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# GLOW Newsletter & Conference Handbook

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## INTRODUCTION

Welcome to the 66th GLOW Newsletter and Conference Handbook, to accompany the 34th GLOW Conference, taking place this year in Vienna from April 27 through May 1.

The bulk of this newsletter comprises all the usual essential information for attending this year's extravaganza, with practical information starting on page 6, then the programmes for the Colloquium and all three workshops (pp. 11-15), and finally the alphabetically-arranged abstracts for all the talks that have been selected for presentation. Your attention is particularly drawn to three distinctive features of the Viennese programme. Firstly, the main Colloquium has a running theme, with talks and discussion focusing on the question of just how much of the grammar is syntactic in nature. Secondly, there will be two poster sessions taking place on the middle day of the Colloquium, with thirteen presentations apiece. And thirdly, the fun doesn't stop on Saturday this year, as the third workshop (*Identity in Grammar*) is taking place on Sunday 1st May, after the Colloquium has ended. It'll be well worth sticking around for, so no going home early, people…

We begin this Spring newsletter on a more poignant note, however. On the following pages, GLOW founder member Henk van Riemsdijk pays tribute to John-Roger Vergnaud, co-founder and co-author of the GLOW Manifesto, who passed away earlier this year.

Marc Richards

# Jean-Roger Vergnaud

**Valence, August 3 1945 – Los Angeles, January 31 2011**

In Jean-Roger Vergnaud, GLOW has lost one of its most remarkable figureheads. We mourn a unique personality, an intellectual giant, and one of the founding fathers of the organization. At the 1977 conference on bounded and unbounded dependencies in Amsterdam, discussions between Jean-Roger, Jan Koster and myself led to the conviction that conferences of this type should be organized in Europe every year and that an organization should be founded to make that happen. This was a reaction to the success and growth of generative linguistics in Europe in the 70s. To give GLOW an identity beyond the mere organizational, the three of us decided to write a kind of mission statement, which was published in the first GLOW Newsletter (1978) as the GLOW Manifesto, a text that sparked considerable controversy but gave GLOW the important position that it still occupies in our field. As one of the spiritus rectores of GLOW, Jean-Roger will remain among us for a long time to come.

Jean-Roger Vergnaud graduated from the famous École Polytechnique, from which he majored in mathematics and where, simultaneously, he served as an officer in the French Air Force. He went on to graduate school in linguistics at MIT and got his Ph.D. in 1974. His dissertation, directed by Morris Halle, presented a powerful argument in favor of the raising analysis of (French) relative clauses. Indeed, this type of raising has become known as 'Vergnaud Raising'. After faculty appointments at the University of Massachusetts, Amherst and the University of Maryland at College Park, he came to the University of California, where he held the Andrew W. Mellon Professorship of Humanities.

In 1985/86, we were lucky to have Jean-Roger, together with his wife Maria Luisa Zubizarreta, for a year as a guest professor at Tilburg University. It was during this period that I enjoyed the most intensive personal and professional interaction with him. In our discussions, I often felt dwarfed by his vast knowledge, his fast thinking, and the unexpected and sometimes elusive directions that his thinking took us. In the acknowledgements of his dissertation, he uses the term πολύμητις to characterize his fellow student Roger Higgins, but to my mind this term even more appropriately applies to Jean-Roger himself. I was and remain particularly impressed by the fact that he firmly held on to the belief that it is important and possible to study both phonology and syntax and to explore the ways in which they can be seen to share abstract mathematical properties.

This was the time when his book "Dépendances et niveaux de représentation" (1985) had just appeared, and when he was working with Morris Halle on the "Essay on Stress" (1987). He saw connections where nobody else could even suspect them. In this, his mathematical mind guided him. Perhaps one of the most impressive examples (though I still suspect I understand at best half of what he is saying) is his article "On a certain notion of 'occurrence': the source of metrical structure and of much more". In this study, Jean-Roger shows that, at an appropriate level of abstraction, the metrical structure of phonological objects, generally held to be flat, and the hierarchical, recursive structure of syntactic objects can be seen to be fundamentally identical, permitting, for example, the unification of locality in the two domains.

The time with Jean-Roger in Tilburg was exciting and immensely enjoyable. It created the opportunity to be friends in the most down-to-earth sense of the word. He had a tendency to be a bit of a recluse, which made it hard to keep a long-distance friendship alive, but in Tilburg we had lots of fun together on a day by day basis. We drank lots of Belgian beer, accompanied by cold Dutch meatballs, just the type of junk food that he would normally give a very wide berth to. It was at such times that he generously revealed what he often liked to hide behind a veil of austerity and shyness: his heart of gold. Jean-Roger deserves to have a permanent place in our hearts and in our minds.

Henk van Riemsdijk
Arezzo, February 9 2011

## CHANGES TO THE BOARD

The current composition of the GLOW Board is given in the table below.

| | | |
|---|---|---|
| Congress President | Martin Prinzhorn | 2010-2011 |
| Chairperson | Sjef Barbiers | 2009-2011 |
| Secretary | Jeroen van Craenenbroeck | 2009-2011 |
| Treasurer | Maaike Schoorlemmer | 2009-2011 |
| Newsletter Editor | Marc Richards | 2010-2012 |
| Journal Editor | Harry van der Hulst | |
| Website Manager | Gunnar Hrafn Hrafnbjargarson | 2010-2012 |
| Member A | Anna Cardinaletti | 2010-2012 |
| Member B | Lida Veselovska | 2009-2011 |
| Member C | Viola Schmitt | 2009-2011 |
| Member D | Maria Rosa Lloret | 2010-2012 |
| Advisory member 1 | Henk van Riemsdijk | |
| Advisory member 2 | Martin Everaert | |
| Co-opted member (Phonology) | Tobias Scheer | 2009-2011 |

Every year, several positions come up for renewal. Nominations are normally sent directly to the Chair, who accepts until January 1st. The GLOW Board wishes to remind GLOW members to be thinking about who they would like to represent them on the board in the future, and to nominate those people in good time.

For the coming year, the Board has made or received the following nominations:

- Sjef Barbiers (re-election for Chairperson)
- Jeroen van Craenenbroeck (re-election for Secretary)
- Maaike Schoorlemmer (re-election for Treasurer)
- Lida Veselovska (re-election for Member B)
- Viola Schmitt (re-election for Member C)
- Tobias Sheer (re-election for Co-opted member for Phonology)

**Welcome to GLOW 34, Vienna**

**General information** The 34th annual GLOW-colloquium is organized by the Department of Linguistics of the University of Vienna. It will be held in Vienna from April 28 to 30, 2011. The topic of this year's colloquium is *'How much syntax is there in grammar?'*. The program features 20 oral presentations and two poster sessions with 13 presentations each.

In addition there will be three workshops: the semantic workshop *Intervention effects from a semantic perspective* organized by Doris Penka (University of Konstanz) & Arnim von Stechow (University of Tübingen) features three invited speakers: Sigrid Beck (University of Tübingen), Elena Guerzoni (USC), and Márta Abrusán (University of Oxford). The workshop will take place on April 27, 2011.

The prosody workshop *On the phonological marking of focus and topic* organized by Edwin Williams (Princeton University) has the following invited speakers: Daniel Büring (University of Vienna), Elisabeth Selkirk (University of Massachusetts, Amherst), and Michael Wagner (McGill University). It takes place on the same day as the semantic workshop.

Finally the workshop on *Identity in Grammar* organized by Martin Prinzhorn (University of Vienna), Henk van Riemsdijk (Arezzo), and Viola Schmitt (University of Frankfurt) has invited Jonathan Bobaljik (University of Connecticut, Storrs), Martin Hackl (Massachusetts Institute of Technology), Philippe Schlenker (Institut Jean-Nicod, NYU), Moira Yip (University College London), and Edwin Williams (Princeton University). It will take place on May 1, 2011.

**Conference site** The registration/reception and the workshops on intervention and on intonation (April 27) will take place in the Department of Linguistics in Sensengasse 3a, 1090 Wien. The colloquium (April 28-30) and the workshop on identity (May 1) will take place in auditorium C1 (Hörsaalzentrum C) in court 2 of the campus of the University of Vienna. You can see the location of the auditorium on the campus marked by the arrow pointing to building 2.6 on the map below. Another arrow points to the location of the department of linguistics in Sensengasse 3a just north of the campus. The map includes useful information on transportation and other infrastructure.

**Innercity transportation** The fastest way to move around the city is the underground/tram/bus network. Vienna has five underground lines (U1, U2, U3, U4, U6). The two conference sites are closest to underground station *Schottentor* connected to U2. There you can change to tram lines taking you directly to the respective site. The department of linguistics can be be reached by tram lines 37, 38, 40, 41, and 42. The closest station when coming from *Schottentor* is *Schwarzspanierstraße*. The closest station when coming from the other direction is *Sensengasse*. The campus can be reached by tram lines 5, 43, and 44 stopping at station *Lange Gasse*. Line 5 runs to train station *Wien Westbahnhof*. The latter two lines run to underground station *Schottentor*.

Ticket prices are the same for all underrground, tram and bus lines. A single ticket is 1.80 EUR if you buy it at one of the ticket vending machines. There are better options for a longer stay with frequent uses of public transportation, though. The 24-, 48- and 72- hour tickets (5.70, 10.00, 13.60 EUR, respectively) are valid for the respective time from the time you stamp them. They are an option to consider should you anticipate to use the public transportation system at least three times a day. Another option, if you plan to stay longer than the duration of the conference, is the seven-day ticket ("Wochenkarte" - 14 EUR) that is valid from Monday morning to Monday 9.00 of the

following week (NOTE: if you stamp this ticket on a Sunday it will only be valid until the next day 9.00! So it would be useable for one day only!). Ticket vending machines are located at the entrance of every underground station.

**Travel information** The *Vienna International Airport* is located on the outskirts of Vienna. There are various transportation possibilities to and from Vienna:

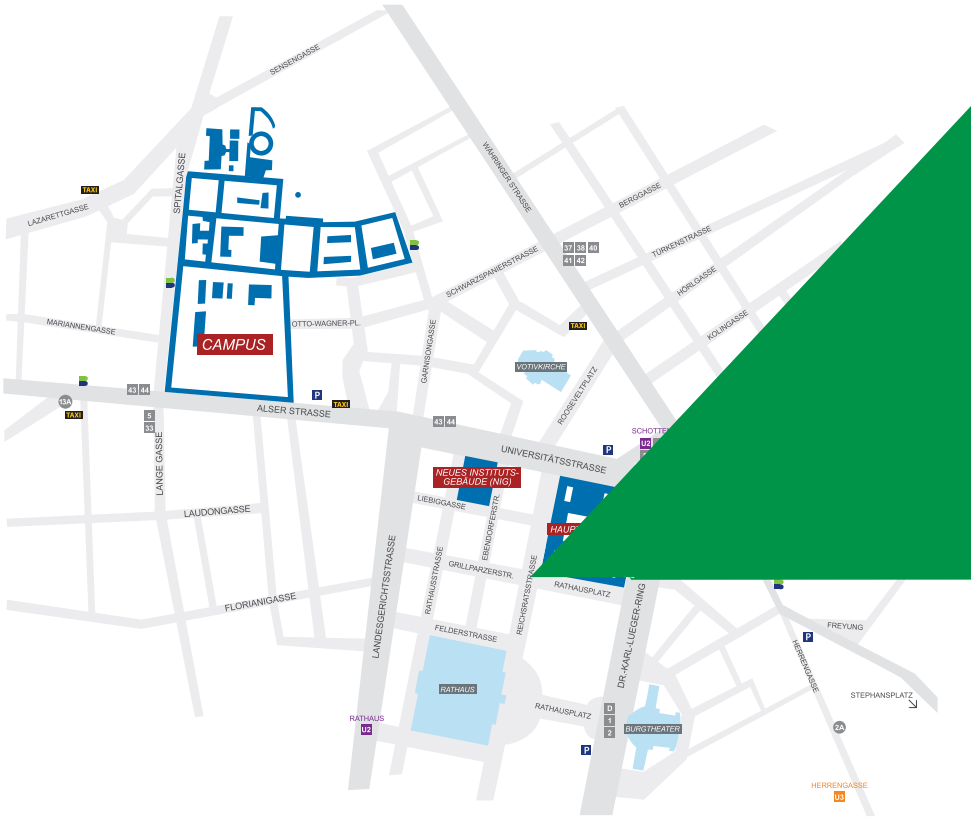
- by CAT (City Airport Train): The CAT connects the airport with the underground/train station Wien-Mitte (which is connected to the underground lines U3 and U4). Travel time is approximately 16 minutes, and costs are 9 EUR for a single ticket and 16 EUR for a return ticket. The CAT leaves every 30 minutes.
- by train (Schnellbahn S7): The S7 takes the same route as the CAT (to and from Wien-Mitte) but is a regional train operated by the Austrian railway service provider (ÖBB). Travel time is around 27 minutes and costs are 3.60 EUR one way. The S7 also leaves every 30 minutes.
- by bus (Vienna Airport Lines): There are three bus lines connecting the airport to the city. Of the two major lines, one connects the airport with Wien Schwedenplatz (which is connected to the underground lines U1 and U4) in the city center. The other connects the airport with the two main train stations Wien Westbahnhof (connected to U3 and U6), and Wien Meidling (connected to U6). Travel time is between 20 and 30 minutes and costs are 7 EUR for a single ticket and 12 EUR for a return ticket. Busses leave every 30 minutes.

Vienna has various railway stations. The most important ones are:

- *Wien Westbahnhof*, where trains coming from the west stop, connected to lines U3 and U6.

- *Wien Meidling*, where trains coming from the south and east stop. Some trains from the north also stop here. It is connected to the underground line U6.

**Map of university area** The map below shows the wider university area. Auditorium C1 is on campus. The department of linguistics is located in Sensengasse 3a just north of the campus.



**Accommodation** To get information on hotels, hostels and other accommodation variants, please contact the *Austrian National Tourist Office*: http://www.austria.info

The Austrian National Tourist Office also provides specific portals for many countries. To find the specific portal for your country, please open the link above. At the top of the page there is a small gray list of links, the first of which is "International: name of some country". When you click on the name of the country, you will be given a list of all supported countries.

**Registration** Everyone attending GLOW 34 (i.e., including all presenters) must be an active member of GLOW. For information on how to join go to
http://person2.sol.lu.se/GunnarHrafnHrafnbjargarson/GLOW/index.php?page=member
You will also be able to join GLOW upon registration onsite during the conference.

Further, everyone except oral presenters in the colloquium is required to register for the conference. Online registration is available through the following web address: http://homepage.univie.ac.at/glow34.linguistics/reg.html

Onsite registration will be possible on Wednesday, April 27 at 8.30 before the workshops and

# Program for GLOW 34 colloquium

**Wednesday, April 27 2011**

*registration and reception* at: Institut für Sprachwissenschaft
Sensengasse 3a
1090 Wien

**Thursday, April 28 2011**
**auditorium C1 on campus**
**1090 Wien**

| **time** | **title** | **speaker** |
|---|---|---|
| 8.30 | *registration* | |
| 9.00 | Parsimonious Merge: The Intricate Syntax of French Causatives and Their Clitic Distribution | Vincent Homer & Dominique Sportiche (UCLA) |
| 10.00 | Optional *Se*-Constructions in Romance: Syntactic Encoding of Conceptual Information | Cinzia Campanini & Florian Schäfer (University of Stuttgart) |
| 11.00 | *coffee break* | |
| 11.30 | On Possibility Modals and NPI Licensing | I-Ta Chris Hsieh (University of Connecticut Storrs) |
| 12.30 | (Partially) free to vary | Anamaria Falaus (University of the Basque Country) |
| 13.30 | *lunch break* | |
| 14.30 | Mapping phonology to syntax: evidence from two wh-in-situ languages | Lisa Cheng (Leiden University) & Laura Downing (ZAS) |
| 15.30 | Linguistic rhythm guides syntactic structure building – reading data and an OT-style processing model | Gerrit Kentner (Goethe-Universität Frankfurt) |
| 16.30 | *coffee break* | |
| 17.00 | Patterns of Prosodic Prominence in English Intransitive Sentences | Aron Hirsch & Michael Wagner (McGill University) |
| 18.00 | *GLOW business meeting* | |

20.00 *party* at Schutzhaus auf der Schmelz
Auf der Schmelz 4
1150 Wien

**Friday, April 29 2011**
**auditorium C1 on campus**
**1090 Wien**

| time | title | speaker |
|---|---|---|
| 9.00 | Functional categories: FLN or FLB? | Rose-Marie Dechaine (University of British Columbia) & Mireille Tremblay (Université de Montréal) |
| 10.00 | Optimality is not a Race: Against a Performance-Based View of Reference-Set Computation | Thomas Graf (UCLA) |
| 11.00 | *coffee break* | |
| 11.30 | Connecting to Illocutionary Force. A Theoretical and Experimental Study of the German Discourse Particle *denn* | Josef Bayer, Markus Bader (University of Konstanz), Jana Häussler (University of Potsdam) & Simon Hopp (University of Konstanz) |
| 12.30 | What is dependent Case dependent on? A case study from Slavic | Ivona Kučerová (McMaster University) |
| 13.30 | *lunch break* | |
| 14.30 | poster session 1 | *program see below* |
| 15.30 | Reducing PRO: a Defective Goal Analysis | Inna Livitz (New York University) |
| 16.30 | *coffee break* | |
| 17.00 | Locating Agreement in Grammar | Rajesh Bhatt & Martin Walkow (University of Massachusetts at Amherst) |
| 18.00 | poster session 2 | *program see below* |

**Saturday, April 30 2011**
**auditorium C1 on campus**
**1090 Wien**

| time | title | speaker |
|---|---|---|
| 9.00 | Some formal conditions on logical syntax | Winfried Lechner (University of Athens) |
| 10.00 | A new argument for Small Clauses | Keir Moulton (McGill University) |
| 11.00 | *coffee break* | |
| 11.30 | Decomposing Blackfoot Proclitics | Heather Bliss (University of British Columbia) &<br>Bettina Gruber (Utrecht University) |
| 12.30 | Vagueness, Universal Quantification and the Syntax-Pragmatics Interface | Heather Burnett<br>(UCLA) |
| 13.30 | *lunch break* | |
| 14.30 | The Spurious NP ellipsis of Hungarian | Éva Dékány<br>(University of Tromsø, CASTL) |
| 15.30 | On COMP-t Effects in Spanish: A New Argument for Rescue by PF-Deletion | Julio Villa-García<br>(University of Connecticut Storrs) |
| 16.30 | *coffee break* | |
| 17.00 | Rescue by PF deletion, intervention effects, and head movement | Željko Bošković<br>(Universtiy of Connecticut Storrs) |

**Alternates**

| rank | title | speaker |
|---|---|---|
| 1 | Impossible predicates | Peter Graff & Jeremy Hartman (MIT) |
| 2 | Getting rid of uninterpretable features: blind movement and Justification | Gary Thoms (Strathclyde University) |

**Poster session 1**

| title | speaker |
|---|---|
| Agent-oriented adverbs = Individual-level predicates(e) | Bryan Leferman (University of the Basque Country) |
| The Composition and Interpretation of *Tough* Movement | Shoichi Takahashi (Nihon University) |
| If-clauses and (c)overt adverbs of quantification revisited | Elena Herburger (Georgetown University) & Simon Mauck (Maagha Press) |
| How much syntax is there in Metalinguistic Negation? | Ana Maria Martins (University of Lisbon) |
| Nalle Wörter werden Brüder: explaining a universal lexical gap | Hedde Zeijlstra (University of Amsterdam) |
| The syntax and semantics of *be like* quotatives | Bill Haddican (CUNY Queens College/University of York), Eytan Zweig (University of York) & Daniel Ezra |
| The Syntax-Information Structure Interface in Korean | Reiko Vermeulen (Ghent University) |
| Arguments against a purely feature geometric analysis of pronominal meanings | Sarah Zobel (Georg-August Universität Göttingen) |
| Piecing together predicate transfer | Orin Percus (University of Nantes) |
| A new perspective on (long) A'-dependencies | Eefje Boef (Meertens Instituut) & Irene Franco (Universiteit Leiden) |
| No syntax for focus marking | Giorgos Spathas (University of Utrecht) |
| Towards a unified analysis of modal existential wh- constructions and purpose clauses | Radek Šimík (Potsdam University) |
| A syntactic feature-calculus and double-access analysis for indexical shift in Tamil | Sandhya Sundaresan (University of Tromsø(CASTL)/Stuttgart) |

**Poster session 2**

| title | speaker |
|---|---|
| Template-induced Tone Sandhi in Northern Chinese Dialects - A Top-down Approach | Te-hsin Liu (National Taiwan Normal University) |
| Degree Cognate Objects with Unaccusative Verbs in English and Spanish | Isabel Oltra-Massuet (CCHS-CSIC) |
| Decomposing merge and move to make room for adjunction | Tim Hunter (Yale University) |
| Strong Resultative as a PathP Construction | Takeru Suzuki (Tokyo Gakugei University) |
| Dative-nominative alternations and the place of Case in Grammar | Artemis Alexiadou(University of Stuttgart), Elena Anagnostopoulou (University of Crete) & Christina Sevdali (University of Ulster) |
| German Pertinence Datives revisited | Solveig Bosse (University of Delaware) |
| Syntax Drives Morphological Impoverishment of Clitics | Martin Walkow (University of Massachusetts at Amherst) |
| Relative Clauses from the Input. Syntactic Considerations from a Corpus-based Analysis of Italian | Adriana Belletti & Christiano Chesi (University of Siena) |
| The ordering of operations in the morphological component: two case studies | Erik Schoorlemmer (MIT) |
| To phrase or not to phrase: on the (non-)congruence of focus and prosody | Laura J. Downing (ZAS) |
| Syntax is not an Innocent Bystander: "Autonomous" Morphemes are Underlearned | Andrew Nevins & Cilene Rodrigues (UCL) |
| Ordering Restrictions in Two Dialects of Aymara | Sara Mackenzie (McGill University) |
| All datives originate low: direct and indirect evidence | Dimitris Michelioudakis (University of Cambridge) |

# Program for workshop on the phonological marking of focus and topic

**Wednesday, April 27 2011**
**Department of Linguistics**
**Sensengasse 3a**
**1090 Wien**

| time | title | speaker |
|---|---|---|
| 8.30 | *coffee and registration* | |
| 8.50 | *opening remarks* | Edwin Williams |
| 9.00 | The phonology of Focus, New and Given: English and beyond *(invited talk)* | Elisabeth Selkirk (University of Massachusetts Amherst) |
| 10.00 | Interaction of tone and intonation in Lhasa Tibetan: A working hypothesis | Irina Monich (University of Connecticut) |
| 10.45 | *coffee break* | |
| 11.15 | Unexpected prosodic marking of focus in Akan - the case of tonal lowering | Frank Kügler & Susanne Genzel (Potsdam University) |
| 12.00 | Focus as phrasing in Georgian | Caroline Féry (Goethe University Frankfurt) & Skopeteas Stavros (Potsdam University) |
| 12.45 | *lunch break* | |
| 14.15 | Shifting Prominence: Grammatical Factors, Cross-linguistic Differences *(invited talk)* | Michael Wagner (McGill University) |
| 15.15 | Focus (non-)realization in Ngamo (West Chadic) | Susanne Genzel & Mira Grubic (Potsdam University) |
| 16.00 | *hot chocolate and pastries* | |
| 16.30 | To Phrase or Not to Phrase: The Effect of Focus in Standard Chinese | Yiya Chen (Leiden University Center for Linguistics) |
| 17.15 | Topics in Questions *(invited talk)* | Beste Kamali & Daniel Büring (University of Vienna) |
| 18.15 | *General discussion* | |

**Alternate**

| title | speaker |
|---|---|
| Focus as Prosodic Alignment | Caroline Féry<br>(Goethe University Frankfurt) |

# Program for workshop on Intervention Effects from a Semantic Perspective

**Wednesday, April 27 2011**
**Department of Linguistics**
**Sensengasse 3a**
**1090 Wien**

| time | title | speaker |
|---|---|---|
| 8.30 | *coffee and registration* | |
| 9.00 | *opening remarks* | Doris Penka (Universität Konstanz) & Arnim von Stechow (Universität Tübingen) |
| 9.15 | tba. *(invited talk)* | Sigrid Beck (Universität Tübingen) |
| 10.15 | *coffee break* | |
| 11.00 | A new intervention effect with 'only' – additional evidence for a distributed syntax-and semantics of scalar 'only' | Daniel Hole (Universität zu Köln) |
| 11.45 | Semantic and Syntactic Analyses of Intervention Effects in Pied-Piping: A Sentence Rating Experiment | Seth Cable & Jesse Harris (University of Massachusetts, Amherst) |
| 12.30 | *lunch break* | |
| 14.00 | tba. *(invited talk)* | Elena Guerzoni (University of Southern California) |
| 15.00 | On the Dependent Character of Licensing | Vincent Homer (UCLA/ENS-DEC) |
| 15.45 | *coffee break* | |
| 16.30 | On Factive and Wh-Islands *(invited talk)* | Márta Abrusán (University of Oxford) |
| 17.30 | *General discussion* | |

# Program for workshop on Identity in Grammar

**Sunday, May 1 2011**
**auditorium C1 on campus**
**1090 Wien**

| time | title | speaker | chair |
|---|---|---|---|
| 08.30 | *registration* | | |
| 09.00 | Opening address | Henk van Riemsdijk | Viola Schmitt |
| 09.15 | Linguistic and non-linguistic identity effects: same or different? *(invited talk)* | Moira Yip (University College London) | Viola Schmitt |
| 10.15 | *break* | | |
| 10.45 | The Copy Theory of Merge *(invited talk)* | Edwin Williams (Princeton University) | Martin Prinzhorn |
| 11.45 | On donkey anaphora *(invited talk)* | Philippe Schlenker (Institut Jean-Nicod, New York University) | Martin Prinzhorn |
| 12.45 | *lunch break - catered on the premises* | | |
| 13.45 | Unifying OCP and Minimality: mutual exclusion and doubling in morphosyntax | Rita Manzini (Firenze) | Marc van Ostendorp |
| 14.25 | Consonant identity in Arabic (dialect) phonology: Elemental! | Alex Bellem (University of Salford) | Marc van Ostendorp |
| 15.05 | Contrastiveness, the basis of identity avoidance | Kuniya Nasukawa & Phil Backley (Tohoku Gakuin University) | Marc van Ostendorp |
| 15.45 | *break* | | |
| 16.15 | Exploring the limitations of identity effects in syntax | Artemis Alexiadou (Universitiy of Stutgart) | Thomas Ede Zimmermann |
| 16.55 | Agreement with coordinate phrases: morphosyntactic vs semantic identity | Katalin É. Kiss (Hungarian Academy of Sciences) | Thomas Ede Zimmermann |
| 17.35 | Identity problems. When two are the same but they shouldn't | Carlo Cecchetto (Università degli Studi di Milano-Bicocca) & Caterina Donati (Università di Urbino) | Thomas Ede Zimmermann |
| 18.15 | *break* | | |
| 18.45 | tba. *(invited talk)* | Martin Hackl (MIT) | Daniel Büring |
| 19.45 | "Vue d'ensemble" *(invited talk)* | Jonathan Bobaljik (University of Connecticut) | Henk van Riemsdijk |
| 20.45 | *drinks and dinner in a restaurant on the premises* | | |

**Alternates**

| rank | title | speaker |
|---|---|---|
| 1 | Identity effects within the M-word domain | Karlos Arregi (University of Chicago) & Andrew Nevins (University College London) |
| 2 | Identity avoidance without phonology: possession and relativization in Semitic | Mary Ann Walter (Middle East Technical University) |

**On Factive and Wh-Islands**

Márta Abrusán (University of Oxford)

This talk develops a theory that can explain the unacceptability of factive and wh-islands. It argues that the oddness of such sentences follows from independently necessary principles of semantic composition rather than abstract syntactic locality constraints. As such, it fits into the family of proposals (most importantly Szabolcsi and Zwarts 1993, Honcoop 1998, Rullmann 1995, Fox and Hackl 2007) that have argued that the correct treatment of at least some weak island phenomena has to be semantic. These, however, concentrated on certain quantificational and/or negative islands, leaving factive and wh-islands largely unexplained. The central claim made is that the unacceptability of these islands follows from the fact that they lead to a contradiction. It is proposed that factive islands arise because manner and degree questionsbut not questions about individualstrigger a presupposition that is contradictory. As no context can entail a contradictory proposition, these questions always lead to presupposition failure. In the case of wh-islands a contradiction arises in a different manner: Here the condition according to which questions must have a unique most informative answer (cf. Dayal 1996, Fox and Hackl 2007) cannot be met. Therefore, the statement for any potential answer that it is the complete (exhaustive) answer to such questions is bound to state a contradiction. Examining the nature of the contradiction that arises in the cases of weak island violations it is observed that it is only a special type of contradiction, namely one that results independently of the content of the non-logical vocabulary that gives rise to unacceptability. Thus the analysis offered here provides further support for recent theories which argue that grammar has to be sensitive to certain logical properties (e.g. Chierchia 1984, Fox 2000, Gajewski 2002).

Artemis Alexiadou, Stuttgart

# Exploring the limitations of identity effects in syntax

**1.** In this paper we compare two recent proposals that deal with identity in syntax, namely Alexiadou & Anagnostopoulou (2001, 2007) and Richards (2010). Our aim is to explore the empirical coverage of these two approaches testing their limitations.

**2.** Alexiadou & Anagnostopoulou (2001, 2007 (A&A))) proposed that the condition in (1) regulates the availability of vP-internal subjects and objects across languages:

(1) *The subject-in-situ generalization (SSG)*
By Spell-Out, vP can contain only one argument with a structural Case feature.

Based on a comparison between Indo-European (IE) and Khoisan languages, these authors argued that (1) is a universal principle that regulates argument externalization. The condition in (1) forces dislocation of arguments as a consequence of a constraint on Case checking. This led to a different conception of the EPP suggesting that it should no longer be viewed as triggering movement of the external argument to Spec,TP, but rather EPP features provide landing sites for arguments (either subjects or objects) escaping the condition in (1). The formulation of (1) was based, among other things, on the behavior of English Quotative Inversion and French Stylistic Inversion (SI). We illustrate SI here (see Kayne & Pollock 1978; Déprez 1991; Collins & Branigan 1997; Watanabe 1996, among others). SI, which involves postposing of the subject in wh-questions, relative clauses and subjunctive sentential complement, is disallowed when the vP contains a direct object (2):

(2) *Je me demande quand acheteront les consommateurs les pommes
I wonder when will-buy the consumers-NOM the appples-ACC

If, however, the direct object itself is wh-extracted or cliticized SI becomes possible again:

(3) a. Que crois-tu que manquent un grand nombre d'etudiants?
what believe-you that be-absent-from a great number of students
b. Tes cours, a quelle occasion les ont manques un grand nombre d'etudiants?
your course at which occasion them-have been absent-from a great number of students

The object must either be moved out of the vP, as in (3), or surface as a PP, as in (4):

(4) ?Quand ecrira ton frere a sa petite amie?
when will write your brother to his little friend

The above facts motivated the generalization in (5), which follows from the SSG:

(5) Subject-inversion with vP-internal subjects is prohibited in the presence of vP-internal DP objects.

**3.** Richards (2010) develops a general theory of 'syntactic OCP' (cf. Hoekstra 1984, Mohanan 1994, Yip 1998, Antilla and Fong 2001, Riemsdijk 2008 for previous such proposals), (6):

(6) *Distinctness:* If a linearization statement <a, a> is generated, the derivation crashes.

According to (6), syntactic nodes with the same label must not be located too close together in the tree: they must be separated by a phase boundary, or else they cannot be ordered w.r.t. each other. Richards further explores different ways of becoming distinct such as (a) adding structure via Ps in e.g. nominalizations *the destruction <u>of</u> the city* and (b) bearing/introducing distinct case morphology as in morphologically rich languages (German) and differential case marking languages (Spanish *a*). From this perspective, the ungrammaticality of (2) is a case of linearization failure: two DPs are included within a strong phase. When, however, the DP object becomes sufficiently distinct as in (4), then linearization is possible. The movement operations in (3) can also be seen as Distinctness-driven: they keep the two argument DPs (subject and object) in separate Spell-Out domains (cf. Moro 2001).

**4.** The idea that the SSG derives from (6) has obvious advantages. From a theoretical point of view, it is immediately explained why a constraint like (1) is imposed on syntactic derivations. On the empirical side, the effects of (1) are unified with a range of different phenomena that have received independent explanations in the literature (such as Doubl-*ing*, double infinitive filters, multiple sluicing; see Richards 2010 for details). However,

Distinctness faces a number of empirical as well as theoretical challenges. At the theoretical level, defining Distinctness across domains and languages is far from trivial. On the contrary, SSG, which is based on Case theory, is uniformly defined across languages for those domains that can be shown to be sensitive to properties of Case-checking/licensing. In other words, what counts as distinct differs within a language and across languages, while structural Case features are uniformly defined. For instance, consider *of*-insertion with the complements of adjectives, e.g. *proud of his father*. Adjectives also require prepositional objects, much like nominalizations do in English, a fact that follows from classic Case theory but is unexpected und Distinctness, since arguably the labels of A and N are sufficiently distinct. Second, there are systematic exceptions to Distinctness. Greek/Spanish/Romanian allow VSO orders with two vP-internal DPs, as discussed in A&A (2001). Distinctness could offer a solution suggesting that case morphology counts (see below). While Greek/Romanian have case morphology, albeit heavily syncretic, Spanish does not. Importantly, however, insertion of the special marker *a* in Spanish is conditioned by factors that poorly relate to Distinctness and rather have to do with the aspectual structure of predicates and structural Case (Torrego 1998). A further set of problems relates to in multiple sluicing and multiple wh-fronting. According to Richards, linearization in Japanese and German (7) is sensitive to features like [NOM], and [ACC], i.e. case morphology makes DPs distinct.

(7) Ich habe jedem Freund ein Buch gegeben, aber ich weiß nicht mehr wem welches
I have every friend a book given, but I know not anymore whom which

This predicts that these languages will not fall under SSG (a prediction apparently correct for German). This, however, raises the question as to the role of case morphology across languages, as it seems that in some languages [NOM] and [ACC] count for Distinctness but not in others. A related issue arises in the area of phonological identity and case syncretism in multiple sluicing and multiple wh-fronting languages. In German, phonological identity does not seem to be the key issue, i.e. (8) is ok:

(8) Ein Auto hat ein Haus zerstört, aber ich weiss nicht mehr **welches Auto welches Haus**
a car has a house destroyed, but I don't know any more which car which house

However, in Serbocroatian multiple wh-questions, identity and syncretism play the key role. It is not clear what regulates the parametric variation observed. We note here that in Greek, where the SSG does not hold, the counterpart of (8) is fine, supporting the idea that there is a correlation between the conditions on multiple sluicing and the SSG. This raises a more general question for Distinctness: why should morphological richness affect syntax? This is especially unexpected under views according to which morphology merely interprets syntax (Marantz 1991, Bobaljik 2006).

**5.** Finally, Khoisan languages pose a crucial challenge for Richards. In these languages a prepositional marker *ko* is obligatorily present in transitive constructions and absent in intransitives. (9), without *ko*, is out:

(9) **Uto dchuun-a /Kaece n!ana n!ang*
car hit-TRANS |Kaece road in 'A car hit Kaece in the road'

In order to account for this, Collins (2003) argues that *ko* is a Last Resort mechanism. It is inserted to provide a landing site for movement in constructions that would otherwise violate the *Multiple Case Condition (MCC),* a variant of the SSG:

(10) *Multiple Case Condition:* By Spell-Out, VP can contain no more than one argument with a (valued) undeleted Case feature.

For (6), the issue is that the two arguments bear distinct labels (DP, PP) and the domain in which the condition is computed (VP) is not a phase. We thus conclude that most cases of Distinctness can be explained by appealing to Case theory. Presumably the other environments discussed by Richards fall under principles that are not part of the syntactic computation but rather of PF, hence their different nature.

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Mapping phonology to syntax: evidence from two *wh*-in-situ languages
Lisa L. S. Cheng & Laura J. Downing

A classic problem in syntax is to account for the cross-linguistic difference between *wh*-in situ and *wh*-movement. Richards (2010), assuming a multiple spell-out model and an edged-based mapping between syntax and phonology, argues that this difference falls out from how *wh*-domains in a language are created. Well-formed *wh*-prosody minimizes the number of Minor [prosodic] Phrase boundaries between a *wh*-phrase and the complementizer C associated with the scope of the *wh*-phrase. In an in-situ language such as Chichewa, which has an initial C and in which the right edge of XPs are mapped with a prosodic boundary, the *wh*-domain is created by aligning the right edge of the *wh*-phrase with a Minor Phrase. Since the *wh*-phrase is within the *wh*-domain of the complementizer, no movement is warranted (parentheses indicate phrasing):

$(_{\text{MinP}}$ C $[_{\text{DP}}])$ $(_{\text{MinP}}$ $[_{\text{DP}}$ **wh** $])(_{\text{MinP}}$ $[_{\text{DP}}$ $]) \rightarrow (_{\text{MinP}}$ C $[_{\text{DP}}][_{\text{DP}}$ **wh** $])$ $(_{\text{MinP}}$ $[_{\text{DP}}$ $])$
(adapted from Richards' (73), p. 185)

Richard's approach predicts that the syntactic properties of *wh*-questions should be the same in all languages with the same prosodic phrasing and position of the complementizer.

In this paper, we compare Chichewa and Zulu, two *wh*-in situ Bantu languages, and argue that (a) though the prosodic properties of the two languages are similar, the syntactic properties of the *wh*-questions are different; and (b) the lack of *wh*-subject in situ (i.e., in SpecTP) in both Chichewa and Zulu is independent of syntax-phonology mapping. Instead, a ban against extraction from TP leads to the cleft strategy for *wh*-subjects.

**Relevant data**: Both Chichewa and Zulu have the canonical word order S V IO O Adjunct (see (1)). As shown in (2a,b), for non-subject *wh*-questions, both Chichewa and Zulu allow the *wh*-object to remain in-situ. In particular, the *wh*-object does not undergo movement to the left (where the $C^0$ position is). However, Zulu differs from Chichewa in that (a) *wh*-phrases MUST appear immediately after the verb (IAV) in Zulu (3). Any canonical noun phrase intervening between the *wh*-phrase and the verb must "exit" the νP. And (b), the *wh*-phrase must be at the right edge of the νP; any canonical noun phrase which originates inside the νP and to the right of the *wh*-phrase must "exit" the νP. The data in (4) show that non-subject wh-morphemes have a variable position in Chichewa: IAV or canonical.

**Our proposal**: *Contra* Richards (2010), we argue that the syntactic domain that syntax-phonology mapping pays attention to is phases (νP and CP), rather than the complement of a phase head. That is, phonological mapping is NOT based on spell-out domains. Rather, syntax generates several possible output linear orders, which are evaluated by the constraints in (6). A syntactic constraint (HPC) optimizes placing *wh*-phrases in the Highest Phrase in νP, and a phonological constraint (FPC) optimizes phrasal stress on *wh*-phrases. One ranking makes IAV optimal for Zulu: HPC, FPC >> STAY, while the reversed ranking of HPC and STAY makes the canonical position optimal for Chichewa. Under the assumption that global (vs. local) considerations are undesirable, the interface between narrow syntax and prosodic phrasal building is limited to the mapping between two types of boundaries.

We conclude the talk by taking up the analysis of *Subject* wh-questions. Richards (2010) predicts that *wh*-subjects in both Chichewa and Zulu will also be in-situ, since the *wh*-subject should be able to assert a right-edge phonological boundary, just like a *wh*-object. However, this is contrary to fact: *wh*-subjects are obligatorily clefted in both languages (see (5)). Based on intervention effects demonstrated by non-subject *wh*-questions (7), and thus LF extraction of *wh*-feature, we suggest that the cleft-strategy is used to avoid direct extraction from SpecTP (see Chomsky 2008, Shlonsky 2007).

(1)a. (wa-patsa bambo tambaala) b. (ú-Síph' ú-phékél' ú-Thánd' in-kû:khu)
S/HE.TAM-give 1.father 5.rooster 1-Sipho 1SM-cooked 1-Thandi 9-chicken
'S/he has given father the rooster.' 'Sipho cooked chicken for Thandi.'

(2) Wh-object in situ in Chichewa and Zulu - question morphemes underlined

a. Chichewa (Downing 2005)
(a-na-ményá chiyáani) (ndi mwáálá)
S/HE-TAM-hit what with 3.rock
'What did he hit with the rock?'

b. Zulu
(ú-nhla:nhlá) (ú-thwéle:-ni)(ngó-bhasikí:di)
1-Nhlanhala 1SM-carry-what with.1a-basket
'What is Nhlanhla carrying in the basket?'

(3) Obligatory IAV for non-subject wh-words in Zulu (Cheng & Downing, to appear)

a. (bá-**m**-níké:-ni) ú-Sî:pho)
3PL-1OM-give-what 1-Sipho
'What did they give to Sipho?'
(IO follows O; cf. (1b))

b. (u-**wa**-thwéle ngâ:n') (ámá-tha:nga)
2SG-6OM-carry how 6-pumpkin
'How are you carrying the pumpkins?'
(DO follows adjunct)

(4) IAV for non-subject wh-words NOT obligatory in Chichewa (cf. (1a))

a. (wa-patsa chiyáani) (baambo) 'What has s/he given to father?' -IAV
S/HE.TAM-give what 1.father

OR b. (wa-patsa bambo chiyáani) 'What has s/he given to father?' -canonical
S/HE.TAM-give 1.father what

(5) Subject wh-words are obligatorily clefted in Zulu and Chichewa

a. (ndaáni) (á-ná-m-dyétsá nsóomba) 'Who fed him fish?' (Chichewa)
1.who REL.1SM-TAM-1OM-feed 10.fish

b. (u-bá:n') (ó-thwel' ámá-tha:nga) 'Who is carrying the pumpkins?' (Zulu)
COP1a-who REL1-carry 6-pumpkin
(tone and/or morphology of the verbs show these are clefts)

(6) Constraints (syntactic and prosodic) accounting for position (IAV and not)

a. ALIGNR[PHASE, INTPH] (ALIGNR-PHASE): Align the right edge of every phase (νP/CP) with the right edge of an Intonation Phrase (IntPh).

b. ALIGNR[INTPH, PHASE] (ALIGNR-INTPH): Align the right edge of every Intonation Phrase (IntPh) with the right edge of a phase (νP/CP).

c. HIGHEST PHRASE CONDITION (HPC), adapted Kratzer & Selkirk (2007): Prominence [i.e., focus] is licensed within the highest phrase (HP) in the minimal νP phase. More precisely: If prominent [focused], then in the Highest Phrase.

d. FOCUS-PROMINENCE CONSTRAINT (FPC; Samek-Lodovici 2005): Focused constituents must be assigned prosodic prominence (i.e., phrasal stress).

e. STAY: Don't move constituents.

(7) a. *u-Sipho aka-theng-anga-ni 'What didn't Sipho buy?'
1-Sipho 1.NEG-buy-NEG-what

b. *u-Sipho aka-y-anga-phi 'Where didn't Sipho go?'
1-Sipho 1.NEG-go-NEG-where

Selected references – Richards, N. (2010) *Uttering Trees,* MIT Press. /Shlonsky, U. 2007. On the immovability of subjects. Ms.

**Functional categories: FLN or FLB?**

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Hauser *et al*. 2002 distinguish FLN (*Faculty of Language in the Narrow sense*) from FLB (*FL in the Broad sense*). Syntactic theory distinguishes Lexical (L) from Functional (F) categories. We propose that there are two types of F-cats with the following properties: (i) FLN F-cats are universal, obligatory and type-rigid; FLB F-cats are not; (ii) FLN fixes a lower bound on categorical inventories (L-forms, D, T), but no upper bound; (iii) The number of F-cats is not fixed, *contra* Cinque (1999). Distinguishing FLN from FLB F-cats provides a solution to the following problems: (i) inventory; (ii) selection; (iii) ordering (iv) class size, and (v) gradience.

***1. Unsolved problems relating to Functional categories***

***1.1 Universality:*** Only some F-cats are universally attested. Some analyses posit a universal F-cat inventory, and allow languages to differ according to whether F-cats are overt or covert (Cinque 1999). Other analyses parameterize F-cat inventories (Ritter & Wiltschko 2009).

***1.2 Ordering:*** The idea that F-cats have a fixed order (Cinque 1999) fails to account for their ordering: some F-cats don't have a fixed position (NEGATION, Ouhalla 1991; EVIDENTIALITY, Blain & Déchaine 2007); some forms don't have a fixed F-cat realization (*that* is D or C).

***1.3 Selection:*** Only some F-cats select for an L-cat: D selects N, T selects V (Abney 1987). Moreover, D and T categorize L-cats (1) (Borer 2005). Other F-cats are type-flexible: Squamish PLURAL (2) occurs on N or V, as does French QUANTITY (3), and Plains Cree ASPECT (4).

(1) a [$_{D}$ ***the*** [$_{L=N}$ *saddle* ] ]
b [$_{T}$ ***will*** [$_{L=V}$ *saddle* ] ] D/T

(2) a *hiyi ta* ***mex****-mixalh big*
DET **PL**.REDUP-bear big
'The **bears** are big.'
b *lha Linda na* ***kw'elh****-kw'elh-nexw-as ta stakw* PL
DET L. REL **PL**.REDUP-spill-TR(LC)-3ERG DET water
'Linda **spills** the water **all the time**.' (Bar-el 2005)

(3) a *J'ai lu* ***beaucoup*** *de livres.*
1SG have read many of books
'I read many books'
b *J'ai* ***beaucoup*** *lu cet été.* QUANT
1SG much read this summer
'I read a lot this summer' (cf. Obenauer 1983)

(4) a *ni-mosôm-****ipan***
1-grandfather-PRETERITE
'my late grandfather'
b *Aspin nîmihito-nâniw-****îpan***. ASP
there dance-indef.actor-PRETERITE
'There had been dancing there' (Wolfart 1973)

***1.4 Class size:*** Some analyses equate closed-class with F-cat status (Abney 1987). But class size is not a reliable F-cat indicator, as any L-cat can be closed-class (Rijkhoff 2002b, Dixon 1982, Emonds 1985), including V (Australian), N (Northern Iroquoian), A (Niger-Congo), and P.

***1.5 Gradience:*** Some forms are semi-lexical (Corver & van Riemsdijk 2001). Semi-lexical verbs include auxiliary, aspectual and light Vs. Semi-lexical Ns include classifier Ns (Rijkhoff 2002a) and measure Ns (Borer 2005). Semi-lexical As include size and quantity adjectives (Morzycki 2009). Semi-lexical Ps include grammatical and aspectual Ps (Zaring 1991, Zwarts 2005).

***2. Our proposal: there are two types of F-categories***

Hauser et al. (2002:1572*f*.) suggest that FLB is based on mechanisms shared with nonhuman animals, while FLN is uniquely human and has been exapted from previous adaptive functions. The FLN/FLB distinction is mirrored in the F-cat system. All languages distinguish arguments from predicates (Gil 2005). Argument expressions arise when D Merges with an L-form to satisfy referential anchoring, (5)a. In the absence of referential anchoring, as property-denoting expressions, L-forms must be temporally anchored; this is satisfied by Merging T with an L-form, (5)b. This defines the lower bound: all languages have: (i) L-forms: (ii) argument

expressions (anchored by D); (iii) predicates (anchored by T). Recursive Merge derives transitive structures (6); as well as the distinction between predication and equation (7).

(5) a [ **D** [ L ] ] b [ **T** [ L ] ] REFERENTIAL/TEMPORAL ANCHORING

(6) a [ L ] b [ L [$_D$ L ] ] INTRANSITIVE/TRANSITIVE

(7) a [ T [[$_D$ L ] [ L ]] ] b [T [[$_D$ L] [$_D$ L]] ] PREDICATION/EQUATION

***2.1 Solving the universality problem:*** Definiteness (D) and finiteness (T) define the core F-cats (Muysken 2008): they are conceptually necessary, and by hypothesis are FLN F-cats. They are universal (present in every language) and obligatory (present in every sentence). The set of FLN F-cats also includes argument-typing and clause-typing F-cats, e.g. Kase and Comp, (8). As for FLB F-cats: they are non-universal and non-obligatory: PLURAL, QUANTITY and ASPECT may be present but need not be; when present in a grammar, they need not be present in all sentences.

(8) a [ **K** [ **D** [ L ] ] b [ **C** [ **T** [ L ] ] ] ARGUMENT- /CLAUSE-TYPING

***2.2 Solving the ordering problem:*** The type-rigid/type-flexible distinction solves the ordering problem. FLN F-cats, because they are type-rigid, necessarily occur in a fixed position. Argument-typing is possible only if an argument expression has been formed; clause-typing is possible only if a predicate expression is temporally anchored. In contrast, FLB F-cats are type-flexible and so may be introduced into any layer of the extended nominal or verbal projection.

***2.3 Solving the selection problem:*** FLN F-cats are type-rigid and provide a unique context of identification. D provides a unique context of identification for argument expressions, T provides a unique context of identification for predicate expressions. In contrast, FLB F-cats are type-flexible and do not provide a unique context of identification: the F-cats PLURAL (2), QUANTITY (3) and ASPECT (4) combine with either argument or predicate expressions. The type-rigid/type-flexible distinction reflects FLN/FLB properties respectively. Because FLN F-cats are constrained by referential and temporal anchoring, they respect the argument/predicate divide, and strictly select for complement type. In contrast, FLB F-cats are not constrained in this way: they cross the argument/predicate divide and do not select for complement type.

***2.4 Solving the class size problem:*** That L-cats can form closed-classes is consistent with vocabulary size being emergent (Hauser *et al.* 2002). All F-cats form a closed-class, but not all closed-classes are F-cats.

***2.5 Solving the gradience problem:*** The existence of a semi-lexical closed-class within each L-cat—Borer's (2005) "twilight zone"— is an outcome of recursive Merge.

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**The spurious NP ellipsis of Hungarian**

Éva Dékány

**Aims and claims:** NP ellipsis is generally taken to be deletion of the phonological features of the noun and possibly some of its satellites. The process does not affect the order of the non-elided NP-satellites, as expected. This talk presents an interesting apparent counterexample to the above generalization from Hungarian. Dékány and Csirmaz (2010) observe that a) Hungarian has optional classifiers and b) low adjectives such as color an nationality (cf. Cinque 1994, Scott 2002) follow the classifier, while high adjectives such as size precede the classifier (1). In ellipsis with an overt classifier, however, all types of adjectives must precede the classifier (2).

(1) két nagy (*piros) szem (*nagy) piros rizs
*two big red CL big red rice*
two big red grains of rice

(2) két nagy piros szem (*nagy/*piros)
*two big red CL big/ red*
two big red ones (eg. grains of rice)

This phenomenon, which I term spurious NP ellipsis, has not been discussed in the literature so far. This talk proposes that the spurious NP ellipsis is not genuine ellipsis, after all.

**Against a focus-movement analysis:** NP ellipsis has been argued to be licensed by focus (Corver and van Koppen 2009, Ntelitheos 2004). A plausible working hypothesis is that the classifier is in the same position in (2) and (1), with the low adjective moving around the classifier of spec, FocP. A DP-internal low focus position (below Num) has been utilized in Scott (2002), Truswell (2004), and Svenonius (2008) to analyze marked adjective orders such as *three BLACK big (~~black~~) cars*. However, on the basis of phonological, semantic and syntactic evidence, I argue that (2) does not involve focus movement of the adjective. Unlike in *three BLACK big cars*, the adjective does not have to be phonologically stressed and does not have a contrastive interpretation. If (2) is licensed by focus movement of an adjective, then a high adjective originating above the classifier, eg. *big*, should also be able to move to spec, FocP, and this should be enough to license ellipsis. In this case a low adjective is predicted to occur in its default position, following the classifier. This is contrary to fact.

(3) két $[_{FocP}$ NAGY $[_{AdjP}$ ~~NAGY~~ $[_{CLP}$ szem $[_{AdjP}$ piros ]]]
*two big CL red*
two big red ones

**Background assumptions and theoretical framework:** As for the functional sequence of extended noun phrases, I follow Borer's (2005) decomposition of the DP: D > Num (her #) > Cl (her Div) > N. Bare nouns have a mass (or "stuff") denotation. This mass needs to be divided before it can interact with a counting system (numerals and quantifiers). Classifiers as well as the plural perform the division of mass and sit in Cl.

As for the theory of Lexicaliczation and Spell Out, I use Ramchand's (2008) "Spanning" theory. In this system every lexical item is specified for one or possibly more category feature(s). Lexical items project all the category labels they have. This in turn means that lexical items with more than one category label are associated to (or spell out) more than one syntactic head, they "Span" the heads in question. That is, lexical insertion is not restricted to terminal nodes. Spell Out is constrained by Underassociation. Underassociation allows a lexical item to spell out only a subset of the features it is specified for. Thus a lexical item specified for features [A, B] may spell out both A and B or only A or only B. Features that a lexical item is specified for but does not spell out in a given structure are "Underassociated".

**Proposal:** I propose that Hungarian classifiers are specified for both the N and the Cl features. I further propose that in the spurious NP ellipsis classifiers Underassociate their CL feature: they spell out only the N feature and hence appear in the regular noun position. Thus in (2) and (1), the adjective *red* sits in the same position, while *szem* does not. Note that this result is obtained without positing a lowering operation on the classifier.

**Deriving the properties of the construction:** The proposal amounts to saying that the spurious NP ellipsis does not involve ellipsis, it rather involves a classifier in the position of the noun. As a result, no focus-related stress or contrast is predicted on any of the constituents of (2), which is a welcome result. The unusual position of the classifier, below the low adjectives, falls out automatically because the classifier is inserted into the N node, below any functional material in the DP.

The definite article does not allow overt classifiers to appear in the DP (5), but this condition is relaxed in the spurious NP ellipsis construction (6). This property follows from the analysis because the classifier does not spell out the Cl feature and in effect, does not have the classifier function. It thus falls outside of the classifer-blocking effect of the article.

| (4) | a saláta | (5) | *a fej saláta | (6) | a zöld fej |
|---|---|---|---|---|---|
| | *the lettuce* | | *the CL lettuce* | | *the green CL* |
| | the lettuce | | the head of lettuce | | the greed one (eg. lettuce) |

Finally, it is also explained why the plural can co-occur with classifiers only in the spurious NP ellipsis. It is a robust cross-linguistic generalization that the plural is in complementary distribution with classifiers, as in (7)-(9) (c.f. Sanches and Slobin 1973, Tsou 1976, Borer 2005). Borer's (2005) explanation of this generalization is that both the classifier and the plural are specified for the feature Cl, so in garden variety DPs they compete for the same (Cl) position. Thus we cannot get both at the same time. Importantly, the present proposal allows us to maintain Borer's elegant account of the complementary distribution. According to the proposed analysis, in the spurious NP ellipsis the classifier spells out only N, but not Cl. This means that the plural and classifiers are not in competition for the spell-out of the Cl node, and the Cl position is freed up for the plural (10). (When the plural and classifiers do compete for the Cl position, the complementary distribution is predicted to hold.)

| (7) | ez a fej saláta | (8) | ez-ek a salátá-k | (9) | *ez-ek a fej salátá-k |
|---|---|---|---|---|---|
| | *this the CL lettuce* | | *this*-PL *the lettuce*-PL | | *this*-PL *the CL lettuce*-PL |
| | this head of lettuce | | these lettuces | | these lettuces |

(10) ez-ek a fej-ek
*this*-PL *the CL*-PL
these ones (eg. heads of lettuce)

The analysis also allows to maintain the generalization that (genuine) ellipsis does not change the order of the non-elided constituents.

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# (PARTIALLY) FREE TO VARY

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**BACKGROUND:** Recent work on Romance epistemic determiners (e.g. Falaus 2009) has shown that Romanian *vreun* has a more restricted distribution than other epistemic determiners (e.g. Spanish *algún,* French *quelque*). Unlike its Romance counterparts, it is restricted to contexts which are interpreted with respect to an epistemic modal base, under operators which satisfy the epistemic constraint in (1):

(1) Op *p* entails that the speaker's epistemic alternatives include *non p*-worlds

This generalization has been argued to capture the occurrence of *vreun* under epistemic modals and epistemic attitude verbs (e.g. *think, suppose, guess, hope*) and its non-occurrence under non-epistemic (e.g. deontic modals) and factive (*know, regret*) or non-epistemic intensional verbs (*advise, say, intend*).

**PROBLEM:** In this paper, we take this generalization one step further, by examining the distribution of *vreun* in an understudied context, namely imperatives. Farkas (2002) argues that *vreun* is ruled out in imperatives, as illustrated in (2):

(2) * Ia ***vreo*** prăjitură!
Take.IMP.2SG VREUN cookie

However, a closer examination of empirical facts reveals that there are imperatives which allow *vreun*, like in the following example:

(3) Verifică pe ***vreun*** site, nu sunt sigur că nu e o greşeală.
Check.IMP.2SG on VREUN site, NEG be.1SG sure that NEG be.3SG a mistake
'Check on some website, I'm not sure it's not a mistake.'

Standard analyses of imperatives treat them as 'modalized' propositions (e.g. Han 2000, Schwager 2006, Aloni 2007). Accordingly, their interpretation involves a modal base and an ordering source, which is obligatorily 'preference-related'. On these assumptions, the occurrence of *vreun* in (3) is surprising. We know that its use under modal operators is restricted to epistemic contexts, but imperatives are not epistemic modals. Consequently, these examples pose a double challenge. On the one hand, we want to pinpoint the distinction among imperatives that determines the (non-)occurrence of *vreun*. On the other hand, we need to understand whether and how these examples square with the data covered by (1).

**PROPOSAL:** In order to account for the use of *vreun* in imperatives and put it together with the facts captured by the generalization in (1), we adopt the alternative-based, semantic approach to polarity developed in Chierchia (2006, 2010) and Falaus (2009). On this account, a dependent determiner like *vreun* has as part of its meaning *active alternatives*, which require the insertion of an exhaustivity operator (akin to *only*), and give rise to (obligatory) implicatures, used for enriching the basic meaning of assertions. The aforementioned analyses have shown that (i) like all indefinites, *vreun* triggers *scalar* alternatives and (ii) like all polarity-sensitive items, it activates singleton *domain* alternatives. The switch to singleton alternatives derives a parametric difference among existential dependent determiners (Jayez & Tovena 2006, Alonso-Ovalle & Menéndez-Benito 2010), namely the extent of **variation** ('freedom of choice') among the members of the restriction set – TOTAL for existential FCIs like *un NP oarecare / qualsiasi/ quelconque* (4) and PARTIAL for epistemic items like *algún* or *vreun* (5):

(4) Poţi dansa cu ***un coleg oarecare,*** # dar nu cu Paul.
'You can dance with a colleague whatsoever, but not with Paul'

(5) E posibil să se fi întâlnit cu ***vreun*** prieten, dar *nu poate fi Luca* tocmai l-am văzut.
'It's possible he met some friend, but *it cannot be Luca*, I have just seen him.'

This meaning difference stems from different sizes in the domain alternatives considered for exhaustification: if the domain alternatives are *non-minimal*, the resulting meaning is a TOTAL free-choice interpretation: there is a single individual satisfying the existential claim, and *all*

relevant alternatives qualify as possible options (existential FCI); if the domain alternatives are *minimal* (singletons), the resulting meaning is PARTIAL VARIATION - *some, but not necessarily all* alternatives qualify as possible options (epistemic items).

Elaborating on this analysis, we show it can capture the imperative facts. More precisely, we argue that the contrast in (2)-(3) can be reduced to a more general distinction between two types of imperatives, discussed in Aloni (2007). The two kinds of imperatives have different entailment properties, as best illustrated by cases involving disjunctions – whereas choice-offering disjunctive imperatives *do a or b* entail that the hearer is both allowed to do *a and* allowed to do *b* ('free-choice permission'), crucially, this entailment is absent for alternative-presenting imperatives, i.e. *Stop that foolishness or leave the room* does not entail *You may stop that foolishness and you may leave the room*. Importing this distinction in terms of *total*/*partial* variation, we show that *vreun* is excluded from *choice-offering* imperatives (2) and possible in *alternative-presenting* imperatives like (3) and (6) below. Only the latter is compatible with a continuation of the type *don't do b,* overtly excluding one possible value, thus qualifying as partial variation models. This is confirmed by the continuation in (6), in a context where A is waiting for an important parcel, but will be away for the next couple of days. B says:

(6) Vorbeşte cu ***vreun*** vecin, să ridice el coletul. Dar *nu cu Petre*, nu prea e dispus să ajute.
'Talk to some neighbor, so that he picks up the parcel. But not to Peter, he is not too willing to help.'

In contrast to this, choice-offering imperatives like (2) qualify as total variation models, and hence rule out the use of *vreun*. To account for the observed pattern, we argue that the full range of occurrences of *vreun* can be captured by assuming that *vreun* imposes a stronger constraint on its domain alternatives – not only does *vreun* allow partial variation, like other epistemic determiners, but actually *requires* it:

(7) *Vreun* rules out TOTAL VARIATION, i.e. one of the domain alternatives must stand a chance of being false.

We implement this requirement by assuming that the total variation implicature gets added to the set of alternatives over which we exhaustify, and show that the resulting meaning in a modal context entails that *one of the alternatives must be false* (but we ignore which one). Whereas epistemic operators satisfy this constraint (in virtue of their *non p*-worlds meaning component), this requirement cannot be met under deontic modalities, like in free-choice permission sentences of the form *You may eat the cake or the icecream*, where *each* disjunct is a possible option (Fox 2007). In other words, the lexical semantics of deontic modalities and choice-offering imperatives allows for total variation, a situation which gives rise to a clash with the partial variation requirement imposed by *vreun* (7), which is correctly predicted to be ruled out in these contexts.

Summarizing, our proposal to reformulate the epistemic constraint as a condition on domain alternatives maintains the empirical coverage of (1), and has the advantage of offering an account for the distribution of *vreun* in imperatives. The alternative-based proposal we pursue allows us to integrate *vreun* in a broader typology of dependent elements, and retains the recurrent insight that differences among dependent indefinites result from different operations on quantificational domains. Their restricted distribution then comes out as the result of the logical interaction of their lexical meaning with other operators in the context.

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# Focus as Prosodic Alignment

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It has been claimed in the literature that there is a strict one-to-one relationship between focus and prosodic prominence. This correspondence has been elevated by a number of authors to the level of axioms, even though not all of them agree on the nature of prominence. For Jackendoff (1972:237), focus has to have the 'highest stress' of its domain and for Truckenbrodt (1995:165) and for Büring (2009:178) the 'highest or maximal prominence.' Büring uses prominence as a cover term for all kinds of prosodic reflexes, not only stress. For him, prominence is equivalent to the head on a metrical grid. But the last decade has uncovered a number of languages for which the equation of focus with prominence is difficult to maintain, as for instance some Gur, Kwa, Tchadic and Bantu language (Fiedler et al 2009), West Greenlandic, Cantonese, Vietnamese, Malayalam and other Indic languages, a number of American languages, Georgian, and even French.

An alternative view of the universal reflex of focus will be proposed: focus tries to be prosodically aligned with a higher prosodic constituent, a prosodic phrase or an intonation phrase, and alignment is usually to the right. Prominence is then a correlate of alignment, since both main accent and focus tend to be aligned to the right/left of a prosodic constituent.

The fact that focus alignment is only a tendency explains two caveats. First, higher ranking constraints can block alignment, like syntactic constraints militating against movement, or constraints against insertion of prosodic boundaries. This explains why alignment is achieved more or less successfully, depending on the syntactic or prosodic restrictions imposed by the rest of grammar. Second, focus needs to be organized on a scale. Information focus is weaker than contrastive focus, which is itself weaker than corrective focus. When coming to the data, it will be shown with statistical comparison that the marked structures accompanying focus are found more often in contexts eliciting a contrastive focus than information focus.

The data will be drawn from the literature and from a comparative study on focus with results of experiments eliciting spontaneous but similar sentences in different languages: English, French, Finnish, German, Georgian, Hungarian, Konkani and Mandarin Chinese. On the basis of the results, it will be shown that these languages use partly similar strategies for focus, but that they also differ from each other in significant ways.

Languages have a common aim in the expression of focus: they all try to align a focused constituent with the right (rarely left) edge of a higher prosodic phrase (phonological phrase or intonation phrase). But they use different strategies to fulfill the aim (a kind of conspiracy), some of them will be presented in the talk:

• Italian (Samek-Lodovici 2005) and Hungarian displace a focus constituent to the right or the left of an intonation phrase. In Hungarian this is accompanied with a drastic compression of post nuclear material.

• French cannot displace constituents to the right. Instead some constituents are clefted to obtain alignment with the right of an intonation phrase (Hamlaoui 2009).

• Chichewa inserts prosodic boundaries after a focus, in using prosodic correlates (Kanerva 1990).

• Cantonese and many African languages create prosodic phrases by inserting particles, bearing a special tone for instance.

• In Georgian, a focused constituent is generally adjacent to the verb and delimited to the left with a prosodic phrase boundary.

• In Indian languages and West Greemlandic, prosodic phrases are the bearers of boundary (or phrasal) tones which are enhanced with the phrase is in focus.

• In English and German, all tonal information after the focus is deleted (postnuclear deaccenting), aligning the strongest accent to the right of the prosodic phrase.

In sum, the formation of prosodic phrases motivated by syntax and information structure is a universal phenomenon, but the assignment of pitch accents perceived as prominences is not. A typological account needs to address this asymmetry.

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Focus as phrasing in Georgian

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It has been claimed for intonation languages that focus is phonologically implemented as highest accent in a domain. In this talk, it will be shown that at least in Georgian, focus does not have a necessary one-to-one relationship with highest stress, thus questioning the allegedly obligatory prosodic correlate of focus as stress for such languages. As compared to well-studied Germanic languages, Georgian uses a different prosodic correlate for the expression of focus, namely phrasing.

Georgian is an intonational language with prosodic events reflecting properties of the constituent structure and pragmatic meanings (see Vicenik & Sun-Ah 2008, Skopeteas, Féry & Asatiani 2009). It has free word order with SOV as the canonical option (see Apridonidze 1986) and intonation is sensitive to this variable word order. However, information structural concepts such as focus do not necessarily relate to pitch accents signaling prosodic prominence, but rather influence the choice of particular word orders that allow for different accentual patterns. Word order issues are well studied for Georgian, and the emphasis will be put on prosodic phrasing, a less understood part of grammar: it will be shown that phrasing is able to confirm some claims made in the recent literature.

Several experiments bearing on the prosodic realization of focus in Georgian will be presented. First a production experiment with short sentences consisting of a subject, an object and a verb in different word orders and in different information structural contexts. Eight native speakers realized simple sentences, like in (1), as answers to questions inducing different focus domains (in total 13 permutations of focus domain and word order).

(1) [[nino]$_p$ [mama-s eloliaveba]$_p$ ]$_I$
Nino.NOM father-DAT cares
'Nino cares for the father.'

The upshot is that there is considerable variation in the pitch realization of preverbal constituents in general, and that the identified patterns do not unambiguously correlate with information structure. Pre-verbal constituents are fully intonated, regardless of their focused status. Focus on postverbal constituents is often realized with a characteristic low and flat pattern on the whole word, labeled 'super-low.' This pattern is not a pitch accent associated with the stressed syllable, but rather a word melody. Furthermore, focus interacts with prosodic phrasing. The variation observed in preverbal constituents can be accounted for as a preference for the focused constituent to be phrased separately from the rest of the utterance. There is evidence that phrasing and phrasal tones are crucial for the identification of the focus structure of the utterance.

In the second experiment, 16 speakers from Tbilisi produced 176 descriptions in total to communicate the changing spatial layouts of toy animals. This experiment was performed in a comparative fashion with 5 other languages. Georgian is the only language in which the marked order (i.e. locative expression before the toy to be localized) is more frequent even when the toy to be localized was already given in the discourse, although this language exhibits a drop in frequency of the marked word order that is in line with the general pattern (see Féry, Skopeteas & Hörnig 2010).

(2) a. cxen-i maimun-is maržvniv dgas.
horse-NOM monkey-GEN right stands
'A/the horse is standing to the right of a/the monkey'.

b. datv-is maržvniv žağl-i dgas
bear-GEN right dog- NOM stands
'There is a/the dog standing to the right of a/the bear ...'

In this experiment, there were occurrences of a post-verbal focused object with the characteristic super-low pattern, indicative for finality, exemplified in (3).

(3) [[cxen-is]$_p$ [marcxena mxare-s dgas]$_p$ [lom-i]$_p$]$_I$
horse-GEN left.DAT side-DAT stands lion-NOM
'There is a/the lion standing on the left side of a/the horse'.

The question remains to be elucidated whether instances of pitch variation in Georgian are correlates of pitch accents, or whether they are indicators of a global prominence on certain words. Presence of lexical stress is controversial for this language, with all possible suggestions having been made in the literature.

The third experiment investigates the exhaustive interpretation of the quantifier *ramdenime* 'some/a few' in sentences like (4) uttered in a way that the continuation "so we cannot buy the present" is felicitous. It must be noted that preverbal (see 4a) and postverbal (see 4b) focus do not have interpretational differences in Georgian i.e., both word orders can motivate an exhaustive interpretation.

(4) a. čven ramdenime lar-i še-v-a-grov-e-t...
1.PL.ERG some/a.few(NOM) lari-NOM PR-SBJ. 1-PV-gain-AOR-PL
'We gained some Lari…'{so we can buy the present.}/{so we cannot buy the present.}
b. čven še-v-a-grov-e-t ramdenime lar-i...

The findings of the empirical study showed clear correlates of prosodic prominence in the realization of the quantifiers. In particular, in the contexts that motivated the exhaustive interpretation there was a lengthening effect on the duration of the quantifier, especially on the first syllable. Second, some effects on the phonation of the first syllable could be identified, namely frequent occurrence of breathy voice. The third correlate was pitch range expansion on the quantifier. Still the correlates found in this experiment cannot be assimilated to pitch accent, because the effect of prominence on the quantifier was scattered on the first two syllables, and also on the contour of the whole word. By contrast, pitch accent in English is mainly located on a single lexically stressed syllable. This result strengthens the view expressed above that Georgian does not realize prosodic prominence by the bias of pitch accents in the way that is known from familiar language. Prosodic phrasing is the main correlate of focus, even if prominence, in the form of a bundle of phonetic correlates on some words may be present as well.

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# Focus (non-)realization in Ngamo (West Chadic)

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This talk discusses an aspect of the fous realization of Ngamo, a West Chadic language spoken in North-East Nigeria. In Ngamo, focused subjects are syntactically marked, whereas focused non-subjects can remain unmarked. We discuss the (absence of) prosodic marking in the case of focused non-subjects and what this might mean for a general theory of focus.

**Background**: Ngamo exhibits a subject/non-subject asymmetry with respect to focus marking: Focused non-subjects remain in the canonical SVOX word order (1), whereas focused subjects invert to the post-VP domain (2). Backgrounded material is morphologically marked by a background marker *-i/ye*, which is optional in the case of non-subject focus, so that non-subject focus is usually neither syntactically nor morphologically marked.

(1) Q: Shuwa esha (-i) **lo** yam?
Sh. call.PFV - BM who loudly
'Who did Shuwa call loudly?'

A: Shuwa esha (-i) **Jajei** yam.
Sh. call.PFV - BM J. loudly
'Shuwa called JAJEI$_F$ loudly.'

(2) Q: Esha Jajei yam ye **lo**?
call.PFV Jajei loudly BM who
'Who called Jajei loudly?'

A: Esha Jajei yam ye **Shuwa**.
call.PFV Jajei loudly BM Shuwa
'SHUWA$_F$ called Jajei loudly.'

Up to now, there has been no systematic investigation of the prosody of syntactically and morphologically unmarked foci in Ngamo, but there are descriptions of the related languages Bole (Gimba & Schuh 2005) and Tangale (Kidda 1993). The authors identify a blocked tone sandhi process as the only prosodic marking of focus (cf. Schuh 2010). This blocking in turn is taken to result from a prosodic boundary insertion to the left of the focused element, cf. syntactic theories of focus marking in Tangale by Tuller (1992) and Kenstowicz (1987) based on this observation. In contrast, it was also argued that this is not a consistent marker of focus: The tone sandhi process does not consistently take place in all-new cases (e.g. Gimba & Schuh 2005 for Bole), nor is it consistently blocked preceding a focused element (Hartmann & Zimmermann 2007 for Tangale).

**Goals:** In this talk, we will address the following two questions for Ngamo: (Q1) Is non-subject focus marked by a preceding prosodic boundary? (Q2) If not, does the focus status of these elements have no effect on their grammatical realization at all?

In order to answer these questions, we first investigate whether in-situ non-subject focus in Ngamo is prosodically marked, specifically whether focused non-subjects exhibit a prosodic boundary on the left, like in Bole and Tangale. As indicators for a possible boundary we will not only explore a possible blocking of the sandhi process under focus, but also downstep, final lengthening, and other indicators of phrase boundaries (see Frota 2000). Our data consists of pairs of two sentences without syntactic or morphological information structure marking, one all-new (3a), and one containing a narrow corrective focus (3b).

(3a) [**Kule salko bano mano**]$_F$
Kule build-PFV house last-year
"Kule built a house."

(3b) A: Kule salko karampe mano.
Kule build-PFV granary last.year
"Kule built a granary last year."

B: O,o, Kule salko [**bano**]$_F$ mano.
No Kule build-PFV house last.year
"No, Kule built a HOUSE last year."

In addition, we test for a prosodic boundary at the previously neglected right edge of the focused constituent. There is reason to believe that focus is consistently marked by being located in a position *preceding* a prosodic phrase boundary (φ). Evidence comes from the behaviour of focused subjects, which invert to the right edge of the VP (cf. (2)). They cannot be realized in a preverbal position, since it is disallowed to insert a phrase boundary of the required type between verb and subject (cf. (4a)). Instead, the requirement that the focused consituent must immediately precede a phrase boundary forces subjects to invert. They can precede an adjunct (4b), if there is a φ boundary at this position, or follow it (4c).

(4) a. *$(SUBJ_F)_φ$ (V OBJ ADJ) b. (V OBJ) $(SUBJ_F)_φ$ (ADJ) c. (V OBJ ADJ) $(SUBJ_F)_φ$

To test this we also apply the above mentioned methods for boundary detection to the right edge of the contrastively focused element (3b) in comparison to the all-new baseline (3a).

There is independent evidence for a phrase boundary at the right edge of VP in these languages: (i) There is a partial resetting of downstepped pitch (Gimba 2000), (ii) High tone ideophones are realized with an extra high tone at the edge of VP (cf. (5)), which according to Schuh (2010) is an indication of a strong phrase boundary typical for these kinds of ideophones, and (iii) there are some functional elements (e.g. determiners, pronouns) which have a "long" and a "short" form, depending on prosodic environment, which are realized in their long form at the right edge of VP when focused (cf. (6)).

(5) zǒri ɓotū ɗot gà gā ̀ bòzò
rope break. PFV snap at inside well
"the rope broke snappo inside the well."

(6)a.**Ne(*'e)** tamko ngo yi yake k(i) kanni. b. Tamko ngo yi yake -i **ne'e** ki kanni.
1SG show-PFV man "every" to himself show-PFV man "every"-BM 1SG to himself
"I showed every man to himself." "$I_F$ showed every man to himself."

Thus when an element which already is right-aligned to an φ boundary (e.g. DOs, IOs, ADJs) is focused, there is no need for any extra focus marking apart from being at this position.

**Consequences and Outlook:** Based on the observable asymmetry between focused subjects and non-subjects in Bole, Tangale and Ngamo, we suggest that in all three languages, it is the postfocal (right edge) boundary which is relevant for focus marking, whereas the prosodic boundary to the left of the focused element is due to independent factors (syntactic construction, speech rate, speech style…). This allows us to formulate a unified account of non-subject and subject focus: Focused constituents need to be at a prosodically prominent position at the right edge of a prosodic phrase (cf. e.g. Zubizarreta 1998). This explains not only the inversion of focused subjects, but also the non-movement of other focused elements, since there are such phrase boundaries at the edge of VP, and is thus a simple unified account of focus realization in Ngamo. The impression that focus is often not marked in Ngamo is due to the fact that – in contrast to intonation languages - the prosodic prominence of the focused constituent in Ngamo is a relative, not an absolute prominence.

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# Optimality is not a Race: Against a Performance-Based View of Reference-Set Computation

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**Problem** Reference-set constraints (RCs; also known as transderivational constraints) differ from standard well-formedness conditions in that for every tree, they compute a set of output candidates called its *reference set* and pick from said set the optimal candidate(s) according to some economy metric. Well-known examples of RCs are Fewest Steps and Merge-over-Move [1], Rule I [9] and Scope Economy [3]. It has been argued in the literature ([6], among others) that if RCs have any role to play in language, it is in the parser, where they emerge as an epiphenomenon of parallel processing. The intuition is that the assembly of optimal outputs involves fewer steps, so suboptimal outputs are ungrammatical because they are discarded by the parser once the optimal candidate has been assembled. In other words, optimality is a race between candidates (Fewest Steps is one of the few RCs where this logic makes immediate sense, but for the sake of argument I will assume that it can be extended to all RCs). Given the Strong Minimalist Hypothesis, it seems indeed preferable to derive RCs from independently posited properties of the parser (see [5] and references therein) rather than treat them as a core component of narrow syntax. But I argue that the opposite is the case: If RCs have any role to play in language, the null hypothesis is for them to reside in syntax.

**Argument 1** Putting RCs in the parser is not an innocent move at a methodological level. The default choice for a parsing model is the fully transparent parser, which uses only mechanisms that are already available in syntax. Any deviation from this model has to be motivated by empirically attested phenomena such as garden path sentences or local coherence [10]. Putting RCs only in the parser is such a deviation, and it isn't supported by conclusive evidence without further assumptions: RCs are supposed to distinguish between grammatical and ungrammatical forms, whereas parsing models should only account for the variable difficulty of processing structures — anything else is at odds with the competence-performance hypothesis.

**Argument 2** Reference-set constraints are not race-like, nor do they involve genuine comparison. When viewed from a mathematical perspective, they turn out to be merely a different way of specifying standard well-formedness conditions (which, in the case of Minimalism, may be implemented as restrictions on the distribution of features in the lexicon). This mathematical perspective is provided by *linear bottom-up tree transducers* (lbutts; [4]), i.e. machines that take a tree as input and traverse it from the leaves towards the root while at the same time transforming it into one or several output trees. Metaphorically speaking, lbutts are to trees as SPE is to strings. The interest in lbutts stems from the fact that, when applied to a language $L$ generated by a Minimalist grammar, they yield an output language of the same complexity as $L$ [7]. That is to say, for every grammar $G_i$ using only RCs that can be modelled by lbutts, there is a grammar $G_j$ without any RCs that derives the same language as $G_i$. Notably, $G_j$ preserves the RC-free part of $G_i$ without changes. It follows that any RC $R$ that can be modelled by an lbutt is equivalent to some constraint $C$ that does not involve reference-set computation.

Consider Fewest Steps (FS): Given a set of convergent derivations over the same lexical items, syntax picks the derivation(s) that involve(s) the fewest instances of Move. FS is captured by the following sequence of lbutts (every lbutt can be decomposed into a sequence of lbutts, which makes them easier to define; crucially, though, this means that there are infinitely many other ways FS could have been sequenced, and the way I do it here is merely meant to aid intuition — no significance should be attributed to the details of each individual lbutt, as they are not reflected in the big lbutt directly modelling FS). The input language is the set of derivation trees of our grammar. We first have to define an lbutt $R$ that will compute the correct reference-set, which is easily accomplished by the lbutt that may remove or add instances of Move at any node in a derivation tree (for the sake of brevity I ignore features here, although they introduce only minor complications). Now $t$ can be rewritten as $t'$ by $R$ iff $t'$ is identical to $t$ *modulo* the Move nodes. We can restrict $R$ such that it does not generate any trees that aren't already contained in the input language. This

gives us the intended set of competitors for every choice of $t$. It only remains for us to implement the economy metric, to which end we define the lbutt $+Move$, which may only add Move-nodes, but not remove them. Now $t$ is optimal iff there is no $t'$ such that $t'$ can be rewritten as $t$ (i.e. there is no $t'$ with fewer instances of Move than $t$ that is otherwise identical to $t$). Some advanced mathematical theorems then tell us how to modify $+Move$ such that it does not generate any of these suboptimal candidates. So when we recombine $R$ and the modified version of $+Move$, we get the big lbutt $FS$ which will rewrite every tree in the input language by the tree(s) that was built from the same lexical items, belongs to the input language, and contains the fewest instances of Move.

**Argument 3** Even if one decides to treat RCs as distinct from their corresponding well-formedness conditions (despite the main insight of argument 2), the lbutt perspective still implies that they are not race-like, because all competing candidates are generated in the same number of steps. This follows from the fact that the number of rewrite steps carried out by an lbutt depends only on the size of the input tree, not the output. Every node in the input tree has to be traversed, and whether the node has to be manipulated — and to which degree — is irrelevant for both the number of transduction steps and the overall runtime.

**Argument 4** Whoever disagrees with the lbutt metric in favor of the parser-centered approach has to address the question what metric the parser uses. As noted in [5], a parallel parser which picks the shortest derivation amounts to adopting the derivational theory of complexity [8], which is incorrect under its literal interpretation [2]. Restricting this proposal to RCs is highly stipulative, so the most plausible alternative is to measure length in terms of parsing steps instead. In general, though, this gauge won't line up neatly with derivational complexity; for instance, parsers are thought to operate in a strictly local manner, such that a simple operation like topicalization may correspond to an unbounded number of slash percolation steps in the parser (cf. [5]). Without an elaborate theory of how steps in syntax and in the parser are to be put into correspondence (which has to make specific assumptions about syntax and the parser that are orthogonal to the issues covered by RCs), the claim that RCs are parsing epiphenomena is vacuous. With such a theory, on the other hand, it is by all measures a more complicated proposal than having RCs in syntax, which — as I showed in argument 2 — comes for free.

**Conclusion** I showed that relocating RCs to the parser is a deviation from the null hypothesis (Argument 1), whereas they naturally reside in syntax if understood as but a different way of defining standard constraints (Argument 2). Even if one rejects this dual-perspective, the lbutt model contradicts the notion that optimality is intrinsically race-like (Argument 3), which the RC-parser connection depends on. Finally, if one does not concede even this point, then the problem remains that the measure of derivation length cannot be a syntactic one for empirical reasons, whence the connection between RCs and their implementation in the parser becomes opaque (Argument 4). In sum, then, RCs reside in syntax by default; they may also be employed by other modules, but such claims need further empirical support.

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# Impossible Predicates

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We propose a novel constraint on the denotations of lexicalized predicates in natural language: the truth-conditions of an expression involving a lexical natural language predicate depend exclusively on the properties of the individuals identified by its arguments. We propose that this generalization constrains the lexicon, and identify its connection to Conservativity (Kenan and Stavi 1986), another semantic constraint on lexical items. Finally, we note that a crucial class of possible but unattested predicates is still allowed by our lexical constraint. We propose that this class of predicates is ruled out in the syntax, via the structure-based mapping of thematic roles. The theoretical conclusion is that, while semantic constraints on the lexicon rule out a wide range of unattested lexical meanings, structure-based principles are still necessary to account for certain gaps, evidencing the need for some syntax proper in grammar.

Conservativity (Keenan and Stavi, 1986) is one of the best known constraints on possible natural language denotations. Defined as in (1), this constraint excludes all natural language determiners whose truth conditions depend on properties of individuals outside of a determiner's restrictor set. For example, to evaluate the truth of *every doctor golfs*, one does not need to "look beyond" the set of doctors; the same cannot be said of the hypothetical non-conservative determiner *every-non*, with denotation in (2). Beginning pre-theoretically, we observe that this interpretation of Conservativity extends intuitively to unattested meanings for other types of predicates. More generally, there do not seem to be any natural language predicates that require one to look beyond the entities denoted by their arguments. For instance: just as there are no natural language determiners like the hypothetical *every-non*, there are no natural language transitive verbs like *kiss-non*, with hypothetical denotations in (3a), and no natural language one-place predicates like *run-non* or *happy-non*, with hypothetical denotations in (3b-c).

We propose the following generalization: for all lexicalized natural language predicates $\phi$, the truth of a formula involving $\phi$ in a universe consisting exclusively of the individuals identified by its arguments must always be identical to the truth of $\phi$ applied to its arguments in the full domain of individuals D. In other words, natural language predicates are "myopic" in the sense that they do not see beyond the entities denoted by their arguments. We dub our larger generalization *Myopia*, and propose the formalization in (4). This formulation successfully rules out predicates like (3a-c), whose denotations quantify over entities beyond those denoted by their arguments. It also successfully rules out other classes of unattested predicates: Myopia rules out predicates that abstract "vacuously" over an argument (5a-b). Secondly, logical predicates that depend on properties of individuals in a specific relation to the arguments are ruled out (6a-b). Third and finally, predicates over arguments and/or other individuals are also successfully excluded (7a-b). We conclude that Myopia is a semantic constraint on lexicalized predicates, and that it successfully accounts for a novel generalization about unattested predicates of various types. We end this section by mentioning possible exceptions to Myopia (e.g., predicates like *married* and *alone*, non-intersective adjectives or predicates asserting context-dependent properties such as, e.g., tallness), and argue for analyses of these exceptions on which these predicates have null arguments.

There is, however, one particular class of predicates that abide by Myopia and which are nonetheless unattested in natural language. These predicates are the ones,

which assign thematic roles differently from their attested counterparts. We may, for example, ask why there is no verb *reverse-kiss* with the denotation in (8a), which effectively reverses the agent-patient relation, or why there is no adposition *reverse-on* with the denotation in (8b), which reverses the figure-ground relation. While languages may differ in the order that these arguments appear in the syntax, we show that no language has co-existing predicates which differ solely in the interpretation of the subject and object. We conclude that such "role-reversal" predicates, have to be ruled out syntactically because the structural assignment of thematic roles leads to a contradiction with their denotation. In (8a), for example, the denotation of the verb tells us that the argument corresponding to the subject is the kissee, which leads to contraction when the subject is assigned the AGENT role in the syntax.

We end by outlining a division of labor between Myopia, which directly constrains the lexicon, and thematic-role assignment, which can constrain meanings *indirectly* by ruling out denotations that will lead to a clash when roles are assigned structurally. Our conclusion is that both syntax and lexical semantic constraints are necessary to rule out the full range of unattested predicates in natural language.

*For illustrative purposes, paraphrases of hypothetical predicates applied to arguments **Jay** and **Pat** are provided in quotes.*

(1) D(A,B) iff D(A,A∩B)

(2) [[every-non]]=λf.λg.[∀x. st. f(x)=0, g(x)=1]

(3) a. [[kiss-non]]=λx.λy.[∃z.z!=y.z kisses x] "Someone other than *Jay* kisses *Pat.*"
b. [[run-non]]=λx.[∃y.y!=x.y runs] "Someone other than *Jay* runs."
c. [[happy-non]]=λx.[∃y.y!=x.y is happy] "Someone other than *Jay* is happy."

(4):

*Myopia*:
For any predicate $\phi$ of type $< \sigma_1, < ..., < \sigma_n, t >>>$ with arguments $\sigma_1$ to $\sigma_n$ of type $< e >$ or $< e, t >$ and the domain of individuals D...

$$[\![\phi]\!]^{\bigcup_{i=1}^{n}\{\sigma_i\}}(\sigma_1, ..., \sigma_n)$$

is defined and...

$$[\![\phi]\!]^{\bigcup_{i=1}^{n}\{\sigma_i\}}(\sigma_1, ..., \sigma_n) = [\![\phi]\!]^{\mathrm{D}}(\sigma_1, ..., \sigma_n)$$

Where $\{\sigma\}$ is the set of individuals which $\sigma \in \mathrm{D}_{<e,t>}$ maps to 1 or the single member set containing the individual denoted by $\sigma \in \mathrm{D}_e$.

(5) a. [[run-all]]=λx.[∀y.y runs] "Everyone runs."
b. [[Mary-kiss]]=λx.λy.[Mary kisses x] "Mary kisses *Pat.*"

(6) a. [[sister-kiss]]=λx.λy.[y kisses x's sister] "*Jay* kisses *Pat*'s sister."
b. [[friend-invite]]=λx.λy.[y invited x's friend] "*Jay* invited *Pat*'s friend."

(7) a. [[only-run]]=λx.[x runs&∀y.y!=x.y doesn't run] "Only *Jay* runs."
b. [[with-Mary-kiss]]=λx.λy.[y and Mary kiss x] "*Jay* and Mary kiss *Pat.*"

(8) a. [[reverse-kiss]]=λx.λy.[x kisses y] "*Object* kisses *Subject.*"
b. [[reverse-on]]=λx.λy.[x is on y] "*Ground* is on *Figure.*"

**Patterns of Prosodic Prominence in English Intransitive Sentences**

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**Prominence in Intransitive Sentences.** English intransitive sentences vary in whether the subject or predicate bears nuclear stress in broad-focus contexts (e.g. Chafe 1974, Schmerling 1976, Gussenhoven 1984, Selkirk 1984, Faber 1987). Several proposals link the preferred prominence pattern directly to the verbal argument structure, in particular to the unaccusative/unergative distinction (e.g. Selkirk 1995, Kahnemuyipour 2004), or to the syntactic differences between individual-level and stage-level predicates (Diesing 1992, Kratzer & Selkirk 2006). In this paper, we report on a series of experiments which challenge the claim that argument structure directly determines stress placement and provide support for an alternative topicality-based account, under which differences in verb classes indirectly interact with the likelihood of construing the subject as topical. Our proposal draws on insights from Jäger (2001), Wagner (2007), and Kratzer & Selkirk (2007).

**Experiment 1.** Experimental evidence that unaccusativity plays a role in determining prosodic prominence has been presented in Hoskins (1996) and Irwin (2010), but their stimuli were arguably not properly controlled for other relevant factors. For example, most unergative predicates in Hoskins' study were paired with animate subjects, while most unaccusative predicates had inanimate subjects. We compared intransitive sentences with unaccusative and unergative predicates, holding the contribution of the sentence to the discourse and the relative contributions of the subject and predicate to the meaning of the sentence constant. One example from our 12 items is given in (1):

(1) Why did the coach look so concerned?
a. A player tripped. (unaccusative)
b. A player limped. (unergative)

Production data were collected in a Latin square design dialogue experiment, with the contextual question played from a recorded file. 24 participants' utterances were acoustically analyzed and perceptually coded for prominence by several annotators and the results were compared to data collected in a separate dialogue experiment eliciting the same sentences under narrow focus on the subject or predicate. A mixed model analysis with item and subject as random effects showed no significant effect of argument structure on prominence, while a model comparison with a model without an item effect showed that there were significant differences between items, with a high rate of predicate stress overall—including for unaccusative verbs. In other words, prominence varied systematically between items, but the choice between an unaccusative or unergative verb had no effect. Our experiment thus fails to replicate earlier results in Hoskins (1996) and Irwin (2010), and also fails to confirm the claim in Zubizaretta & Vergnaud (2009) that unaccusatives prefer subject stress, while unergative predications can have either prominence. Our experiment suggests that once information structure is controlled for, argument structure is, in fact, irrelevant.

**Experiment 2.** In Experiment 2, the class of predicates was varied, holding unaccusativity constant. Patterns of prosodic prominence were compared between predications with verbs of appearance/coming into existence and verbs of disappearance/ceasing to exist (classifications based on Levin 1993). The subject can more easily be construed as discourse-related and, therefore, topical with a verb of disappearance, since for something to disappear it must have been present before the described event. Stimuli consisted of 6 items, as in (2):

(2) What happened after you took the medication?
a. A rash formed. (verb of appearance)
b. A rash faded. (verb of disappearance)

Results show a higher proportion of predicate stress with verbs of disappearance than with verbs of appearance.

**Experiment 3.** Experiment 3 varied the subjects and held the predicates constant. Patterns of prosodic prominence were compared between intransitive sentences with human and non-human animate subjects. Givón (1976) (among others) argues for a hierarchy of topicality in which human subjects are more likely to be construed as topical. Stimuli consisted of 12 items varying by two conditions, as exemplified in (3):

(3) Why was the farmer concerned?
a. A worker limped. (human)
b. A cow limped. (non-human)

Results show a higher proportion of predicate stress with human subjects than with non-human subjects.

**A topicality-based approach.** Any approach to prominence in intransitives necessarily acknowledges information structure effects, e.g. in order to account for the effects of focus and givenness on prominence. Our proposal differs from earlier ones, however, in claiming that once we properly understand these information structure effects, the interaction with other factors, like the apparent differences between unaccusatives and unergatives, will follow. Unergatives, e.g., may be more likely to be construed with animate and human subjects (which are more likely to be construed as topical, leading to predicate prominence) compared to unaccusatives simply for pragmatic reasons, due to the thematic roles they assign to their subject (e.g. agent vs. theme). As per the findings in Experiments 2 and 3, we propose that prominence falls on the predicate when the subject is construed as 'topical': We assume that every sentence quantifies over situations, and our claim is that predicate prominence ensues if the material in subject position is construed as part of the restrictor of that quantification, as part of the 'topic situation' (Kratzer 2006, Klein 2008). Our approach can account for the pattern of subject prominence with verbs of coming into existence (*a rash formed*), since if a referring expression is construed as being part of the topic situation, its existence is presupposed, which (depending on the predicate) may seem odd in a statement of its appearance. It may also offer an explanation of predicate stress in the case of individual-level predicates. We argue that in individual-level predications, the subject can be construed as part of the restrictor. Not construing the subject as part of the restrictor although one could have triggers the implicature that there could have been a situation involving that subject in which the predicate would not have held. In other words, we argue that *Bill was intelligent* with nuclear stress on Bill is odd for the same reason that Magri (2009) gives for why *Bill was intelligent on Monday* is odd—it suggests that he might not have been intelligent on Tuesday, contrary to what we know about individual-level predicates like *intelligent*.

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**A new intervention effect with 'only' –**
**additional evidence for a distributed syntax-and-semantics of scalar 'only'**

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**Main claims:** The first claim of this talk concerns an hitherto undescribed intervention effect in the domain of 'only' operators which leads to the categorical blocking of scalar 'only' readings. The second claim is that at least three distinct syntactic positions contribute to establishing scalar 'only' meanings in a clause. Vietnamese and, to a lesser extent, Dutch and German provide overt evidence for the different positions involved. The observed intervention effect is hypothesized to belong to the larger class of Beck effects (in the sense of Beck 1996), or to be a new subtype of negative weak islands, if Beck effects are treated as a special case of weak islands (Szabolcsi 2002). **Theoretical implications:** (i) The intervention effect under scrutiny cannot be reduced to non-syntactic factors, thereby weakening proposals that aim at a semantic/pragmatic reduction of all intervention effects. (ii) The proposed distributed syntax and semantics of scalar 'only' and the newly described intervention effect shed new light on the typology of focus-sensitive operators. **The new intervention effect:** Clause-mate sentential negation leads to the blocking of scalar 'only' readings in German (as in English); cf. (1). (1a) easily evokes a scalar reading which has it that becoming fourth is little. This reading is categorically blocked in (1b) (corrective stress on *nicht* or *nur* makes it reappear, similar to other instances of negative intervention phenomena; Williams 1974). The biclausal (1c), which is predicted to have at least one reading which is truth-functionally equivalent to that of (1b), does not filter out scalarity. Given this truth-functional identity, the contrast between (1b) and (1c) demonstrates that purely semantic or pragmatic reasons cannot be held responsible for the absence of the scalar reading in (1b). (1d) shows that narrow constituent negation off the main projection spine, as opposed to the broad negation of (1b), does not lead to the intervention effect; a scalar reading is easily available. **The scope of the exclusion of alternatives and of scalarity:** The effects in (2)-(4) serve to show that it is necessary to assume different scoping positions for scalarity and complement exclusion with 'only'. The foci in (2) project up to the I/T-level in accordance with theories predicting the interactions of contexts, sentence accents and focus. Surprisingly, the focus associating with 'only' in (3) may not project beyond I/T; the variation in tense in (3), which was innocuous without 'only' in (2), leads to infelicity. A parallel effect with modals is found in (4a). (4b) serves to show that the modal category in (4a) may topicalize, and may therefore be assumed to be *nur*'s sister in (4a), too. At the same time, speakers converge on the intuition that the scalar presupposition of (4) may include the modal (i.e., the 'allowance to drink tea', and not just 'drinking tea' alone, may be considered little). To account for these patterns I hypothesize that the scalar operator with 'only', if present, scopes above I/T, while the exclusion of alternatives scopes below I/T. **Particle proliferation in Vietnamese:** Vietnamese allows for up to four 'only' words per clause with a single focus. In (5), each of the four 'only' particles alone suffices to express a full-fledged scalar 'only' meaning in a suitable context, but any combination of the four particles likewise leads to grammatical and interpretable sentences. Sentence-final *thôi* is in the typical position of speech-act operators found in (South) East Asian languages; it scopes over the rest of the clause. I identify it with Krifka's (1995: 224) scalar assertion operator. It presupposes an informational ordering over propositional alternatives and excludes more informative ones (by implicature). *Chỉ* is in a typical adverbial 'only' position and entails the falsity of alternatives (Büring & Hartmann 2001). In accordance with the scope facts relative to I/T categories described for (3), it must follow, and hence be in the scope of, the Vietnamese anteriority and posteriority markers *đã/sẽ* (6). *Mỗi* in (5) is an ad-focus (phrase) particle. (I don't discuss *mới*, the fourth pertinent particle, in this talk; I assume it is a background marking device.) **The intervention effect as blocked LF movement:** Focus phrases that are to be interpreted as scalar must (LF-)move to the specifier of Krifka's Scalar Assertion operator spelt out by Vietnamese *thôi*. Clause-level negation

between the adverbial 'only' position and the position of the Scalar Assertion operator with its scalarity presupposition blocks this movement. A prediction for Vietnamese made by this analysis is that scalar *thôi* should be incompatible with clause-level negation, because the focus phrase should be blocked from LF-moving across negation to the specifier of the scalar assertion operator. This prediction is borne out (7). **'Only' doubling in Dutch and German:** Dutch *maar* 'only' may occur twice per clause if a numeral is in focus (8) (Barbiers 2010). I interpret this generalization as describing a configuration which gets interpreted with a scalar presupposition: the preposed focus phrase is overtly moved past the (ultimately stranded) adverbial 'only' to the specifier of the unpronounced scalar assertion operator. I.e., movement to the illocutionary operator level may be overt in Dutch. In German, focus particle doubling typically leads to (parser-unfriendly) double-'only' meanings (9). Following the contrastive positive polarity particle *DOCH* 'it IS the case that…', however, 'only' doubling is possible, and attested even in carefully edited texts (10)/(11). Speakers of German and of Vietnamese converge on the intuition that, in sequences of adverbial 'only' and ad-focus 'only' as in (7) or (10)/(11), it is the ad-focus 'only' which contributes the scalar component of meaning. This fits in with the hypothesized (LF-)movement of the focus phrase including the ad-focus particle to the illocutionary operator position: in one of its guises, ad-focus 'only' has a scalar feature that must be interpreted at the level of illocutionary force. To sum up, there is both indirect intervention evidence and morphological evidence for a distributed syntax and semantics of scalar 'only'. The intervention effect involved has an irreducible syntactic residue.

(1) a. *Er ist* ***nur*** *Vierter*$_F$ *geworden.* 'He **only** became fourth$_F$.'
b. *Er ist* ***nicht nur*** *Vierter*$_F$ *geworden.* 'He did**n't only** become fourth.'
c. *Es ist* ***nicht*** *so, dass er* ***nur*** *Vierter*$_F$ *geworden ist.* 'It's **not** the case that he **only** became fourth$_F$.'
d. *Er ist* ***nicht*** *gestern*$_F$ ***nur*** *Vierter*$_F$ *geworden.* 'It was**n't** yesterday$_F$ that he **only** became fourth$_F$.'

(2) *…dass sie* [*TEE trank*]$_F$ *und* [*jetzt SCHWEIN isst*]$_F$. '…that she [ate PORK]$_F$, and [is now drinking TEA]$_F$.'

(3) *Ich weiß, dass sie* ***nur*** *TEE trank*(*,* #*und demzufolge nicht jetzt SCHWEIN isst*).
'I know that she only had TEA (#and is thus not eating PORK now).'

(4) a. *Er hat* ***nur*** *TEE trinken dürfen, nicht aber BREI essen dürfen/*#*müssen.*
'He was only allowed to drink TEA, but {wasn't allowed to/#didn't have to} eat PAP.'
b. [*TEE trinken dürfen*]$_i$ *hat er* ***nur*** t$_i$, *nicht aber* [*BREI essen dürfen/*#*müssen*.]
'He was only allowed to drink TEA, but {wasn't allowed to/#didn't have to} eat PAP.'

(5) [[***Chỉ*** [***mỗi*** *Nam*$_F$] ***mới*** *ăn thịt bò*] ***thôi***]. 'Only NAM$_F$ eats beef.'
only only Nam only eat meat beef only

(6) *Nam* (****chỉ***) *đã/sẽ* (***chỉ***) *ăn thịt bò*. 'Nam only ate beef.'/'Nam will only eat beef.'
Nam only ANT/POST only eat meat beef

(7) [*Nam* [*không* [***chỉ*** *ăn* [***mỗi*** [*thịt bò*]$_F$] ] ] (**thôi*)]. 'Nam didn't only eat beef$_F$.' (non-scalar)
Nam not only eat only meat beef only

(8) ***Maar*** *één boek ken ik* (***maar***). 'I only know one$_F$ book.'

(9) **Nur**$_{F1}$ *EIN*$_{F1}$*Buch KENne*$_{F2}$ *ich* ***nur***$_{F2}$. 'Only$_{F1}$ [one$_{F1}$ book]$_i$ is such that I only$_{F2}$ know$_{F2}$ it$_i$.'

(10) *Das unvordenkliche Existiren ist ein* (…) *nothwendiges, aber doch* ***nur nur*** *zufällig*$_F$*-nothwendiges, d. h. ein blindes.* (von Schelling, F. W. J. (1858), 347) 'The unfathomable existence is a … necessary one, but only a randomly$_F$-necessary one, i.e. a blind one.'

(11) *Ihr* (…) *Erklärungsgrund* (…) *würde uns* (…) *doch* ***nur nur*** *halb*$_F$ *befriedigen können.* (Fichte, J./F. Niethammer (1798), 329) 'Its reason would still only be able to satisfy us only half$_F$-way.'

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**On the Dependent Character of Licensing**

Vincent Homer (ENS, IJN)

**Introduction.** NPIs are sensitive to the effect of certain expressions (quantifiers, conjunction, *because*-clauses) intervening at LF between them and a potential licenser (1) (Linebarger 1980; we call the offending expressions 'Linebarger interveners'). It has not been noticed that *some* creates an intervention effect too: the narrow scope interpretation of *someone* is impossible in (2d) (unlike in the grammatical (2c)). We propose that the source of the ungrammaticality of (2d) lies in a clash between the opposite demands of the PPI *someone* and the NPI *anything*.

**Domains.** There are three main circumstances in which a PPI, e.g. *some,* can be interpreted in the scope of negation. (i.) The negation is in a superordinate clause (3b); (ii.) the negation is a clausemate of the PPI but the PPI is also in the scope of another downward-entailing (DE) expression (3c) (the PPI is rescued in Szabolcsi's 2004 terms); (iii.) the negation is a clausemate of the PPI but there is a Linebarger intervener between the PPI and negation, cf. (3d) (where the PPI is said to be shielded) vs. (3e). Taken together, these three facts suggest that a PPI $\pi^+$ is only licensed in a given sentence *S* if there is a constituent A of *S* which is not DE w.r.t. the position of $\pi^+$ (the monotonicity of constituents is defined in (4)). Symmetrically, an NPI $\pi^-$ is only licensed in a given sentence *S* if there is a constituent A of *S* which is DE w.r.t. the position of $\pi^-$. We call 'domain of a PI' a constituent on which the licensing of the PI is checked: a PPI needs to find a non-DE domain. In view of the unavailability of the narrow scope of *some* under a clausemate negation, we stipulate that only constituents at least as large as NegP (or PolP if one assumes that negation sits in the specifier of Pol) are *eligible* domains of a PPI. In (3b) any eligible constituent of the embedded clause is upward-entailing (UE) w.r.t. *someone* and satisfies the requirement (in (3a) no eligible constituent does); in (3f), the DE expression *at most five* sits in Spec,TP, therefore outside of PolP, and the PPI is licensed on PolP (in (3g) the negative quantifier is the spell-out of negation and of an existential quantifier, and as such it creates a DE environment in the smallest eligible domain of the PPI, namely PolP); in the rescuing case, (3c), the composition of 2 DE expressions yields a UE environment for the PPI in TP; given the perfect overlap between the Linebarger interveners and the class of PPI shielders, we propose to adapt Chierchia's 2004 original proposal for NPIs to PPIs, and argue that in the shielding case (3d) the universal quantifier being a strong scalar term triggers an indirect scalar implicature in the scope of negation: this SI is factored into the meaning that is relevant for licensing and makes the environment of the PPI non-monotonic (hence not DE).

**Dependency and cyclicity.** What (2d) reveals is that the acceptability of a PI $\pi$ in a constituent A is dependent on the acceptability of all other PIs in A (*dependency* of PI licensing (5)). In (2d) all the eligible DE domains of *anything* are the matrix PolP and superconstituents thereof: they all contain a PPI in a DE position, i.e. an anti-licensed PPI, in violation of (5). On the other hand, all the non-DE eligible domains of *someone* are in the embedded clause: they all contain an NPI in a UE position, i.e. an anti-licensed NPI. In the grammatical (2e), the embedded PolP is an eligible UE domain of the PPI and it contains no other PIs. *Something* is thus licensed on PolP. The matrix PolP is a DE domain of the NPI; it contains a PPI which is licensed *within* it, therefore the condition (5) is met for the licensing of *anyone.* These facts bring to light the essential *cyclicity* of licensing: in (2e) the NPI and the PPI are licensed in different cycles, while licensing has to be checked on the same cycles in the ungrammatical (2d). The hypothesis about the dependency and the cyclicity of the licensing of Polarity Items is corroborated by the ungrammaticality of the configuration schematized in (6a) and illustrated in (6d): all the non-DE domains of the PPI *somewhere* are DE domains for the PPI *someone* and vice versa. The only reading of the sentence is one in which the subject PPI has reconstructed under negation (this meaning is not felicitous in the conversation). The reconstruction of a

subject PPI is however impossible if there is an NPI under negation (7d): all the DE domains of the NPI contain an anti-licensed PPI and all the non-DE eligible domains of the PPI contain an anti-licensed NPI. The same point can be made with the PPI *would rather* (8b). Lastly, we correctly predict that a PPI is anti-licensed if an NPI co-occurs in its smallest eligible domain, i.e. PolP (9): condition (5) cannot be met (the PIs cannot be licensed on separate cycles) whether the NPI c-commands the PPI at LF or the other way around (this is a double object construction where the respective scope of the objects is frozen). This latter fact confirms that the intervention observed here is not syntactic (*someone* in (2d) doesn't interrupt a syntactic relation between the NPI an its licenser) but semantic. It also shows, together with (2d), that *some* is anti-licensed by mere downward-entailingness (contrary to the consensus in the field).

**Conclusion.** The intervention effects that we put forward reveal the existence of domains of PIs and the dependent character of PI licensing.

(1) *I'm not sure that everyone stole anything.

(2) a. *$[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}\dots\pi^{+}\dots\pi^{-}\dots]]$ ($E_{DE}$ is the notation for a DE expression)
b. $[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}\dots\pi^{-}\dots[_{\text{PolP}}\dots\pi^{+}\dots]]]$
c. I'm not sure that someone stole a camera. ✓ NEG>SOME
d. *I'm not sure that someone stole anything. *NEG>SOME
e. I'm not sure that anyone stole something. ✓NEG>SOME

(3) When Fred speaks French…
a. …Jean-Paul doesn't understand something. *NEG>SOME
b. …it is impossible that Jean-Paul understands something. ✓NEG>SOME
c. …at most five people don't understand something. ✓NEG>SOME
d. …not everyone understands something. ✓NEG>SOME
e. …not a single person understands something. *NEG>SOME
f. …at most five people understand something. ✓AT_MOST_5>SOME
g. …no one understands something. *NEG>SOME

(4) A constituent A is DE (non-DE) w.r.t. the position of $\alpha$ ($[\![\alpha]\!]\in D_\sigma$) iff the function $\lambda x.[\![\ A[\alpha/\nu_\sigma]\ ]\!]^{g[\nu_\sigma\to x]}$ is DE (non-DE resp.). [Gajewski 2005]

(5) **Licensing of Polarity Items:** A PI $\pi$ is licensed in sentence *S* only if it is contained in at least one eligible constituent A of *S* which has the monotonicity properties required by $\pi$ w.r.t. the position of $\pi$ and all other PIs in A are licensed within A.

(6) a. *$[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}$ $\pi_k^{+}$ $\dots[_{\text{PolP}}$ E$_{DE}$ $\dots\pi_l^{+}\dots]]]$
b. —A: Everyone is hiding.
c. —B: That's exactly true, it's impossible that someone isn't hiding.✓SOME>NEG
d. —B': #That's exactly true, it's impossible that someone isn't hiding somewhere.
*IMPOSSIBLE>SOMEONE>NEG>SOMEWHERE

(7) a. *$[_{\text{CP}}$ E$_{DE}$ $\dots[_{\text{CP}}\dots[_{\text{PolP}}$ E$_{DE}$ $\dots\pi^{+}\dots\pi^{-}\dots]]]$
b. —A: Someone is eating.
c. —B: That's exactly true, it's impossible that someone isn't eating.✓NEG>SOME
d. —B': #That's exactly true, it's impossible that someone isn't eating anything.
*IMPOSSIBLE>NEG>SOMEONE>ANYTHING

(8) a. *He wouldn't rather be in Montpelier. [Baker 1970, ex. 46a]
b. There isn't anyone here who wouldn't rather do something/*anything downtown.

(9) a. At most five people sold anyone something. *AT_MOST_5>SOME
b. At most five people sold someone anything. *AT_MOST_5>SOME

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**Parsimonious Merge**
**The Intricate Syntax of French Causatives and their Clitic Distribution**
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**Introduction.** French *Faire-infinitif* (FI) causative constructions exhibit multiple analytical challenges: seemingly irregular θ-role/grammatical function pairing and unusual full constituent order ((1) and (2)), unusual pattern of argument cliticization (3). To meet the former two, we motivate a novel analysis requiring substantial derivational depth. To meet the third, noting that no current locality theory accounts for the distribution of clitics in such (or other) constructions, we propose an account in terms of **Merge Parsimony** prohibiting Merging of non truth functional material not required for convergence (a condition requiring some look-ahead in bottom up derivations).

**1. Complexity and Movement.** The placement of clitic pronouns reveals that the architecture of causative constructions is significantly more complex than has been recently assumed (*pace* Alsina 1992, Guasti 1996, Ippolito 2004, Folli & Harley 2007 a.o.). **i.** Cliticization (Sportiche, 1995) requires the presence of some functional structure **FuncStruc** hosting clitics and "leaning" on some verbal element. Complements cliticize freely in simplex clauses (see (4)-(5)), but such clitics are illicit on the verb embedded under *faire* (3), and some of them, namely Bare Dative IO clitics, which can cliticize in simple clauses (5), are *altogether illicit* (6). **ii.** Causative constructions crucially differ from double object constructions (witness the striking difference in cliticization options (4) *vs.* (6)). This shows that Causatives do not reduce to the formation of a single (but complex) predicate made up of *faire* and the embedded verb (*contra* Guasti 1996 a.o.). Biclausal analyses (Kayne 1975, Rouveret and Vergnaud 1980 or Burzio 1986 a.o.) appealing to VP preposing of a projection of the embedded V do not suffice either. Indeed, it can be shown, by means of new observations about e.g. pronominal binding or anaphor binding (see Charnavel 2009 on the anaphoric status of *son propre*) that in (1) under *Faire*, S can c-command O and IO, O c-commands S, IO c-commands O (under reconstruction as in prepositional double object constructions) but IO does not c-command S (see (7), (8), (9), (10), (11)). More movements are needed: one preposing O (by A-movement given the binding facts) out of the VP-preposed constituent itself preposed past S, one preposing V past O, given the word order, as shown in (14) (with S having raised to the main clause for Dative Case see Kayne 2005 - not a relevant assumption here).

**2. Cliticization.** Cliticization used to be thought of as being constrained by the presence of an intervening subject (starting with Kayne 1975). Such proposals, not tenable in current theories as probes for subjects and clitics are of a different nature, must be replaced by an appeal to either of the locality inducing constraints: Phase theory or Closest Attract. We adopt (without justifying it here) the simple (and independently motivated) idea (CLosestCLitic) that Clitics must cliticize in the smallest domain allowing the presence of FuncStruc (and a V). **Puzzle1**: Why can't arguments of V in (3) cliticize on V (see (17))? **Puzzle2**: Why can't a Bare IO cliticize on *Faire*? It is tempting to solve Puzzle1 by hypothesizing, as customarily, that the complement **CompFaire** of *Faire* necessarily lacks the necessary FuncStruc, but we show this is insufficient by demonstrating that the size of CompFaire is *variable* (a novel claim): it can be as small as to lack FuncStruc but it can also be big enough to include it. Examples (12)-(13) provide evidence that *Faire* can also embed a bigger infinitival constituent, which may contain negation and may (and sometimes must) contain clitic versions of V's internal arguments (if any). As a matter of fact and this is **Puzzle3**: low cliticization of V's internal arguments is the forced option when an internal argument of V is "reflexivized" with the reflexive morpheme *se*.

**3. Size and Merge Parsimony.** We first solve Puzzle2 by treating, as Pylkkänen (2008) suggests, bare IOs as high Applicatives in their clause, so high that they are stranded (in a way reminiscent of Quicoli 1979), by VP-preposing, in a lower phase (lacking a V, hence disallowing any cliticization). To solve Puzzle 1, we must guarantee that FuncStruc in CompFaire cannot be introduced unless CompFaire includes negation or a reflexive clitic. Reasoning first with negation, merging negation high or low makes scopal differences (neg in the scope of *Faire* or not). Merging low negation ipso facto guarantees that CompFaire can be (and therefore must be - cf. CLosestCLitic) large

enough to include FuncStruc (in part because CompFaire with Negation is a Phase). But surely (cf. non negated simple clauses) FuncStruc does not require the presence of negation. Why then can't it be merged in CompFaire allowing (impossible) low cliticization in the absence of negation? Merge Parsimony prevents this: since *Faire* independently allows FuncStruc in its clause and VP preposing allows "clitic climbing" (by "smuggling"), Merging the non truth functional FuncStruc in CompFaire is blocked since it is not required for convergence.

Puzzle3 is solved in a similar way: reflexivizing an internal argument of V cannot be done with the reflexive clitic *se* (re-)Merged high (an independent prohibition derived from locality considerations as *se* cliticization, unlike other kinds of cliticization, must involve "A-movement"). Low cliticization of *se* being the only option ipso facto guarantees that FuncStruc must be Merged low for convergence, thus allowing all of V's internal arguments to in principle cliticize low, and therefore requiring - by ClosestClitic all clitics (if any) originating low to cliticize low.

(1) Simple clauses: [ S V O (IO) ] or [ S V (IO) ]; under *Faire*: [Faire V O (IO) à S] or [Faire V S (IO) ]

(2) Faire envoyer une lettre au maire à Jean (make John send a letter to the mayor) / Faire parler Jean au maire (make John speak to the mayor)

(3) In [Faire V O (IO) à S ], S, O and IO cliticize on *Faire*[1]. In [ Faire V S (IO) ], S cliticizes on *Faire*, the "Bare Dative" IO cannot cliticize at all. Cliticization on V is excluded throughout.

(4) Marie le$_i$ lui$_j$ a donné (le livre$_i$) (à Jean$_j$). (Marie has given it (the book) to him (Jean)

(5) Marie lui$_j$ a parlé (à Jean$_j$). (Marie spoke to him (Jean))

(6) Marie le$_i$(*lui$_j$) a fait parler (Pierre$_i$) (à Jean$_j$) $t_i$ (Marie him to-him has made speak (Pierre) (à Jean))

(7) Marie a fait réparer [chaque voiture]$_i$ à son$_i$ propriétaire. (lit. Marie has made repair each car to its owner) *'Marie had each car be repaired by its owner.'*

(8) Marie a fait réparer sa$_i$ voiture à [chaque propriétaire]$_i$. (Marie has made repair his car to each owner)

(9) Le général a fait encercler la caserne$_i$ des mutins à son propre$_i$ régiment d'élite. (The general has made surround the mutineers' barracks to its own regiment of elite)

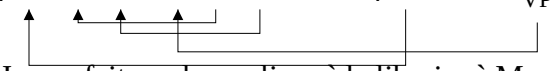
(10) *Le professeur a fait apporter un livre à [chaque enfant]$_i$ à ses$_i$ parents. (The teacher has made bring a book to each child to his parents)

(11) Le professeur a fait apporter un livre à son enfant à chaque parent. (The teacher has made bring a book to his child to each parent)

(12) ?Marie (*la$_i$) a fait ne pas (?la$_i$) réparer (la voiture$_i$) à Jean. (M. has made not repair it/the car to J.)

(13) Ceci a fait se les(=chaussures) acheter à Jean. (This has made REFL them=shoes buy to Jean)

(14) *faire* V DO [$_{VP}$ t$_V$ t$_{DO}$ IO] S$_i$ ~~*faire*~~ [$_{vP}$ t$_i$ t$_{VP}$]



(15) Jean a fait rendre un livre à la libraire à Marie. (J. has made return a book to the bookseller to M.)

(16) Jean l'$_i$ a fait rendre $t_i$ à la libraire à Marie. (J. it has made return to the bookseller to M.)

(17) *Jean a fait le$_i$ rendre $t_i$ à la libraire à Marie. (J. has made it return to the bookseller to M.)

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[1]This is often not recognized for IO, see however: Elle me la lui fera envoyer (She will make me send it to him)

# On Possibility Modals and NPI Licensing

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Possibility modals such as *may/might* have been taken to be ∃-quantifiers over worlds (Lewis 1973, Kratzer 1986, a.o.). However, this assumption, with the SDE condition on NPI licensing (von Fintel 1999), leads to a wrong prediction regarding the distribution of NPIs in the *if*-clause of conditionals with possibility modals (CPM). With a Lewis/Kratzer-style semantics, I suggest that this can be solved by assuming that ◊-modals are ∀-quantifiers over a set of worlds selected by a modal choice function from the quantificational domain (Rullman et al. 2008).

**Background:** NPIs such as *any* and *ever* are licensed in the *if*-clause of a necessity conditional.

(1) If he subscribes to any newspaper, he is well-informed.

Building on the assumption that the *if*-clause serves to restrict the modal quantifier in conditionals (which, in the default case, is the covert necessity operator WOULD (Kratzer 1981; a.o.)), von Fintel (1999) suggests that the licensing of NPIs in the *if*-clause of conditionals is captured by the semantics in (2) and the NPI licensing condition in (3). Based on (2), the *if*-clause of a necessity conditional serves to restrict the default ∀-quantifier over worlds that is introduced by WOULD and hence is SDE. Therefore, weak NPIs are licensed in the *if*-clause in (1).

(2) For any $W' \subseteq W$, $[\![ \text{WOULD} ]\!]^{A,R,w,W'}$(if p)(q) is defined only if i) W′is an admissible sphere in the modal base ∩A(w) with respect to the ordering source R(w), and ii) $W' \cap p \neq \emptyset$;
if defined, $[\![ \text{WOULD} ]\!]^{A,R,w,W'}$(if p)(q)=1 iff $\forall w' \in W' \cap p$: $w' \in q$

(3) The Strawson Downward Entailment (SDE) condition on NPI licensing:
An NPI is only grammatical if it is in the scope of α such that $[\![ \alpha ]\!]$is SDE; a function f of type $<\sigma, \tau>$ is SDE iff for all x, y of type σ such that $x \Rightarrow y$ and f(x) is defined: $f(y) \Rightarrow f(x)$

Nevertheless, this account with the widely endorsed assumption that possibility modals (such as *may/might/can*) are ∃-quantifiers leads to a wrong prediction on the distribution of NPIs in a CPM. Since the restrictor of an ∃-quantifier is (S)UE and cannot be SDE, von Fintel's suggestion with the assumption of possibility modals being ∃-quantifiers predicts that NPIs are ungrammatical in the *if*-clause of a CPM. As shown in (4), this prediction is incorrect.

(4) If John had ever been to Paris, he *might* have become a good chef.

The contrast between (4) and (5) further shows that possibility modals behave differently from other quantificational elements that have been taken to be ∃-quantifiers. (5) shows that the Q-adv *sometimes*, unlike possibility modals, fails to license NPIs in the *if*-clause. While, with the assumption that the existential Q-adv *sometimes* in (5) is restricted by the *if*-clause (Lewis 1975; Kamp 1981; Heim 1982; a.o.), the ungrammaticality in (5a) follows from the SDE condition in (3), it is left unexplained why NPIs are licensed in the *if*-clause in a CPM (see (4)).

(5) a. **Sometimes*, if a man feeds a dog any bones, it bites him. (Partee 1993)
b. LF: [[sometimes [a man feeds a dog any bones]][it bites him]]

**Proposal:** Following Rullman et al. (2008), I suggest that the presented puzzle can be accounted for by treating possibility modals as ∀-quantifiers involving modal choice functions.

***Modal Choice Functions*:** To account for the quantificational variability of modal elements in St'át'imcets (see (6)), Rullman et al. propose that modal elements in St'át'imcets are ∀-quantifiers over a set of worlds selected from the quantificational domain by a modal choice function f, the definition of which is given in (7). According to Rullman et al., with the semantics in (8), the modal element *k'a* gives rise to a necessity meaning when f maps the quantificational domain W' to itself and a possibility meaning when f maps W′ to a non-empty subset of W′.

(6) a. t'ak **k'a** tu7 kents7á ku míxalh *necessity*

go.along INFER then DEIC DET bear ‘A bear must have gone by around here.’

b. plan **k’a** qwatsáts *possibility*

already INFER leave (Context: His car isn’t there.) ‘Maybe he’s already gone.’

(7) A function $f_{<<s, t>,<s, t>>}$ is a modal choice function iff for any $W_{<s, t>}$, $f(W) \subseteq W$ and $f(W) \neq \emptyset$.

(8) $[\![\text{k'a}]\!]^{W'}(f_{<<s, t>, <s, t>>})(p_{<s, t>})^{w,A,R,W'} = 1$ iff $\forall w' \in f(W')$: $p(w')$

Building on Rullman et al., I suggest that English possibility modals *may/might*, just like St’át’imcets modal elements, take a modal choice function as an argument and universally quantify over the set of worlds selected by this function from the quantificational domain (see (9)); unlike Rullman et al., I suggest that the modal choice function f in a possibility statement is obligatorily bound by ∃-closure (cf. Reinhart 1997; Winter 1999; a.o.).

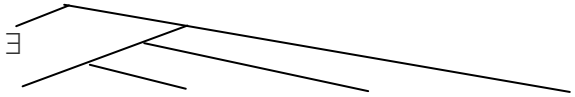
(9) $[\![\text{may/might}]\!]^{W'}(f_{<<s, t>, <s, t>>})(p_{<s, t>}) = 1$ iff $\forall w' \in f(W')$: $p(w)$

The lexical distinction between necessity and possibility modals in English is captured by Neo-Gricean Conversational Principle (Dowty 1980): since *must* is lexically specified as ∀ and unambiguously carries a necessity interpretation but *may/might* is ambiguous between ∀ and ∃ due to the unspecified value of f, *may/might* is blocked by *must* in the case of necessity.

I maintain the assumption that the Q-adv *sometimes* is an ∃-quantifier (Lewis 1975; Kamp 1981, Heim 1982; a.o.). The idea of treating possibility modals as ∀ but *sometimes* as genuinely ∃ is supported by the fact that, in St’át’imcets, the absence of the quantificational strength distinction occurs only in modals and there is a lexical distinction on Q-adverbials.

***Conditionals with Possibility Modals*:** Building on the semantics in (2), I suggest that a CPM has the LF (10a) and semantics (10b). The possibility modal, based on (10), universally quantifies over the set of worlds selected from W′ by the modal choice function f, and, along with a Lewis/Kratzer style semantics, the *if*-clause serves to restrict the possibility modal.

(10) a.




may/might $f_{<<s,t>, <s, t>>}$ if $p_{<s, t>}$ $q_{<s, t>}$

b. $[\![\text{may/might}]\!]^{A,R,w,W'}(f)(\text{if } p)(q)$ is defined only if i)W′is admissible and ii) $[f(W') \cap p \neq \emptyset]$;

if defined, $[\![\text{may/might}]\!]^{A,R,w,W'}(\text{if } p)(q) = 1$ iff $[\forall w' \in f(W') \cap p: w' \in q]$

According to (10), the *if*-clause of a CPM is an SDE context; hence, it follows from the SDE condition (3) that NPIs are grammatical in the *if*-clause of a CPM. Since NPIs are subject to local licensing, ∃-closure on f does not affect the licensing of NPIs in the *if*-clause in a CPM.

**Final Remarks**: Although the semantics for possibility modals proposed here ((9-10)) aims to account for NPI licensing, this proposal preserves the desirable consequences the assumption of possibility modals being ∃ has. As shown in (11), since f(W′) is a subset of W′, the proposed semantics of possibility modals predicts that *must-p* asymmetrically entails *may-p* as well. Furthermore, the proposed semantics also predicts the consistency between the possibility statements in (12a) with respect to inner negation. I will further show that the proposed semantics is compatible with Klinedinst’s analysis (2006, 2007) of free choice disjunction.

(11) a. You must stay. --> You may stay. b. You may stay. -/-> You must stay.

(12) a. You may stay, but also, you may leave. (assuming that *stay=not leave*)

b. $\exists f\, [\forall w' \in f(W')$: $p(w')] \wedge \exists f[\forall w' \in f(W')$: $\neg p(w')]$

In summary, the proposed semantics provides a solution to the NPI licensing in a CPM and, at the same time, preserves the merits of the assumption of ◊-modals being ∃-quantifiers.

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**TOPICS IN QUESTIONS**

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In this talk we present evidence that contrastive topic (CT) is marked in questions. Our main data comes from Turkish. Apart from novel data on the realization of topics, the talk has direct bearing on the theory of topic interpretation, as it shows that CT can be marked in questions as well as in declaratives (pace Büring, 2003).

**Data:** The question marker *mI* usually attaches after the constituent bearing sentential stress, e.g. the object in a broadly focused transitive sentence, (1a), or a narrowly focused constituent, (1b/c) (main stress=capitals; *mI* marked in bold):

(1) a. Ali dün ISKAMBİL **mı** oynadı?
*Ali yesterday cards Q played*
'Did Ali play cards yesterday?'
b. Ali DÜN **mü** iskambil oynadı.
'Was it yesterday that Ali played cards?'
c. ALİ **mı** dün iskambil oynadı?
'Was it Ali who played cards yesterday?'

When *mI* is placed in final position, but main stress, and the same pitch contour as in the previous examples occur earlier in the sentence, a different interpretation results:

(2) Ali hiç İSKAMBİL oynar **mı**?
*Ali ever cards plays Q*
'Does Ali ever play CARDS?' 'Is cards one of the things Ali plays?'

(3) a. ALİ iskambil oynar **mı**?
'Does ALİ play cards?' 'Is Ali one of the people who play cards?'
b. Ali DÜN iskambil oynadı **mı**?
'Did Ali play cards YESTERDAY?' 'Was yesterday one of those days Ali played cards?'

As the paraphrases are meant to suggest, these questions are understood as decidedly non-exhaustive. Thus, (3a)/(3b) directly contrast with (1b)/(1c) above, which express an expectation that in case of a 'yes' answer, Ali exhaustively identifies the card players (among the relevant individuals), and yesterday the exclusive time of playing, respectively. (3a)/(3b), on the other hand, express the expectation that even if Ali played cards (yesterday), others might have, too (and perhaps on other days). Call these EXHAUSTIVE

and NON-EXHAUSTIVE questions, respectively.

Subject CT is not found in the same example as the adverb. I rephrase below: (3a), on the other hand, expresses the expectation that in the case of a 'yes' answer Ali is part of the set of card players whose existence is presupposed. Similarly, (3b) involves the presupposition that Ali played cards on the days before, and asks if yesterday is part of the presupposed set.

If a context/question is biased in favor of either reading, one of the question-types becomes unacceptable. When the context requires that the accented element denotes an exhaustive set, final attachment of the clitic is out:

(4) a. Bu Kupa'da en çok gol-ü MESSI **mi** attı?
*cup-loc most many goal-acc Messi Q scored*
'Did Messi score the most goals in this World Cup?'
b. #Bu Kupa'da en çok golü MESSI attı**mı**?

Conversely, when the accented element is a member of a non-exhaustive set under question, object attachment is unacceptable.

(5) [77 goals have been scored so far in World Cup 2010.]
a. KLOSE gol attı **mı**?
*Klose goal scored Q*
'Did KLOSE score a goal?'
b. #Klose **mı** gol attı?

**Analysis:** We propose that post-verbal *mı*-marking is indicative of a contrastive topic, rather than a focus, in the question. More specifically, the main stress constituent is CT, while the finite verb bears polarity focus (*mı* thus consistently attaches to the focus in both cases).

As proposed in Büring (2003), CT marks a *strategy*: different sub-question of the same type serve to jointly answer a super-question. Crucially, a direct, exhaustive answer to the superquestion is not part of a strategy (cf. the discussion of CT-marking in questions containing universals and polarity focus in that paper). We extend this to claiming that a subquestion that asks for an exhaustive (rather than a partial) answer likewise is not part of a strategy, and hence forbids CT marking. Where, on the other hand, several subquestions jointly seek to answer the superquestion, a strategy exists, and CT marking is thus preferred (op. cit.).

**Significance:** English and German appear to utilize only focus-type marking in questions. Indeed, the topic theory in Büring (2003) *predicts* that focusing in questions should have an effect parallel to CT-marking in answers. Our findings indicate that this is at least not universally so. Turkish questions clearly differentiate CT- and F-marking. An adaption of Büring's theory allows us to pragmatically characterize the two uses parallel to those in declaratives.

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# Linguistic rhythm guides syntactic structure building
## reading data and an OT-style incremental processing model

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In written text comprehension, the task of the reader is to assign the printed word sequence a sufficiently coherent syntactic structure to allow semantic analysis. At the same time, readers generate from the graphemic string an intrinsic auditory version of the text, entailing rich prosodic structure. Various reading studies have revealed that this 'implicit prosody' may affect the syntactic analysis of written text (e.g. [1,2]). The role of 'implicit prosody' in written sentence comprehension, however, has been described as paradoxical [3]: on the one hand, prosody is shaped according the syntactic structure of the word string, suggesting that the syntactic analysis determines the prosodic representation; on the other hand, experimental evidence attests a clear influence of 'implicit prosody' on the syntactic analysis proper.
The following research questions guide our attempt to clarify the syntax–prosody interaction in reading:

1. At what stage do prosodic factors constrain the incremental syntactic analysis?

2. How can this interaction be modeled with respect to a performance compatible competence grammar?

In a controlled reading experiment, using sentences like (1), we tested the influence of stress-based linguistic rhythm on syntactic ambiguity resolution.

(1) a. ...nicht mehr {NACHweisen, erMITteln} kann, wer der Täter war.
*...couldn't {prove, determine} anymore who the culprit was.*
b. ...nicht MEHR {nachweisen, ermitteln} kann, als die Tatzeit.
*...couldn't {prove, determine} more than the date of the crime.*

The ambiguity concerns the word *mehr* featuring either an unaccented temporal adverbial (1-a) or an obligatorily accented, comparative complement to the verb (1-b). The rhythmic-prosodic environment was systematically varied at the verb following *mehr* with either initial or medial stress. Accented comparative *mehr* followed by a verb with initial stress in the citation form involves a stress clash, violating the (supralexical) prosodic constraint *Clash.
Eye-tracking data from a silent reading experiment reveal that readers exhibit significantly higher processing difficulties at the disambiguating clause in the comparative reading when the verb features initial stress, suggesting that readers initially compute the unaccented temporal *mehr* in this condition to avoid a stress

clash. Thus, at points of syntactic underspecification, the accruing prosodic representation may affect even the earliest stages of structure building in reading, viz. the analysis of syntactic features on the ambiguous word. Such an effect remains inexplicable in the context of (psycho-) linguistic theories that assume a strictly unidirectional relationship between syntactic and phonological processes, the latter merely interpreting the conditions the syntactic component imposes.
The performance data are modeled as an incremental constraint satisfaction process in the framework of an OT parsing account (cf. [4,5]). Solely making use of constraints from competence grammar, the model is capable of capturing the data and advocates the simultaneous application of syntactic, prosodic and syntax-phonology interface constraints in incremental processing. The model predicts that, at points of syntactic indetermination, weak prosodic constraints alone may guide syntactic structure assignment. The OT grammar/processor integrates syntactic parsing and prosodification in reading, hence dissolving the strict separation of language production and comprehension. At the same time the OT model endorses a bidirectional relationship between syntax and phonology in grammar.

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# Agreement with coordinate phrases: morphosyntactic versus semantic identity

## 1. Goal

The talk examines the agreement behavior of coordinate phrases, which, lacking a lexical head, have no phi-features of their own. It will be claimed that they participate in agreement with the morphosyntactic features of their conjuncts, and they participate in binding and coreference with the semantic features of their discourse referent. &Ps whose agreement behavior appears to be semantically determined are left-dislocated expressions represented in agreement processes by a resumptive pro sharing their semantic features.

## 2. Facts to be explained

The discussion will be based on Hungarian material. In Hungarian, the agreement behavior of coordinate singular subjects depends on their IP-internal versus left-peripheral position. IP-internally, they only allow singular agreement on the verb:

(1)a. [$_{IP}$ **Egy fiú és egy lány** érkezett /*érkeztek]
*a boy and a girl arrived-SG/arrived-PL*

b. Tegnap össze veszett /*vesztek **János és Mari**.
*yesterday PRT quarrelled-3SG/quarrelled-3PL John and Mary*

An &P in topic position can elicit either plural or singular agreement (2). In the case of an &P in focus position the possibility of plural agreement depends on the referentiality of the conjuncts (3a,b).

(2) [$_{TopP}$ **János és Mari** tegnap össze veszett /vesztek.
*Johnos and Mary yesterday PRT quarrelled-3SG/quarrelled-3PL*

(3)a. [$_{FocP}$ **JÁNOS ÉS MARI** veszett /vesztek össze]
*John and Mary quarrelled-3SG/quarrelled-3PL PRT*

b. [$_{FocP}$ **MELYIK FIÚ ÉS MELYIK LÁNY** veszett /*vesztek össze]
*which boy and which girl quarrelled-3SG/quarrelled-3PL PRT*

## 3. Shared morphosyntactic features in verbal agreement

The singular agreement attested in the case of postverbal coordinated singular subjects is usually interpreted as partial agreement: agreement with the specifier of &P in some theories, and agreement with the closest conjunct in others. As the talk will demonstrate, the partial agreement theory is untenable in Hungarian, because &P elicits plural agreement if either one of the conjuncts bears a plural suffix:

(4) Tegnap össze *veszett /vesztek **János és a lányok**/**a lányok és János**.
*yesterday PRT quarrelled-3SG/quarrelled-3PL John and the girls /the girls and John*

It will be claimed that &P, having no phi-features of its own, participates in agreement with the phi-features of its conjuncts. Both conjuncts pass their features on to &P. As [plural] is a privative feature (NPs are not marked for [singular] – cf. Farkas and de Swart (2010)), feature projection from the specifier and the complement of & never results in a feature conflict.

In Hungarian, [plural] is a morphosyntactic feature of NPs bearing a *-k* plural suffix. Plural agreement on the verb (also involving a *-k*) is elicited by a [plural] NP. Semantic plurality plays no role; NPs with a numerical modifier, not bearing any plural suffix, do not elicit plural agreement:

(5) **Három lány**/**sok lány** össze veszett /*vesztek.
*three girl /many girl PRT quarrelled-3SG/quarrelled-3PL*

IP-internally, the agreement behavior of &P depends on whether any of the conjuncts has passed on a [plural] feature to &P. In (1a,b), &P has no number feature; in (4), on the other hand, it has assumed the [plural] feature of one of its conjuncts, hence it elicits plural agreement.

**4. Shared semantic features in coreference relations**

The talk will claim that an &P with singular conjuncts seemingly eliciting plural agreement is a hanging topic, associated with a resumptive pro. Whereas &P participates in verbal agreement with the morphosyntactic features inherited from its conjuncts, it participates in coreference with the semantic features of its plural discourse referent. The plural agreement on the verb is elicited by the plural pro associate of &P.

It follows that the possibility of singular and plural agreement in (2a) derives from structural ambiguity. The hypothesized structures are supported by independent evidence:

(6)a.[Az $pro_k$ edzője és a $pro_k$ gyúrója]$_i$ mindegyik sportolót$_k$ elkísérte $t_i$.
*the (his) trainer-3SG and the (his) masseur-3SG each athlete-ACC accompanied-3SG*
'His$_k$ trainer and his$_k$ masseur accompanied each athlete$_k$.'

b.*[Az $pro_k$ edzője és a $pro_k$ gyúrója]$_i$ mindegyik sportolót$_k$ elkísérté**k** pro**PL**$_i$
*the (his) trainer-3SG and the (his) masseur-3SG each athlete-ACC accompanied-3PL*
'*His$_k$ trainer and his$_k$ masseur, they accompanied each athlete$_k$.'

In (6a), the singular verb agrees with the trace/lower copy of &P. The Q-raised object c-commands this lower copy, binding the pronominal genitives of the conjuncts. In (6b), plural agreement on the verb indicates that &P is a hanging topic, and the verb agrees with its pro associate. Since the pronominal genitives are not c-commanded by the Q-raised object at any stage of the derivation, they have no bound reading.

Not only topics but also foci can be coreferent with a resumptive pro, provided they are referential. In (3a,b), the possibility of plural agreement with the focused &P depends on its (co)reference potential.

**5. Extending the proposal**

The proposal will also be extended to subject-verb agreement in person. Hungarian being a pro-drop language, conjoined personal pronouns occur in the left or right periphery as topics or foci, where they are associated with a resumptive pro:

(7) [Te és én] mindig el késünk pro-1PL.
*you and I always PRT late-be-1PL*

As argued by Farkas and Zec (1995), the semantic features of personal pronouns include the features [+/-speaker], [+/-participant], and [+/-group]. The composite referent of &P, having the features [+speaker], [+participant], and [+group], is associated with a silent 1st person plural pronoun with the same features, eliciting first person plural agreement.

In Hungarian, the verb agrees with the object in definiteness. In the case of conjoined objects with different definiteness features, feature projection to &P is blocked. IP-internally, the feature conflict is resolved by closer conjunct agreement. In the case of left-peripheral objects, definiteness agreement with a resumptive pro is also an option. In arguing for the latter claim, I will show that (i) the resumptive pro, the silent equivalent of *azt* 'that' appearing in contrastive left dislocation, is [+/-definite], sharing the definiteness feature of the left-dislocated NP. (ii) An &P involving a definite and an indefinite conjunct is semantically definite and is coreferent with a definite pronoun. (iii) In the case of a left-peripheral &P with a definite first conjunct and an indefinite second conjunct, definite agreement on the verb is indicative of agreement with a resumptive pro (because the alternative strategy of closer conjunct agreement would yield indefinite conjugation).

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**What is dependent Case dependent on? A case study from Slavic**

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Accusative case (Acc) is often analyzed as a dependent Case, where being dependent means being dependent on another argument (Burzio, 1986) or dependent on a chain assigning Nominative case (Nom) to another argument (Marantz, 1991). I present a case study of a construction that cannot be accounted for by either of these families of approaches: an instantiation of *have*-perfect traditionally analyzed as an impersonal passive (Borsley, 1988; Nedashkivska Adams, 1998; Blevins, 2003; Lavine and Freidin, 2002; Lavine, 2005, 2010). I argue that this construction differs from the canonical passive in that vP is a strong phase and as such is subject to Spell-out (Chomsky 2001, 2005, 2008, contra Legate 2003). Once the vP phase is spelled-out, the morphological realization of the Case assignment cannot be changed. Thus, Acc is in principle independent of the presence of Nom or a Nom assigner (contra Sigurðsson 2006, to appear): the only relevant factor is whether or not vP is a Spell-out domain. I provide evidence that in this case, the phase boundary stems from the semantics of the construction. Data come from Polish, Ukrainian and North Russian dialects.

**Puzzle:** Slavic so-called impersonal passives, aka the *-no/-to construction* (*NT*) lack an external argument and yet the internal argument (IA) gets Acc in a violation of Burzio's generalization. Even though the construction superficially resembles the canonical passive, it differs from it in several important respects: **(i)** IA in NT is realized as Acc instead of Nom, (1). **(ii)** There is no overt Tense marking, (1). **(iii)** the verb does not agree with IA. **(iv)** NT *must* be interpreted as Past, (2) v. (3). **(v)** NT IA must be interpreted as focus, while the passive IA may be interpreted as given. The contrast can roughly be captured by the corresponding English articles, (1). **(vi)** *Ukrainian* and *North Russian dialects* NT has an optional auxiliary but even then Tense is restricted to Past and Future; Present is always excluded, (4). None of the existing proposals accounts for (iv-vi).

**Proposal:** I argue that the key for analyzing NT lies in its semantics. As has been recognized in dialectology and traditional descriptive linguistics (Kuz'mina and Nemčenko, 1971; Maslov, 1984; Trubinskij, 1988; Kuz'mina, 1993; Leinonen, 2002; Danylenko, 2006), the syntactic distribution of NT resembles the West-European *habere* Perfect. I argue that NT is indeed a perfect construction: If the perfect interpretation is enforced by the context, passive constructions, i.e., constructions with Nom, are excluded, (5). Furthermore, the passive participle morphology is cross-linguistically often identical to the perfect participle morphology (Iatridou et al., 2001). However, there are significant syntactic differences: (i) The canonical passive in these languages may contain two independent aspectual and negation projections (Veselovská and Karlík, 2004) but only one of each is allowed in NT. (ii) The NT ending is a participle ending but the canonical passive inflects as a deverbal adjective (Sobin, 1985; Lavine, 2000; Danylenko, 2006). Since NT is *have*-Perfect, it contains a covert 'have' structure in the sense of Kayne (1993). The relevant property of *have* is that it is inherently transitive. In turn, this transitive property turns vP into a strong phase. At the point of Spell-out, IA is assigned Acc by $v$. After C/T is merged, Nom remains unassigned because the IA has already been spelled-out: Since the IA is interpreted as focus, it does not raise to the edge of vP and therefore it cannot enter a feature-checking relation with C/T without violating the PIC. The difference between the NT with and without an auxiliary is a property of T: If there is no valued Tense feature on T, there is no auxiliary and the resulting interpretation is Past as the default interpretation for tense-less languages (Bohnemeyer and Swift, 2004). Since Perfect is semantically incompatible with Present, a valued Tense feature on T may be only Past or Future. Finally, IA optionally surfaces preverbally without a change in the case assignment. This follows from the semantics of NT: fronting of the IA is an instance of left-periphery focus, (iv), and as such it only arises at PF (Fanselow & Lenertová 2010), with no effect on feature valuation.

(1) a. Kobietę *(było)zabito.
woman.ACC *(was) killed
'A woman was killed.' *NT (Polish)*

b. Kobieta była/została zabita.
woman.NOM was/stayed killed
'The/*A woman was killed.' *regular passive (Polish)*

(2) Samochód jest/był/będzie malowany.
car.NOM is/was/will-be painted
'The car is/was/will be painted.'

(3) *Teraz/✓Wczoraj/*Jutro opisano problem.
now/yesterday/tomorrow described.NEUT.SG problem.MASC.SG.ACC
"The problem *is/was/*will be described *now/yesterday/*tomorrow."
**Present–✓Past–*Future*

(4) Presidenta bulo/*jest/bude vbyto/vbyvato.
president.ACC was/is/will-be Perf/killed.Imperf
'A/The president was killed.' *✓Past–*Present–Future*

(5) a. *Anna jest szczęśliwa od kiedy jej syn był zabrany.
Anna.NOM is happy since then her son.ACC stayed taken-away
Intended: 'Anna has been happy since her son has been sent away.' *canonical passive*

b. Anna jest szczęśliwa od kiedy jej syna zabrano.
Anna.NOM is happy since then her son.ACC taken-away
'Anna has been happy since her son has been sent away.' *NT*

(6) a. Zadanie było ✓rozwiązan**e**/*rozwiązan**o**.
task.NOM was solved.ADJ/solved.PP
'The task was solved.' *canonical passive*

b. Zadanie *rozwiązan**e**/✓rozwiązan**o**.
task.ACC solved.ADJ/solved.PP
'The task was solved' *NT*

(7) a. Žinky byvaly vbyty.
woman.NOM.F.PL. was.HAB.F.PL killed.F.PL.
'(The) women used to be killed.' *canonical passive*

b. *Žinok byvalo vbyto.
woman.ACC.F.PL was.HAB.N.SG. killed.N.SG.
*Intended:* 'Women used to get killed.' *NT*

(8) a. Žinky ne buly ne vbyty.
woman.NOM.F.PL not was.F.PL. not killed.F.PL.
'It wasn't the case that the women weren't killed.' *canonical passive*

b. *Žinok ne bulo ne vbyto.
woman.ACC.F.PL not was.N.SG. not killed.N.SG.
*Intended:* 'It was't the case women were killed.' *NT*

# Unexpected prosodic marking of focus in Akan – the case of tonal lowering

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This paper addresses two questions with respect to the expression of focus in a tone language. First, given that F0 is functionally used as the correlate of lexical tone the question is whether, and if so, to what extend intonational function such as focus marking may be expressed in a tone language. For Akan Boadi (1974) claims on the basis of an impressionistic description that *ex situ* focus is accompanied prosodically by means of tonal raising of High (H) and Low (L) tones. Thus, we expect Akan to belong to a group of tone languages that indeed uses prosodic means for encoding focus like for instance Mandarin Chinese (Xu 1999).

Given that we assume Akan to express focus prosodically the second question addresses whether *in situ* (1), (2) and *ex situ* (3), (4) focus is marked by means of different or identical prosodic strategies. In Akan, focus is encoded syntactically by constituent fronting to the sentence initial position and morphologically by the focus marker nà (3) (Boadi, 1974; Saah, 1988; Marfo & Bodomo, 2005; Ermisch, 2006; Kobele & Torrence, 2006; Amfo, 2010). According to Saah (1988) and Ermisch (2006) focus can also be expressed *in situ*. In a production study we examined the prosodic expression of focus in Akan, and in particular compare the prosodic realization of *in situ* and *ex situ* focused constituents.

Akan belongs to the Kwa branch of the Niger-Kongo family spoken by 8.3 million people in Ghana. As a tone language Akan distinguishes lexically L and H tones (Dolphyne, 1988), which mainly express grammatical meaning such as verb aspect and tense. The tone bearing unit (TBU) is the syllable, and syllabic structure only allows for open syllables (e.g. Dolphyne, 1988). According to Christaller (1933), Purvis (2009), and Anderson (2009) Akan also employs stress, yet the exact details of stress in Akan remain unclear.

In the production study eleven speakers of Asante Twi, one of the three main dialects of Akan, were asked to produce answers to prerecorded context questions. Recordings were conducted at the University of Ghana in Accra. Participants listened to pre-recorded context questions and were asked to answer these questions by reading the corresponding sentence aloud. The recordings were digitized at a sampling frequency of 44.1 kHz and 32 bit resolution. We analyzed target words carrying lexically L (Àddò) (1) or H tones (àmáǹgò) (2) that were embedded in carrier sentences. The context questions put target words either in wide (serving as baseline for comparison), informational, or corrective focus (Krifka 2008). The target word in all sentences was labelled by hand at the level of the word and the syllable. Duration of target words in ms and F0 in Hz was measured in the middle of the TBU.

Results for F0 show a gradual decrease of pitch height with increasing prosodic prominence for *in situ* and *ex situ* constructions. H tones *in situ* associated with contrastively focused words are realized on average 1.5 semitones (st) lower than in the wide focus contexts. For e*x situ* focus we observe the same effect, contrastively focused words are realized on average 1.8 st lower than in the wide focus contexts. For the L tone we find *in situ* a lowering of 1.0 st under corrective focus and *ex situ* a lowering of 0.8 st in comparison the wide focus baseline. Duration did not show any significance. Thus, contrastive focus is prosodically marked by means of F0 lowering whereas informational focus is not.

The data suggests that prominence may be expressed prosodically by means of a deviation from an unmarked prosodic structure. The same strategy of focus marking is used *in situ* and *ex situ*. The results are thus contradicting the view of the effort code (Gussenhoven 2004) that predicts a positive correlation of more effort resulting in higher pitch targets. Furthermore they show that a tone language can mark focus by means of pitch register modification and therefore uses intonation to express sentence level pragmatic meaning.

Speech materials

(1) Âgyèmàǹ bóàà Àddò ánɔ́pá yî.
Agyeman help.PAST Addo morning this
'Agyeman helped Addo this morning.'

(2) Ânúm̀ tɔ̀ɔ̀ àmáǹgò ánɔ́pá yî.
Anum buy.PAST mango morning this
'Anum bought a mango this morning.'

(3) Âddò nà Âgyèmàǹ bóàà ánɔ́pá yî.
Addo FM Agyeman help.past morning this
'It was Addo who helped Agyeman this morning.'

(4) Âmáǹgò nà Ânúm̀ tɔ̀ɔ̀ ánɔ́pá yî.
mango FM Anum buy.past morning this
'It is a mango that Anum bought this morning.'

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*Some formal conditions on logical syntax*

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**A.** Evidence for an informationally encapsulated syntactic component (FLN) is usually attained by comparing the expressive power of all subcomponents of the system, followed by identifying features characteristic of natural language for which only FLN provides a model. Two of the strongest criteria establishing ontological grounding for FLN along these lines are based on the two hypotheses that (i) information is computed procedurally in terms of *derivations* (Hyp1) and that (ii) there are *purely formal restrictions* on the manipulation of symbols (Hyp2). I will present new evidence in support of these two hypotheses from phenomena that intersect at the syntax-semantic interface. The argument for Hyp1 comes from a radical case of rule opacity (**B**) while Hyp2 is supported by the observation that DP-interpretation is co-determined by conditions that are purely syntactic in nature and can therefore not be expressed by semantic rules (**C**). The two studies converge in that they present two possible continuations of a single syntactic environment, viz. subextraction out of displaced nodes.

**B.** *Duke of York* (DoY; Pullum 1976) constellations follow the tripartite format A → B → A: input A is mapped to B, some operation targets B, and the derivation returns to the initial state A, rendering all computations on B opaque. DoY conspiracies constitute one of the strongest known type of argument for derivations - but have proven elusive so far. It is submitted that the German relative clause (1) instantiates such a rare DoY. (1) involves three ingredients: (i) a relative pronoun (*das*$_3$/'which$_3$') which pied-pipes an infinitival CP and covertly raises to its scope position (von Stechow 1996); (ii) two interveners in the shape of a negative quantifier (*keiner*/'nobody'; Beck 1996) and the degree particle *genau*/'exactly' which have been shown to block silent pronoun movement (Sauerland and Heck 2003); and (iii) two safeguards (the NPI *auch nur NP*/'even a single NP' and the bound variable pronoun *his*$_1$) which secure reconstruction of CP below the negative intervener *nobody*.

(1) etwas [[$_{CP}$ [$_{PP}$ über (***genau**) das$_3$] [auch nur mit einem seiner$_1$ Freunde]$_{NPI}$ zu sprechen]]$_2$
something about (exactly) which$_3$ [even only with a single of his$_1$ friends]$_{NPI}$ to speak
wohl **keiner**$_1$ t$_{CP,\,2}$ wagen würde
particle nobody dare would
"something that$_3$ nobody$_1$ would dare to talk about t$_3$ [to even a single one of his$_1$ friends]$_{NPI}$"

(2)
a. [**nobody**$_1$ ... [[$_{CP}$ which$_3$ [...pron$_1$ ...]$_{NPI}$]]]
b. [[$_{CP}$ which$_3$ [...pron$_1$ ...]$_{NPI}$] [**nobody**$_1$ ... [.... ]]]
c. which $\boxed{\lambda_3}$ [[$_{CP}$ $\boxed{t_3}$ [...pron$_1$ ...]$_{NPI}$] [**nobody**$_1$ ... [.... ]]]
d. which $\lambda_3$ [... [**nobody**$_1$ ... [[$_{CP}$ t$_3$ [...**pron**$_1$ ...]$_{\mathbf{NPI}}$]]]

(2) demonstrates why (1) is a DoY. In the transition from (2)a to (2)b, CP-fronting evacuates the pronoun (*which*$_3$) across *nobody*. Covert movement of *which*$_3$ to a clause-peripheral position in (2)c accordingly avoids an intervention effect (Smuggling; Collins 2005). Finally, NPI licensing and pronominal variable binding (*pron*$_1$) are evaluated in the lower occurrence of CP in (2)d subsequent to reconstruction. It is exactly this combination of upward CP-movement ((2)b), subextraction out of the higher CP ((2)c), followed by recycling of the lower CP ((2)d) which is characteristic of *DoY*. Thus, the syntactic component is structured in discrete, derivational units.

**C.** An adequate theory of DP-interpretation needs to include a syntactic as well as a semantic device for scope diminishment (Lechner 1996; Sharvit 1998). On the coreferential distributive interpretation of (3), binding relations are evaluated in the pronounced copy while movement can be undone for scope, indicating that scope can be dissociated from binding ((3) by Sharvit 1998):

(3) How [many students who like *John*$_1$] does he$_1$ think everyone talked to? (*de re/*de dicto*)

But the hybrid theory is also known to overgenerate unless properly confined. A restrictive theory of reconstruction will be presented which also entails qualitatively new evidence for the assumption that referential opacity is co-determined by *syntactic* factors.

Dislocated DPs may be restored into lower chain positions for the evaluation of three interpretive properties: (i) the scope of D°; (ii) principles of Binding Theory, variable binding, etc... (*e-binding*); and (iii) referential opacity, expressed in terms of binding of object language situation variables inside the restrictor (*s-binding*; Percus 2000). An inspection of the full logical space of possible dissociations among these three factors leads to the generalization in (4):

(4) a. E-binding and s-binding are evaluated in the same position of a movement chain.
b. Determiner scope can be dissociated from s/e-binding.

One side of the bi-conditional underlying (4)a is supported by the observation that coreference in (3) depends on construing the restrictor *de re* (Sharvit 1998). Thus, s-binding reconstruction, which is a precondition for *de dicto* readings, entails e-binding reconstruction. Evidence for the other direction (e-binding reconstruction entails *de dicto*) comes from the contrast (5) vs. (6). (5) admits both a consistent *de dicto* and a contradictory *de re* interpretation for the subject, while such a nonsensical reading is absent from (6). This signals that e-binding reconstruction secures reconstruction for s-binding, yielding a opaque *de dicto* reading:

(5) [Their$_1$ height]$_{de\ dicto/de\ re}$ seemed to them$_1$ to exceed [their actual height]$_{de\ re}$
(6) [Each others$_1$'s height]$_{de\ dicto/*de\ re}$ seemed to them$_1$ to exceed [their actual height]$_{de\ re}$

Thus, s-binding and e-binding must be evaluated in the same position. The two assumptions in (7), each of which is independently motivated, have the desired consequence:

(7) a. Covert movement out of silent nodes is strictly local, *modulo* interpretability.
b. Traces do not include situation arguments (<et,t>, but not <s<et,t>>, is a possible type).

E-binding reconstruction without s-binding reconstruction is excluded for (6) by the minimality condition (7)a, which blocks non-local s-variable binding across the closer operator *seem*, as in (8). Thus, reconstruction in syntax invariably produces locally bound *de dicto* readings.

(8) *[[$_{DP}$ ... s ...]$_{1,\ overt}$ $\boxed{\lambda 2}$ ... [*seem* [$\lambda$3 ... [[$_{DP}$ ... $\boxed{s}$ ...]$_{1,\ de\ re}$ ...]]]]

(7)a receives independent support from the fact that it leads to a unified analysis of three hitherto unrelated phenomena: reconstruction, scope freezing with predicate fronting ((9)a; Barss 1986)) and scope restrictions on inverse linking ((10)a; Larson 1987). (7)a dictates that subextraction out of silent nodes (VP in (9)b, the QRed object in (10)b) needs to proceed strictly locally. Thus, the underlined symbols in (9) and (10) cannot obtain scope across the closest binder (italics).

(9) a. .... and [$_{VP}$ teach every student], noone will ($\neg\exists \succ \forall$/*$\forall \succ \neg\exists$)
b. .... and *noone* will [$_{VP}$ teach <u>every student</u>]
(10) a. Two policemen spy on someone from every city ($2 \succ \forall \succ \exists$/$\forall \succ \exists \succ 2$/*$\forall \succ 2 \succ \exists$)
b. *Two policemen* [<u>every city$_4$</u> [someone from t$_4$]]$_1$ spy on t$_1$ (after type driven QR)

The second condition (7)b ensures that reconstruction in semantics only generates narrow scope *de re* readings interpretations (see also Heim & von Fintel 2005), accounting for (3). Among others, (7)b sheds new light on the inability of subjects to reconstruct into small clauses ((11)a). If intensional traces are not part of the inventory, all subjects must be interpreted above their base position ((11)b). Together with the assumption that small clauses are indeed small (vPs), it follows that *a linguist* cannot be interpreted below *seem*:

(11) a. A linguist seems *(to be) unhappy. (*de dicto*) b. seem [$_{small\ clause\ <st>}$ t$_e$ unhappy$_{<e,st>}$]

**D.** The constellations generated by (7)a are isomorphic to DoY derivations except that only DoY admits subextraction out of higher copies ((12)a). With (7)a, movement must target the lower copy ((12)b); extracting the situation variable out of the higher $\beta$ results in the unattested *de re* reading that reconstructs for e-binding. It will be seen that this imbalance is due to the fact that the landing site for $\alpha$ is fixed in (12)a only, signaling a scope economy effect (Fox 2000).

(12) a. [$\boxed{\alpha}$ ... [[$_\beta$ ... $\boxed{t_\alpha}$ ...] [intervener ... [[$_\beta$ ...$\alpha$ ...]...]]]] (Duke of York)
b. [*$\alpha$ ... [[$_\beta$ ...*t$_\alpha$ ...] [intervener ... [$\boxed{\alpha}$... [[$_\beta$ ...$\boxed{t_\alpha}$ ...]...]]]]] ((7)a)

**Reducing PRO: a Defective Goal Analysis**

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While there exists considerable crosslinguistic variation in the availability of null subjects in finite clauses, PRO is consistently silent crosslinguistically. I present a novel approach to the obligatory silence of PRO rooted in the typology of pronominal subjects in Holmberg (2010). I propose the following: 1) PRO is unpronounced because it is a Defective Goal in the sense of Roberts (2010); it has no features not shared with its Probe and is thus deleted in the same way that copies are. 2) When PRO is not a Defective Goal, it may be overt, which happens in PRO-control configurations (in the sense of Landau (2008)) where PRO bears a Focus feature.

**Account of PRO's silence:** Holmberg (2010), following Roberts (2010), claims that null pronouns result from an Agree relation with a Defective Goal: when a Probe enters into an Agree relation with a Goal whose features are a subset of those of the Probe, a chain is formed. Chain reduction allows only the highest link to be pronounced, making the consequences of Agree indistinguishable from movement in these instances.

Holmberg's subject pronoun typology (1) relies on three layers of DP structure (2) and includes three pronoun types: full DPs, which correspond to overt referential pronouns, and two types of structurally deficient null pronouns. Pronouns that lack a D layer altogether, φPs, correspond to *pro*. Since the features of a φP are a subset of those of T, a chain is formed when they enter into an Agree relation. Chain reduction ensures that *pro* is silent, since T is the highest link in the chain. (DPs with an unvalued D feature correspond to contextually linked null subject pronouns in partial null subject languages (Holmberg and Sheehan 2010).)

(1) **Holmberg's (2010) Subject Pronoun Typology**

| | |
|---|---|
| $[_{DP}$ D $[_{\varphi P}$ φ $[_{NP}$ N ]]] | Overt subject pronouns |
| $[_{DP}$ uD $[_{\varphi P}$ φ $[_{NP}$ N ]]] | Null subjects in finite embedded clauses in Partial-Null-Subject languages |
| $[_{\varphi P}$ φ $[_{NP}$ N ]]] | *pro* in Null-Subject languages |

(2) **Pronominal Structure:** $[_{DP}$ D $[_{\varphi P}$ φ $[_{NP}$ N ]]] (Holmberg 2010)

Holmberg's typology predicts the existence of a fourth type of pronoun: a φP with unvalued φ-features (uφ), parallel to the uD null subjects: $[_{\varphi P}$ uφ $[_{NP}$ N ]]]. I propose that this pronoun does exist, and that it is PRO. Since PRO only has φ-features, it will be a Defective Goal, and thus silent, whenever it enters into an Agree relation. Assuming that PRO must have its φ-features valued via an Agree relation with a higher functional head, which receives φ-features from the controller (Landau 2008), PRO will always be silent. Furthermore this analysis correctly predicts PRO to be prohibited from matrix clauses, which lack a full DP to value the features of a functional head capable of valuing PRO's φ-features.

**Account of overt PRO:** Szabolcsi (2009) demonstrates that a number of languages, like Hungarian, do allow what can be analyzed as overt PRO in certain contexts, as in (3). Szabolcsi argues that the overt pronoun in (3) behaves like PRO in allowing only a *de se* interpretation.

(3) A(z amnéziás) hős nem akart csak ő kapni érdemrendet. (*Hungarian*)
the amnesiac hero not wanted.3SG only he get.INF medal.ACC
`The (amnesiac) hero did not want it to be the case that only he gets a medal'

Notably, all of the instances described by Szabolcsi contain either a focusing particle like *only*

or contrastive intonation. The possibility of overt PRO is predicted by the present analysis: the presence of an additional Focus feature on PRO makes it no longer a Defective Goal, since the matrix functional head that PRO Agrees with (T or *v*) is not marked for Focus. Lacking a DP layer, PRO cannot be a Topic, explaining why only Focus is compatible with overt PRO.

Landau proposes that PRO's φ-features can be valued in two different ways by the matrix functional head: under PRO-control, PRO Agrees with the matrix functional head directly, while in C-control, infinitival C enters the derivation with a bundle of unvalued φ-features, and mediates the relationship between the matrix functional head and PRO. Crucially, in C-control, it is the infinitival C that assigns case to PRO (dative in Russian), meaning that only under PRO-Control does PRO bear the case of its controller.

The present proposal accounts for the observation that overt PRO is incompatible with C-control. In addition to the fact that overt PRO bears the case of the controller (nominative) in Szabolcsi's examples, Szabolcsi (2010) notes that overt PRO is incompatible with a partial control reading. In partial control (e.g. *The mayor wanted to meet at six.*), PRO is interpreted as plural despite a singular controller. Landau (2008) argues that partial control is possible only under C-Control, where infinitival C can have features additional to those of the matrix functional head. Under the present proposal, when PRO is marked for Focus, this Focus feature is also shared by the infinitival C. Therefore under C-Control PRO would again have no features separate from its Probe (the infinitival C), making it again a Defective Goal.

**Extensions:** The present approach can be extended to account for the possibility of an overt Focused pronoun coreferential with the matrix subject in English ECM constructions. The Focused pronoun has a *de se* reading and can be analyzed as overt PRO in the infinitival clause.

(4) a. *I want me to leave. *no Focus on* me
b. I want ME to leave (and you to stay). *Focus on* me

The present analysis of PRO also extends naturally to non-obligatory control (NOC). Adopting Landau's framework in which infinitival C enters the derivation with φ-features, I propose that in NOC, where no matrix functional head can value the φ-features on C, C must enter the derivation with default φ-features, which value the features on PRO.

**Conclusion:** The present proposal fits PRO naturally into a typology of null subject pronouns, reducing its silence to the silence of other subject pronouns. While capturing an appealing intuition of the Control-as-Movement theory (Hornstein 1999)—namely that PRO is silent for the same reason that copies are silent—the present proposal also predicts instances of overt PRO and extends naturally to NOC. Moreover, by providing a principled explanation for overt PRO, the present proposal covers more empirical ground than most approaches to control, which reduce the silence of PRO to its restriction to non-finite clauses.

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**Unifying OCP and Minimality: mutual exclusion and doubling in morphosyntax.**

In morphology, the OCP is invoked to account in particular for the impossibility of sequence of two *l-* clitics in Spanish, yielding suppletion by *se* (Spurious *se*, e.g. Grimshaw 1997). In syntax, Minimality is invoked to explain for instance the impossibility of moving imperatives to C across negation, yielding suppletion by the infinitive (e.g. Rivero 1994). Both constraints involve mutual exclusion under (partial) identity. In this paper we argue that apparently morphological level phenomena like the Spurious *se* are best treated by syntactic means ï and that suppletion in the imperative is better explained without having resort to movement constraints. This paves the way for the somewhat surprising conclusion that the two constraints may be (partially) unified.

1**. The double *lï* constraint.** OCP accounts of the Spurious *se* in (1) work on the basis of an Optimality/ Distributed Morphology view of lexicalization. In these frameworks, underlying structures are filled by the best candidates in lexical space. If the OCP excludes the sequence of two *l-* morphemes, then the best candidate for insertion under the dative node becomes the only clitic which does not violate its specifications, i.e. *se* (eventually via the application of an Impoverishment of the dative feature, cf. Harris 1994). In languages like French in (2) where *l-* clitics cooccur freely, they will simply not define an OCP violation.

| | | | | | |
|---|---|---|---|---|---|
| (1) | Marìa | *le/se | lo | mandó | |
| | Maria | to-him/SE | it | sent | ôMaria sent it to himô |
| (2) | Il | la | lui | donne | |
| | He | it-f. | to.him | gives | ôHe gives it to himô |

One problem that the OCP approach to (1) leaves open is why only the *l-* segment would matter ï why wouldnôt there be at least a language/ dialect where it is complete identity that matters? Another, more significant problem is that linear adjacency is in fact irrelevant to the constraint; this can be seen in Northern Italian dialects where an *l-* object clitic excludes an *l-* subject clitic even if non-*l* clitics intervene between them, as in (3) (Tavullia, data from Manzini and Savoia 2007)

| | | | | | |
|---|---|---|---|---|---|
| (3) | (*ɛl) | m | la | da | |
| | he | me | it-f. | gives | ôHe gives it to meô |

The analysis that we propose depends on a lexicalist view of the morphological interface, under which there is no underlying structure under which (possibly default) óexponentsô are inserted; rather syntactic structures are projected from positively specified properties of lexical items, conceived as mappings of sounds and meanings. We assume a morphemic analysis of Romance clitics along the lines of Harris (1994) so that Spanish *lo* in (1), French/ Tavulliaôs *la* in (2)-(3) etc. are segmented in a common *l-* base followed by nominal class (gender) inflections. We impute to *l-* the basic content on introducing definite (D) denotation. We argue that it is not the (PF-level) repetition of the same morpheme that triggers mutual exclusion but the (LF-level) operator content of *l-* . Specifically we propose that D morphology has scopal properties and the minimal domain of *l-* is the sentence, hence the entire clitic string. It is this property that licences the insertion of *se* in (1). The reflexive/ impersonal properties of the latter are most usefully construed as variable properties (Chierchia 1995). When read in the scope of the *l-* operator, they yield definite denotation. In other words, in (1) the single *l-* form lexicalizes D properties for the entire string. No default, Impoverishment, Late Insertion or competition in constraint satisfaction need (or can) be involved at any point; and notions such as inflectional identity or adjacency are predicted to play no role.

We take similar conclusions to hold for the simpler case in (3) where mutual exclusion does not yield suppletion. By contrast, the compatibility of several *l-* forms in (2) indicates that the economy implied by (1) and (3) (roughly, one lexicalization suffices) does not hold in French.

**2. V-to-C.** Consider imperatives, which we construe as inserting in a (high) C position (Rivero

1994), on the basis of facts such as the triggering of enclisis ï where enclisis corresponds to the verb moving past the clitics located in the inflectional domain (Kayne 1991). Negating an imperative can have three different effects, illustrated with Italian in (4) and (5). First, negation may have no effect: the imperative still moves to C, as (4a), yielding enclisis. Second, negation may block verb movement, in which case the imperative simply sits in its I position preceded by clitics, as in (4b). Third, the blocking of verb movement by negation may result in suppletion in the C position, for instance by the infinitive, as in (5). A Minimality account of these data faces obvious problems when compared to parallel accounts of phrasal movement. In phrasal movement, the crossing of a negation by measure, manner and other *wh*-phrases that are sensitive to it yields ill-formedness ï i.e. no órepairô is possible either by suppletion, as in (5), or by simple avoidance of movement, as in (4b).

(4) a. Non mangiate-lo!
not eat.2pl-it óDonôt eat(pl) it!ô

b. Non lo mangiate!
not it eat.2pl óDonôt eat(pl) it!ô

(5) Non lo mangiare!
not it eat.inf óDonôt eat it!ô

Consider (4b). If we assume that Minimality accounts for the blocking of verb movement by negation, this is still insufficient to account for the wellformedness of the verb remaining in situ. In minimalist terms verb movement is possible only if it satisfies some feature requirement. But if so, what satisfies the same requirement in negative contexts? A way of resolving this problem is suggested by Zanuttini (1997). The idea is that if verb movement to C satisfies certain properties, say modal ones, and Neg blocks the movement of the verb because of its similar modal properties, then we could let Neg itself satisfy these properties. This yields the blocking of verb movement and at the same time the grammaticality of it remaining in situ. But consider the logic of this argument: Neg, where present, e.g. (4b), checks properties which are checked by the raising of V in non-negative contexts. If so, economy considerations are sufficient to explain why the verb is not raised, namely because it is unnecessary to do so. In other words, the preliminary step represented by the blocking of verb raising by negation under Minimality becomes redundant.

In this perspective, we argue that (4)-(5) is best accounted in a way entirely parallel to (1)-(3). In the grammar instantiated by (4a) irrealis modality properties are lexicalized both by the negation and by the imperative sitting in C ï effectively an instance of doubling, like the doubling of the *l-* morphology in French (2). In the grammar instantiated by (4b) and (5) the negation is sufficient to lexicalize properties of irrealis modality for the entire sentential domain and the same properties are not therefore independently lexicalized by the verb in C. As we fully expect given the Spanish Spurious *se* in (1), the missed instantiation of the imperative in I can lead to the insertion of an alternative form, i.e. the so-called infinitive, yielding (5).

**3. The general pattern of doubling vs. mutual exclusion.** According to the present discussion, notions of identity (mutual exclusion/ doubling) represent a strong unifying link between the OCP and Minimality, while the differences between them revolve mostly around strictly theory-internal assumptions. Thus we argue that clitic phenomena do not in fact involve an OT/ DM morphological component (cf. Kayne 2008 among others); similarly it is not clear that head movement is to be unified with phrasal movement under Minimality (cf. Chomsky 2001). As time allows, we will address the questions that this general conclusion raises, in particular concerning the primitives targeted by mutual exclusion /doubling parameters. It seems obvious that ófunctionalô categories are at stake ï yet this notion may not be restrictive enough. We surmise that operator properties are what is relevant: thus definiteness, irrealis, etc. provoke the relevant effects, but not nominal class (gender) etc. This may also clarify the connection with Minimality constraints on phrasal movement, namely that (partially) overlapping classes of operators are involved.

# INTERACTION OF TONE AND INTONATION IN LHASA TIBETAN: A WORKING HYPOTHESIS.

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Whether or not phonological tone exists in Lhasa Tibetan (LT) and, if the answer is positive, how many tones are phonologically distinctive in this language, has been a subject of considerable controversy (Kjellin 1972, Duanmu 1992, Meredith 1990 to name a few). As many as 8 lexical tones have been proposed and as few as none. According to the hypothesis advanced here, the reality has been obscured by the fact that Lhasa tonal contour is produced by the interaction of lexical and intonational modules of grammar. This talk examines interaction of these two components and suggests a plausible direction for an account[1].

**Tibetan tonal system:** I am in agreement with those researchers that propose that LT has a simple 2-tone system. The value of each syllable's lexical tone corresponds diachronically to the voicing features of the syllable's onset: $H_{lex}$ generally developed from voiceless onsets while $L_{lex}$ from voiced ones. The $T_{lex}$ appears only on the initial syllable of the word (tonal distinctions are neutralized on all following syllables) and is followed by an H tone. This next tone is assigned to stressed syllables and thus is an exponent of metrical prominence (accent or stress). Since LT prosody is based on syllabic trochee meter, this tone (which I will indicate as *H) is associated to the initial syllable. However, as a repair of tonal crowding (due to the presence of the lexical tone), it de-links and re-associates to the 2nd syllable within the foot if it is available.

1.[2] a) [$l^h$a kaŋ] "temple" b) [ a mɛ] [ ri ga] "America" c) [kaŋ] [ga ri] "bicycle"

$L_{lex}$*H $H_{lex}$ *H (L)(L) $H_{lex}$ *H (L)(L)

**Dephrasing:** The $T_{lex}$+*H sequence appears once per domain that I will call αP. A lexical item may be merged into the αP formed by the preceding lexical item (under certain syntactic conditions) in the process losing this tonal sequence. This way a sort of "deaccentuation" is achieved for functional or semantically impoverished lexical items or for those that represent old, redundant, presupposed or predictable information (see Jun (1993) for a similar phenomenon in Korean as well as Pierrehumbert & Beckman (1988) for Japanese). Some lexical items, when "de-phrased" in this manner, acquire purely functional properties. For example, words *'de*. "this" and *chig*. "one", when dephrased, are interpreted as definite and indefinite articles correspondingly (compare 2(a) and 2(b)); similarly, locational nouns in Dative are dephrased when used as postpositions (compare 3(a) and 3(b)).

2. a) ($_{αP}$ dɛb)($_{αP}$ çiʔ) "one book" b) ($_{αP}$ par - çiʔ) "picture.INDEF"

$H_{lex}$ *H $H_{lex}$*H (L)

3. a) ($_{αP}$ naŋ- la) "inside.DAT" ("at home") b) ($_{αP}$ liŋgä: -naŋ - la) "park.GEN inside.DAT" ("in the park")

$L_{lex}$*H(L) $H_{lex}$*H (L) (L)

Full lexical items may be dephrased as well when they represent predictable or redundant information. For example, the word *ming.la* "name" in (4a) or the word *nyo.* "buy" in (4b):

4. a) ($_{αP}$ ŋä: miŋ - la) ($_{αP}$ lɔsaŋ - sɛr-gi-yɔ:)
$L_{lex}$*H(L) (L)
I-Gen. name.DAT Lobsang. call-LINK.AUX
"(His name is X). My name is Lobsang."

b) ($_{αP}$ ʃamɔ - çi:-njɔ - gi - ji:)
$L_{lex}$*H (L) (L) (L) (L)
hat buy.INF.AUX.
"(It's hot!) I'll buy a hat."

[1] Among other simplifications, I am ignoring boundary tones of larger constituents for the purpose of this abstract.
[2] Tones in parenthesis are those assigned by default. The square parenthesis here indicate foot structure.

**Pitch accents and pitch range:** LT does not have an inventory of intonational Pitch Accents the way that English does. Instead of supplying the pitch contour with particular tonal elements, the intonational module of LT grammar modifies the height of the accent peak (*H) associated with the stressed syllable. The pitch range is boosted in αP containing focused and emphasized items, as well as new topics.

This view of LT intonation can help explain several phenomena that have been observed in this language. Denwood (1999) reports that when verbs are placed in narrow focus, some syllables of the stem (those which *may* carry H-tone) are pronounced in high pitch. On the other hand, according to Denwood as well as Sprigg (1954), topics placed after the verb, i.e. right-dislocated arguments, are pronounced in low flat pitch. Having conducted my own investigation, I conclude that tonal distinctions are preserved in right-dislocated arguments but the pitch range is contracted sharply after focus. According to my observations, old preverbal topics also peak low and have limited tonal range. I interpret these findings as indicating that even though these items form their own αPs, either no pitch accent is assigned to their metrically prominent syllables or a kind of pitch accent that contracts the range of the peak instead of boosting it (indicated by the H with * in parenthesis).

5. a) ($\alpha P_{Foc}$ ji gi - taŋ- gi- rɛ:)
$L_{lex}$*H (L) (L)(L)
letter-ABS. send-LINK.-AUX.
"(He)'ll send the letter"

b) ($\alpha P_{Pre\text{-}Foc}$ji gi - tɛ-da) ($\alpha P_{Foc}$ taŋ- gi -rɛ:)ɔ) ($\alpha P_{Foc}$ taŋ-gi- rɛʔ)($\alpha P_{PostFoc}$ ji gi:)
$L_{lex}$(*)H(L)(L) $H_{lex}$*H (L) $H_{lex}$*H (L) $L_{lex}$(*)H
letter-ABS.DEF.-TOP. send-LINK.-AUX. send-LINK.-AUX. letter-ABS.
"(He)'ll SEND the letter" "(He)'ll SEND (it), the letter"

We can account similarly for the differences between realization of tonal contour in polar and wh-questions. In (6a) the wh-pronoun is in focus while the predicator is postfocal. At the same time (6b) is a polar question with the verb in focus. This difference is correspondingly reflected in the focal PA being assigned to the wh-word in (6a) but to the predicator in (6b).

6. a) ( $\alpha P_{PreFoc}$ $p^h$u -ti) ($\alpha P_{Foc}$ $k^h$a rɛ) ($\alpha P_{PostFoc}$ çi - gi - dɔ:)?
$L_{lex}$*H(L) $L_{lex}$*H $L_{lex}$(*)H(L)
boy.THIS what do-LINK.-AUX.
"What does the boy do?"

b) ($\alpha P_{Pre\text{-}Foc}$ji gi - tɛ - da) ($\alpha P_{Foc}$ taŋ -gi -rɛ -bɛ:)?
$L_{lex}$(*)H(L) (L) $H_{lex}$ *H (L) (L)
letter-DEF.-TOP. send-LINK.-AUX.-INTERR.
"Did (he) SEND the letter?"

**Summary:** I advocate the position that tonal contour of an LT sentence is produced by interaction of several components. Leaving aside the question of boundary tones, I was able to identify the following contributing factors: 1) LT has a 2-value lexical tone system; 2) metrical prominence in a word is cued in with an H-tone; 3) a lexical item may be "dephrased" by merging into the phonological domain to its left (provided certain syntactic conditions are observed); 4) intonational pitch accents may boost or contract the tonal peaks based on the informational structure of the sentence. My current work is aimed to verify empirically the hypothesis advanced here and to flesh out the details in more precise theoretical terms.

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# A new argument for Small Clauses

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The raised small clause subject (SCS) in (1b)—in contrast to the subject of the infinitive in (1a)—must scope above the embedding verb (Williams 1983, Heycock 1995, Stowell 1991).

(1) *Given the fact that a seat is empty in our otherwise crowded classroom...*

a. A student seems to be sick today. $\exists \succ$ *seem; seem* $\succ \exists$

b. A student seems sick today. $\exists \succ$ *seem; *seem* $\succ \exists$

This contrast is generally thought to indicate that SCSs do not reconstruct (Johnson and Tomioka 1998; den Dikken 2008, a.o.). We will show that the generalization we inherit here from Williams is incomplete: a SCS *can* be interpreted inside the small clause (SC) in a narrow set of circumstances. These new facts support the suggestion of Sportiche (2005) that small clauses simply lack the functional structure that introduces quantification. They also confirm the existence of small clauses.

**The central data:** The SCSs in (2) take scope within the SC. (2a), for instance, can convey that: what seems to me is that in all worlds that satisfy some relevant needs, there is a fridge—but not necessarily the same fridge across those worlds where those needs are satisfied.

(2) a. A new fridge seems to me very necessary. *seem* $\succ$ *necessary* $\succ \exists$

b. Two more Green Party senators seem necessary. *seem* $\succ$ *necessary* $\succ$ *2*

c. Someone or other from France appears likely to win. *appear* $\succ$ *likely* $\succ \exists$

d. Five deck chairs seem appropriate. *seem* $\succ$ *appropriate* $\succ$ *5*

By virtue of being interpreted in the scope of *necessary*, the SCS in (2a) is interpreted in the scope of *seems*. So why can't the SCS scope low in (1b)?

**Proposal:** The quantificational force of indefinites can be introduced higher in the clause, separate from the NP restrictor (Heim 1982) (and it may be generally true that all quantificational expressions are "split" in this way (Beghelli and Stowell 1997)

(3) $[\ \exists \ldots [\ _{VP} \ldots [\ \ldots \text{NP} \ldots ]\ ]\ ]$

Following a suggestion in Sportiche (2005, p. 56–57), we attribute the lack of narrow scope for SCSs in the general case to the absence of quantificational heads like $\exists$ in SCs. What gives rise to narrow scope in (2) is the fact that predicates like *necessary* and *likely* are themselves a source of existential quantification. Without such predicates, i.e. with a garden-variety extensional predicate like *sick* as in (1b), there's no other source for quantification in SCs. **The Details:** For the convenience of giving a simple demonstration, we assume indefinites are property-type expressions (Zimmermann 1992). We will combine property-type indefinites with their selecting predicates by predicate intersection; that derived predicate then combines with $\exists$ ($[\![\exists]\!] = \lambda P_{e,st}.\lambda w.\exists(x)[P(x)(w)]$ ) This is demonstrated for the infinitive in (1a). Narrow scope of the existential is derived by locating $\exists$ at the top of the embedded clause.

(4) *seems* $[_{TP}\ \exists$ [[*a student*] *to be sick* ]] $= \lambda w.\forall w' \in \text{seem}(w)[\exists x$ [*student*$(x)(w')$ & *sick*$(x)(w')$ ]]

SCs can't host $\exists$, so when they have indefinite subjects they remain predicates—not the right type for the proposition-taking *seems* (5a). The only option is for the indefinite NP to raise, leaving an individual-type trace in the SC (which makes the SC the right type for *seems*), and compose by predicate intersection in the matrix clause, after which $\exists$ applies, as shown in (5b). This gives a wide scope, transparent indefinite.

(5) a. * *seems* [$_{AP}$ [$_{NP}$ *a student* ] *sick* ]] = [*seems* [$\lambda x.\lambda w.student(x)(w)$ & $sick(x)(w)$]]

b. $\exists$ [[$_{NP}$ *a student* ]$_i$ *seems* [$_{AP}$ t$_i$ *sick*]] = $\exists y[student(y)(w_o)$ & $\forall w' \in \text{seem}(w)[sick(y)(w')]]$

**Narrow scope SCSs:** What gives narrow scope to SCSs in (2) is the nature of modal adjectives, which behave like intensional transitive verbs (Zimmermann 1992 in taking property-type objects. For instance, quantificational expressions like *most*-NPs (which don't have property denotiations) cannot scope under intensional *look for* as in (6a); likewise with *necessary* (6b).

(6) a. John looked for most semanticists. *most* $\succ$ *look for*; **look for* $\succ$ *most*

b. Most of the cans of fish are necessary. *most* $\succ$ *necessary*; **necessary* $\succ$ *most*

This motivates (7a) as a denotation for *necessary*. The LF of the SC construction in (2a) is given and interpreted in (7b); since *necessary* existentially quantifies the property-type NP, then the SCS can be interpreted low.

(7) a. $[\![$ *necessary* $]\!] = \lambda P_{e,st}.\lambda w.\forall w' \in \text{Nec}(w)\ [\exists x\ [P(x)(w')]]$

b. [ *seem* [ $_{AP}$ *a new fridge necessary* ] ] = $\lambda w.\forall w' \in \text{Nec}(w)\ [\exists x\ [\text{fridge}(x)(w')]]$

**Small clauses** We've put to rest the small clause debate: SCSs start low and can be interpreted there. Existential quantificational force may have a number of sources. SCs eliminate one source, and so now the interest of small clauses is their use as a guide to probe the locus of other quantificational expressions in the extended verbal projection.

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# Contrastiveness: the basis of identity avoidance

It is often claimed that identical objects should be preventing from coexisting side by side, and that this restriction should apply across various areas of the grammar. The idea is usually characterized as identity avoidance (cf. Yip 1998, references therein), which has been formalized in a number of ways but is most often stated as the Obligatory Contour Principle (OCP), a key structural principle in both phonology and morphology. In the literature (Yip 1998, Van Riemsdijk 2008), OCP is seen as a meta-principle/constraint which can be employed using a range of different arguments including 'stem', 'affix', 'foot', 'syllable', 'segmental (C/V) position' as well as individual phonological features. For example, many tone languages prevent morphological operations from creating sequences of adjacent identical tonal features. And in non-tonal languages we often see a ban on the same feature appearing more than once in a given prosodic or morphological domain, e.g. [voice] in Japanese Rendaku, [strident] ([cor][cont]) in the formation of English plural nouns, [spread glottis] or [tense] (i.e. aspiration) within the foot in languages such as English, Thai and Korean. These examples imply that OCP operations refer both to prosodic constituents and to melodic features; we never encounter any OCP effects that involve prosodic domains to the exclusion of melodic features, or vice versa.

Interestingly, we do not find any reference to OCP in phonological domains smaller than the segment — that is, in domains relating to intrasegmental structure such as those that occur in feature dependency or feature geometry. With a few notable exceptions (Schane 2005), feature theories usually assume — albeit without any explicit argument — that two or more identical features cannot appear in the same position, since there are no reported instances of OCP-related phenomena occurring at this level of structure. In other words, at intrasegmental levels such as the laryngeal and place nodes, the OCP is never violated within a single position. This begs the question why only intrasegmental structure always conforms to the OCP, and furthermore, whether we might gain a better understanding of the OCP by closely examining the role of features and their organisation in phonology.

In principle, features are seen as minimal structural units which are essential for creating phonological contrasts. Putting this another way, contrastiveness — one of the central notions of phonological (and more generally, linguistic) theory — is reliant on features. According to one monostratal approach to phonological derivation (Harris 2004, references therein), the use of privative features, as opposed to equipollent or multi-valued features, is needed in order to reduce representational redundancy and thereby improve generative capacity; for example, the contrast between *n* and *d* is represented by the presence versus the absence of the feature [nasal], while the contrast between $p^h$ and *p* is captured by the presence/absence of [spread glottis]. And in contrastive terms, there is nothing to be gained by allowing a second [nasal] or [spread glottis] feature to appear in the same segment. Within a

single segment, a feature can contribute only once to a melodic contrast; the existence of two identical features is redundant and, in relation to contrastiveness, irrelevant. On this basis, we might say that melodic contrasts are maximally satisfied within a segment.

Turning to other domains of phonology and morphology, we can assume that the same mechanism driven by CONTRAST — a general principle covering constraints such as OCP and *REPEAT — is at work in other identity avoidance phenomena. The fact that identity avoidance phenomena are observed at various prosodic levels can be attributed to the way certain features are bound by certain prosodic domains. In Yamato Japanese, for example, because two identical tokens of [voice] are redundant for the purposes of contrastiveness, this feature is considered to be a morphemic property rather than a segmental one. And in languages such as English, Thai and Korean, two identical tokens of [spread glottis] are contrastively redundant within a foot domain. This feature is thus taken to be a foot-level property which is realized on the strongest position in that foot, typically the initial position (Harris 1997). One of our findings is that those features which display an affinity with the edges of prosodic domains (e.g. aspiration, true voicing, prenasality and glottalisation/tensing) tend to be the ones which are targeted by identity avoidance constraints at prosodically higher levels; by contrast, place properties are less frequently targeted by CONTRAST, and instead are more likely to function as harmonically active properties at higher prosodic levels. The difference between these two patterns of behaviour is straightforwardly captured by the division between non-resonance features (prosodic markers) and resonance features (segmental markers). This distinction is altogether simpler than one which refers to three or more different feature divisions of the kind proposed in some models of Feature Geometry (cf. McCarthy 1988, *et passim*).

Our paper includes additional examples of identity avoidance phenomena taken not only from the phonological and morphological domains but also from syntax (Van Riemsdijk 2008), again referring to the same CONTRAST-driven mechanism.

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**On donkey anaphora**

by Philippe Schlenker (Institut Jean-Nicod and New York University)

In simple cases, a pronoun is dependent on a quantifier if it is c-commanded by it (e.g. 'Every man respects his mother'). When this happens, the quantifier c-commands and binds a trace, and the pronoun gets the same referential value (relative to assignment functions) as this trace. But this simple picture does not extend to donkey anaphora (e.g. 'John owns a donkey. He beats it.'), where the pronoun fails to be c-commanded by its antecedent. Dynamic semantics has proposed that the interpretive procedure must be revised to allow for binding in this case: the referential identity between the pronoun and its antecedent is preserved, but the c-command condition on binding is lost. E-type approaches have argued for the opposite conclusion: the c-command condition on binding should be preserved, but one should abandon the assumption that the pronoun has the same value as its antecedent. We will revisit this debate, using in particular some data from sign language.

# Getting rid of uninterpretable features: blind movement and Justification

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Examining evidence from wh-fronting in Slavic and ellipsis/movement interactions in Hungarian, I argue that movement is not driven by uninterpretable features (uFs) on either the mover or target; rather, it occurs blindly to be "Justified" at the interfaces. I argue for dispensing with uFs and analyse the syntax as a blind engine that overgenerates structures that are filtered by convergence and (global) economy at the interfaces.

MOTIVATING MOVEMENT**:** It is often proposed that movement is motivated by uFs. Chomsky (2008) argues that Move is parasitic on Agree, applying when the probe bears an EPP-feature; Agree is subject to the Activation Condition, which dictates that an element is only available for Agree (and thus Move) when it bears a uF. Bošković (2007) proposes that it is a uF on the goal that drives movement; Agree obtains in the opposite configuration, when a uF is on the probe. On the other hand, Zeijlstra (2010) argues for the reverse, where movement involves uFs occuring on the probe. All three accounts have uFs driving movement in the narrow syntax. Since they are only relevant to narrow syntax, uFs are an "imperfection" in the Minimalist view. I argue that a more minimal grammar without uFs is preferable not only theoretically but also empirically, providing evidence that shows that uFs occur on neither the probe (neutrally *target*) nor the goal (*mover*).

RUSSIAN DOLL QUESTIONS**:** I argue that the properties of "Russian doll questions" (RDQs) in Slavic show that wh-movement is not driven by uFs on the mover. RDQs are questions with whPs that contain other whPs, like *[Which picture of [what]] did you buy?*. Richards (2004) describes RDQs in Bulgarian, a multiple wh-fronting language: he presents RDQs with a second modifier and shows that the contained whP in RDQs has to move from its base position (cf. 1) to a second specifier either above (2b) or below (2c) the container. Looking at other multiple wh-fronting languages, I show that out-of-container movement (OCM) in RDQs only occurs when there is genuine wh-movement that is mover-driven. (3) shows that Russian RDQs do not allow OCM; I note that Russian multiple wh-fronting is focus-fronting, whereas Bulgarian multiple fronting is genuine wh-movement (Bošković 2002). I then examine Serbo-Croatian (SC). SC has "genuine" wh-movement in embedded-, long- and overt-C-wh-questions but focus-fronting in simple wh-questions (Bošković 2002). That wh-movement in SC is sensitive to embedding indicates that the syntax of the target, and not the mover, that determines whether we get wh-movement; this is confirmed by the fact that SC patterns with Russian with respect to the non-necessity of OCM in RDQs, in both wh-movement contexts (embedding, 4) and focus-fronting ones (5) (4b,5b are attributed to leftward PP-scrambling prior to wh-fronting, as SC allows for PP-scrambling in non-questions). If SC wh-movement involved uFs on whPs, it would pattern with Bulgarian. I propose (i) Bulgarian wh-fronting is driven in part by properties of the whPs; (ii) genuine wh-movement is driven by properties of C; (iii) focus-fronting is due to a PF condition that requires focused material to be in the focus domain CP (as in Bošković 2002). Thus OCM is only necessary for convergence in Bulgarian, so in the other languages it is blocked by economy.

The RDQ paradigm militates against uFs on the mover. uF-based accounts predict that *all* whPs in multiple wh-fronting languages should bear uFs of some kind; in RDQs, uFs on the contained whPs should remain unchecked when there is no OCM, causing unattested crashes (OCM-less 3a,4a,5a are OK). Thus these cases mustn't involve uFs on the whPs. One might still account for Bulgarian by proposing uFs on the whPs, but considering the increasing rarity of uF effects in the typology, I dispense with uFs and explain wh-movement in phonological terms. Movement is not *driven* in the narrow syntax, by uFs or any other unnecessary primitives; rather it occurs "blindly" without a narrow syntax trigger. Derivations with movement are well-formed since those without movement crash at PF. I describe such cases in terms of "Justification." Regarding the RDQs, I propose that (a) genuine wh-movement is a property of C, Justified by Richards' (2010) condition on wh-prosody in the first instance; (b) a Q-particle takes the whP as its complement in wh-movement languages (Cable 2007), and in languages like Bulgarian Q is affixal, with Q-affixation to C Justifying movement. The affixal nature of Bulgarian Q is attested by the fact that whPs in CP cannot be separated by parentheticals unless the whP is D-linked (6); according to Cable (2007:249-255), D-linked whPs lack Q-particles in these cases. I show that these assumptions derive (i)-(ii) without uFs, and by assuming (iii) we explain the paradigms of multiple wh-fronting.

ELLIPSIS BLEEDS VERB MOVEMENT: next I reconsider cases where ellipsis bleeds verb movement (VM) and argue that they provide more evidence for blind movement; specifically, they show that uFs do not occur on the *target*. Craenenbroeck & Lipták (2008) provide data from Hungarian yes/no sluicing which shows that VM to $Foc^0$ is

bled by ellipsis; this is shown by the fact that the affix that realizes $Foc^0$, *-e*, appears on the sluicing remnant (7), even though it only shows up on the verb (after VM) in the absence of ellipsis (8). I reject the PF-movement analysis of VM and Schoorlemmer & Temmerman's (2010) related analysis of ellipsis/VM interactions because it cannot account for semantic effects of VM (cf. Vicente 2008:53-59) and is problematized by other counter-examples (from Irish, Brazilian Portuguese). Yet the bleeding effect is impossible to model with syntactic VM driven by uFs: PF-deletion does not stop uFs target from causing LF crashes, and even if we said that unchecked uFs were only relevant to PF, this would still not suffice since the $Foc^0$ target survives ellipsis in (8). Thus movement cannot be driven by uFs on the target either. I propose the facts can be captured by assuming that VM is syntactic movement that is Justified by affixation at PF, and that movement is costly. Standard derivations with VM are well-formed because the competing (and more economical) VM-less derivations crash at PF due to the Stray Affix Filter (i.e. unaffixed T, C), but VM is bled when ellipsis deletes an affix that normally Justifies VM: the derivations without VM outcompete those with it because both converge (stray affixes are elided) and the VM-less ones are more economical. The Hungarian case is explained by assuming that the affixal properties of T Justify both v-to-T and T-to-Foc: v-to-T only partially satisfies the affixal requirement of T, so T-to-Foc is required. This is attested by the fact that the finite verb standardly occurs to the immediate right of the element in Spec,FocP in Hungarian (the "preverbal position"). It also explains the fact that the *-e* affix must appear on the verb in non-ellipsis clauses even though the sluicing data shows that this is not due to selectional restrictions of the *-e* suffix itself: without T-to-Foc, T's affixal requirements are not satisfied so the derivation crashes at PF. With sluicing, there are two possible derivations: one with VM to Foc (9a), and one without (9b) where suffixation of *-e* to the sluicing remnant occurs before ellipsis. Both converge at PF (no pronounced stray affixes), but (9b) is more economical because (9a) involves an extra instance of Move, so (9b) blocks (9a) and ellipsis bleeds VM.

(1) Vidja (*po matematika) studenti (po matematika) ot Bulgaria (*po matematika). *Bulgarian*
you-saw students of mathematics from Bulgaria. "You saw students of maths from Bulgaria"

(2)a. *[Kolko studenti po kakvo ot Bulgaria] vidja?
How-many students of what from B. you-saw? "How many students of what from B did you see?"

b. [Po kakvo]$_i$ [kolko studenti $t_i$ ot Bulgaria] vidja? c. [Kolko studenti $t_i$ ot Bulgaria] [po kakvo]$_i$ vidja?

(3)a. [Skol'ko risunkov chevo iz kollektsii Dzhona] ty zabral? *Russian*
[How-many drawings of-what from collection of-John] you took

b.?*[Chevo]$_i$ [skol'ko risunkov $t_i$ iz kollektsii Dzhona] ty zabral?

c.?*[Skol'ko risunkov $t_i$ iz kollektsii Dzhona] [chevo]$_i$ ty zabral?

(4)a. [Koliko priča o čemu iz naše istorije] najviše voliš? *Serbo-Croatian*
how-many stories about what from our history you-like the most?

b.[O čemu]$_i$ [koliko priča $t_i$ iz naše istorije] najviše voliš?

c.?*[Koliko priča $t_i$ iz naše istorije] [o čemu]$_i$ najviše voliš?

(5)a. [Koliko priča o čemu iz naše istorije] misliš da Ivan najviše voli?
how-many stories about what from our history you-think C John likes the most?

b.[O čemu]$_i$ [koliko priča $t_i$ iz naše istorije] misliš da Ivan najviše voli?

c.?*[Koliko priča $t_i$ iz naše istorije] [o čemu]$_i$ misliš da Ivan najviše voli?

(6)a.?*Koj, spored tebe, kavko e kupil? b. ?Koj, spored tebe, koja kniga e kupil? *Bulgarian*
Who according-to you what is bought Who according-to you which book is bought
"Who, according to you, bought what?" "Who, according to you, bought which book?" (Rudin 1988)

(7)János meghívott egy lányt, de nem tudom hogy Annát*(-e) *Hungarian*
John invited a girl but not I-know COMP Anna-Q "John invited a girl, but I don't know if it was Anna."

(8) Kivánsci vagyok, hogy János elment*(-e) iskolába.
curious I.am COMP John PV-went-Q school-to "I wonder if John left for school."

(9) a. [$_{FocP}$ XP [~~$_{Foc'}$ [T+V]-e [… [$t_{T+V}$]]]~~] b. [$_{FocP}$ XP-e [~~$_{Foc'}$ [… [T+V]]]~~]

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**On COMP-t Effects in Spanish: A New Argument for Rescue by PF Deletion**

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**Overview**. In this paper I present new Spanish facts which are highly reminiscent of the English *that*-t phenomenon, and argue that they provide novel support for a system where an aspect of locality is PF-based, namely the rescue-by-PF-deletion analysis of the mitigating effect of ellipsis on island violations (Boeckx & Lasnik 2006; Bošković 2011; Fox & Lasnik 2003; Hornstein *et al*. 2003; Lasnik 2001; Merchant 1999 *et seq.*; Park 2005; among many others).

**Novel observation**. As shown in (1), left-dislocated phrases in spoken Iberian Spanish may be sandwiched between overt complementizers in embedded clauses (cf. "recomplementation") (Campos 1992; Demonte & Fernández-Soriano 2009; Fontana 1993; López 2009; Uriagereka 1988, 1995; a.o.). It is well known that Romance null-subject languages like Spanish are insensitive to the COMP-t effect (cf. 2a). Nevertheless, it has so far gone unnoticed that in double-complementizer configurations in Spanish (cf. 1), movement across the secondary complementizer induces a locality problem (cf. 3a), which vanishes in the absence of the secondary complementizer (cf. 3b) (see also (4a) for dislocated phrases moved to the CP across secondary *que*). Cases like (3a) stand in glaring contrast to single-complementizer constructions, where the complementizer does not block extraction of the moving element (cf. 2a).

**Major claims**. I argue that **i)** movement across secondary *que* yields a locality-of-movement violation (be it long-distance extraction, as in (3a), or movement of the dislocate to the CP, as in (4a)); **ii)** PF-deletion of secondary *que* removes the locality violation caused by movement across it; and **iii)** left-dislocated phrases can be merged in, or moved to the CP domain/left periphery.

**Analysis and predictions**. Ross (1969) observed that ellipsis mitigates the effect of island violations (cf. 5), which gave rise to the repair-by-PF-deletion analysis of the amelioration of locality violations under ellipsis. Within this line of research, Bošković (2011) shows that if Ross's ellipsis operation is extended to the deletion of copies and offending elements, recalcitrant problems such as the notorious English *that*-t effect (cf. 6a) can be handled uniformly. Following the majority of the literature on COMP-t effects, Bošković attributes the contrast between (6a) and (6b) to locality of movement, noting that the complementizer is crucially implicated in the violation. I argue that in Spanish, the trouble-maker is the secondary complementizer *que*, as illustrated by the contrast between (3a) and (3b) (see also the ungrammatical reading of (4a)). Unlike in English, where only local Ā-subject extraction is problematic (cf. 6a), in Spanish all movements across secondary *que* are illicit. In the paper I provide an account of the difference, the basic idea being that in Spanish only elements that are very close to secondary *que* prior to crossing it are affected by it, which in English only holds for local subjects. The (simplified) derivations of the sentences in (3) and (4) are provided in (7) and (8), respectively. Drawing on Bošković (2011), I propose that when a moving phrase crosses secondary *que*, the offending complementizer is *-marked *à la* Chomsky (1972), as in (7a,b) and (8a,b). If *que** survives into PF, a locality violation occurs (cf. 7a/8a), since the presence of * in the final PF representation triggers a violation (cf. i). Yet, if deletion of *que** occurs in PF (cf. ii) (see Chomsky & Lasnik 1977), the violation is circumvented (cf. 7b/8b), which explains why movement is possible if secondary *que* is absent, as in (3b) and (4b). It should be noted that unlike the higher *que*, whose deletion is highly restricted in Iberian Spanish (cf. 2b) (Torrego 1983, a.o.), secondary *que*, which is optional, can be deleted in PF, as in Chomsky & Lasnik's analysis of optional *that* in English, whereby *that* has been deleted when it does not surface. Regarding (iii), I argue that in recomplementation cases (cf. 1), the dislocated phrase is merged in between *que*s in the left periphery (cf. 8c), which is an option independently available for Spanish dislocation (Martín-González 2002, a.o.). Hence, no locality problem arises in (8c),

since there is no movement at all across secondary *que* (i.e. the dislocate is base-generated in the CP; cf. iii). If this analysis is on the right track, dislocates in recomplementation contexts should not exhibit reconstruction effects. This prediction is correct, as indicated by the unavailability of the bound variable interpretation in (4a) (cf. 8c). Conversely, when secondary *que* is absent, reconstruction of the dislocate is possible (cf. 4b). In this case, movement of the dislocate to the CP across secondary *que* results in *-marking of secondary *que*, which is then deleted in PF (cf. 8b). Under the current system, (3b), (4b), and (6b) are treated in the same way as Ross's original examples (cf. 5b; i/ii). Moreover, this analysis does not require positing a different syntax for the ungrammatical sentences with secondary *que* (cf. 3a) and their grammatical counterparts without secondary *que* (cf. 3b). Further, the present account allows for a unification of the analysis of the seemingly unrelated facts presented in (3) and (4). Lastly, it is important to note that the overall approach pursued in this paper predicts secondary *que* locality violations to be rescued by ellipsis, much like ellipsis remediates *that*-t effect violations in English (Merchant 2001) (cf. 9). This prediction is borne out by the data in (10), which substantiates the analysis proposed here.

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(1) a. *Dijo <u>que</u> cuando lleguen (<u>que</u>) me llaman*
said that when arrive that cl. call
'S/he told me they'll call me when they arrive.'

b. *Me dijo <u>que</u> a mi prima (<u>que</u>) la echaron*
cl. said that my cousin that cl. threw
'S/he said my cousin was fired.'

(2) a. *Quién crees que ganó?*
who believe that won
'Who do you think won?'

b. **Quién crees ganó?*
who believes won

(3) a.**Quién me dijiste que a tu madre* ***que*** *la iba a llamar?*
who cl. said that your mother that cl. was to call

b. *Quién me dijiste que a tu madre la iba a llamar?*
'Who did you say was going to call your mom?'

(4) a. *Me contaron que su*$_{*i/j}$ *coche* ***que*** *todo el mundo*$_i$ *lo tiene que dejar aquí* (* bound variable interpret.)
cl. told that his car that all the world cl. has that leave here

b. *Me contaron que su*$_{i/j}$ *coche todo el mundo*$_i$ *lo tiene que dejar aquí* (✓ both interpretations)
'They told me that everybody has to leave his car here.'

(5) a.**That he will hire someone is possible, but I will not divulge who that he will hire is possible*

b. *That he will hire someone is possible, but I will not divulge who* ~~that he will hire is possible~~

(6) a.**Who do you think that won?*

b. *Who do you think won?*

(7) a.*Quién…[$_{CP}$ que [$_{XP}$…**que***…~~quién~~]] (=(3a), * survives into PF: PF violation)

b. Quién…[$_{CP}$ que [$_{XP}$…~~**que***~~…~~quién~~]] (=(3b), *que** deleted in PF: derivation salvaged)

(8) a. *[$_{CP}$ que [$_{XP}$ su coche **que***…todo el mundo…~~su coche~~]] (=(4a), * survives into PF: PF violation)

b. [$_{CP}$ que [$_{XP}$ su coche ~~**que***~~…todo el mundo…~~su coche~~]] (=(4b), ✓ var. bound in lower copy of *su coche*)

c. [$_{CP}$ que [$_{XP}$ su coche **que**…todo el mundo… ]] (=(4a), base-gener. dislocate; no bound reading)

(9) a.**They said that a professor was hired, but I won't reveal which professor they said that was hired*

b. *They said that a professor was hired, but I won't reveal which professor* ~~they said that was hired~~

(10) a. **Me dijo Marta que a tu madre* ***que*** *le habían regalado flores, pero no te voy a decir*
cl. said Martha that to your mother that cl. had given flowers, but not cl. go to say

*quién me dijo Marta que a tu madre* ***que*** *le había regalado flores*
who cl. said Martha that to your mother that cl. had given flowers

b. *Me dijo Marta que a tu madre* ***que*** *le habían regalado flores, pero no te voy a decir quién* ~~me dijo Marta que a tu madre que le había regalado flores~~
'Martha told me that somebody gave your mother flowers, but I won't tell you who.'

**Shifting Prominence: Grammatical Factors, Cross-linguistic Differences**

Michael Wagner (McGill University)

Germanic and Romance languages differ in how prosody is affected by information structure. Ladd (2008), e.g., observes contrasts between English and Italian that reveal differences in how argument structure and information structure affect prosody. These differences seem to generalize to other Romance and Germanic languages (see Swerts et al. 2002, Swerts 2007 for experimental evidence on Dutch, Italian, and Romanian). Using experimental evidence (mainly from English and French), this paper explores the semantic, syntactic, and phonological underpinnings of the prosodic differences, and their repercussions in grammar, including their influence on what types of rhyme are considered artistic in poetry.

Mary Ann Walter, Northwestern

# Identity Avoidance without Phonology: Possession and Relativization in Semitic

Many grammatical processes seem to be motivated by "avoidance of identity" (Yip 1998). Nearly all such phenomena documented so far, even so-called syntactic ones, make reference to *phonological* identity, even if phonological identity is not sufficient in itself to trigger some identity-avoiding grammatical repair processes (though see Kornfilt 1986, Neeleman and van de Koot 2005). This study provides evidence for the relevance of purely non-phonological identity (presence of definiteness and case inflection) within a particular syntactic domain (the strong phase) at a particular point in a derivation (linearization at Spell-Out; Kayne 1994, Richards ). Data comes from the Semitic languages Hebrew, Arabic, Ge'ez, Akkadian, Ugaritic, Amharic, Modern South Arabian, and Sabaic. I argue that alternative constructions for possession and relativization in these languages involve the identity-avoidance mechanisms of deletion and distancing.

## Argument

Semitic periphrastic and "construct" genitives, and parallel relativizing constructions, arise from an identity-avoiding requirement on syntactic linearization.

## Identity Avoidance and Possession

Various Semitic languages mark nouns for definiteness, case, or both. In periphrastic/prepositional possessive phrases such as (1a,2a,3a), all of this inflection is expressed freely (with Noun 2 always in genitive case). For possessive phrases without such a preposition – "construct state," as in (1b,2b,3c) – the first noun lacks all such inflection.

| | Periphrastic | Construct |
|---|---|---|
| 1) Akkadian case | a. kasp-um ša šarr-im<br>silver-nom of king-gen<br>'king's silver' | b. kasap šarr-im<br>silver king-gen<br>(Ge'ez patterns similarly.) |
| 2) Hebrew definiteness | a. ha bayit šel ha mora<br>the house of the teacher<br>'the teacher's house' | b. beyt ha mora<br>house the teacher<br>(Sabaic patterns similarly) |
| 3) Classical Arabic case AND definiteness | a. al-kitaab-u ᶜand al-walad-i<br>the-book-nom ~of the-boy-gen<br>'the boy's book' | b. kitaab-u-l-walad-i<br>book-nom-the-boy-gen |

I argue that these constructions are instances of identity-avoiding distancing and deletion phenomena, respectively. Unless a preposition is present to introduce a new syntactic phrase in between the two nouns, identity-avoidance is satisfied by deletion of inflectional material from the first noun.

## Identity Avoidance and Relativization

Semitic relative clauses can be introduced by a relativizer, which for many of the languages is homophonous with the prepositional possessive. For relative clauses without this, the first noun is restricted in the inflection it can express, just as in possessive "construct state" Noun 1's.

| | | |
|---|---|---|
| 4) Akkadian | a. kasp-um ša itbal-u(šu)<br>silver-nom that he took-sub-(it)<br>'silver that he took' | b. kasap itbal-u(šu)<br>silver he took-sub.-(it) |
| | (Ugaritic, Hebrew, Old South Arabian, and Ge'ez pattern similarly.) | |
| 5) Arabic | a. al-kitaab-u allaði qaray-tu-hu<br>the-book-nom that read-I-it<br>'the book that I read' | b. kitaab-u-n qaray-tu-hu<br>book-nom-indef read-I-it<br>'a book I read' |

On the assumption that relative clauses are introduced into the syntactic structure by a phonologically null DP relative operator, these clauses and their head noun DPs face the same problem with identity as Semitic possessives. That is, two DP heads within a strong phase lack an asymmetrical c-command relationship, and therefore cannot be linearized at Spell-Out.

## Conclusions

Richards (2010) formulates a Distinctness Principle with respect to Kayneian linearization (1994), holding that linearization cannot proceed when identically-labelled syntactic nodes occur structurally adjacently. I show that such an identity-avoiding principle accounts for an array of syntactic properties in languages of the Semitic family, corresponding to well-known phonological processes. An analysis along these lines provides support for the notion of morphomic representations and an account of construct state in which N raises to D (Ritter 1988, 1991, Borer 1999, Siloni 2000, contra Cinque 2003, Shlonsky 2004). Most importantly, the Semitic data constitute a class of identity-avoidance phenomena based only purely morphosyntactic properties, with no reference to phonetic form.

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**The Copy Theory of Merge**

Edwin Williams (Princeton University)

In implementations of the Copy theory of Movement, the derived structure has in it two copies of a moved NP, and each of the two copies can be operated on further, independent of the other; Fox (2002) is a prominent example. I will present a theory in which much of the benefit of the copy theory is gotten, but without the independence of the copies. It begins with how a NP is inserted in the first place: rather than embedding an NP, one embeds a "pointer" or (or trace of) the NP, but the NP itself stays in the workspace. Movement is simulated by inserting further instances of the same pointer in higher positions, and in the end, the NP is "read into" the top pointer. Since the NP remains a top-level member of the workspace, it is eligible for further operations, but there can be no analog of acting differentially on different copies, and so analyses (Fox's, for example), are eliminated. It remains to show that the Copy THeory of Merge is adequate in the obvious ways–that Binding Theory, rules of interpretation, islands, etc, can get satisfactory formulations.

Fox, D . (2002) "Antecedent-contained deletion and the copy theory of movement" Linguistic Inquiry 33(1): 63-96

**Linguistic and non-linguistic identity effects: same or different?**

Moria Yip (UCL)

The OCP, and its approximate inverse REPEAT or COPY, are grammatical statements about identity. As such they may hold sway over different entities, and in one or more areas of the grammar, such as phonology, morphology, syntax or semantics, and their effects may be more or less visible in any given language (an effect modelled in OT by how highly ranked they are).
But identity or an avoidance of identity also plays a role in areas that are less obviously grammatical, such as syntactic processing, onomatopoeia, and the aesthetics of language. And if we range further afield it may even play a role in the communications of non-human primates. This talk will offer a brief survey of the range of such effects, and ask whether there is a common thread and /or origin, and whether a unified account is either possible or desirable.

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