of word order variation that is found within languages and thus in the input that children are exposed to. Some of this variation represents exceptions to what has been argued to be a parameter (e.g. V2), while other language-internal variation has not been argued to be the result of a parameter (e.g. different subject positions or word order in possessive constructions). In all cases it is shown that children produce both word orders from the earliest attestable stages, making the same fine distinctions in syntax and information structure as in the target language, with only a slight delay in syntactic movement (e.g. Anderssen & Westergaard 2010, Westergaard 2009, 2011). The paper thus makes the following argument: Since this complex variation has to be learned from the input, and children are clearly good at it from early on, there is no need for parameters to explain the acquisition of basic word order facts, such as VO/OV or V2. These word order rules are salient in the input and frequently attested, and there is no reason why they should not also be learned from exposure to the primary linguistic data. Thus, the main question in language acquisition should not be poverty of the stimulus, but rather why children are so good at learning fine details from the input.

The findings reported support other recent studies both within constructivist and generative approaches to language acquisition which have observed that children are ‘conservative learners’, hardly ever making errors of commission in their spontaneous production. That is, there are very few overgeneralizations attested in child language syntax. Within the constructivist camp, this is argued to be due to children’s focus on the input: Language is learned in an item-based and usage-based fashion, where children are picking up unanalyzed chunks and frames and making generalizations only after a large number of such frames have been learned (e.g. Tomasello 2003, 2006, Rowland & Pine 2000, 2003, Ambridge et al. 2006). Within the generative camp, these findings have been combined with a parametric account, e.g. in Snyder (2007) or Yang (2002, 2010). According to the latter, children are endowed with a set of parameters as well as a powerful statistical learning mechanism, allowing them to evaluate evidence for and against competing grammars or parameter settings.

The present paper presents an alternative model, arguing for the existence of micro-cues in language acquisition to account for conservative learning. Micro-cues are small pieces of syntactic structure emerging in children’s I-language grammar on exposure to the relevant input. This model is a generative approach assuming a UG consisting of a pool of possible syntactic primitives (features), principles of structure building (basic syntactic operations) and certain universal constraints, but crucially no parameters. This genetic endowment is enables children to parse the linguistic input, and formulate the micro-cues in their I-language grammars. Thus, the micro-cues do not exist in UG, but are part of the grammar of a specific language – i.e. they emerge in the acquisition process as a result of the interaction between UG and the input.

According to the micro-cue model, children do not learn the major generalizations for their language first, but start out with small pieces of structure and build up their grammars incrementally. Crucially, when making syntactic generalizations, they do not immediately extend to a major category, but only within a class or subcategory, i.e. one micro-cue at a time. This means that children have smaller grammars than adults, and their occasional non-target-consistent production (lack of movement) may typically be accounted for by economy. Children’s conservative approach also occasionally causes them to make even finer distinctions than what is found in the input, and by studying these phenomena, we may arrive at an understanding of natural classes provided by UG.
References

Anderssen, Merete & Marit Westergaard. 2010. Frequency and economy in the acquisition of variable word order. Lingua, 120.11, 2569-2588.


Yang, Charles. 2010. Three factors in language variation. Lingua 120, 1160-1177.
The historical reality of parametric variation

Goals. Arguing that syntactic parameters: 1) are really at work in cross-generational language transmission; 2) are ‘more’ real than sets of ‘syntactic patterns’, as used by surface-oriented and non-formal approaches to linguistic variation (e.g. Dixon’s 1997 Basic Linguistic Theory).

Background. In many respects, P&P models of UG are a conceptually plausible answer to the problem of explanatory adequacy (Chomsky 1964). However, empirically, parametric theories are not yet sufficiently corroborated, since nobody has so far indisputably assessed the effectiveness of such nativist approaches to the acquisition of grammatical diversity by implementing a parameter setting system over a large and realistic collection of parameters (Fodor 2001, Yang 2003; cf. Chomsky 1995:7). It is therefore debatable that a P&P model has actually attained substantial explanatory adequacy, though progressing beyond language-specific descriptive adequacy. To address the need for more solid arguments in favor of P&P, Longobardi (2003) suggested the opportunity of: i) adopting a Modularized Global Parametrization strategy, aiming at studying together relatively many (and closely interacting) parameters in relatively many languages within the circumscribed domain of small modules of grammar; ii) beginning to aim at further testing grounds and levels of success, in particular to aim at satisfactory accounts of the actual distribution of grammatical diversity in time and space (historical adequacy).

Methods. Elaborating on previous work (Longobardi/Guardiano 2009), a sample of more than 50 carefully identified binary parameters in three submodules of DP syntax, set in over thirty languages, is focused on; it is complemented with a set of hypotheses about UG constraints, defining two levels of deductive structure: one determines the traditional covariation of properties following from the same parameter, the other encodes an extraordinarily rich implicational hierarchy among parameters themselves (more pervasive and detailed than originally hinted in Baker 2001), largely responsible for hierarchies of size among parameters (e.g. Biberauer/Roberts 2012). Phylogenetic programs of biostatistical derivation have been applied to this database to formally measure syntactic diversity and generate hypotheses of phylogenetic trees and networks. Specific mathematical procedures (a sampling algorithm capable of dealing correctly with the universal constraints imposed on parameter setting) have been elaborated on purpose, to compute the width of potential diversity allowed by this fragment of UG and to evaluate the significance of the one observed in the actual language set.

First results. The distribution of actual syntactic distances provided by the parametric system is statistically highly significant. The results (distances, trees, and networks) have been plotted and measured against independently known historical data (from comparative linguistics, history, genetics), with largely correct correlations: given a non-trivial set of languages, the description of their variation provided by the systematic parametric analysis of a whole compact domain quite exactly recapitulates their known history and relationships. The reality of a P&P model of the language faculty (i.e. of generative grammar), therefore, receives strong and original support from its historical adequacy.

Further testing. Recently, the use of structural traits (superficial grammatical patterns) has been advocated and tested for conclusions on language phylogenies, the status of universals, and the modeling of grammatical evolution (Dunn et al. 2011). Now, since parameters try to represent ‘abstract’ differences, often exhibiting a high degree of deductive depth with respect to surface contrasts, counting similarities in patterns rather than in parameter values could turn out to provide different outcomes when quantitatively assessing areal or genealogical relatedness. In order to test this idea, the same experiments above have been repeated using a choice of the surface descriptive patterns derived from the parameters, rather than the parameter values themselves (i.e. comparing E-languages rather than I-languages). Again, the results were plotted against the same independently known historical variables. This experiment allows one to empirically test the parameter-pattern controversy and Dunn et al.’s alleged conclusion that implicational universals and UG are not supported by the extant distribution of structural diversity in the world’s languages. The first computations suggest that pattern-based phylogenies are by no means more significant or more revealing than those founded on abstract parameters and that the latter better represent actual historical linguistic relations. Corroborating these results with further experimentation, we will argue that P&P models are likely to encode a higher level of reality than surface-oriented typologies.
References


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**Fig. 1: UPGMA Tree from 56 syntactic parameters**

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**Legenda.** Wo = Wolof; StB = Standard Basque; WB = Western Basque; Hu = Hungarian; Fin = Finnish; Ar = Arabic; Heb = Hebrew; Hi = Hindi; Ma = Marathi; Nor = Norwegian; Da = Danish; Icc = Icelandic; E = English; D = German; Wel = Welsh; Ir = Irish; Rus = Russian; Po = Polish; Slo = Slovenian; SC = Serbo-Croat; Blg = Bulgarian; Gri = Grico (Salentino Greek); BoG = Bovese Greek (Calabria, Greecanico); Grk = Greek; It = Italian; Cal = Calabrese; Sal = Salentino; Sic = Sicilian; Ptg = Portuguese; Sp = Spanish; Fr = French; Rm = Rumanian

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**Fig. 2: UPGMA Tree from 113 corresponding surface patterns**
How can a Merge-based efficiency-compliant mechanism deal with a “head-initial vs. head-final” variation?

In the GB framework, language variation was captured by parameterization of the principles (Chomsky 1981). For example, the head-parameter – “head-initial vs. head-final” – was implemented to distinguish two types of languages, e.g. English and Japanese. But it was not clear why such principles were parameterized in the way they were. In this paper, adopting a minimalist perspective (Chomsky 2007, 2008), we argue that the observed typological difference is reducible to independently motivated morpho-featural cross-linguistic variation in the lexicon, while keeping a Merge-based mechanism intact.

The core assumption adopted in this paper is that Merge is the sole structure-building operation, defined in the simplest form: Merge takes X and Y, forming {X, Y}, and it can apply freely as long as it conforms to the third factor principles of efficient computation. Given this much, consider English (1) and Japanese (2):

It has been observed that in analytical languages such as English (1), functional heads are morpho-featurally independent, appearing in the sentence-initial (left-most) position, while in agglutinative languages such as Japanese (2), functional heads are morpho-featurally dependent, appearing in the sentence-final (right-most) position. A question is, what can we say about this observation?

First, consider the derivation of (1), given in (3a-f). (3a) Merge takes V and Obj, forming {V, Obj}. The next step is (3b): v* is merged to {V, Obj}, forming {v*, {V, Obj}}. Then, (3c) Subj is merged to {v*, {V, Obj}}, forming {Subj, {V, v*, {V, Obj}}}. In the next cycle, (3d) T is merged to {Subj, {v*, {V, Obj}}}, forming (T, {Subj, {v*, {V, Obj}}})). And (3e) C is merged to {T, {Subj, {{v*, {V, Obj}}}, forming (C, {T, {Subj, {v*, {V, Obj}}})). The final step is (3f): Subj is internally merged to (T, {Subj, {v*, {V, Obj}}}), forming (C, {Subj, {T, {Subj, {v*, {V, Obj}}})).

Now, compare this derivation with the derivation of (2), given in (4a-h), where we find different executions of Merge. (4a) Merge takes two heads V and v*, forming {V, v*}. Then, (4b) Obj is merged to {V, v*}, forming {Obj, {V, v*}}. The next step is (4c): v* is internally merged to {Obj, {V, v*}}, forming {v*, {Obj, {V, v*}}}. And (4d) Subj is merged to {v*, {Obj, {V, v*}}}, forming {Subj, {v*, {Obj, {V, v*}}}). In the next cycle, (4e) Merge takes two heads T and C, forming (T, C). Then, (4f) Subj is merged to {v*, {Obj, {V, v*}}}, forming {Subj, {v*, {Obj, {V, v*}}}}. The next step is (4g): C is internally merged to (T, {Subj, {v*, {Obj, {V, v*}}})), forming (T, C), forming (C, {Subj, {v*, {Obj, {V, v*}}})). The final step is (4h): Subj is internally merged to (T, {Subj, {v*, {Obj, {V, v*}}})), forming (C, {Subj, {T, {Subj, {v*, {Obj, {V, v*}}})), {T, C}}).

The crucial difference between (3) and (4) is that, unlike English derivation (3), Japanese derivation (4) first externally merges two heads, a phase-head and a non-phase-head, and then internally merges the phase-head to some higher position. Saito (2012) develops this type of “excorporation” of the phase-head into a full-fledged analysis of generative procedures, providing a number of empirical arguments, based on Japanese data. We are essentially following the insights of Saito (2012) for Japanese. As for English, we maintain the analysis, reviewed above. In other words, we would like to suggest that both types of generative procedures are consistent with third factor principles of efficient computation; hence, they are (in principle) available options to the narrow syntax.

What is surprising is that, despite their different but third factor compliant executions of Merge, these two derivations yield syntactic objects, arguably identical in the eyes of the conceptual-intentional CI systems, but for the sensorimotor SM systems, they yield different representations due to the fact that functional heads such as C and T are morpho-featurally independent in English, while they are morpho-featurally dependent in Japanese (Kuroda 1988). Given this morpho-featural cross-linguistic variation, we see, following the insights of Kayne (1994), that some general algorithm converts hierarchical relations into linear relations and does so in accord with the cross-linguistically variant morpho-featural requirements.

Given this much, we argue that the derivation of (1) generates (5a) {C, {SUBJ, {T, {SUBJ, {V+v*, {OBJ, {V, OBJ}}})){, which yields (5b) C > SUBJ > T > V+v* > OBJ for SM, and (5c) [C [T, {SUBJ [T, V, V]}}]] for CI, whereas the derivation of (2) generates (6a) {C, {SUBJ, {{SUBJ, {v*, {OBJ, {V, O}}})), {T, )), which yields (6b) SUBJ > OBJ > V+v*+T+C for SM, and (6c) [C [T, {SUBJ [T, {v*, {OBJ, {V, V]}}]] for CI. (5a) and (5b) are schematically represented as (7a,b), respectively.

The CI representations of (1) and (2) – (5c) and (6c) – are identical if those boxed (lower) copies are invisible to the labeling process (Chomsky 2012), while the SM representations of (1) and (2) – (5b) and (6b) – vary due to independently motivated morpho-featural cross-linguistic variation in the lexicon. The Merge-based efficiency-compliant mechanism itself, however, need not be parameterized to deal with the observed “head-initial vs. head-final” variation.
(1) (Tom said) that John criticized Mary

(2) Taroo-ga Hanako-o hihansi-ta-to (Ken-ga itta)
    Taroo-Nom Hanako-Acc criticize-Past-Comp (Ken-Nom said)
    ‘(Ken said) that Taroo criticized Hanako’

(3) English
   a. EM (V, Obj) => {V, Obj}
   b. EM (v*, {V, Obj}) => {v*, {V, Obj}}
   c. EM (Subj, {v*, [V, Obj]}) => {Subj, {v*, [V, Obj]}}
   d. EM (T, [Subj, {v*, [V, Obj]}]) => {T, [Subj, {v*, [V, Obj]}]}
   e. EM (C, [T, {Subj, {v*, [V, Obj]}}) => {C, [T, {Subj, {v*, [V, Obj]}]})
   f. IM (Subj, [T, {Subj, {v*, [V, Obj]}]) => {C, [Subj, [T, {Subj, {v*, [V, Obj]}]})}

(4) Japanese
   a. EM (V, v*) => {V, v*}
   b. EM (Obj, {V, v*}) => {Obj, {V, v*}}
   c. IM (v*, {Obj, {V, v*}}) => {v*, {Obj, {V, v*}}}
   d. EM (Subj, {v*, [Obj, {V, v*}]}) => {Subj, {v*, [Obj, {V, v*}]}}
   e. EM (T, C) => {T, C}
   f. EM ([Subj, {v*, [Obj, {V, v*}]}, {T, C}) => {{Subj, {v*, [Obj, {V, v*}]}, {T, C})
   g. IM (C, [{Subj, {v*, [Obj, {V, v*}]}, {T, C})} => {C, [{Subj, {v*, [Obj, {V, v*}]}, {T, C})}
   h. IM (Subj, [{Subj, {v*, [Obj, {V, v*}]}, {T, C})} => {C, [{Subj, {v*, [Obj, {V, v*}]}, {T, C})}}

(5) English
   a. C, [SUBJ, [T, {SUBJ, [V+v*, {OBJ, [V, OBJ]}}]]]}
   b. C > SUBJ > T > V+v* > OBJ
   c. [C C [T SUBJ T [v* [OBJ V]]]

(6) Japanese
   a. C, [SUBJ, {v*, [OBJ, {V, v*}]}, {T, C}]
   b. SUBJ > OBJ > V+v*+T+C
   c. [C C [T [v* [OBJ V]]]]

(7) a. English
   b. Japanese


Chomsky, Noam. 2007. Approaching UG from below. In Interfaces + Recursion = Language? ed. by Uli Sauerland and

by Robert Freidin, Carlos P. Otero and Maria Luisa Zubizarreta, 133-166, MIT Press, Cambridge, MA.


Investigationes 12, 1-47.

The Head Parameter as Encoded into Functional Categories

This paper aims to argue (i) that the head parameter exists and (ii) that it is encoded only into functional categories. Accordingly, I argue for a hybrid position in which lexical categories have only asymmetrical structures a la Kayne (1994) and Fukui and Takano (1998) while functional categories allow symmetrical structures with the head parameter encoded. If this hybrid approach turns out to be tenable, it gives support to Fukui’s (1995) Functional Parametrization Hypothesis (FPH), according to which lexical projections are uniform among languages and parametrization is attributed to functional categories. First, I address the question why parameters exist in UG under the conception of the Minimalist Program. Given the minimalist thesis that the faculty of language (FG) is an optimal solution to interface conditions, I argue that there exists a situation in FG where a solution to a requirement imposed by the interfaces is more optimal if a piece of that solution is left undecided, or left to the decision by experience and that a parameter is an optimal solution for dealing with such a situation. The head parameter is one such illustration. I propose that the optimal mapping from dominance to precedence is captured as follows: When \( \alpha \) and \( \beta \) merge to make \( K \), so that \( K \) dominates \( \alpha \) and \( \beta \), \( \alpha \) precedes \( \beta \) if \( \alpha \) is visible and \( \beta \) is invisible. Here the visibility of a syntactic object is determined on the basis of relevance to interpretation at the interface. I follow Chomsky (1995:242) in assuming that “bare output conditions make the concepts ‘minimal and maximal projection’ available [=visible] to CHL,” since only these projections are relevant to interpretation at the interface. This, in effect, produces structures in which maximal and minimal categories precede intermediate categories. Thus, suppose that in (1), \( \beta \) projects so that \( K \) inherits the label of \( \beta \). In this case, \( \alpha \) precedes \( \beta \) since the latter is an intermediate projection. In this way, syntactic structures have strictly right branching structures universally, except for one case: the head-complement relation. Suppose that in (1), either \( \alpha \) or \( \beta \) is a lexical item. In this case, both \( \alpha \) and \( \beta \) are visible, so that the above mapping mechanism is silent about the linear ordering of such a head-complement relation. I argue that this mechanism is an optimal solution to the determination of the relationship between dominance and precedence and hence that to keep this optimality, the linear ordering of a head to its complement should be determined by implanting a parameter. I further argue that the way the head-parameter is implanted should obey Fukui’s FPH. By comparing VP structures of English and Japanese as well as adjunction structures of these languages, I demonstrate that though these two languages have opposite head-complement orders, their VP structures basically have strictly right branching structures, as witnessed by such binding tests as shown in (2) and (3). These data show that what precedes is higher than what follows basically and that the fair acceptability of (2d) and (3d) is due to reconstruction effects under the assumption that the basic hierarchical order of VP is subject-IO-DO (cf. Takano 1998). Further I argue that adjunction structures of such a head-initial language as English allow a case in which what precedes is lower than what follows, as shown in (4), provided by Reinhart (1976). The acceptability of (4a,b) shows that the pronouns him and her do not c-command into the in order adjunct clause and the extraposed relative clause, respectively, despite the fact that they precede the latter adjunct clauses. I propose (i) that adjunction is allowed only in functional categories and (ii) that, following Fukui (1993), the value of the head parameter should be preserved in derived structures, so that an adjunction operation should create a structure that is consistent with the value of the head parameter in a given language. This in effect allows a head-initial language as English to have right-adjointed structures in a functional category above VP, so that in (4), the in order and extraposed adjunct clauses are right-adjointed to vP or TP, positions higher than the matrix object pronouns.
(2) a. I gave the mothers each other’s babies.
   b. *I gave each other’s mothers the babies.
   c. I gave the babies to each other’s mothers.
   d. ?I gave each other’s babies to the mothers.

(3) a. Mary-ga [subete-no gakusee]-ni soitu1-no sensee-o syookaisita.
       -Nom every student -Dat his/her teacher-Acc introduced
       ‘Mary introduced his/her teacher to every student.’
   b. *Mary-ga soitu1-no sensee-ni [subete-no gakusee]-o syookaisita.
       -Nom his/her teacher-Dat every student -Acc introduced
       ‘Mary introduced every student to his/her teacher.’
   c. Mary-ga [subete-no gakusee]-o soitu1-no sensee-ni syookaisita.
   d. ?Mary-ga soitu1-no sensee-o [subete-no gakusee]-ni syookaisita.

(4) a. We sent him_i to West Point in order to please Ben_i’s mother.
   b. Nobody would ever call her_i before noon who knows anything about Rosai’s weird sleeping habits.

References
Microvariation in Welsh pronouns and agreement

This paper presents a formal account of variation in the expression of second-person pronouns in Welsh dialects. Many northern varieties of Welsh have two forms of the second-person singular pronoun, *ti*/*di* and *chdi*. In broad terms, *chdi* is a strong pronoun, while *ti* is a weak pronoun. All varieties that have both forms use *chdi* in clause-initial focus position and after uninflected prepositions. However, varieties vary extensively in which form is chosen in other contexts (subject of auxiliary, object of inflected preposition, object of agreeing infinitive, subject of nonfinite verb, possessor and tag questions). This paper documents these patterns of microvariation with data from the ongoing *Syntactic Atlas of Welsh Dialects* (SAWD), and goes on to argue that the patterns that emerge can be derived from two larger-scale historical changes: first an expansion in the realm of agreement, and then a collapse of the agreement system in some varieties. Microvariability is therefore derived in large measure from differences in a more major agreement parameter (mesoparameter).

The weak pronoun *ti* is associated with agreeing contexts, and the strong pronoun *chdi* with non-agreeing ones. Agreement is Agree of φ-features for person, number and gender, along with a pro-feature for lexical vs. pronominal, as in (1). I assume that the weak pronoun *ti* then results from surface-level readjustment along the lines of pronoun incorporation analyses of Celtic agreement, via a morphological readjustment rule as with the allomorphy rules of Ackema and Neeleman (2004), or some similar mechanism (Anderson 1982, Dorrort 1988, Rouveret 1991, Adger 2000). This captures the widespread intuition that Celtic agreement represents a relatively superficial morphosyntactic phenomenon (Borsley 2009, Borsley, Tallerman & Willis 2007). Multiple terminal nodes under adjacency may be spelled out together, as illustrated schematically in (2). Thus an agreeing preposition plus an object pronoun undergoes this process and spells out with *ti*, as in (3). Other agreeing contexts (e.g. *basat ti* ‘you would’) are parallel. This is the only way for *ti* to arise.

Since uninflecting prepositions lack φ-features, they can never undergo this process. Each terminal node is spelled out individually and the object is therefore always the strong pronoun *chdi* (*efo chdi* ‘with you’ but *efo ti* in all relevant dialects). Other syntactic contexts, however, show dialectal variability. This is dealt with in two ways. First, in some varieties, *chdi* is extended into the weak pronominal system. In these varieties, for instance, new tag questions have been created based on *chdi* (with a new verbal suffix -*chd*), illustrated in (4). The rules for spellout under adjacency have been extended in these cases. For instance, these varieties add the spellout rule in (5) for the tag in (4).

However, most of the variation can be accounted for by a second parameter of variation, namely the extent to which the variety in question has maintained agreement. I suggest that Welsh is losing agreement (hence both subject–verb agreement and object–preposition agreement). Many paradigms contain few contrastive forms (cf. the spoken northern Welsh paradigm in (6)), hence provide little evidence for the presence of agreement features. Agreement features (φ-features and pro-features) may be specified either at a generalized level (the lexicon specifies that a functional category F bears [u-φ: ___] and [u-pro] unless specified otherwise) or individually for each functional head (P, T, C, D), creating a system of less and more marked options reminiscent of the cascading parameter hierarchies of Roberts & Holmberg (2010). I argue that Welsh dialects vary in which of these options is chosen, and thus in the way that the presence of agreement is specified. Dialects which do not include a generalized specification of the presence of agreement may specify the presence of agreement for individual functional categories and such a system is subject to attrition over time. Where agreement features are retained, the pronoun *ti* surfaces in accordance with spellout rules of the form in (2); where agreement has been lost, *chdi* surfaces. Differential loss of agreement therefore accounts for most of the dialectal microvariation that we observe. Thus, a variety which lacks agreement features on P will extend *chdi* to prepositions (hence *amdana chdi* ‘about you’ rather than *amdanat ti*); a variety which lacks agreement on T will extend *chdi* to auxiliaries (hence *basa chdi* ‘you would’ rather than *basa ti*).

The resulting analysis of variation across Welsh dialects derives variation from both feature specification and variable spellout rules, with generalizations in the lexicon expressed at both greater and lesser levels of generalization (meso- and micro-parameters).
Examples

(1)

\[
\begin{array}{c|c|c}
| & PP & \text{DP/D} \\
\hline
| P & [\text{u-}\varphi: \text{2sg}] & [\text{pro: +}] \\
| & [\text{u-pro: } \pm] & [\varphi: \text{2sg}] \\
\end{array}
\]

(2)

\[
\begin{array}{c|c|c}
| & \text{agreement morphology} & + \text{weak pronoun (ti)} \\
\hline
| [\text{u-}\varphi: \text{2sg}] & [\text{pro: +}] & \text{am} \text{ ‘about’} \\
| [\text{u-pro: } \pm] & [\varphi: \text{2sg}] & \text{amdanat ti} \text{ ‘about you’} \\
\end{array}
\]

(3)

\[
\begin{array}{c|c}
| & \text{am} \text{ ‘about’} > \text{amdanat ti} \text{ ‘about you’} \\
\hline
| [\text{u-}\varphi: \text{2sg}] & [\varphi: \text{2sg}] \\
| [\text{u-pro: } \pm] & \\
\end{array}
\]

(4)

\[
\begin{array}{c|c|c|c}
| & \text{be.IMPF} & \text{you still away}, & \text{TAG.IMPF.2SG} \\
\hline
| [\text{force: tag}] & [\text{u-}\varphi: \text{2sg}] & \text{do’chd?} \\
| [\text{u-polarity: aff}] & [\text{tense: impf}] & \text{‘You were still away, weren’t you?’} \text{ (SAWD, conwy_14)} \\
\end{array}
\]

(5)

\[
\begin{array}{c|c|c|c}
| & \text{am} \text{ ‘about’} \text{ in northern dialects} \\
\hline
| \text{SING.} & \text{PLUR.} \\
| 1\text{SG} & \text{amdana fi} & \text{amdana ni} \\
| 2\text{SG} & \text{amdana ti/chdi} & \text{amdana chi} \\
| 3\text{SG} & \text{amdano fo (m.)} & \text{amdana nhw} \\
| & \text{amdani hi (f.)} & \\
\end{array}
\]

References


1. GOAL: This paper puts forward a unitary account for a series of object agreement asymmetries in Romance by parametrizing the vP field. Adopting a microparametric perspective (Belletti & Rizzi 1996, Biberauer 2008, Fukui 1986, Kayne 2000, 2005, Roberts 2010, a.o.), and following numerous precedents on this topic (Koizumi 1993, Johnson 1991, Lasnik 2003, Torrego 1995, 1999, Lopez 2012), we claim that the vP can vary with respect to the feature-specification of an additional functional projection sandwiched between v and V, as shown in (1). First, we argue that the presence/absence of \( \alpha \) captures a microparameter covering v-related phenomena in Romance (DOM, participial agreement, object shift). Second, we suggest that the \( \eta \)-feature composition of this head accounts for more fine-grained interlinguistic distinctions in Romance (OD clitic doubling, leismo, laismo, and auxiliary selection).

2. OBJECT ASYMMETRIES: Romance languages manifest various asymmetries with respect to well-known object-agreement phenomena. We focus on four of them here, which are the following:

- **2.1. Differential Object Marking:** Only some Western-Eastern languages (Spanish and Romanian) display a Case marker (pe, a) preceding DOs (in so-called DOM; Torrego 1998, Leonetti 2004, Lopez 2012, Richards 2004, a.o.); Central Romance rejects this Case marker. See (2) for examples.

- **2.2. VOS sentences:** Central Romance (Catalan, Italian) generates VOS sentences via VP fronting, whereas Western-Eastern Romance (Spanish, Portuguese, Romanian) resort to object shift, as binding data reveal (Belletti 2004, Lopez 2012, Ordonez 1998, Zubizarreta 1998). See (3).

- **2.3. VSO sentences:** Only Western-Eastern languages (Spanish, Portuguese and Romanian) display VSO sentences, a fact that has sometimes been associated to an additional projection in the vP domain (Belletti 2004, Ordonez 2007, a.o.). See (4) for examples.

- **2.4. Participal agreement:** Particles can agree with (displaced) objects in Central Romance (Catalan, French, Italian), but not in Western-Eastern Romance (Spanish, Portuguese, Romanian) (Kayne 1999, Paoli 2006, a.o.). See relevant examples in (5).

3. A MICROPARAMETER FOR v IN ROMANCE. Considered together, the asymmetries above plausibly have the category “v” (or some object-agreement related projection) as its locus. Capitalizing on the first asymmetry (availability of DOM), we formalize this as in (6) below, taking v to be associated with a functional category (labeled \( \alpha \) here in order to be neutral as for its specific content) that is responsible for DOM, object shift (in VOS sentences), and VSO. Once \( \alpha \) is postulated, we need to adjust it so that we can distinguish Western-Eastern Romance type languages (Spanish, Romanian, Portuguese) from Central-Romance type languages (Catalan, Italian, French). We argue that \( \alpha \) can have an agreement (\( \eta \)) or prepositional (\( p \)) nature, as in (6).

For our modest purposes, we leave open the precise connection between \( \alpha \) and v in the lexicon. All that matters is that \( \alpha \) stands for a source of \( \eta \)-features or not (being thus ‘prepositional’). The presence of \( \eta \)-features on \( \alpha \) accounts for DOM and object shift (both being A-related phenomena; Ordonez 1998, Torrego 1998, Lopez 2012). Moreover, \( \alpha \) is also the position that hosts subjects in VSO sentences, under the fairly standard assumption that \( \alpha \) can manifest itself in isolation (as an independent projection below v) or incorporate into v, giving rise to extra specifiers. Interestingly, languages where \( \alpha \) is prepositional not only lack DOM, object shift, and VSO, but also display: (i) participial agreement (see 5a) and (ii) oblique clitics (see 7).

The correlation between oblique clitics and prepositional \( \alpha \) is straightforward if oblique Case has adpositions as its source. The same holds for participial agreement if particles involve an adjectival layer, and adjectives contain a preposition in their lexical structure (as argued for by Amritavalli & Jayaseelan 2003, Mateu 2002, and Kayne 2008).

4. PARAMETRIZING \( \alpha \). Given that \( \alpha \) is an agreement element, its status should be subject to further cuts. We show that this is indeed the case. In particular, we argue that the \( \eta \)-feature make-up of \( \alpha \) can be complete of defective (Chomsky 2000, 2001), a fact that determines domino-effect (a cluster of) microparameters. In brief, we argue for (8). The facts in (8) are well-known (Jaeggli 1981, Kayne 1993, Torrego 1995, Romero 1997, Fernandez-Ordóñez 1999, Ordonez & Trevino 1999, 2008, a.o.), but have not been connected in a unitary fashion. We suggest that they follow from the feature specification of \( \alpha \). If \( \alpha = \eta \), then it can be \( \eta \)-complete (giving rise to clitic doubling) or \( \eta \)-defective (showing or not gender distinctions); If \( \alpha = p \), then it can be defective (feeding incorporation in the context of auxiliary be), or complete (bleeding it).

5. CONCLUSIONS. This paper aims at capturing different object-agreement-based asymmetries in Romance by focusing on the nature and feature composition of a functional projection (labelled \( \alpha \) here, although it could correspond to Chomsky’s \( \Agro \), Zubizarreta/Sportiche’s 1999 Cl, Pykännänen/Maranz’s Appi, etc.). The proposal offers a way to handle a series of object-agreement-based facts in a unitary fashion, establishing interesting connections that are consistent with well-known observations about Romance languages.
Syntactic variation in Romance $\nu$

(1) \[ \nuP \ \nu [ \nuP \ \alpha \ [ \nuP \ \nu ] ] \]

(2) a. Il caut pe un student (Romanian) b. *He vist a l'Anna (Catalan)
CL seek PE a student have seen A the-Anna
I'm looking for a student I have seen Anna

(3) a. Recogio cada coche su dueño (Spanish) b. *Hanno salutato Gianni i i propri genitori (Italian)
picked-up each car its owner have greeted Gianni the own parents
Its owner picked each car up His own parents have greeted Gianni

(4) a. O invita cam de Ion pe fata acesta (Romanian) b. *Aime mon frere Marie (French)
CL invite-3.sg quite often Ion PE girl the-that love-3.sg my brother Marie
Ion invites that girl quite often My brother loves Marie

(5) a. Combien de tables as-tu repeintes? (French) b. *Cuantas promesas has rotas? (Spanish)
how-may of tables have you repainted-fem.pl how-may promises have broken-fem.pl
How many tables did you repaint? How many promises did you break?

(6) \[ \nuP \ \nu [ \nuP \ \alpha \ [ \nuP \ \nu ] ] \]
MICROPARAMETER \[ \rightarrow \alpha = \{ \phi / p \} \]

(7) a. J'en ai bu (French) b. Hi he viscut molt de temps (Catalan)
I-CL have drunk CL have lived a lot of time
I drank some I lived there for a long time

(8) $\alpha = \phi$
<table>
<thead>
<tr>
<th></th>
<th>q-complete</th>
<th>DO doubling/no leísmo</th>
<th>RIO DE LA PLATA SPANISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>q-defective</td>
<td>no DO doubling/leísmo</td>
<td>laismo</td>
<td>CENTRAL PENINSULAR SPANISH</td>
</tr>
<tr>
<td>p-complete</td>
<td>no AUX selection no possessive have</td>
<td>EPP/overt expletives</td>
<td>CATALAN</td>
</tr>
<tr>
<td>p-defective</td>
<td>AUX selection possessive have</td>
<td>no EPP/no overt expletives</td>
<td>FRENCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NON-CENTRAL PENINSULAR SPANISH</td>
</tr>
</tbody>
</table>

REFERENCES (SELECTED).


Formal Features and Ergative Variation

Aldridge (2004), Legate (2008), and Coon et al. (2011) have demonstrated for several language families that there are at least two types of ergative language, one in which absolutive case is licensed solely by T and one in which v (also) plays a role. In this paper, I propose an analysis of ergative variation in Austronesian languages in terms of the availability of a structural case feature on transitive v.

One diagnostic supporting the existence of two types of ergativity is the availability of absolutive case in nonfinite clauses. (1) shows that Tagalog allows overt absolutive objects to surface in nonfinite clauses, indicating that the source of absolutive case must be v and not T, given that nonfinite T is generally unable to license case. In contrast to Tagalog, the Formosan language Seediq does not allow absolutes to surface in nonfinite clauses. If there is an object, the embedded clause must be antipassive and the object in oblique case. This can be accounted for by positing that T is the sole source for absolutive case in Seediq.

A second argument comes from a little-known type of existential construction common in Philippine languages. In Tagalog, the existence of an individual is asserted by a nominal complement to the existential verb, as in (3a). An event can be asserted to exist with a reduced relative clause complement to the existential verb, as in (3b). The reduced nature of the relative clause in (3b) is suggested by the status of the agent of the embedded verb. Since the agent has ergative case in (3a), it must be contained within the embedded clause, which is transitive. In (3b), the agent appears with absolutive case, indicating that it cannot be contained within the transitive embedded clause but must be located in the intransitive matrix clause.

What is interesting about existentials like (3b) for the purposes of the discussion at hand is that they must make absolutive case available inside the reduced relative clause for the head nominal. This is clear, given that extraction has taken place. As a syntactically ergative language, only absolutes are able to undergo A’-movement in Tagalog, as shown in (4). This restriction also applies in reduced relatives, arguing in turn that case must be available in the clause to license the gap position or dislocated head nominal, i.e. libro ‘book’.

However, the source of that case cannot be T. The relative clause in nominal existentials like (5a) can contain a temporal adverb, and this adverb can contradict a temporal adverb in the matrix clause. Event existentials can have a temporal adverb in the matrix clause, as in (5b). But the reduced relative in event existentials does not allow a temporal adverb in the embedded clause which conflicts with one in the matrix clause, as in (5c), suggesting the lack of a TP layer in the reduced relative. Consequently, v must be available in the reduced relative to supply case to the absolutive. Formosan languages like Seediq, which require T for absolutive case licensing, do not have event existentials like (3b) but require a full (finite) relative clause (of the type in 3a) in order to license a dislocated absolutive argument.

In the analysis, I correlate the difference between Philippine and Formosan languages with diachronic variation. The source of the ergative systems seen in these languages is a clausal nominalization (Starosta et al. 1982, Ross 2009, and others), which I analyze as nP in (6a). Genitive case (which is identical to ergative in the modern languages) is assigned to the external argument in nP. Since n has no structural case feature to license the internal argument, this DP moves to the edge of nP to check case with T. Note that absolutes in Seediq appear in clause-final position, suggesting support for the movement based analysis of case. The ergative system arises when nP is reanalyzed as vP in (6b). Philippine languages, which constitute a lower-order subgroup in the Austronesian family, have undergone a second innovation which fully transitivized this vP, resulting in the acquisition of a structural case feature on transitive v.
(1) Nagba-balak ang babae-ng [PRO tulung-an si Pedro] INTR.PROG-plan ABS woman-LK help-APPL ABS.PN Pedro
‘The woman is planning to help Pedro.’ (Aldridge 2004:105)

(2) a. M-n-osa [PRO m-ari patis taihoku] ka Ape.
NTR-PRV-go INTR-buy book.OBL Taipei ABS Ape
‘Ape went to buy books in Taipei.’ (Aldridge 2004:114)
NTR-PRV-go buy-TR Taipei ABS book ABS Ape
‘Ape went to buy books in Taipei.’ (Aldridge 2004:115)

(3) a. May [libro-ng b<in>ili ng babae].
exist book-LK < TR.PRV>buy ERG woman
‘There is a book which the woman bought.’
b. May [b<in>ili-ng libro] ang babae.
exist < TR.PRV>buy-LK book ABS woman
‘The woman bought a book.’

(4) a. isda-ng b<in>ili ng babae (Relativization on ABS: OK)
fish-LK < TR.PRV>buy ERG woman
‘fish that the woman bought’
b. *babae-ng b<in>ili ang isda (Relativization on ERG: *)
woman-ng < TR.PRV>buy ABS fish
‘woman who bought the fish’

(5) a. Kanina may [DP love letter [CP na i-s<in>ulat=niya kahapon]].
just now exist love letter LK APPL<TR.PRV>write=3S.ERG yesterday
‘Just now there was just a love letter which he/she wrote yesterday.’
b. [TP Kanina May [i-s<in>ulat=siya-ng love letter]]
just now exist APPL<TR.PRV>write=3S.ABS-LK love letter
‘He/she wrote a love letter just now.’
c. *[TP Kanina may [i-s<in>ulat=siya-ng love letter kahapon]]
just now exist APPL<TR.PRV>write=3S.ABS-LK love letter yesterday
‘*Just now, he/she wrote a love letter yesterday.’

(6) a. [TP T[NOM] [iP DP[NOM] [iP DP[GEN] [NP N tNOM ]]]] (Clausal nominalization)
b. [TP T[NOM] [iP DP[NOM] [iP DP[GEN/ERG] [VP V tNOM ]]]] (T-absolutive)
c. [TP T [iP DP[GEN/ERG] v[ABS] [VP V DP[ABS] ]]] (v-absolutive)

References
Towards a parameter hierarchy for alignment

Following the format in Roberts (2012), this paper presents an attempt to characterize the parameter hierarchy governing case/agreement alignment. It has long been known that there is no single ‘ergativity parameter’ regulating alignment in transitive clauses (Moravcsik 1978, Dixon 1994). It is also now widely agreed, moreover, that there are no thematically ergative languages (contra Marantz 1981, 1984, Levin 1983), so that alignment is a matter of case and agreement (i.e. the distribution of uninterpretable features). While split-ergativity (whereby a language is accusative in some contexts and ergative in others at the clausal level) may not exist (cf. Coon & Preminger 2012), various different alignments are fairly uncontroversially attested: morphological ergativity (Anderson 1976), split-S and fluid-S systems (Dixon 1994: 73-8, Comrie 2011, Deal 2012), syntactic ergativity (Dixon 1994, Manning 1996), which can be subdivided into High ABS and Low ABS (Legate 2008, Aldridge 2004, 2008). The alignment hierarchy in (1) provides a new perspective on these patterns, building on the insight that ERG is a theta-related case/Case (Woolford 1997, 2006) , and the other differences stem from the presence/absence of EPP and phi-features on the functional head ‘v’ (building on analyses by Aldridge 2004, 2008, Legate 2008, Coon, Mateo Pedro & Preminger 2011). We argue that (1) not only provides a coherent minimal description of attested alignments but also explains certain important gaps and one-way implications, notably the nonexistence of languages which ERG-mark only unergative subjects, which is otherwise a problem for analyses treating ERG as a theta-related Case/case.

In a morphologically ergative system, ERG functions as a quirky case and syntactic Agree relations are established as in Accusative languages, hence the fact that (i) these languages appear to have an accusative syntax (Anderson 1976), and (ii) in some cases have accusative agreement morphology (e.g. Walpiri). The fact that apparently no system has ergative agreement and accusative case alignment (Anderson 1977, Corbett 2006) also follows from (1). While ERG can be quirky, the same is not true for NOM/ACC, which are structural Cases. The difference between morphologically ergative and split-S systems concerns only whether this property is generalized to all little ‘v’s in the language. Note that the apparent non-existence of syntactically ergative split-S languages also follows from (1) (cf. Deal 2012, Coon et al 2011).

Outputs lower down in the hierarchy are all ‘syntactically ergative’ in that they have a syntax minimally different from their accusative counterparts. In all cases, the presence of an EPP feature on V_{ERG} leads to the ban on A-bar extraction of ERG DPs, due to an intervention effect: essentially, the presence of DPOBJ in the phase edge traps DP_{ERG} inside vP (Aldridge 2004, 2008, Coon et al. 2011). In high ABS languages, DPOBJ agrees with T, so ABS/NOM Case is suppressed where T is deficient (Dixon 1972, 1994 on Dyirbal, Coon et al. 2011 on High ABS Mayan). In low ABS languages, ABS is dependent on v not T, so it is preserved in transitive non-finite contexts (cf. Aldridge 2004, Legate 2008). Again, Dixon’s observation that all ‘syntactically ergative’ languages must also be morphologically ergative, follows from the structure of (1).

We further argue that the same kind of parameter hierarchy should be extended to cover alignment in applicative/ditransitive constructions (cf. Dryer 1986, Baker 1988, Malchukov, Haspelmath & Comrie 2010). Assuming, following Aoun and Li 1989, that goals are base generated above themes, the ‘ergative’ pattern is one where a goal receive a theta-related case (DAT), and themes get structural ACC by agreeing with v. Once again, we propose that the theme must raise past the goal in such instances to be accessible to the probe v. The ‘accusative’ pattern is instantiated in secundative languages in which the goal gets structural ACC (Yoruba), as in (2). Haspelmath (2005) shows that there are languages with indirective case marking and secundative agreement, but not vice versa. In our terms, this is equivalent to the lack of ERG-agreement/ACC-case languages. Again, this is explained by (3) because DAT can be quirky. As such, a language with indirective case marking can be underlyingly secundative, whereas the reverse is impossible.

Crucially, both alignment hierarchies are composed of the same basic parameters – Does X do F? Does this generalize to all instances of X? Is X associated with EPP? Does X bear phi-features? The order in which they are assembled is at least partly determined by extra-linguistic factors, and in fact may be underspecified. If this is the case then parameter hierarchies may not themselves be specified by Universal Grammar but might rather emerge from the process of language acquisition.
(1) 

**Basic alignment parameter:** Does transitive ‘v’ assign theta-related ERG to its specifier in L?

\[
\begin{array}{c|c|c}
\text{N} & \text{Y} \\
\text{Accusative} & \text{Split-S parameter: Do all ‘v’s in L assign ERG?} & \text{Y} & \text{N} \\
\end{array}
\]

Morphologically Split-S

(Chol, Basque)

**Syntactic ergativity parameter:** Does \( \text{v}_{\text{ERG}} \) bear an EPP feature in L?

\[
\begin{array}{c|c}
\text{N} & \text{Y} \\
\text{Morphologically ergative} & \text{High/low ABS parameter: Does \( \text{v}_{\text{ERG}} \) assign structural Case in L?} & \text{Y} & \text{N} \\
\end{array}
\]

Morphologically ergative

(Walpiri)

**High/low ABS parameter:**

Low ABS

(West Greenlandic, Tagalog)

High ABS

(Dyirbal, Q’anjob’a)

(2) \[ \text{[}_{\text{vP} \ldots v} \text{[}_{\text{vP} \text{DP}_{\text{ACC}}} \text{[}_{\text{APPL} \text{DP}_{\text{DAT}}} \text{APPL} \text{[}_{\text{v} \text{DP}_{\text{ACC}}]} \text{]]} \]

(3) a. ó pa mí
he kill me

[Yoruba, Atoyebi et al. 2010, citing Rowlands 1969]

b. ó fún mi l' ówó
he give me SEC money

Selected references

I. Introduction: One hurdle for a unified theory of ergativity is that not all languages with ergative case exhibit the well known prohibition on ergative extraction. Examples (1-2) show that the Mayan languages Kaqchikel and Q’anjob’al ban the WH-movement of the agent in a normal transitive clause, while a similar clause in the related language Chol, shown in (3), is acceptable. Recent research in Coon et al. 2011; Weisser et al. 2012 has explored the idea that the height of absolutive case assignment is the source of this difference, connecting the pattern to the influential proposal that ABS is assigned from T in some languages and $v_{tv}$ in others (e.g., Legate, 2008). One such proposal is that in high-ABS languages, ABS is assigned to transitive objects by Infl$^o$. Assuming transitive $v_{tv}$ is a phase, extracting the agent in high-ABS languages means the object cannot get case because it cannot move to the phase edge to agree with Infl$^o$. In contrast, objects get case in low-ABS languages from $v_{tv}$, which predicts that subject extraction should be permitted.

II. Proposal: This talk makes the new proposal that there are two ways that languages falling on the high-ABS side of the macro-parametric divide solve the problem of ergative extraction: (i) Languages like Q’anjob’al have a special $v$ head, namely $v_{AF}$ that assigns ACC case, allowing the subject to extract because the object need not move for case, while (ii) Languages like Kaqchikel have a special flavor of Infl$^o$, that while selecting for $v_{AF}$-marked complements, does all the work itself by introducing the agent in its specifier. If the agent is introduced external to the $vP$ phase, the object’s movement to the phase edge for case is not blocked. Importantly, the two strategies appear surface-similar in closely related languages like Q’anjob’al and Kaqchikel, which both use the Mayan AGENT FOCUS morpheme (4 & 5, respectively). In this way, our analysis emphasizes the importance of micro-comparative work, which can uncover parametric variation in cognate forms with far-reaching grammatical consequences.

The primary piece of evidence for our account comes from the properties of non-finite clauses across high-ABS languages. Given that objects are licensed under relation with Infl$^o$ in these languages, we predict that normal transitive clauses should be banned in non-finite contexts. This borne out for both Kaqchikel and Q’anjob’al, as shown in (6-7). Crucially, though, our analysis predicts an important split that is also observed. Q’anjob’al has grammatical resources, namely $v_{AF}$, which licenses objects in situations where they cannot be licensed by Infl$^o$. Kaqchikel, in contrast, rescues objects in such situations by base-generating subjects above Infl$^o$, which should not be possible in non-finite clauses. We thus correctly predict, as shown in (8), that Q’anjob’al, but not Kaqchikel, should be able to use $v_{AF}$ in non-finite clauses in order to realize both arguments. Kaqchikel, in contrast, must detransitivize the predicate via passive or antipassive (9 and 10, respectively), and use genitive case to realize the sole remaining argument.

III. Extensions: The final part of the talk compares the Kaqchikel strategy for agent extraction with the normal route to case-licensing in Austronesian languages like Malagasy. Travis 2006 argues that Malagasy has different flavors of Infl$^o$ that introduce an A’-argument in its specifier that receives ABS / NOM case (11-12). Just like Kaqchikel, no other argument can extract over this high-ABS argument in Malagasy. If Kaqchikel base-generates certain agents in Infl, while Q’anjob’al never does, we might expect Kaqchikel, but not Q’anjob’al, to have morphological resources to base generate other A’-arguments in Spec-Infl$^o$ like Malagasy. This appears to the case. Example (13) shows that focused locatives trigger the appearance of the verbal clitic $wi$, which we could analyze as the reflex of a flavor of Infl$^o$ generating A’-adjuncts in its specifier. We could make sense of this requirement within the system developed above if the extraction of low adjuncts, just like the extraction of subjects, blocked object movement to the left edge of the $v$ phase for case licensing. This correctly predicts that adjuncts which are already base-generated high, like temporal adverbials, should not need adjunct focus particle, as shown in (14). The result is that in this corner of the grammar, we find Kaqchikel behaving like other high-ABS languages like Malagasy, which always base-generate a single A’-bar argument in Infl.
(1) Q’ANJOB’AL
*Maktxel max-Ø
who ASP-ABS3
y-il-a’ ix ix?
ERG3-see-TV CL woman
Intended: ‘Who saw the man?’

(3) CHOL
Maktxel max-Ø il-on ix ix?
who ASP-ABS3-see-AF CL woman
‘Who saw the woman?’

(5) KAOCHIKEL
Achike x-Ø-u-tz’ët ri ixoq.
who ASP-ABS3-see-AF the woman
‘Who saw the woman?’

(7) Q’ANJOB’AL
*Chi uj [hin yil-a’].
ASP be.able.to ABS1 GEN3-see-TV
Intended: ‘It is possible for her to see me.’

(9) KAOCHIKEL
X-Ø-in-chäp
ASP-ABS3-ERG1-start
[w-aq’oma-n-ik k-ichin].
GEN1-heal-AP-NOM GEN3P-DAT
lit. ‘I started my healing for them.’

(11) MALAGASY
Anasan’ny lehilahy ny
AT.wash DET man DET
savony ny lehilahy.
clothes DET soap
‘The man washes the clothes with the soap.’

(13) KAOCHIKEL
Akuchi’ x-Ø-a-löq’ *(wi’).
where ASP-ABS3-ERG2-buy F.Ad
‘Where did you buy it?’

(2) KAOCHIKEL
*Achike x-Ø-u-tz’ët ri ixoq.
who ASP-ABS3-ERG3-see the woman
Intended: ‘Who saw the woman?’

(4) Q’ANJOB’AL
Maktxel max-Ø il-on ix ix?
who ASP-ABS3 see-AF CL woman
‘Who saw the woman?’

(6) KAOCHIKEL
*X-Ø-in-chäp
ASP-ABS3P-GEN1-start
[e-w-aq’omaj-ik].
ABS3P-ERG1-heal-NOM
Intended: ‘I started to heal them’

(8) Q’ANJOB’AL
Chi uj [hin yil-on-i].
ASP be.able.to ABS1 GEN3-see-AF-ITV
‘It is possible for her to see me.’

(10) KAOCHIKEL
X-Ø-in-chäp
ASP-ABS3-ERG1-start
[k-aq’oma-x-ik].
GEN3P-heal-PAS-NOM
lit. ‘I started their being healed.’

(12) MALAGASY
Manasa ny lamba amin’ny
AT.wash DET clothes with-DET
savony ny lehilahy.
clothes DET soap
‘The man washes the clothes with the soap.’

(14) KAOCHIKEL
Achike ramäj x-Ø-a-löq’ *(wi’).
what time ASP-ABS3-ERG2-buy *(F.Ad)
‘What time did you buy it?’

Two analyses have emerged from work on variation in person based restrictions on agreement and cliticization. Cyclic Agree analyses [5, 6] follow the Borer/Chomsky conjecture in locating variation (i) the feature specification of probes, (ii) the syntactic position of probes, and as a function thereof (iii) the locality pattern of Agree. On the other hand Multiple Agree analyses [1, 10, 11] assume that both the specification of the probes and the locality pattern are constant, but that variation arises from the availability of different syntactic operations in different languages. [10, 11] in particular argues that the operation Multiple Agree is parameterized differently in different languages. The two approaches have not been applied to the same data. While Cyclic Agree has been applied to variation in person restrictions between subjects and objects, Multiple Agree has been applied to restrictions on combinations of internal arguments known as the Person Case Constraint (PCC, [8]). This paper shows that Cyclic Agree can also account for the variation between two kinds of PCC, the Strong PCC (S-PCC, [8]) and the Ultrastrong PCC (U-PCC, [10]) via different specifications of the probe. Key to the analysis is [2]'s observation that the PCC can be understood as the lower direct object (DO) bleeding person Agree with the higher recipient. Cyclic Agree’s flexibility of deriving person restrictions in different syntactic structures also offers a better understanding of a second type of variation. Languages that show the same types of PCC can differ in the alternative strategies they use to realize person combinations banned by the PCC. This is shown for Catalan (C, [7]) and Classical Arabic (A). The analysis also integrates restrictions on combinations of third person pronouns in C and A into a syntactic analysis. S-PCC and U-PCC is in how finely clitic restrictions distinguish between person categories. Different Alternative Strategies. C and A have different alternative strategies for realizing person combinations subject to restrictions. C changes the realization of the recipient, (1), while A changes the realization of DO, (3)/(4)/(7). Both languages use the same strategies in PCC and in combinations of two third person pronouns, (1)/(8). The difference between S-PCC and U-PCC follows from the different structures that give rise to person restrictions and different ways of how failure to Agree is interpreted by the post-syntactic component. Clitic restrictions in C arise in a configuration where DO has moved above the recipient IO, (9), visible in DO-IO order between 3-clitics and between non-pronominal arguments ([13]). v AGrees with DO before IO, so that when DO \( \geq_2 \) IO, IO fails to Agree with v, (10). When IO is 3, the failure of person-AGree leads to the absence of person morphology ([2]). Person restrictions in A arise in causative constructions ([4]), where the two internal arguments are the subject and object of a causativized transitive and both vag and vacaus carry probes, (11), vag can Agree with DO from its base position (AGree 1), and via Cyclic Expansion ([12]) with its specifier (AGree 2), if it has active features left the causee can value. When person restrictions block AGree 2, vacaus AGREes with vag’s specifier. At PF, the AGree relations of the highest valued probe translates into cliticization. In person effect environments, this is vacaus leading to the cliticization of only the recipient. Elsewhere it is vag, which has AGREed with both arguments. Recognizing that person effects arise in different syntactic environments and different locality patterns as a function thereof derives the difference in the alternative structures in a way that a Multiple Agree system cannot.
(1) \{Me, Te, alz\} \{*-l, i\} ha recomanat
\{1SG, 2SG, 3PL\} \{3-DAT, DAT\} has recommended
‘(S)he has recommended [me, you him/her] to him/her.’

(2) Te ’m van recomanar \([7]:179\)
Strong Ultrastrong
PCC: PCC:

\begin{aligned}
1 & : \text{S-} & 2 & : \text{U-} \\
3 & : \text{PCC.} & 3 & : \text{PCC.}
\end{aligned}

a. ‘They recommended me to you’ * * ✓
b. ‘They recommended you to me’ * ✓

(3) ?aʕʕaː -huː \{*-ni/ \?iːj-a:-ja\} gave.3SG -CL.3SG.M \{-CL.1SG/ ACC-1SG\}
‘He gave me to him’ ([13]:336)

(4) ?aʕʕaː -huː \{*-ka/ \?iːj-a:-ka\} gave.3SG -CL.3SG.M \{-CL.2SG.M/ ACC-2SG.M\}
‘He gave him you’ ([13]:336)

(5) ?aʕʕaː -niː \{-ka/ -lu\} gave.3SG -CL.1SG \{-CL.2SG.M / -CL.3SG.M\}
‘He gave me you’ ([13]:336)

(6) ?aʕʕaː -ka -lu gave.3SG -CL.2SG -CL.3SG.M
‘He gave you him/it’ ([13]:336)

(7) ?aʕʕaː \{-ka/ -lu\} \{*-ni/ \?iːj-a:-ja\} gave.3SG \{-CL.2SG.M / -CL.3SG.M\} \{-CL.1SG / ACC-1SG\}
‘He gave me to you/him/it’ ([13]:336)

(8) ?aʕʕaː -lu \?iːj-a:-lu gave.3SG -CL.3SG.M ACC-3SG.M
‘He gave him it’ ([13]:336)

(9) \[v[φ]\] [DO[φi]] [IO[φj]] [APPL DO]]

(10) 2-DO+3-IO:

\begin{align*}
\text{(same for S-PCC, } \left[ \begin{array}{c}
\text{uT}_{\text{UPART}} \text{uT}_{\text{ISPEA}}
\end{array} \right] \text{, and U-PCC, } \left[ \begin{array}{c}
\text{uT}_{\text{UPART}} \text{uT}_{\text{ISPEA}}
\end{array} \right] \; \text{)}
\end{align*}

\[\begin{array}{c}
\text{Cyclic Expansion by projection}
\end{array}\]

A tale of two datives

The parametric approach to syntactic variation establishes a distinction between macro- and micro-parameters (e.g., Baker 2008, Kayne 2000). Many consider macro parameters as useful descriptive devices devoid of much explanatory force (e.g., Haspelmath 2008; Baker 1996, 2008). Micro-parameters for their part have originally been proposed mainly to account for variation between closely related regional or social (dialectal) varieties (e.g., Kayne 2005). We argue here that micro-parameters can serve to describe variation between closely related or equivalent syntactic constructions in different grammars that are not otherwise related, and we show that a featural approach to micro-parametric variation can provide insights into the nature of the observed variation. More specifically, using as a case study the Russian impersonal structures with a dative experiencer (1a) and its Spanish syntactic counterpart (1b), we show that an approach based on discrete parameters of binary values fails to provide adequate explanation. We suggest that the featural approach is qualitatively superior in explaining theoretical and empirical facts. Our theoretical analysis finds support in the results of a 2nd language acquisition study involving the constructions at stake.

The relevant difference between the two languages, as glosses indicate, pertains to the interpretation of the dative, which receives an experiencer reading in Russian (1a), and a benefactive interpretation in Spanish (1b). The morphosyntactic makeup of the two constructions is, however, parallel in the two languages: dative-marked argument, reflexive morphology, and non-agreeing activity verb. Following Rivero (2003) and Cuervo (2003) among others, Spanish dative benefactives are analyzed as non-selected applicative arguments in a High Applicative Phrase (HApplP), where the dative clitic le (which obligatorily doubles the dative argument in these constructions) occupies the functional head of HApplP, as shown in (2b). In Russian, we propose that the unselected dative experiencer merges in Spec of a Super High Applicative Phrase, as in (2a) (cf. Buell 2005; Rivero 2004, 2008; Sedighi 2009).

In Russian these non-core dative arguments have the feature content [+experiencer, -control], where [-control] simply means ‘not capable of control’, or non-agentive. In the absence of the dative, the structure is that of the (more familiar) impersonal construction in Russian (3). Spanish benefactives, by contrast, have the feature bundle [+benefactive, -control]. In essence, then, the difference between the two languages is simply in the functional head, HApplH vs. SHApplH, which also encodes the difference in featural semantics.

The Principles & Parameters approach has long offered the only available descriptive and explanatory method within generative grammar to study language acquisition by proposing that any acquirable phenomenon be narrowed down to discrete binary values. But the ‘switchboard’ metaphor seems to have outlived itself, as suggested in Boeckx (in press, 2008), and Lardiere (2008, 2009) among others. Recasting this approach using variation in feature selection and specification in functional categories (e.g., Adger 2006, Lardiere 2009) allows: 1) for a more specific theoretical explanation; and 2) to pinpoint more precisely the building blocks of the acquisitional process. We therefore test our account of the distinction between the two constructions against an acquisition context involving both. Savchenko (in prep) reports on an experimental study in which Spanish learners are tested with respect to the acquisition of Russian dative experiencers -- (1a). The results show that near-native Spanish speakers of Russian do not interpret Russian dative experiencers at the rate of Russian monolingual speakers, which suggests that they did not restructure their L1 set of features to match the L2 set. Experimental details aside, we attribute such behaviour to the failure to re-assemble L1 set of features in a target-like manner (cf. Lardiere 2009; Stringer in press).
Examples:

(1) a. Ivanu zdes’ xorosho rabotaetsja.  
   Russian  
   Ivan.Dat here well work-Refl.Pres.3sg.Neut  
   ‘For some reason, Ivan {works / feels like working} well here.’  
   b. A Juan se le trabaja mucho aqui.  
   Spanish (Rivero 2003)  
   John.Dat Cl.Refl he.Dat works much here  
   ‘Here people work a lot on John’s behalf.’ (NOT ‘John feels like working a lot here.’ NOT ‘John works a lot here.’)

(2) a. Russian  
   b. Spanish

(3) Zdes’ xorosho rabotaetsja.  
   Here well work-Refl.Pres.3sg.Neut  
   ‘For some reason, one {works / feels like working} well here.’

Selected References

This paper is about a class of variation phenomena which does not in general receive uniform treatment in the literature, namely, the array of strategies that different languages employ to deal with what one may call ‘congestion phenomena’, mainly configurations where there appears to be only one agreement/phi-head (T, Voice/v etc.) that needs to take care of/license more than one argument/phi-bearing XP. Such phenomena in the thematic domain include cases of multitransitivity, such as applicative and linker constructions, while the relevant constructions in the T-domain are quirky subject constructions, agreement displacement in ergative languages etc. I argue that such configurations are regulated by the following principle:

(1) **The Generalized Applicative Hypothesis:** If an argument \( \alpha \) with an unvalued/uninterpretable Case feature \([uCase]\) is merged in a position inaccessible to any Case assigning head, then an applicative head Appl must merge as soon as possible (to create an appropriate configuration for \( \alpha \)’s Case licensing).

This formulation allows for the following to be parameterized: the availability of Appl in a given language, the amount and the nature of its uninterpretable features, the presence/absence of an EPP-feature on Appl, and \( \alpha \)’s \([uCase]\). Also, this hypothesis presupposes Chomsky’s (2000, 2001) Activity Condition. Another central assumption is that the feature content of Appl does not vary depending on its position (high vs. low Appls). More concretely, depending on the actual values of the aforementioned parametrizable features, Appl licenses \( \alpha \) in at least three different ways:

(i) **Appl Agrees with \( \alpha \) and attracts it to a position accessible to a higher phi-probe.** This is arguably the mechanism that derives dative alternations (2) and the typology of dative shifted arguments: assuming (1), \( \alpha \) in this case is the IO DP in its first-merged position: \([vP v* [\sqrt{P} DO \sqrt{IO}]]\). In bi-eventive VoicePs, such as most ditransitives, \( v^* \) is a fusion of two \( v \)-heads (e.g. \( v_{\text{CAUSE}} \) and \( v_{\text{TRANSFER/BE}} \)), which can be split when Appl is forced to merge under (1). In this case, both \( v \)-heads inherit Voice’s phi and Case-assigning capacity, while Appl merges between them, attracting IO, after agreeing with it for \([uParticipant]\) (thus, the intervention of a 1/2 person DO gives rise to PCC effects); \( v_1 \) licenses IO and \( v_2 \) licenses DO: \([\text{Voice} [v_1 [\text{IO Appl} [v_2 [DO \sqrt{IO}]]]]\). In monoeventive predicates, the soonest Appl can merge is above VoiceP, giving rise to the scopal and other properties of ‘very high benefactives/’affected experiencers’ etc. (3) (Boneh & Nash 2010, Bosse e.a. 2011). Also, given that certain datives may also start off as non-thematic, as \( v\)-adjuncts, the system allows for at least a 2x2 typology (4).

(ii) **Appl Agrees with \( \alpha \) and licenses it in situ.** I argue that this is the mechanism underlying \( \ddot{a}/a \)-datives in Romance: insertion of such an Appl can take place as low as above \( vP\): \([\text{VoiceP EA Voice} [v^*P DO \sqrt{v^*} [\text{[ApplP [Appl \ddot{a} [\forall P \langle DO \rangle \langle v\rangle DP\ddot{IO}\rangle]]]}\) (assuming that \( v \) also inherits an EPP feature from Voice). This explains why all the datives of the typology in (4) appear in a ‘V DO a-DP’ frame in languages like Italian (Folli & Harley 2006), while it also accounts for the exceptional dativisation of transitive but not intransitive causees in Romance causatives. Assuming that part of the embedded infinitival raises past the embedded subject, Appl only needs to be inserted when the embedded V is transitive, otherwise matrix \( v^* \) can directly license the causee (5): \([\text{faire… } [v^*P V_{\ddot{a}}-v^* [v_2P DO… [\text{ApplP [raised-XP [\forall P DO \langle v\rangle ]]} \text{[Appl \ddot{a} [\text{VoiceP EA…[smuggled-XP]]]}\]})].

(iii) **Appl attracts \( \alpha \) to a position visible to a higher Case assigner, and then Appl itself Agrees with \( \beta \) and licenses \( (\&\text{Case-marks}) \) it in situ; this may be the way linkers work in Bantu & Khoisan languages (6) (Baker & Collins 2005), i.e., elements that show up when a secondary argument needs to be licensed, in the presence of another, arguably structurally Case-marked, argument in the same vP/VoiceP (7).
(2) a. John \[\text{VoiceP} \text{ gave } [\text{vP} \text{ a letter } <v_i>] [\text{vP} \text{ a letter } <v_j>] \text{ to Mary].
   b. John \[\text{VoiceP} \text{ gave } [\text{vP} \text{ Mary } <v_i>] [\text{ApplP} \text{ Mary } <v_j>] \text{ Appl } [\text{vP} \text{ a letter } <v_2>] [\text{vP} \text{ ... }]]

(3) Mu to ksanalinis/ksanavriskis, se parakalo? (Greek)
   Me.DAT.CL it.ACC.CL again-solve.2SG/again-find.2SG, please
   (i) ‘You’ve solved/ found it for me before, but can you do it again?’ again-Benef
   (ii) ‘I know you’ve solved/ found it before, but can you do it again, this time for me?’
   Benef=again
   [TP T [ApplP (again) [ApplP Benef Appl [\text{VoiceP} (again) [\text{VoiceP} EA Voice [\text{v*P} \text{ v* ... }]]]]]]
   (Benef and EA are made equidistant from T under obligatory cliticisation of Benef)

(4) Bi-eventive Mono-eventive
DAT is √’s sister (i) dhino ‘give’ (ii) thimono ‘get angry at’
DAT is √P-adjunct (iii) majirevo ‘cook’ (iv) lino ‘solve’

(5) a. Gianni ha fatto lavare la macchina a Maria/*Maria
   John has made wash the car a Mary/Mary
   ‘John has made Mary wash the car’
   b. Gianni ha fatto correre Maria/*a Maria
   John has made run Mary/a Mary
   ‘John has made Mary run’

(6) a. Uto dchuun-a /Kaece *(ko) n!ana n!ang (Ju’hoansi)
   Car hit-TRANS /Kaece ko road in
   ‘A car hit Kaece in the road’
   b. Mi ba // ohm-a !aihn ko / ‘ai
   My father chop-TRANS tree ko axe
   ‘My father chopped the tree with an axe’
   c. Besa komm // ’ama-/’an Oba ko tcisi
   Besa EMPH buy-give Oba ko things
   ‘Besa bought Oba some things’
   (from Baker & Collins 2005)

(7) [vP v* [ApplP DO koAppl [\text{vP} <DO>] √ DP LOC[uCase]]].

(adapted from Alexiadou & Anagnostopoulou 2006)

References:

Unexpected variation between EP and BP - rethinking parameters

The tension between explanatory and descriptive adequacy has been one of the main challenges of linguistic theory in the last 40 years, essentially the work developed within the Theory of Principles and Parameters (Chomsky 1981, henceforth P&P) has provided an impressive amount of new knowledge on natural languages. In the Minimalist Program, the hypothesis on how the computational system derives universal properties and variation of natural languages is puzzling and incites to the revision of the concept of parameter in the P&P model, as the discussion on the topic has shown (Kayne 2005, Baker 2008, Roberts & Holmberg 2010, a.o.).

This paper will focus on certain disconnected oppositions between two (apparently) closely related languages: Brazilian Portuguese (BP) and European Portuguese (EP). Assuming those oppositions are the result of absence of T-to-C movement in BP, our ultimate goal is to discover what deeper property is implied in the process and how we can derive such phenomenon through the computational system; our second goal is to contribute to the discussion on what a parameter is and how micro and macro variation correlate, considering the previous variation facts and respective analysis as illustrative to that discussion.

Our unexpected findings on variation in BP and EP are observed in three syntactic domains: question-answering, distribution of adverbs, complementation. We hypothesize that the apparently disconnected oppositions reduce to one phenomenon: absence of T-to-C movement in BP, pied-piping the verb, as opposed to EP. The central questions turn out to be: (i) why is there such an operation in the system? (ii) What allows or disallows it? (iii) How does the computational system derive it? With these questions we will attempt to support our idea that the locus of variation is not the T-to-C movement, but some deeper property that underlies it and that is responsible for co-variation. In other terms, T-to-C movement allowing languages of the EP or BP type could be compared to the so-called null subject parameter allowing languages of the Portuguese or English type or to the wh-parameter allowing languages of the Chinese (obligatory wh-in-situ) or Hungarian type (lack of wh-in-situ).

The talk will be organized as follows. First, we will present the variation data in EP and BP concerning the syntactic domains referred to above. Then we will take the empirical working generalization drawn from the observation of that phenomenon in other languages, relating wh-movement, T-to-C and complementizers (Ambar 2003). Finally, we will concentrate on complementation structures, in order to motivate the answer to questions (i)-(iii) above, i.e. the understanding of which deeper property opposes EP to BP to other languages. We tentatively assume the locus of variation is Tense. We think it will be clear that the study of closely related languages is not different from the one that considers unrelated languages. More precisely, we will show that starting the research on related languages can bring to light aspects on other (unrelated) languages that wouldn’t be discovered otherwise and, plausibly, vice-versa. Related to this we would discuss the concepts of microvariation and macrovariation, whose opposition often assumed can be misleading in our view. We will then conjecture on the shape of UG.
References


A Unified Account for Italian Pro-Drop and German Topic-Drop

[Introduction] This paper proposes a novel account of a null subject phenomenon in terms of the probe-goal system under Chomsky’s (2008) feature-inheritance system (hereupon, FIS), and provides a unified account for Italian pro-drop and German topic-drop phenomena. [FIS] The FIS assumes that a phase head C has two probes, an edge-feature (EF) and Agree (φ)-features, and T inherits φ-features from C ([1]) (C-to-T-inheritance; henceforth, CTI), and φ-probe is subject to intervention effects, but EF-probe is not. On the CTI, Richards (2007) argues that it is operative at the domain where the edge and nonedge (complement) of a phase are transferred separately. Hence, it is predicted that the CTI becomes inoperative at the domain where the edge and nonedge of a phase are transferred at once. Given that such an at-once-Transfer is the most appropriate manner of Transfer in verb second V2 environments (Goto 2011), we can expect [2] as a natural consequence of Richards’ argument. [Proposals] I propose that in addition to EF and φ-features, C can enter a derivation with a Delete-feature, which makes it possible for an element to be deleted at PF ([3]), and that an element assigned a Delete-feature can be deleted at PF through a process of Delete-feature assignment which is implemented in terms of EF-probing by C or φ-probing by T. [Prediction] This mechanism of PF-deletion makes the prediction in terms of [2]: in non-V2 languages such as Italian, a Delete-feature is inherited from C to T in tandem with φ-features, whereas in V2 languages such as German, a Delete-feature is not inherited to T but stays on C, as shown in [4] and [5]. Consequently, Delete-feature assignment is implemented via T’s φ-probing in [4] and via C’ EF-probing in [5], and the distribution of null arguments in Italian is restricted by the φ-probing that is subject to intervention effects, and the distribution of null arguments in German is restricted by the EF-probing that is not subject to intervention effects. [Analysis] Given [4] in Italian, the null subject [6] is derived as in [7]. As soon as C that has a Delete-feature as well as φ-features is introduced into the derivation ([7a]), both features are inherited by T from C ([7b]) and the φ-features on T enter into a probe-goal relation with egli, which is in the minimal search domain of T ([7c]). Given that the probe-goal relation makes it possible not only to value uninterpretable features on T and egli but also to assign the Delete-feature to the agreeing element, egli can be deleted at PF ([7d]). Under this analysis, pro is eliminable from the grammar and such a null entity is just the result of PF-deletion of a full-fledged pronoun. Our analysis explains the impossibility of the null object in Italian [8]: since φ-probe is subject to intervention effects, it is impossible to assign a Delete-feature to the downstairs object beyond the intervening subject; hence the object cannot be null at PF. Unlike Italian, given [5] in German, it is predicted that the object as well as the subject can be freely null: since EF-probe is not subject to intervention effects, Delete-feature assignment is freely applied to an argument if it is in the search domain of C. This prediction is borne out by [9]. This analysis of German null arguments explains the ungrammaticality of [10] as follows: the EF on C is satisfied by Ihn/Ich/Wer; hence EF-probe is deactivated, so that it is impossible to assign a Delete-feature to the arguments in its domain; hence neither the subject nor the object can be null at PF. [Consequences] The proposed mechanism of PF-deletion not only gets rid of pro but also unifies the pro-drop phenomenon and the topic-drop phenomenon under Chomsky–Richards’ FIS. The point is whether the CTI takes place or not in terms of [2].
[1] \( C_{[\text{EF}]} \ldots T_{[\Psi]} \)  \\
| \( \Downarrow \)  \\
[2] C-to-T feature-inheritance does not take place in the V2 environment.  \\
[3] \( C_{[\text{EF}][\Psi][\text{Delete}]} \ldots T \)  \\
[5] \( C_{[\text{EF}][\text{Delete}]} \ldots T \) (in V2 environment, cf. German)  \\
[6] [e] parla. ‘He/She is speaking.’ ([e] indicates the null subject that corresponds to  \\
[7] a. \( [C_{[\text{\phi}][\text{Delete}]} \left[ T_{[\nu \text{egli parla}]} \right]] \) the third person pronoun egli ‘he/she.’)  \\
   b. \( [C \left[ T_{[\text{\phi}[\text{Delete}]} \left[ \nu \text{egli parla} \right] \right]] \)  \\
   c. \( [C \left[ T_{[\Psi][\text{Delete}]} \left[ \nu \text{egli parla} \right] \right]] \)  \\
       \( \Downarrow \) (Agree)  \\
   d. \( [C \left[ T_{[\Psi]} \left[ \nu \text{egli [Delete]} \right] \text{parla} \right]] \) (Strike-through indicates deletion)  \\
   Mario has.3SG forced (me / her / …) to leave (Rizzi 1986:517)  \\
   b. *Gianni sa che Maria [e] vide  \\
   Gianni knows.3.SG that Maria (him) saw (Sigurðsson and Maling 2008)  \\
[9] a. (Ich) hab’ ihn schon gesehen.  \\
   (I) have him already seen  \\
   ‘(I) saw him already.’ (Huang 1984:547)  \\
   b. (Ihn) hab’ ich schon gesehen.  \\
   (him) have I already seen  \\
   ‘I saw (him) already.’ (Huang 1984:547)  \\
   him have (I) already seen  \\
   ‘(I) saw him already.’ (Huang 1984:547)  \\
   b. *Ich hab’ [e] schon gesehen.  \\
   I have (him) already seen  \\
   ‘I saw (him) already.’ (Huang 1984:547)  \\
   c. *Wer hat [e] schon gesehen?  \\
   who has (it) already seen  \\
   ‘Who has already seen it?’ (Rizzi 1986:513, fn.8)  \\

Selected References  
Syntactic variation in nominal root compounding

According to what is known as the Borer-Chomsky conjecture all syntactic variation can eventually be attributed to differences in the specification of features on functional heads in the lexicon. This paper looks at syntactic variation that can be found in nominal root compounding and argues against the standardly made parametric distinction between what is known as the Romance pattern and the Germanic pattern in the literature (cf. e.g. Roeper, Snyder & Hiramatsu 2002; Roeper & Snyder 2005; Delfitto, Fábregas & Melloni 2008). Contrary to common assumptions Romance does have a productive pattern of phrasal compounding (e.g. French: *tasse à café* ‘coffee cup’) and Germanic has very clear instances of non-compositional highly drifted compounds (e.g. German: *Kindbett* ‘childbed’; English: *redneck*, *catbird seat*). In other words, these languages display clear instances of word formation processes that go against the alleged parameter setting (cf. ibid). Similarly, e.g. Chinese uses both compounding patterns in breakable compounds (cf. Zhang 2007), which behave either as a word or as a phrase (e.g. *dan xin* ‘worry’ lit. ‘carry heart’) which would suggest that Chinese, in contrast to other languages, does not display a clear parameter setting. Boeckx (2010) argues against such macroparameters and even goes so far as claiming that the notion of Parameter is devoid of any meaningful content. The understanding of parameter is according to him deeply influenced by P&P Theory and no longer compatible with current minimalist theorizing. On the other hand, Roberts (2010) argues for a set of micro-parameters with distinctive characteristics. I follow this approach present an analysis that is based on a Phase-theoretic approach to compounding. According to Chomsky (2008) the only prerequisite for Merge is that the lexical item (LI) be specified for an edge feature (EF). Provided that roots are specified only for EFs - which is the null assumption, because otherwise they could not enter the derivation at any stage - it is in principle possible to Merge two uncategorized roots (*pace* Delfitto, Fábregas & Melloni 2008). Provided further that categorizing *x*-heads are Phase heads (cf. Marantz 2007), Merger of two roots does not involve a Phase (cf. 1). When the complex root that results from the Merger in (1) is merged with a categorizing *x*-head, say *n*, the complement of the Phase-head is Spelled-Out. In this case, however, none of the roots is Spelled-Out independently and a drifted lexicalized reading ensues (cf. 2). If, however, an uncategorized root is merged with a categorizing Phase-head prior to Merger with another LI, the complement domain of the Phase-head is Spelled-Out and thus the root is independently interpreted, yielding a compositional reading (cf. 3). Both types of Merger lead to a point of symmetry (PoS), that has the capacity of stalling the derivation when it remains unresolved. However, the PoS get resolved for both types, albeit differently: Merger of two roots, as in (2a,b) leads to a PoS that is dissolved at PF by dynamic antisymmetry (cf. Kayne 1994; Moro 2000). This is possible, because no feature-checking operations are involved in this type of compounding. Merger of a categorized Phase-head with another LI involves feature-checking and thus excludes a dynamic antisymmetry approach to PoS-resolution. Here the PoS is resolved by a clitic-incorporation style of head-movement (cf. Roberts 2010) that ensues from checking the number feature on the categorized *n* (cf. 4). Thus, the analysis to root-compounding presented here is one that is not only in line with the SMT and minimalist theorizing and that does not make use of unmotivated features or principles, but also one that ties the cross-linguistic
differences between the two patterns of compounding to a microparameter that is sensitive to the properties of number-checking.

Examples:

(1a) Merge \{\alpha\} and \{\beta\} → no Phase:

\[ \sqrt[\alpha_{EF}]{\sqrt[\beta_{EF}]{}} \]

(1b) \[ \sqrt[\alpha_{EF}]{\sqrt[\beta_{EF}]{}} \]

(2a) Merger of categorizing little x-head (\(n\) in this case) → Spell-Out of complement of the Phase head → no independent meaning realization of roots \(\alpha\) and \(\beta\): drifted reading

\[ nP \]

(2b) \[ \sqrt[\alpha_{EF}]{\sqrt[\beta_{EF}]{}} \]

(3a) Merger of root \(\alpha\) and \(\beta\) respectively with categorizing little x-head (\(n\) in this case) → Spell-Out of complement of the Phase head → independent meaning realization of root \(\alpha\) and root \(\beta\) respectively: compositional reading

\[ nP \]

(3b) \[ \sqrt[\alpha_{EF}]{\sqrt[\beta_{EF}]{}} \]

(4a) Number checking on \(n\) → incorporation ensues (cf. Roberts 2010)

\[ PoS \]

(4b) \[ \sqrt[\alpha_{EF}]{\sqrt[\beta_{EF}]{}} \]

(Selected) References:
Marantz, A. 2007. ‘Words and Phases’. Ms. NYU.
Toward Microparameters of Mass and Count

Mass/count distinctions in natural languages prototypically divide a group of syntactic behaviors associated with nouns describing substances from another group associated with nouns describing individuals. In English, as in many languages, count nouns show number distinctions, and combine with numerals directly. Mass nouns resist pluralization, and are counted only via a pseudopartitive.

(1) Count: pencil(s); one pencil, two pencils
(2) Mass: blood(*s); one *(unit of) blood, two *(units of) blood

It is well-known that the particular syntactic differences seen in (1)-(2) are not universal. Languages like Mandarin, for instance, famously require a classifier whenever nouns combine with numerals, and make no simple distinction of grammatical number. These properties have sometimes been taken to show that all nouns in such languages are mass nouns (Krifka 1995).

(3) Obligatory classifiers
   a. san *(ben) shu three CL book
   b. yi *(li) mi one CL rice
(4) Absence of number marking
   wo kanjian gou le I see dog ASP
   three books one grain of rice I saw the dog(s)

Chierchia’s seminal Nominal Mapping Parameter (NMP; 1998) handles this difference in terms of variation in nouns’ semantic properties. Mandarin nouns refer to natural kinds; Italian nouns describe properties; and English nouns may be of either type. Chierchia’s formulation is clearly macroparametric in Baker’s (1998) sense. The variation concerns the semantic nature of an open class of lexical items. Its effects are felt in a variety of ways: in classifier systems, in the marking of number, and also in the distribution of determiners. Three types of languages are predicted.

Cheng and Sybesma (1998, 1999, 2005) argue for an alternative which might be characterized as microparametric. They demonstrate that classifier languages Mandarin and Cantonese do indeed make mass/count distinctions, but that these surface internal to the classifier system. This seems to call for finer-grained parameterization than the NMP allows. On their proposal, nouns themselves universally support a semantic distinction between mass and count (pace Chierchia), but particular aspects of syntactic structure differ from language to language such that the semantic difference becomes visible only in the classifier domain in certain languages. In this paper I argue for a version of this microparametric view on the basis of a language where it appears at first glance that all nouns are count nouns—a previously unattested pattern. This language allows all N(P)s to mark number distinctions and to combine with numerals directly, but the distinction between mass and count surfaces once again in the details of the nominal functional system.

Nez Perce is an endangered Penutian language of the western USA. Nez Perce has previously been described as showing both a singular-plural distinction and a limited classifier system (Aoki 1994). Drawing on original fieldwork, I present a thorough investigation of both claims. Number distinctions manifest themselves syntactically in three places: on nouns, verbs (by agreement), and attributive adjectives (by concord). The realization of number is determined by animacy; inanimate nouns show number distinctions via adjectival concord only. Plural marking on adjectives is equally available, however, for all types of noun, whether substance- or individual-describing. In this respect, all Nez Perce nouns behave like English count nouns.

(5) a. yiyosiyos *ispuuqun / tii’men’es blue.PL quilt / pencil
   b. yiyosiyios mayx / tiipip / samq’ayn blue.PL sand / frosting / fabric
   blue quilts/pencils quantities of blue sand/frosting/fabric
Note that familiar ‘sorting’ and ‘packaging’ coercions are not involved in (5b). The Nez Perce equivalents of the English mass nouns are understood with built-in apportionment or individuation.

There is also no mass/count distinction evident in the distribution of numerals. All numeral-noun combinations involve a suffix on the numeral word, either Vt (6) or u’/we (7). The latter is used for human nouns only. These suffixes have previously been described as classifiers—an analysis which is perhaps surprising in view of the language’s use of a singular/plural distinction.

(6) a. lep-it heesu / nicka’nicka’
   2-SUF eel / strawberry
two eels/strawberries

b. lep-it mayx / kikeet / samq’ayn
   2-SUF sand / blood / fabric
two grains of sand / drops of blood / pieces of fabric

(7) lep-u’ ha-’aayat / ma-may’ac / lawtiwaa-ma
   2-HUM PL-woman / PL-child / friend-PL
two women / children / friends

I argue for a reanalysis of u’/we as a φ-element indicating [+human] and Vt as a default ending needed to support the prefixal numeral root. This explains why the -Vt suffix is not in complementary distribution with open-class measure words, as we would expect of a true classifier.

(8) lep*(-it) temiinewit / ’ipselipt nicka’nicka’
   2-SUF measure / handful strawberry
two lbs/handfuls of strawberries

On this analysis, Nez Perce lacks a classifier system, and all numeral-noun combinations in (6) are direct. By the criteria of number marking and combination with numerals – the same types of facts that would suggest all Mandarin nouns to be mass – all Nez Perce nouns seem to be count.

Just like the mass/count distinction surfaces in the fine details of classifiers in Chinese, it surfaces in Nez Perce in the details of plurality in quantified nominals. Nez Perce combines its quantifiers and nouns freely, but quantifiers impose a plurality requirement on count nouns only. This means that count and mass nouns must be in some way differentiated in the grammar of Nez Perce.

(9) a. la’am cicmuxcicmuux kapoo
    all black*(.PL) coat
all black coats

b. la’am cicmuxcicmuux/cimuxcimux samq’ayn
    all black.PL/black.SG fabric
all black pieces of fabric / all black fabric

Adopting from Cheng and Sybesma the claim that mass and count noun (roots) universally differ semantically, I propose that Nez Perce combines its nouns with a functional head α. When meaningful, α serves as an apportioner, mapping mass denotations to count ones. Apportioned mass nouns combine with plural (5b) and numerals (6b) just as count nouns do. α may also be semantically inert, in which case noun root differences shine through. If, as Chierchia 1998 proposes, mass nouns are treated as inherent plurals, (9b) is handled straightforwardly. The quantifier imposes a semantic plurality requirement, and mass noun samq’ayn may pass this either on the basis of its root meaning alone, or by shifting to a count meaning and combining with syntactic plural.

On this view, the count-like behavior of Nez Perce mass nouns arises from their combination with a functional element, α. I close with an extension to Chinese, where a parallel structure may be implicated in the mass-like behavior of count nouns. I propose that meaningful α in that language maps count roots to mass N(P)s. Classifiers are obligatory, as on the NMP approach, in view of the fact that all NPs are accordingly mass. Differences among classifiers reveal the mass/count distinction via agreement with meaningful α (count roots) versus inert α (mass roots).
Language Variation and the Nature of Parametric Dependencies

Parameters in the early stages of the Principles & Parameters (Chomsky 1981) approach were conceived as predicting clusters of grammatical properties manifested across morphosyntactic environments that additionally give rise to certain parametric paths such as those proposed in Baker (2003). However, when put under empirical, crosslinguistic scrutiny, the classic notion of macroparameter, albeit theoretically plausible and well-motivated, seems hard to maintain for it fails to retain its ‘macro’ status since, among other things, it quickly decomposes in order to account for subtler points of variation.

If one wants to put forth a theory of Universal Grammar (UG) that involves unfixed principles the values of which await setting on the basis of the language the child encounters, this theory should essentially be a theory that assumes macroparameters and parametric dependencies that hierarchically organize parameters in an ‘X proceeds Y’ and ‘if X(yes) then Y, if X(no) then Z’ fashion, rather than thousands of unrelated points of variation. Unrelated points of variation entail no parametric dependencies and do not predict any paths that organize the possible space of variation in a way that makes the acquisition task less burdensome. In this sense, one might still call such unrelated points of variation ‘parameters’, however ascribing them to UG would be theoretically unmotivated and of absolutely no aid to acquisition.

Assuming then that any parametric approach to UG and variation is at the same time a theory that makes use of parametric dependencies, this paper discusses the nature of these dependencies as they occur in a specific pool of data that consists of hierarchically-organized parameters. The dependencies are approached through implementing a novel program-based analysis of relations of setting and setability that exist between the different parameters in the pool of data at hand. The latter consists of 62 parameters that are proposed in Longobardi & Guardiano (2009): These are binary parameters coming from the nominal domain, presented alongside setting states and setability relations, across 23 contemporary and 5 ancient languages. Setting occurs on the basis of language data, whereas setability depends on the status [+,-] of the input nodes that the parametric dependency specifies.

The fact that Longobardi & Guardiano articulate in sufficient detail and across a sufficient range of languages the status of all the input nodes as well as the parametric dependencies that define the neutralization/setability of their dependent parameters makes their pool of data a unique candidate for program analysis. The relevant portion of the parametric space defined in Longobardi & Guardiano (i.e. those dependent parameters that can reach neutralization/setability in more than one ways) was converted into program input in order to (i) shed light on how deterministic models that assume such dependencies are and (ii) see whether languages proceed in uniform ways in terms of the number and the complexity of the setability paths they involve. The results showed that languages proceed in largely non-uniform ways both in terms of the number of settable parameters they involve but also with respect to the number of ways to reach setability of a given parameter.

These observations give rise to several considerations which can be viewed as five intertwined problems that pertain to (i) cross-linguistic variability in terms of complexity of the setability paths that each language realizes, (ii) the (species-) uniform nature of UG, (iii) the fixed character of the architecture of UG, (iv) the overproduction of predicted setability paths by the system, and (iv) optimality considerations that emerge from the above points. In their totality, these five problems suggest that the notion of parametric dependencies runs into empirical problems that should cast doubt on the feasibility of parametric approaches to UG that postulate hierarchically-organized parameters.

All empirical observations about the nature of parametric dependencies that are drawn from this pool of data should not be read only in relation to these specific parameters or this specific functional domain. Instead, these observations are highly likely to have parallels in data from other functional domains, because dependencies and states aside, the developed program does not see the parameters under examination; it simply traces issues related to their existence.
References


Parametric View on Tense Projection in Secondary Predication

Secondary predication (SP) has two subtypes, resultatives and depictives. To interpret SP, it is necessary to fix the temporal points where the events denoted by the main and secondary predicates take place, because, by definition, the event of a resultative secondary predicate takes in a different time from the event of its matrix clause, while the events of a depictive secondary predicate and its matrix clause take place simultaneously. In this paper, we will show that languages differ as to how the event time of SP is specified, and offer a parametric account for the variation of SP with regard to TP projection (cf. Simpson (1983), Roberts (1988), Carrier, Jill and Randall (1992) and Guéron, Jacqueline and Hoekstra (1995) for syntactic accounts of SP, Washio (1997), Rappaport Hovav and Levin (2001) and Rothstein (2001) for semantic accounts of SP).

By way of illustrating our proposal, we take up Mongolian, English and Japanese SPs. Mongolian allows (infinitival) TP to be generated inside SP, whereas English and Japanese SPs do not allow for TP projection inside (see Guéron and Hoekstra (1995) for English resultatives (3a,b) and Japanese resultative (6)). By virtue of the structural difference, the two types of languages show a difference as to whether the SP clause allows for its notional subject within the SP (Mongolian allows it (2), but English and Japanese do not (3)&(6)), and they employ different strategies for fixing the relative temporal relations when SP refers to a distinct event time from what is referred to the main predicates. In Mongolian, as in (1), the event time of a resultative must be grammatically fixed by T inside SP. In contrast, the event interpretation of an SP fully depends upon the context/our real world knowledge in English, as in (4); thus certain SPs (5) give raise to ambiguity between resultative and depictive interpretations. In Japanese, (6a) can only have the resultative reading though there is no T inside the SP clause because of the postposition -ni ‘to’, which induces the reading of change taking place posterior to the event described by the main predicate.

Furthermore, in Mongolian depictives, the events of an SP and its matrix clause are interpreted to take place simultaneously, and in such a case T may/may not be projected. (2a) represents the TP type depictive, allowing its notional subject inside the SP clause, while (2b) represents the small clause type depictive, disallowing its notional subject inside the SP clause. This shows that in Mongolian, small clause type predication can be used when no distinct tense specification is necessary for SP, but still this type of predication cannot be utilized for a resultative SP, where two event times need to be specified. Since small clause type predication is the only option for Japanese and English depictives, we claim that languages can be categorised into two types in the way of interpreting SP events. One language allows SP to project TP inside, which may be used to signal its temporal relation, and another does not. The latter type of languages resorts to other means to assign SPs an appropriate temporal relation relative to the matrix tense.
[T is necessary in Mongolian resultatives]

John ene metal-ig [\text{T}_r(\text{helber n'}) havtgai bol-tol] davt-san.

John this metal-ACC shape 3.POSS flat(Adj) become-CVB hammer-PST

“John hammered the metal, as a result its shape became flat.”

[T is necessary in Mongolian depictives]

a. [TP type depictive]

John Mary-g [\text{T}_p (biye-n') nuzgen bai-h-d-n'] shalga-san.

John Mary-ACC body-3.POSS naked be-INF-DAT-3.POSS examine-PST

“John saw Mary while her body was naked.”

b. [Small clause type depictive]

John Mary-g [\text{SC} (*biye-n') nuzgen] shalga-san.

John Mary-ACC body-3.POSS naked examine-PST

“John examined Mary naked.”

[No T in English resultative clause (Guéron & Hoekstra,1995)]

a. John hammered the metal [(*its shape) flat]

b. *The dog bit the cat [miss the mouse].

[No T in English depictive clause]

c. John hit Mary (*her body) naked.

(4) The magician microwaved the meat raw.

(Resultative reading is possible, when there is a right context.)

(5) John hit Mary sober.

(a) resultative ‘John hit Mary, as a result she became sober.’

(b) depictive ‘John hit Mary, while s/he was sober.’

(6) a. <No T in Japanese resultatives>

*Taroo-ga kuruma-o [\text{SC}(*hyoomen-ga) pikapika-ni] migai-ta

Taro-NOM car-ACC surface-NOM shiny-ni polish-PST

“Taro polished a car (its surface) into a brilliant shine.”

b. <No T in Japanese depictives>

*Taroo-ga suupu-o [\text{SC}(*ondo-ga) atuatu-de] non-da

Taro-NOM soup-ACC temperature-NOM hot-de drink-PST

“Taro drank the soup (its temperature) hot.”

Partial *wh*-movement revisited: a microcomparative perspective

**Overview** This talk proposes a novel, unified account of partial *wh*-movement (or *wh*-scope marking) in *wh*-questions ( *wh*-Qs) and relative clauses (RCs) in varieties of Dutch.

**Data** It is well known that certain varieties of Dutch exhibit partial *wh*-movement in long *wh*-Qs that question a person (*wie ‘who’*), cf. (1a). The results from a recent large scale survey in the Dutch speaking language area show that more or less the same patterns are attested in long RCs with the neuter gender human RC head *meisje* ‘girl’, cf. (1b); the marginal status of *wat-wie* in (1b) is most likely related to the observation that *wie* is not commonly used as a relative pronoun to the antecedent *meisje*.

**Long-distance extraction** I take all long A-bar dependencies to be derived by successive-cyclic movement via SpecCP of (part of) the interrogative/relative pronoun (A-bar pronoun), as in (2a). For linearization purposes, all copies but the highest copy of the A-bar pronoun must delete at PF (Nunes 2004), as illustrated in (2b) and exemplified by (3).

**The structure of pronouns** I assume that pronouns (i) have internal structure (cf. Cardinaletti & Starke 1999, Déchaine & Wiltschko 2002 a.o.), and (ii) spell out phrases/non-terminals (cf. Weerman & Evers-Vermeul 2002, Neeleman & Szendröi 2007 a.o.). I propose that the internal structure of A-bar pronouns (DPs) includes an operator that is located in the specifier of the pronoun (cf. Szabolcsi 1994), as illustrated in (4).

**Subextraction and double spell out** When an A-bar pronoun in a long A-bar dependency has reached the embedded CP domain, two possibilities emerge: either the whole pronoun (containing the operator that triggers movement) moves up (*pied piping*) as in (2a), or only the operator itself moves up as in (5a) – the pronoun and the operator in its specifier being *equally local* to the probe for operator movement in the higher CP. In the latter scenario, the operator is spelled out in its final landing site, the higher SpecCP (i.e. the operator becomes PF visible when subextracted). Since deletion of the pronoun that is left behind by subextraction of the operator in the lower SpecCP would lead to a *recoveryability* problem, it needs to be spelled out, and in doing so, a violation of the *Condition on Extraction Domain* (Huang 1982) is circumvented. This particular means to salvage an otherwise illicit step in the derivation, I call *rescue by PF spell out* – the logical counterpart of *rescue by PF deletion* (Bošković 2011). As spell out of the pronoun subsumes spell out of the operator, the intermediate chain link will always surface as a full pronoun, as illustrated in (5b).

**Lexicalization** The operator is spelled out as *wat – wat* being the most underspecified A-bar pronoun in Dutch (cf. Postma 1994 a.o.). The pronoun in the left periphery of the lower clause is spelled out as *wie* or *die*. These pronouns are shown to be equally suited to spell out a structure that contains an operator and (at least) a [human] feature (assuming a late insertion model of morphology, cf. Halle & Marantz 1993). This explains their interchangeability in (1).

**Ungrammatical patterns** The reverse patterns in (1) are not (or only very marginally) attested, as can be seen in (6). Their ungrammaticality is explained in terms of a violation of the Inclusiveness Condition (Chomsky 1995:228): to derive the patterns in (6) structure and features would have to be added during the course of the derivation (cf. Barbiers et al. 2009).

**Predictions and alternative analyses** It will be shown that the proposed analysis (i) correctly predicts the difference between full *wh*-movement and partial *wh*-movement with respect to intervention effects, e.g. (7); (ii) can successfully be extended to account for different patterns of partial *wh*-movement involving PPs (8a) and complex *wh*-phrases (8b), in part by adopting the notion of *concord* (cf. Den Dikken 2009): the subextracted operator may share some features with the phrase it extracts from (a [human] feature in (8)), as a result of which it may surface as a form different from *wat* (*wie* in (8)); (iii) fares better – on empirical grounds – than the account of similar data by Barbiers et al. (2009); and (iv) fares better than any *indirect dependency approach* to partial *wh*-movement, as it can be shown to be difficult, if not impossible, to get the nature of the most deeply embedded clause right (e.g. it cannot be a question given that partial *wh*-movement can feature *die* and seems to occur in RCs).

**Conclusion** The presence or absence of partial *wh*-movement is thus reduced to the availability of *subextraction* (or *pied piping*), cf. Koster (2000), Koopman & Szabolcsi (2000), Barbiers et al. (2009). If the proposed analysis is on the right track, not all variation can be reduced to the lexicon or PF; some variation must be dealt with in syntax (*pace* Chomsky 1995). The remainder of the talk explores the potential of reducing the effects of subextraction/pied piping to PF.
Eefje Boef (ZAS Berlin)

(1) a. \% wat denk je <wie/die> het gedaan heeft?
   what think you who/REL.PRON it done has
   ‘Who do you think has done it?’

b. \% het meisje wat ik denk <?wie/die> het gedaan heeft
   the girl what I think who/REL.PRON it done has
   ‘the girl who I think has done it’

(2) a. \[CP pronoun1 ... CP pronoun1 ... pronoun1 ... \]

b. \[CP pronoun1 ... CP pronoun1 ... pronoun1 ... \]

(3) Wie denk je <wie> dat wie het gedaan heeft?
   who think you that it done has
   ‘Who do you think has done it?’

(4) DP = e.g. wie, die

   operator

   D

   D^0

   PhiP

   Phi^0

   NP

   Ø

(5) a. \[CP operator1 ... CP pronoun1 ... pronoun1 ... \]

b. \[CP operator1 ... CP pronoun1 ... pronoun1 ... \]

(6) a. <?*wie/*die> denk je wat het gedaan heeft?
   who/REL.PRON think you what it done has

b. <? het meisje <wie/die> ik denk wat het gedaan heeft
   the girl I who/REL.PRON think what it done has

(7) a. Wie denk je niet dat zij uitgenodigd heeft?
   who you not that she invited has
   ‘Who don’t you think that she invited?’

b. *Wat denk je niet wie zij uitgenodigd heeft?
   what you not who she invited has

(8) a. \% <wat/wie> denk je welke jongen het gedaan heeft?
   what/who think you which boy it done has
   ‘Which boy do you think has done it?’

b. \% <wat/wie> denk je op wie hij verliefd is?
   what/who think you on who he love is
   ‘Who do you think he is in love with?’

Why Is Integrated Parenthetical Integrated?

The present paper investigates a less-studied interrogative sentence in Russian, German and Japanese: Integrated Parenthetical Constructions (IPCs). Gelderen (2001) analyzes the example in (1) as a kind of IPCs. This construction shows three different properties from what she calls Construction B, the real instance of Partial Wh-movement: a) IPCs do not allow the presence of an overt complementizer (2), b) IPCs allow a preposing of the ‘apparently embedded’ interrogative clause (3), and c) IPCs do not allow for more than two clauses (4). Although her analysis is based on the similarities to the German counterpart of IPCs, why IPCs have these three properties still requires an explanation. In this paper we will propose that these properties are derived from two assumptions concerning the nature and internal structure of wh-phrases in Russian, German and Japanese. Specifically, assuming that wh-phrases in these languages are morphological triggers to create a set of alternatives and also that associated interrogative clauses function as a restrictor, we will argue that wh-phrases have a layered internal structure, as in (5), each element of which is taken to correspond to a particular object in semantic representation.

Assuming that the operator and the restrictor are configurated like (5), the property (a) can be considered to be one of the concord phenomena; that is, several wh-elements contribute to one question. A wh-stem merged firstly with a question operator is realized as kak ‘how,’ which triggers a creation of alternative set. Then the associated interrogative clause restricts the domain of alternatives. The presence of an overt complementizer is semantically incompatible with the notion of alternatives. The property (b) can now be reanalyzed as an instance of a large-scale pied-piping; kogo ja videla kak moves to the sentence initial position as one wh-phrase with a rich internal structure. Lastly, the property (c) can be directly accounted for by the proposed internal structure; a wh-stem with an operator affixed is not locally merged with the associated interrogative clause.

The present analysis gains additional support from cross-linguistic evidence. Japanese also has an Integrated Parenthetical Cnstruction (6a) as well as a long-distance wh-question (6b). Like Russian and German, IPCs in Japanese do not allow the presence of the overt complementizer, as illustrated in (7). As for the property (b), Japanese, a strict SOV language, exhibits a mirror image effect to Russian and German. While the associated interrogative clause in IPCs can be post-posed (8a), the embedded clause in long-distance wh-questions cannot (8b). The example in (9) exemplifies the impossibility of multiple embedding in Japanese IPCs. Although Japanese permits almost unlimited freedom of word order, IPCs display a peculiar word order restriction. If the scope-marker doo is reordered to the left of its associate clause, the sentence is degraded, as indicated in (10). This word order restriction is also derived from the proposed structure of wh-phrases.

In summary, assuming that wh-phrases have a rich internal structure, we can offer a unified account for IPCs in Russian, German and Japanese. The difference between Russian and German, on the one hand, and Japanese, on the other, does not reflect the availability of wh-movement operation but it is the result of differing instantiations of a parameter that specifies the possible size of checking phrases; both a wh-stem and a large-scale wh-phrase in Russian and German, while only a large-scale pied-piping of a wh-phrase containing a wh-stem and its associated interrogative clause in the case of Japanese. The present analysis also opens the way for a possible typological correlation: only the language that uses the same wh-stem to build questions and existential/universal quantifiers has the Integrated Parenthetical Constructions.

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Data

(1) Kak ty dumaesh kogo ja videla? (Russian)
   how you think who I see-PAST
   ‘Who do you think I saw’
(2) Kak ty dumaesh (’chto) kogo ja videla? (R)
   how you think (that) who I see-PAST
(3) a. [Kogo ja videla], [kak ty dumaesh]?
   who I see-PAST how you think
   b. Wird er morgen kommen, was glaubst du? (German)
   will he tomorrow come what believe you
   ‘Will he come tomorrow, do you think?’
(4) a. *Kak ty dumaesh [(kak) Ivan skazal [kogo ja videla]]?
   how you think how Ivan said who I see-PAST
   ‘Who do you think Ivan said I saw?’
   b. Was (’glaubst sie er meint) eird er mogren tun? (G)
   what believes she he thinks will he tomorrow do
   ‘What does she believe he thinks he will do tomorrow?’
(5) [DP [Restrictor …] [Op Operator [wh -stem]]]
   you-TOP John-NOM who-ACC loves Q how think Q
   ‘Who do you think that John loves?’
   b. Anata-wa [John-ga dare-o aisiteiru to] omotteiru no? (J)
   you-TOP John-NOM who-ACC love COMP think Q
(7) a. *Anata-wa [John-ga dare-o aisiteiru to] doo omotteiru no? (J)
   you-TOP John-NOM who-ACC love COMP think Q
   b. *Anata-wa [John-ga dare-o aisiteiru ka to] doo omotteiru no? (J)
   you-TOP John-NOM who-ACC love Q COMP how think Q
(8) a. Anata-wa doo omotteiru no, [John-ga dare-o aisiteiru ka] (J)
   you-TOP how think Q John-NOM who-ACC love Q
   b. Anata-wa omotteiru no, [John-ga dare-o aisiteiru to] (J)
   you-TOP think Q John-NOM who-ACC love COMP
   you-TOP John-NOM who-ACC loves Q Mary-NOM how said Q how think
   no? (J)
   Q
   ‘Who do you think Mary said John loves?’
(10) *anata-wa doo [John-ga dare-o aisiteiru ka] omotteiru no? (J)
    you-TOP how John-NOM who-ACC love Q think Q
    ‘Who do you think that John loves?’

References
Netherlands 2001, 89-100.
Reis, Marga. 2000. “On the Parenthetical Features of German Was … W-Constructions and
How to Account for Them,” In U. Lutz, G. Müller and A. von Stechow, eds., Wh-Scope
Marking, Benjamins, Amsterdam, 359-407.