# Charting the landscape of linguistics

On the scope of Josef Bayer's work

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# **Preface**

Ellen Brandner, Anna Czypionka & Andreas Trotzke

On occasion of Josef's 65th birthday and his upcoming retirement, we present here a collection of articles from colleagues and friends that can be taken as an attempt to reflect (at least part of) the influence that Josef had on different fields of linguistics. Josef worked in linguistic subfields as diverse as psycho- and neurolinguistics (including research on aphasia), the syntax and morphology of dialects, comparative work with a focus on South Asian languages, and finally the syntax-pragmatics interface with his recent work on discourse particles. Given this diversity of research topics, we therefore named this collection "Charting the landscape of linguistics: On the scope of Josef Bayer's work." On the website's title page, we indicate (in a 'cartographic' fashion, as it were) where Josef has left his mark during his long career — either by working on the languages spoken in the marked areas or by intensive exchange with colleagues living in these countries.

As for the present collection, needless to say, we had to make tough choices regarding the selection of potential contributions. We nevertheless hope that the present collection will please Josef. One aspect of Josef's work that might be underrepresented in this webschrift is that Josef was one of the first to take syntactic theory to the lab. In addition to the theoretical analysis of the phenomena indicated above, he has investigated their role in processing, always seeing empirical and theoretical research as complementary (rather than opposed) ways to answer the big questions of linguistics. His work has profoundly shaped the land-scape of psycholinguistics, adding theoretical quality and depth to empirical research.

We became friends with Josef at different stages of his career. His groundbreaking work on dialectal syntax, his comparative research on discourse-oriented grammar, and his work on language processing influenced the three of us to a different extent. Working in Josef's research team has always felt like we are all contributing to the same explanatory enterprise. Josef has always been able to provide a conceptual umbrella for all scholars working within his research unit. His colloquium, reliably taking place every Tuesday, has been an exceptional place for us to exchange and develop new ideas and to keep up with current work of our colleagues. Long-term research strategies often emerged during Tuesday's dinner at Josef's favorite Italian place in town. Thank you, Josef, for all the wonderful evenings and the invaluable feedback we received from you!

All in all, the contributions to this webschrift reflect how generously Josef has been sharing his knowledge, his ideas, his enthusiasm, and his time throughout his career—and that is the message that we, as well as all contributors to this collection, would like to convey to Josef. **Dear Josef**: Please enjoy 'browsing' through the contributions from your colleagues and friends—either for finding many interesting ideas for your future work or for dwelling in memories also outside linguistics!

We would like to thank our co-editor Constantin Freitag for a great type-setting job. Also thanks to Uwe Braun and Johanna Steindl for their assistance and to Walter Kempf for 'visualizing' the landscape.

# **MP-Transport?**

WERNER ABRAHAM

# 1 Vorüberlegung

Da die Setzung von Modalpartikeln/MPn ebenso wahrheitsfunktional bedingt ist wie Negationssetzung, ist zu erwägen, ob neben Negationstransport auch MP-Transport möglich ist. Man vergleiche dazu (Lakoff, 1968; Bartsch, 1973): "Neg-Transport" betrifft die fakultative Anhebungstransformation, die ein Negationselement (wie nie, nirgends, kein, niemand, nichts) aus einem eingebetteten Satz in den übergeordneten, einbettenden hebt. Diese Verschiebung ist an eine bestimmte Verbklasse mit Ergänzungssätzen gebunden: etwa denken, glauben, hoffen, erwarten, annehmen, nicht jedoch z.B. bei wissen. Vgl. Er glaubt nicht kommen zu müssen, welches sowohl eine Lesart erlaubt, in der die Negation sich mit glauben verbindet (nicht-glauben, dass ...) als auch eine, in der die Negation nur im eingebetteten Satz Skopus hat (glauben, dass nicht ...), (Abraham, 1988: 524).

Zu beachten ist nun, dass die erwähnten Performativverben, auf die Negationstransport beschränkt ist, zu den nichtfaktiven Verben gehören, die die sog. 'Brückenkonstruktion' (also Hauptsatzstellung mit V2 in der Komplementeinbettung) erlauben. Dies steht im Gegensatz zu den faktiven Verben, die dies nicht erlauben, sondern an die Einleitung mit einem Subjunktor in Comp (und damit mit Vletzt) gebunden sind. Die Einbettungen unter nichtfaktiven Prädikaten haben autonome Illokutionspotenz, die faktiven hingegen nicht (Abraham, 2014). Daraus nun leitet sich der methodische Eckpunkt unserer Vermutung ab: MP-Setzung ist nur in illokutionspotenten Einbettungen möglich (Brückenprädikationen und Prämisseneinbettungen). Die nachfolgenden Illustrationen und Distributionsproben dienen dem Zweck, dieser These nachzugehen.

Vorkontext zu (1)- (4): *eben* ist in den Einbettungen nur als MP konzipiert: "Du darfst nicht glauben, dass er religiös ist." [##=kontextuell nicht verträglich, #=fraglich]

- (1) a. ##Aber ich glaube, dass er eben religiös ist.
  - b. Aber ich glaube, er ist eben religiös.
  - c. #Aber ich glaube, dass er eben religiös ist.
- (2) Aber ich glaube eben, dass er religiös ist.
- (3) \*Aber ich vertraue darauf, \*(dass) er ⟨\*ist⟩ eben religiös ⟨ist⟩.
- (4) \*Aber ich vertraue eben darauf, \*(dass) er (\*ist) religiös (ist).

Wir notieren, dass (1b) und (2) dem Vorkontext gleichermaßen entsprechen, also semantisch äquivalent sind. Hier findet also so etwas wie MP-Transport statt. Wir notieren auch, dass die Einbettungsstruktur in (1b) ebenso illokutivautonom ist wie im Matrixsatz in (2).

- (5) a. ##Aber ich glaube, dass er JA religiös ist.
  - b. Aber ich glaube, er ist JA religiös.
  - c. #Aber ich glaube, dass er JA religiös ist.
- (6) Aber ich glaube JA, dass er religiös ist.
- (7) \*Aber ich vertraue darauf, \*(dass) er (\*ist) JA religiös (ist).
- (8) \*Aber ich vertraue JA darauf, \*(dass) er (\*ist) religiös (ist).
- (9) a. ##Aber ich glaube, dass er scном religiös ist.
  - b. Aber ich glaube, er ist schon religiös.
  - с. #Aber ich glaube, dass er scноn religiös ist.
- (10) Aber ich glaube schon, dass er religiös ist.
- (11) \*Aber ich vertraue darauf, \*(dass) er (\*ist) schon religiös (ist).
- (12) \*Aber ich vertraue schon darauf, \*(dass) er (\*ist) religiös (ist).

Es ist unsicher, dass *wohl* in *glauben*-Sätzen sinvoll ist. Dies hängt wohl damit zusammen, dass *glauben*=,nicht sicher sein' ausdrückt und damit die MP *wohl* überflussig wird.

- (13) a. ##Aber ich glaube, dass er woнц religiös ist.
  - b. Aber ich glaube, er ist wohl religiös.
  - с. #Aber ich glaube, dass er wohl religiös ist.
- (14) Aber ich glaube woнц, dass er religiös ist.
- (15) \*Aber ich vertraue darauf, \*(dass) er ⟨\*ist⟩ woнц religiös ⟨ist⟩.
- (16) \*Aber ich vertraue wohl darauf, \*(dass) er (\*ist) religiös (ist).

Gut ist nun die MP aber nach Matrix-glauben wie in (17):

- (17) a. ##ICH glaube, dass er ABER religiös ist.
  - b. ICH glaube, er ist ABER religiös.
  - c. #ICH glaube, dass er ABER religiös ist.
- (18) Ich glaube ABER, dass er religiös ist.
- (19) \*ICH vertraue darauf, \*(dass) er (\*ist) ABER religiös (ist).
- (20) \*ICH vertraue ABER darauf, \*(dass) er (\*ist) religiös (ist).

# 2 Versuch zu einem Zwischenergebnis

Nur in Brückenkonstruktionen, also bei nichtfaktiven Matrixprädikaten führt so etwas wie MP-Transport zu einem vertretbaren Ergebnis. Dies ist auch im Einklang mit der These (Abraham, 2014), dass performative Verben ('Brückenkonstruktionsverben') nicht eigentlich miteinander verankerte Ereignissemantiken entwerfen, deren Einbettungen als Prädikatskomplemente zu sehen sind. Performativverben entwerfen vielmehr eine Sprecherdeixis ohne eigene Verankerung zur Ereignissemantik der Einbettung, zu der das Komplement in

#### Werner Abraham

einem ableitbaren Ereigniszusammenhang steht. Dies gilt, wie gesagt, in klarem Gegensatz zu den nichtfaktiven Matrixverben, die ja auch keine Brückenkonstruktion erlauben und die Verankerung der Einbettungssemantik in der Matrixsemantik voraussetzen. Schibboleth ist die Setzbarkeit von Modalpartikeln/MPn. MP setzen einzelsententielle Illokutionsautonomie voraus. Eine solche ist bei Brückenkonstruktionen gegeben, nicht jedoch bei nichtfaktiven Matrixverben, also bei Prädikaten mit selbständiger Ereignissemantik.

Dieses Ergebnis steht im Einklang mit der Folgerung von Bartsch (1973), dass Negationstransport eigentlich deshalb nicht möglich ist, weil die Paarung <Performativ-CP1 mit Ereignis-CP2> keine aufeinander abbildbare Semantik erlaubt. Aus demselben Grund gibt es keine allgemein gültige Regel 'MP-Transport'. Die Begründung für letztere Folgerung sieht sich allerdings in einem weiteren Zusammenhang begründet, der über Bartschs Folgerung hinausgeht: Es muss nicht nur das Zusammenspiel der Illokutionspotenzen zwischen Matrixsatz und Einbettung geklärt sein, sondern es geht um mehr: nämlich dass Deixisillokution und Ereignisillokution deutlich voneinander getrennt bleiben – keinerlei Verankerung der Einbettung in das Ereignis des Matrixereignisses voraussetzen. Dies kann nur Ergebnis der Semantik komplexer Sätze sein, also über die Erfüllung von Syntaxbedingungen hinausreichen. Zu diesem Ergebnis gehört nun auch, dass Prämisseneinbettungen mit V2 ebenfalls für MP-Transport offen sind. Vgl. (21)- (24), wo ja statt des erwartbaren Vletzt nach Subjunktoren vielmehr V2 steht:

- (21) Das reicht deshalb nicht, [ $_{V2}$  weil das Programm des Landes ist eben keine strukturelle Hilfe, sondern bloß temporäre Unterstützung].
- (22) Natürlich. Auch das ist ein Argument, was eine große Rolle spielt, [ $v_2$  wobei man darf ja auch nicht übersehen], dass wir hier jetzt nicht über riesige Anzahlen von Arbeitsplätzen sprechen.
- (23) Für Theater interessier ich mich schon, also da geh ich öfters mal hin und auch ins Kino, [ $_{V2}$  während Kunstausstellungen hab ich mir eben selten angeguckt].
- (24) Also, ich würde sagen, es ist natürlich so, der/das Wesentliche ist daran ja, [ $_{V2}$  dass der Regisseur sitzt ja unten und sieht mich von Kopf bis Zeh].

Ich habe dazu eine syntaktisch elidierte Parenthese mit Performativeinblendung angenommen (Abraham, eingereicht), etwa der Art wie in den folgenden Beispielen, (25) und (26).

- (25) Das reicht deshalb nicht, [ $_{V2}$  weil (ich das so sehe:) das Programm des Landes ist eben keine strukturelle Hilfe, sondern bloß temporäre Unterstützung].
- (26) Natürlich. Auch das ist ein Argument, was eine große Rolle spielt, [ $v_2$  wobei (zu sagen ist:) man darf ja auch nicht übersehen], dass wir hier jetzt nicht über riesige Anzahlen von Arbeitsplätzen sprechen.

Auch hier ist der eingeschränkte MP-Transport möglich und zwar unter denselben Bedingungen wie für die Brückenkonstruktionen in (1)-(24). Und das ist auch plausibel, sind die V2-motivierenden Prädikate eben die parenthetischen Performativeinblenungen, die ebenfalls eine Brückenkonstruktion erlauben.

#### Werner Abraham

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# Dokthonorium: What Wikipedia should tell about Josef

# **Josef Bayer**

Josef Bayer is a professor for General and Germanic linguistics in the Department of Linguistics at the University of Konstanz, an expert on Bavarian and Bangla, classical music, operas, good wines and food.

# **Biography:**

Josef Bayer was born on the 15<sup>th</sup> of November, 1950, in Dietfurt/Altmühl in the famous region of Oberpfalz in Bavaria. 1970 marks the beginning of his academic career when he started a Magister in German studies, Linguistics, Philosophy and Music sciences. He left his Bavarian home to Hamburg, Southern Illinois, Carbondale, and Konstanz where he got his PhD and Habilitation.

#### **Profession:**

After cyclic movement from Aachen to Nijmegen, Düsseldorf, Vienna, Stuttgart and Jena, he checked his features with the Department of Linguistics in Konstanz, which is the terminal node of the movement chain. In Konstanz Josef c-commands some PhD-students, and they are bound by the following topics:

# Small things

YVONNE VIESEL

Research on German discourse particles (DiPs) reveals that small things matter much. An unsuspicious lexeme like *schon* (literally 'already') entirely changes the Force of an utterance:

(1) aber wer weiss ja schon wo du flitzpiepe herkommst? but who knows JA SCHON where you nitwit come.from (http://hukd.mydealz.de/deals/medimax-externe-2-5-festplatte-toshiba-stor-e-plus-2-tb-79-euro-750-gb-44-euro-397150, 03/18/2015)

With a subtle change in meaning, *schon*, yielding a rhetorical reading in *wh*-questions, might have shown up in the dependent clause preceding the copy of the *wh*-operator in its VP-internal base position (cf. Bayer et al., to appear). It is unclear why the presumably Hessian

speaker sprinkled in *ja* (literally 'yes'); Bavarian speakers will surely prefer *denn* (roughly 'I wonder') instead.

As a linguist and Bavarian, Josef has shared personal insights into the hard-wired relation between Bavarian information seeking questions and their grammatical marker -n, the reduced enclitic form of *denn* (cf. Bayer, 2012). This brief glimpse into his work serves to illustrate his observation of detail that deserves attention as a piece of the bigger picture, and his enthusiasm for language. His appreciation of the scholarly tradition connected to it is apparent from his regards for earliest predecessors, beginning with the Sanskrit grammarian Pānini.

The interface of linguistics proper and everyday working life is shaped by small things, too, specific moments in time. Years after looking forward to the next legendary example each Syntax I course as a student assistant, learning about Pretzel Logic on the side makes minimalism all the more enjoyable today. Keen observation even in minor matters enhances awareness of the brighter sides of serious business and, as shown by Josef, may enable one to predict the near future. After his comment on a student's question ("What little do I do for just three credits?"), we are presently awaiting those from Tripsdrill<sup>1</sup> University demanding one credit only.

In sum, working with Josef has meant working with pleasure. Since my interest in DiPs was sparked in a seminar by him in 2008, he has shared his expertise, but also inspired my affection for our subject of investigation—crucially, as linguistics, really anything, thrives on joy.

# **Processing of small things**

#### Laura Dörre

German discourse particles (DiPs) are not only interesting for theoretical linguists. These small words are quite interesting with regard to language processing as well; another field that Josef is well versed in. The reason is that they are ambiguous between primarily semantic and primarily pragmatic readings, depending on the context in which they occur. While scalar particles like *nur* have a fixed meaning that enters semantic composition regularly, *nur* as a DiP modifies the speech act (Bayer, 1991). Therefore, it is worth looking at how the two different meanings are processed.

Furthermore, this is interesting from a neurolinguistic point of view with regard to patients with a left vs. right brain damage, since, roughly speaking, it is assumed that semantic aspects of language are processed in the left hemisphere, while pragmatic aspects of language are processed in the right hemisphere. In his seminal study, Josef examined this question by means of neurolinguistic methods and laid the foundation for experimental research on the processing of DiPs (Bayer, 1991).

His work inspired me to enlarge upon this topic, which sometimes is an adventure. An important issue is the choice of a proper experimental technique. For instance, reading experiments with the eyetracker turned out to be problematic, since DiPs are so small that they

<sup>1</sup> The name of an amusement park in Treffentrill, a small village in Southern Germany.

are likely to be skipped by the reader. Another point is the choice of participants: Speakers from Southern and Northern Germany differ in their usage of particles like *nur* and *bloß*. And what about disambiguation? Ambiguous sentences containing particles that can function as a scalar particle or as a DiP are read faster if they are ambiguous than if they are disambiguated by a context. This result seems to be counterintuitive, but was also observed by Josef in his work on argument ordering in German, where sentences with arguments not marked for case were read much faster than those with case-marked ones (Bayer & Marslen-Wilson, 1992).

The range of Josef's expertise in the field of psycho- and neurolinguistics is clearly broad and it is impressive how he combines this knowledge with his research on theoretical linguistics. It is a pleasure to work with him and to gain from this interdisciplinary input.

### **Bavarian matters**

### Iris Bräuning

Since 1984 at the latest we know that Bavarian syntax reveals striking differences from Standard German (SG) and other German dialects:

Not only extraction out of finite complement clauses and partially pro-drop phenomena but also doubly filled COMP constructions place the language rather in the proximity of Romance languages than its Germanic neighbouring varieties.

(2) Da Sepp, (dea) wo fo da Oberpfalz is, sted do u dringt a bia the Sepp, (who) PRT from the Oberpfalz is stands there and drinks a beer 'Josef who is originally from Oberpfalz stands there and drinks beer'

The sentence in (2) shows a typical Bavarian relative clause structure with a particle introducing a relative clause preceded by a (sometimes optional) relative pronoun in the left periphery. These left-peripheral phenomena are also found in other Southern German varieties. Josef Bayer was among the first linguists claiming a strong influence of dialect syntax to the knowledge of generative grammar and principles of syntax in particular. Many followed and now, micro variation is indispensable from present day's syntax-landscape.

Many years later, the complementizer *wo* (Bayer, 1984) and its occurrence in relative clauses as well as other types of subordinate structures was my point of entry into dialect syntax reviewing the Bavarian results for Alemannic varieties.

Working for and with Josef means merge of Bavarian and syntax into an anaphor that is bound by Josef and it means being in the scope of an excellent linguist. Sentence structure has never been taught so clearly and based on real data before:

(3) dass ein Student aus Wallhausen einer fleißigen Studentin zuflüsterte, ihm den eng beschriebenen Spickzettel herüberzureichen

Josef's numeration is far from being monotone and seems to be inexhaustible for creative morphology. Our Lexicon has been enriched incredibly by items like *Semmelbröselfan*, *Problemfingernagel*, *Bierbauchlosigkeit* and *Bäckerinnenclub*.

## Sündtax

## Alexandra Rehn

In Standard German, attributive adjectives always inflect and there are two inflectional paradigms: a strong (phi features and case) and a weak one. Unlike in Standard German, attributive adjectives in Alemannic can be uninflected and since there seems to be no 'trigger' for zero-inflection, as an empirical study undertaken in the Alemannic area has shown. This casts doubt on the traditional morpho-syntactic analysis of adjectival agreement.

- (4) a. Alemannic
  I hab an alt-Ø Rucksack
  I have an old-zero backpack
  - b. Standard German
    Ich habe einen alt-en Rucksack
    I have an-acc old-weak backpack

In the morpho-syntactic approach, adjectival agreement is analysed as being dependent on the inflection of the preceding article. Adjectives inflect pronominally (phi-features and case) when the preceding article is uninflected and they have weak inflection if the preceding article has a strong ending itself. Uninflected adjectives, however, do not fit into this analysis and thus a new approach is needed.

When I came to Konstanz to do my masters in linguistics I have to admit I didn't know too much about theoretical linguistics—syntax in particular. So my first contacts with theoretical syntax are also connected with meeting Josef and his classes, which were very inspiring—and I soon found myself focusing on syntax. It always seems to me that no matter what topic, Josef can always make a contribution, often by giving examples from his Bavarian dialect which are helpful or funny or both (thank you for the *Scheißhaus – scheiß Haus* one!).

Josef's way of expressing his thoughts—for example in the Syntax-Colloquium—are thus not only insightful but can also be quite amusing. A recent example had to with the question why some people when hearing the German word <code>Bank</code> ('bench' or 'bank') first come up with <code>Bank</code> as a seat and Josef said: "…na ja, wenn sich halt gerade jemand im Dunstkreis der Sitzgelegenheiten befindet…" (Thanks for that phrase! Transl: '…well, if someone just happens to be in the "orbit" of seating accommodations…'). Syntax is thus not only one of the most fascinating areas in linguistics but it can also be fun, especially when working with Josef.

When I was talking to him one day in the office and the problem of students with hardly any interest in syntax, he came up with the idea of syntax as a punishment and to turn it into *Sündtax* (sin-tax). This, of course, will never happen because Josef certainly has never turned Syntax into *Sündtax*, but to me and I am sure many others (especially his (PhD-)students) he turned it into *Sinntax*! (*Sinn*: engl. 'sense').

# First, the second and then the test

## **CONSTANTIN FREITAG**

When I started my PhD project about verb second phenomena Josef gave me a manuscript he wrote in the late two-thousands entitled "What is verb second?" (Bayer, 2008) to explain this very interesting property to psychologists, who—according to Josef—never read it. I on the other hand did read it and can truly say it is a very good introduction to the topic, with very smart observations about German, that did not find their way into the linguistic debate so far.

One of them is the observation that the German modal verb *brauchen* is an NPI. Since it must be licensed by a c-commanding element (e.g. negation) it provides a strong argument that verb second order must be a derived order and that the verb reconstructs into its base position, see (5). This hypothesis we were able to confirm with experimental evidence (Freitag & Bayer, 2015).

(5) Der Josef braucht sich über einen Mangel an guten Ideen nicht zu sorgen the Josef have to.npi refl for a shortage of good ideas not to worry braucht.

have to.NPI

'Josef doesn't need to worry about a shortage of good ideas.'

But this was by far not the only observation that could find its way into the lab. Especially when it comes to the connection of grammar and processing Josef is a source of ideas that starts with something like *yeah*, *I've been thinking about this for a long time* and ends with an elegant minimal pair that can be directly implemented in an experiment.

So after reading the above mentioned manuscript, I made my way through a large amount of literature and ended up believing that the key to verb second phenomena is the complementizer, bringing me back to Josef's seminal article about the Bavarian COMP (Bayer, 1984), a paper that was published before I was born.

I am very grateful to have Josef as a supervisor, since he is a *Hansdampf in allen Gassen*: whenever I come with ideas about psycho-/neurolinguistics, L1/L2 acquisition, theoretical linguistics, or linguistic typology, we end up in very fruitful conversations about these ideas and many other things as well. Moreover he is never too busy to leave some notes about a phenomenon we discussed in my mailbox. For this, his entertaining anecdotes, and many other things I'm happy to call him *den Chef*.

He Chef, alles Gute zum Geburtstag!

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# Exceptive negation in Middle Low German\*

Anne Breitbarth

For Josef, who first taught me about negation, explanatory adequacy, and the value of small empirical puzzles.

# 1 Background

Languages employ a wide variety of constructions to express an exception to a matrix situation. Two common strategies in European languages are what we could label a comparative and a negative strategy, respectively:

- (1) Comparative:
  - a. English unless < on less (Traugott, 1997)
  - b. French à moins que 'to less that/than'
  - c. German es sei <u>denn</u> < ez (en) sî danne 'it (NEG) be than'
- (2) Negative:
  - a. Portugese a não ser 'to NEG be'
  - b. Duтсн *tenzij* < het en zij 'it NEG be'

The Dutch and German constructions are in fact, historically, two sides of the same coin: Deriving from a biclausal structure involving a negative particle (het/ez ni sî/wari [CP daz/dat...] 'it NEG be/were [CP that...]') in OHG / ODu, this structure has evolved into a subordinating complementiser in the case of Dutch, complete with clause-final verb placement (3), but into a frozen expression ('connector', Pasch et al., 2003) in German, taking a dass- or V2-CP-complement (4).

(3) Wij zullen de trein niet halen, <u>tenzij</u> er een wonder <u>gebeurt</u>. we will the train not catch <u>unless</u> there a <u>miracle happens</u>

<sup>\*</sup> This squib is a side product of work undertaken as part of the projects *The development of negation in the languages of Europe and the Mediterranean* (University of Cambridge, AHRC grant AR119272), *Layers of Structure* (Ghent University, FWO Odysseus grant Haegeman-G091409), and an FWO postdoctoral grant (Ghent University, FWO12/PDO/014).

(4) Wir werden den Zug verpassen, <u>es sei denn</u>, es geschieht ein Wunder/dass ein we will the train miss it be than/then it happens a miracle/that a Wunder geschieht.

miracle happens

In this squib I look at the development of the same construction in historical Low German (Old Saxon and Middle Low German), discuss the role of the negative particle, sketch a formal account, and speculate about the path of the development.

# 2 Development

In Old Saxon (OS), only biclausal exceptives are found, that is, there is a negated (subjunctive) form of *wesan* 'be' followed by a subject *that*-clause containing the actual exception. In total, there are six occurrences, all in the *Heliand* (none in the other texts and fragments), (5).

- (5) a. <u>ni uuari</u> [ <u>that</u> it gibod godes selbes uuari ]

  NEG were that it order God.GEN self were

  'unless (lit. were it not that) it were something ordained by God himself' (Heliand: 205-206)
  - b. ef nu uuerðen ni mag mankunni generid, quað he, ne sî [ that ik mînan if now become NEG can mankind saved said he NEG be that I mine gebe / lioban lîchamon for liudio barn ]... give dear body for men.GEN children
    'If now mankind cannot be(come) saved, he said, unless I give my dear body for the children of men ...' (Heliand: 4760-4763)

OS, being a partial null subject language (Walkden, 2014), did not have overt expletives or correlates of subject clauses. Middle Low German (MLG) did, hence the expected form of the exceptive constructions should be a biclausal structure with a correlate of the subordinate clause containing the exception, thus either *en si* <u>it</u> dat/ en were <u>it</u> dat with verb-initial (like V1-conditionals) or <u>it</u> en si dat/ it en were dat with V2-order.

However, while there are biclausal V2-exceptives (all with past subjunctive *were*) in my MLG corpus (Breitbarth, 2014), as in (6), the vast majority of exceptive clauses (ca. 90%) are monoclausal. These monoclausal exceptives appear to be a structural blend of the biclausal ones: they are V2, the verb is in the subjunctive, preceded by the negative particle *en/ne*, but the verb (not always a copula, (9)) and preverbal constituent—not always a subject (7), not always a pronoun (8), more often a referential than an expletive pronoun (9)—clearly belong to content of the exception, that is, the subordinate clause in a biclausal structure.

(6) ... it ne were, dat he worde begrepen vppe der handhaftighen dat enes dodslaghes it NEG were that he were caught on the actual act of a manslaughter '...unless he were caught redhanded committing an act of manslaughter' (Braunschweig: 29/06/1361)

- (7) ... den genanten kalandes heren ensyn ersten sodane veirundevertich marck the named kaland's sirs neg=be.subjn first those fourty.four marks gensliken [...] betalt.
  entirely paid
  '... unless those fourty-four marks have been paid first in their entirety to the named sirs of the kaland society' (Uelzen: 1487)
- (8) It en scal nement enne nyen stenwech setten eder hoghen, <u>de rad</u> en it neg shall no one a new stone.way set or make.higher the council neg si darbi.

  be.subjn along
  'No one shall build a new stone way or make one higher, unless the council agrees.'
  (Braunschweig: 1349)
- (9) Wy en=schullen ok nemande, de zy geistlik edder werlik, in unsen rad kesen we Neg=shall also no one he be clerical or secular in our council elect [...], de en=love und swere ersten ome zinen rad gelik unsem.
  [...] he Neg=vow and swear first on his council like ours 'We shall also elect no one clerical or secular into our council, unless he vow and swear first on his council as he does on ours' (Uelzen: 1457)

# 3 Analysis

The question now is how to analyse these 'blended' exceptives (which are also found in Middle Dutch (Burridge, 1993), and, to a lesser extent, in Middle High German (Jäger, 2008). What role does the negation particle play, and how is the exceptive interpretation derived? Wallmeier (2012: 38) surmises that the single preverbal negation particle together with the subjunctive mood on the verb function as a subordination marker. But how?

Concerning the role of the negative particle, it is first of all remarkable that it occurs on its own in these clauses, at a time when MLG was already in the transition to stage III of Jespersen's Cycle, i.e., from a bipartite (ne/en ... nicht) to a unipartite (nicht alone) construction (Breitbarth, 2014). It is evident, however, that ne/en in exceptive clauses is not a negative marker with sentential scope: None of the regular expressions of sentential negation ((ne/en) ... nicht or (ne/en) ... negative indefinite) is ever found in an exceptive clause in the corpus used, and NPI indefinites (e.g. enig 'any') are not attested in exceptives either. On the other hand, I do not subscribe to Härd's (2000: 1460) claim that ne/en in MLG exceptives is a purely pleonastic negator. I will argue that it does negate something, only that it does not have sentential scope. Rather, I claim that the construction derives the exceptive semantics in a compositional fashion.

The preverbal negative particle in MLG exceptive clauses in fact shows formal and semantic parallels with preposed negation in English yes-no questions (Romero & Han, 2004) (cf. also Cormack & Smith's 2000 EchoNeg) in that (i) it doesn't have sentential scope, but rather appears to be C-related, (ii) it is a clitic, not a full negation particle and (iii) because of a semantic similarity: both English yes-no questions with preposed negations and (MLG) exceptive clauses invoke a positive (epistemic) implicature.

Romero & Han (2004) argue that the clitic negation marker takes scope over the World operator, in case of yes-no questions, it quantifies over the actual world (VERUM / realis). The whole clause is in the scope of another operator, in this case, a question operator Q.

- (10) Isn't Jane coming too? = Jane is coming too, isn't she?
- (11)  $\left[ \operatorname{CP} Q \, \underline{n't} \, \left[ \, \operatorname{VERUM}_F \, \left[ \operatorname{P} \, \operatorname{Jane} \, \operatorname{is} \, \operatorname{coming} \, \operatorname{too} \, \right] \right] \right]$

Analogously, I propose to analyse MLG exceptives as in (12). The clitic negation marker takes scope over the World operator, but here, it quantifies over a possible world (potentialis). The whole clause is again in the scope of another operator, this time, an exceptive operator  $OP_{exc}$ , operating on the restriction of a universal quantifier introduced in the main clause (von Fintel, 1992: 144; von Fintel, 1993).

- (12) .. de rad ensi darbi.  $\left[ _{\text{CP}} \text{ OP}_{\text{exc}} \ \underline{en} \ [ \ \text{W} \ [_{\text{IP}} \ \textit{de rad} \ \text{BE} \ \textit{darbi} \ ] \right]$
- (13)  $\forall$ x.(EXCEPT the council agree [to x's plans])  $\rightarrow$   $\neg$ (x shall set a new stone way or make one higher)

I detail, I propose to situate the exceptive operator in SpecForceP, while I locate the world operator in SpecMood<sub>irrealis</sub>P (Cinque, 1999; Kempchinsky, 2009; Haegeman, 2010) (just) below C. I argue that it is lexicalized by the subjunctive morphology on the finite verb of the exception clause. The negative particle *ne/en* is in Fin. Due to its clitic nature, it needs a host and therefore attracts the finite verb. As in declarative V2-clauses, any constituent can occupy SpecFinP.

(14) 
$$[ForceP OP_{exc} [Force] Force [FinP de rad_i [Fin'] ne=si_j [MoodP_{irr} W [Mood'_{irr} t'_i [TP t_i t_j darbi]]]]]]]$$

Regarding the diachronic development, sketched in (15), I propose that in the original biclausal structure, the negated copula  $(s\hat{\imath}/wari)$  of the higher clause would move through  $Mood_{irrealis}$  to Fin. This movement was lost, and the negative marker was reanalysed as merging directly in Fin. Under adjacency, the complementiser of the subordinate clause could be reanalysed as occupying the higher Fin, too. Once the lower Fin was identified with the higher Fin through the reanalysis of *that*, the lower verb could target the higher Fin, now reanalysed as the Fin head of the same clause, as well. Once verb movement was possible, V2, that is, occupying SpecFinP became possible as well.

(15) a.  $[ForceP \ OP_{exc} \ [FinP \ \underline{ni} = s\hat{\imath}/uuari_i \dots \ [VP \ t_i \ [CP \ \underline{that} \ [TP \dots ]]]]]] \rightarrow$ b.  $[ForceP \ OP_{exc} \ [FinP \ \underline{ni} (+s\hat{\imath}) = \underline{that} \ [MoodP_{irr} \ W \ [Mood_{irr} \ Mood_{irrealis} \ [VP \ V \ ]]]]]] \rightarrow$ c.  $[ForceP \ OP_{exc} \ [FinP \ \overline{XP_j \ [Fin' \ \underline{en} = V_i \ [MoodP_{irr} \ t'_i \ [t_j \ t_i \ ]]]]]]$ 

Thank you Josef for introducing me to syntax, to negation, and for helping me in every possible way to start a career in linguistics. It is thanks to you that I am still able today to enjoy puzzling over things like MLG exceptives, and am even paid to do it. Happy birthday, and many happy returns.

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# What do you do if you don't have modal particles?\*

Anna Cardinaletti

### 1 Introduction

Languages differ in the words speakers have at their disposal. One major difference between German and Italian is the very rich system of modal particles found in the former language (about 20 particles) vs. the restricted modal lexicon of the latter (few particles, such as *ben, mai, poi, pure*, Coniglio, 2008; Cardinaletti, 2011). Does Italian have other ways of expressing the semantics conveyed by modal particles? It has often been observed that Italian makes use of marked word orders in contexts in which German displays modal particles (Helling, 1983; Masi, 1996; Tamborra, 2001, a.o.). In this short paper, I will show, on the basis of Grosz' (2010) analysis of German particles *doch* and *ja*, how the sentences containing these particles, which do not have an Italian counterpart, can be translated into Italian. It is shown that Italian may make use of syntactic devices such as Left and Right Dislocation when the particle has a smaller scope than the entire proposition. The discussion will also point out a difference between Italian Left and Right Dislocation not discussed before.

# 2 German doch and ja and their Italian counterparts

It is a common understanding that doch and ja mark the proposition in which they appear as 'familiar/old/given' (Abraham, 1991; Jacobs, 1991; Karagjosova, 2001; Karagjosova, 2004; Karagjosova, 2008; Lindner, 1991; Ormelius-Sandblom, 1997, among many others; cf. Thurmair's 1989 [bekannt] feature). Grosz (2010) formalizes these observations by extending to doch Kratzer & Matthewson's (2009) semantic analysis of German ja. He points out that the proposition modified by these particles is already "established in some sense, i.e., its negation is no longer under consideration (from the speaker's point of view)." Both doch and ja trigger an "uncontroversiality" presupposition; doch further triggers a "correction" presupposition. In Grosz' words, "doch p presupposes that p is uncontroversial in some sense and that p corrects a salient q."

In what follows, we will make a simple exercise: translating into Italian the different contexts in which German particles doch and ja are used, as discussed by Grosz (2010). We will

<sup>\*</sup> This paper is offered to Josef Bayer. It would have been less struggling to learn modal particles as a student of German as a foreign language if his illuminating work on modal particles were available at the time.

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see that in Italian, some of the sentences that contain modal particles can have Italian counterparts with left- and/or right-dislocated elements, which are identified as topics established in the discourse (from the speaker's perspective).

Grosz (2010) observes that in (1), where the modified proposition is shared knowledge, the particles ja and doch are both possible, whereas the absence of particles (signalled by  $\emptyset$ ) is pragmatically odd, given that it is unnecessary to assert shared information:

(1) Context: Speaker and hearer are both well aware that the hearer has been to Paris before, and the speaker wants to make this fact salient in order to follow up on it:

```
Du warst ja/doch/#Ø schon in Paris.
you were ja/doch already in Paris
'You've (ja/doch /#Ø) already been to Paris.'
```

Since being in Paris is the topic of the discourse and presumably outside of the proposition modified by the particles, the Italian counterpart of (1) can contain a left- (LD) or right-dislocated (RD) locative (a Parigi). A marginalized locative is also possible after a constituent pronounced emphatically (signalled in (2c) by extra-length on the stressed syllable; for Marginalization vs. Right Dislocation, see Cardinaletti, 2002). In the same context, a simple sentence with unmarked SVO word order, as in (2d), would be as odd as is the absence of particles in German:

- (2) a. A Parigi, ci sei già stato. LD in Paris, there you.have already been 'You have already been in Paris.'
  - b. Ci sei già stato, a Parigi. RD there you.have already been, in Paris
  - c. Sei già STA::to, a Parigi. Marginalization
  - d. #Sei già stato a Parigi. SVO

Differently from the examples in (1), the sentence in (3) expresses new information. Grosz (2010) observes that in this context, both particles ja and doch are ill-formed:<sup>1</sup>

(3) Context: The hearer is an amnesiac and believes that she has never been to Paris. The speaker doesn't know whether the hearer has been, and discovers an old flight ticket to Paris with the hearer's name on it:

```
Du warst #ja/#doch schon in Paris. 
'You've (#ja/#doch) already been to Paris.'
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In the Italian counterpart to (3), marked word orders would be inappropriate (4a)-(4b), and only a simple SVO sentence is possible (4c):

<sup>1</sup> Grosz observes that stressed DOCH, which lacks the uncontroversiality component, is acceptable:

<sup>(</sup>i) Du warst doch schon in Paris. 'You've (doch) already been to Paris.'

(4) a. #A Parigi, ci sei già stata. LD in Paris, there you.have already been

b. #Ci sei già stata, a Parigi. RD

c. Sei già stata a Parigi. SVO

'You have already been in Paris.'

Since doch provides an established fact from the speaker's perspective, Grosz (2010) tests its occurrence in utterances that provide hearer-new information. Typically, these are experience reports, in which the speaker recalls a recent experience and may correct his or her own expectations. As shown in (5), doch is possible (while ja is not because it lacks the correction component):

(5) Context: The speaker tells a recent story that the hearer cannot possibly have heard before:

Jetzt hör dir an, was ich erlebt habe! Das wirst du nicht glauben. Otto hat doch tatsächlich angerufen und sich entschuldigt.

'Now listen to what I experienced! You won't believe this. Otto (doch) really called and apologized.'

By using *doch*, the speaker intends to correct his prior expectation that Otto would never call and apologize. In Italian, a simple declarative sentence with emphasis on the most prominent syllable as in (6c)-(6d) (with or without the direct object) would be a perfect translation of (5). In this context, a left dislocation would however also be appropriate (6a), while a right-dislocated structure is excluded (6b)<sup>2</sup> (we will come back to this contrast below):

(6) Sai cosa è successo? Non ci crederai.

a. Otto, Maria l'ha chiaMA::ta e si è scusato. LD Otto, Maria, her he.has called and REFL is apologized 'Otto called Maria and apologized.'

b. #(Maria,) l'ha chiamata, Otto, e si è scusato.

c. Otto ha chiamato MaRI:a e si è scusato. SVO 'Otto called Maria and apologized.'

d. Otto ha chiaMA::to e si è scusato. SV 'Otto called and apologized.'

Finally, Grosz considers surprise contexts, in which neither the speaker nor the hearer has knowledge of the proposition modified by *doch* and *ja*:

(7) Context: Speaker and hearer are at a party, believing that Hans is currently in Paris. Suddenly the speaker notices Hans talking to the host:

<sup>2</sup> In (6a), a left-dislocated object (*Maria*) has been added to make sure that the preceding subject (*Otto*) is also left-dislocated.

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Das ist ja/doch der Hans! Was macht der hier? that is ja/doch the Hans. what does he here? 'That's (ja/doch) Hans over there! What is he doing here?'

As pointed out by Grosz, in (7) the relevant presupposition is that the negation of the modified proposition is not considered as a possibility given that the truth of the proposition is obvious. In this context, Italian would allow a simple SVO sentence, optionally introduced by the adversative coordinative element ma 'but':

(8) (Ma) quello è Hans! Cosa ci fa qui? but that is Hans! what there he does here? 'That's Hans over there! What is he doing here?'

# 3 Italian Left vs. Right Dislocation

The contrast in (6) brings us to the well-known difference between Italian Left and Right Dislocation. In the terms of Frascarelli (2007) and Frascarelli & Hinterhölzl (2007), left-dislocated topics can be Aboutness-shift topics or Familiar topics, right-dislocated topics are only Familiar topics, where Familiar topics are defined as "textually given and d-linked with a previously established Aboutness topic." We believe that the difference between Left and Right Dislocation has one more component, namely, the speaker's perspective. In other words, the use of Familiar topics does not simply involve the retrieval of given information but adds the speaker's point of view. While Right Dislocation necessarily implies shared knowledge, Left Dislocation is a means for the speaker to establish a topic which is not necessarily shared by the hearer. This is exactly the kind of context tested in (5) and (6). In (6a), the left-dislocated Otto is established by the speaker as a topic not shared by the hearer. In this type of context, (6b) is ungrammatical: if the speaker believes that the hearer does not share his/her knowledge about Otto, he/she cannot right-dislocate Otto. The difference between Left and Right Dislocation is made evident by the following examples. In the context of (9), Chomsky is given information. By using a Right Dislocation, as in the answer in (9), the speaker intends to claim that he/she shares the hearer's knowledge. It is therefore odd to ask whether the hearer has this knowledge:

#### (9) a. Question:

Conosci Chomsky? you.know Chomsky 'Do you know Chomsky?'

b. Answer:

No, non lo conosco, Chomsky. #Tu sì? RD No, not him I.know, Chomsky. You yes 'No, I do not know Chomsky. Do you?'

If the speaker does not know whether the hearer shares his/her knowledge, and wants to ask about this, he/she must use a Left Dislocation, as in (10a), or a simple declarative sentence containing a clitic pronoun, as in (10b):

#### (10) a. Question:

Conosci Chomsky? 'Do you know Chomsky?'

b. Answer:

No, Chomsky, non lo conosco. Tu sì? LD No, Chomsky, not him I.know. You yes? 'No, I do not know Chomsky. Do you?'

c. No, non lo conosco. Tu sì? clitic pronoun No, not him I.know. You yes?
'No, I do not know him. Do you?'

# 4 Concluding remarks

In this short paper, I have argued that the Italian counterparts of German sentences containing modal particles like *ja* and *doch* may contain a left- or right-dislocated constituent. The common component of sentences with modal particles in German and sentences with Left or Right dislocation in Italian is the involvement of the CP layer. Italian dislocated items occur in CP and identify the topic of the discourse.<sup>3</sup> In spite of their IP-internal position, German modal particles are taken to be interpreted with a high scope in the CP domain and to modify features, such as clause type and illocutionary force, which are encoded in projections of the CP layer (see Bayer, 2012; Coniglio, 2007; Coniglio, 2009; Coniglio, 2011; Zimmermann, 2004a; Zimmermann, 2004b). The particle may take scope over the entire proposition or a smaller constituent. In the former case, a declarative sentence with unmarked SVO order is used; in the latter, dislocation is more appropriate in Italian. Depending on the speaker's presuppositions on the hearer's knowledge, a left- and/or a right-dislocated constituent is chosen.

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<sup>3</sup> In an antisymmetric view of Right Dislocation, right-dislocated constituents sit in CP on a par with left-dislocated constituents (see Cardinaletti, 2002, for discussion).

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# A note on 'other'\*

# GUGLIELMO CINQUE

I. 'Other' is one of those words that languages could very well do without. Yet it is apparently grammatically encoded in all languages.<sup>1</sup> Its contribution to the meaning of the noun phrase has to do with the context of communication. If you ordered a beer and later you ask the same waiter for a beer, you are virtually forced to say "Can I have *another* beer?" even if "Can I have a beer?" could communicatively be just as effective. The speaker has to take into account what the addressee knows about the previous context. Context dependent, presuppositional, words of this kind (*same*, *still*, *no longer*, *not yet*, etc.) abound in the languages of the world.

Here I want to briefly discuss some evidence pointing to the existence of two readings of 'other', associated with two distinct positions in the extended projection of the NP.

These two readings are as a first approximation characterizable as in (1a) and (1b).<sup>2</sup>

- (1) a. further token(s) of x (where x is some substance/entity/measure)
  - b. further type(s)/kind(s) of x (where x is some substance/entity/measure)

To begin, consider Italian *altro*. It can either precede or follow cardinals:

- (2) a. (gli) altri due libri di sintassi (the) other two books on syntax
  - b. (i) due altri libri di sintassi (the) two other books on syntax

In this as in many other cases it is difficult to see a clear interpretive difference between the two orders, but there are cases where the difference comes out more clearly. When it makes little sense to have "further type(s)/kind(s) of x", as in (3) and (4) (with measures, 'minutes'

<sup>\*</sup> This short squib is dedicated to Josef Bayer as a small token of my great appreciation of his contributions to the field. I thank Alexander Grosu, Richard Kayne, Marie-Claude Paris, and Andrew Radford for their very useful comments.

A perusal of different grammars from different continents (North and South America, Europe, Asia, Africa, Australia, Papua New Guinea) seems to support this conclusion, though as usual this can only be formulated as a conjecture. In some languages, Papuan (Rotokas – Firchow, 1974: 90 – and Maiani, Miani, Mala – Loeweke & May, 1982: 19), Mayan (Jacaltec – Grinevald Craig, 1977: 56, note 30) and Pama-Nyungan (Kayardild – Evans, 1995: 86f; Wankajunga – Jones, 2011: §4.2.3.6), it is a nominal affix, which points to its functional nature (on the functional nature of *other* also see Kayne, 2005: 13).

<sup>2</sup> Thanks to Richard Kayne for the discussion of this point. See section II below for languages that express the two readings with two distinct morphemes. The distinction is occasionally made also for languages where the two readings are expressed by a single morpheme. See for example Gutiérrez Rodríguez (2011: 67) distinction between significado aditivo (otro libro 'uno más' (one more)) and significado de alteridad (otro libro 'uno distinto' (a different one)).

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and 'dollars'), the pre-cardinal position is the only natural one. On the contrary, when the context favors the reading "further type(s)/ kind(s) of x", as in (5), it is the post-cardinal position that is the most natural:

- (3) a. Dammi altri cinque minuti! 'Give me another five minutes!'
  - b. \*?Dammi cinque altri minuti! 'Give me five other minutes!'
- (4) a. Mi puoi dare altri venti dollari? 'Can you give me another twenty dollars?'
  - b. \*?Mi puoi dare venti altri dollari?'Can you give me twenty other dollars? (not in the sense of twenty other dollar bills)'
- (5) a. \*Se sopravviveranno, saranno altri due individui 'If they survive, they will be another two individuals'
  - b. Se sopravviveranno, saranno due altri individui 'If they survive, they will be two other individuals'

Michelle Sheehan tells me that there is a similar difference in English between *(an)other* preceding the cardinal and *other* following it.<sup>3</sup>

- (6) a. They ordered another two beers ("two further tokens of x")
  - b. They ordered two other beers ("two further types/kinds of x")

In forthcoming work Craig Sailor points out that *another*, if historically decomposable into an + other, is in some varieties of American English synchronically composed of a + nother, part of the evidence being the possibility of inserting certain adjectives between them

(7) I saw John eat an entire cake, but after I left, he apparently ate a whole nother cake.

Interestingly, he adds that "use of *other* in place of *nother* with these interveners changes the output. For example, (7) is not equivalent to (8):

(8) #...he ate a whole other cake.

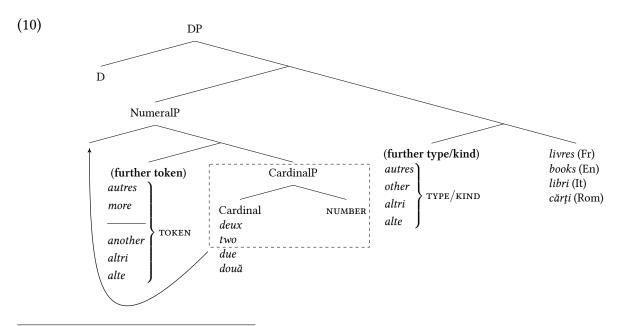
[which] is a statement about kinds: i.e., John at a whole other KIND of cake. (Intuitively, *other* corresponds to 'different KIND-OF N' in these environments, whereas *nother* corresponds simply to 'additional N'."

Similarly: he drank the other two beers ("the two further tokens of x") vs. he drank the two other beers ("the two further types/kinds of x"). As 'additive' more (He drank two more beers) seems to have just the "further token(s) of x" reading I take it to be merged before the cardinal, and to be crossed over by it like French autre is in (10). On 'additive' more in English see Greenberg (2009) and Greenberg (2010) and Thomas (2011). Unlike English more, which forces movement of the cardinal to its left, Italian ancora (ancora due birre 'lit. still two beers' = 'two more beers') and Romanian inca (inca o bere 'lit. still one beer' = 'one more beer') are incompatible with any such movement (\*due ancora birre, \*o inca bere).

Romance languages show some variation in the order of 'other' and cardinals. Italian as noted has 'other' preceding or following cardinals depending on the interpretation. Romanian *alt(ul)* appears to behave like Italian *altro* (Alexander Grosu, p.c.; Pană Dindelegan, 2013: §5.3.1.3). French instead appears to have the order cardinals > 'other' with both interpretations (compare (3) and (5) with (9)):

- (9) a. J'ai besoin de deux autres minutes/\*d'autres deux minutes (i.e. two additional minutes)
  - 'I need another two/two more minutes'
  - b. Il faut utiliser deux autres isotopes/\*autres deux isotopes (i.e. two different isotopes)
    - 'It is necessary to utilize two other isotopes'

I submit that the "further token(s) of x" 'other' is merged, as shown in (10), within the NumeralP above cardinals while the "further type(s)/kind(s) of x" 'other' is merged below the NumeralP. French, but not Italian, moves CardinalP past it so that both kinds of *autre* will follow cardinals in French:<sup>4</sup>



For the French data and judgments reported here I am indebted to Marie-Claude Paris. This difference between Italian and French concerning 'other' seems to be a special case of a more general pattern, which involves other "high" adjectives like prossimo/prochain 'next' and ordinals, like primo/premier, ultimo/dernier. While Italian allows both orders (le prossime due settimane 'the next two weeks', le due prossime settimane 'the two next weeks'; le prime/ultime due settimane 'the first/last two weeks', le due prime/ultime settimane 'the two first/last weeks'), French seems to admit only the order cardinal > prochain/premier/dernier. This can possibly be understood if 'next' and ordinals are also both inside the NumeralP (apparently between 'other' and the cardinals in the order 'next' > ordinal) and outside, and if movement of the cardinals to their left is also obligatory (movement of the cardinals to the left of altro is marginally possible also in Italian, for some speakers, as the "further token(s) of x" reading is not entirely excluded for them with the order cardinal > altro). The two ordinals may be combined in Italian (i miei ultimi due primi giorni di scuola 'my last two first days of school', with a slight pause after the cardinal) as they can in Russian (poslednie pjat' pervyx učitelej 'the last five first teachers'—Kagan & Pereltsvaig, 2012: 171). French instead (as expected) positions them both after the cardinal (mes deux derniers premiers jours de l'école 'my last two first days of school', again with a slight pause after the first ordinal).

The lower merger of 'other' qua "further type(s)/kind(s) of x" in the spine of the extended projection of NP below the NumeralP seems to be supported by the following fact from Matses (Panoan). According to Fleck (2003: 777), *utsi* 'other' in Matses is ambiguous between the two readings of (1) when it precedes the noun (see (11a)), but has only reading (1b). when it follows the noun. See (11b):

- (11) a. utsi uicchun other bird (= a different bird or an additional (one more) bird)
  - b. uicchun utsi bird other (=a different bird)

This pattern could be derived, it seems, if the noun (phrase) optionally raised along the spine of its extended projection past the lower "further type(s)/kind(s)" 'other' but no higher. If the lower 'other' were within the left branch containing the cardinal, after it, that would not be possible (under standard c-command requirements on chain links).

II. As mentioned above, while languages like Italian, Romanian, French, and English use the same morpheme for both readings of 'other', there are languages, including Modern Eastern Armenian (Indo-European), Yidin and Kayardild (Pama-Nyungan), Chindali (Bantoid), Palaung (Mon-Khmer), and Mono (Adamawa-Ubangi) which realize the two readings through two distinct morphemes.

Dum-Tragut (2002: §III.2.3.8.1) reports the existence of two different words in Modern Eastern Armenian for 'other', *myus* and *ayl*, which she glosses in the way shown in (12) and (13):

- (12) im myus erek<sup>c</sup> grk<sup>c</sup>er-∂ (Dum-Tragut, 2002: 71, ex. (116)) my other three books-the 'my other three books' (meaning 'three more books of mine')
- (13) im erek<sup>c</sup> ayl grk<sup>c</sup>er-∂ (Dum-Tragut, 2002: 71, ex. (117)) my three other books-the 'my three other books' (meaning 'my three somehow-different books')

It should be noted that they also differ in distribution. The one apparently meaning "further token(s) of x" precedes the numeral while the one apparently meaning "further type(s)/kind(s) of x" follows it (bearing resemblance to the Italian and English cases seen above).

Dixon (1977) reports that Yidin has two separate words for '(an)other': "bagil 'another—a further token of the same type' and gayal 'another—a token of a different type'", and says that "bagil describes another object similar to something already referred to" (Dixon, 1977: 497), while "gayal indicates something totally novel" (Dixon, 1977: 498).

Another Pama-Nyungan language apparently making the same distinction is Kayardild. Evans (1995: 186) reports the existence of two morphemes for 'other'. One is an affix, - yarraLH, which he glosses as "another token of the same type" (see (14a)), and says that "to convey the other sense of English 'other' (i.e. 'different'), the free nominal jatha-a is used" (Evans, 1995: 187) (see (14b)):

- (14) a. kukuju-yarrad-a uncle-another-nом 'another uncle'
  - b. kamarr jatha-a wuran-d stonefish.nom other-nom sort-nom 'Now the stonefish is something else again'

The Bantoid language Chindali also has two separate morphemes for 'other', -nine, which (Botne, 2008: 50f) glosses as '(an)other [of the same kind]', and -ngi, which he glosses as '(an)other [of a different kind]', exemplified in (15a) and (15b):

- (15) a. umú**níne** akáfwa another died
  - b. bakabāāmwo ábáá fikolo ifii**ngi** there were those of other clans

Palaung (Mon-Khmer) also has two different words for 'other', (i-)har and  $l\bar{a}\bar{\imath}$ , which Milne (1921) glosses as 'another' and 'other/different', respectively, giving examples like (16a)-(16b):

- (16) a. dεh kā i-har ta o u to (Milne, 1921: 49) give fish other to me one 'give me another fish'
  - lāī rū (Milne, 1921: 51)
     other or different villages
     'other villages'

The same is true of Mono (Adamawa-Ubangi). Kamanda-Kola (2003: 318) renders the two separate forms,  $\acute{a}ng\acute{a}$  and  $\grave{a}ngbi$ , as "autre de même nature" and "autre de nature différente", respectively.

Both the distributional and the lexicalization data reviewed above thus seem to point to the existence of two distinct (functional) categories 'other', located in two different positions of the extended projection of the noun phrase:

(17) ...[['other' (further token(s) of x) cardinal] ['other' (further type(s)/kind(s) of x)...N]]

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# Wide wh-scope from a postverbal adjunct in Bangla

Probal Dasgupta

In this note, I consider Bangla sentences such as (1) and (2), where a wh-constituent and an Emphatically Topicalized (ET) constituent, respectively, appear in situ in a postverbal adjunct clause, without constituent preposing or pied piped clausal preposing, and yet take wide scope, thus appearing to counterexemplify the main point of Bayer's (1996) account that emerged from some work that he and I did jointly in 1988. I am referring to the claim that postverbal clauses in Bangla are wh-scope islands – a claim elaborated in the context of more recent architecture in Bayer & Dasgupta (forthcoming):

- (1) ram rege gEche jodu ka-ke biye koreche bole? Ram angry go-PST-3 Jodu who-OBJ marriage make-PST-3 BOLE 'Who-x is Ram angry because Jodu has married x?'
- (2) amra Onek ceSTa korchi tumi jate niScint-e kaj kor-te par-o we much trial make-PST-1 you so-that peace-LOC work do-INF can-2 'We are trying hard so that you can work in peace'

What needs commentary is the fact that in Bangla, though not in Bavarian, wh and ET constituents can remain in situ in certain postverbal adjunct clauses and take wide scope, whereas such constituents – as becomes apparent in the robustly ill-formed sentences (3) and (4) – cannot remain in situ in postverbal complement clauses and take wide scope:

- (3) \*tumi Sunechile jodu ka-ke biye kor-b-e bole? you hear-PST-2 Jodu who-OBJ marriage make-FUT-3 BOLE intended reading 'Who had you heard Jodu would marry?'
- (4) \*ram Sunechilo jodu je Sita-ke biye kor-b-e Ram hear-PST-3 Jodu COMP Sita-Obj marriage make-FUT-3 intended reading 'Ram had heard that Jodu would marry Sita'

In his earlier work referencing the Principles and Parameters conceptual architecture, Bayer (1996), in order to protect the core of the account from these examples, proposed that examples like (1) go through because the upstairs VP does not properly contain the adjunct, which makes the adjunct clause as well as its wh constituent accessible to the upstairs Comp, enabling the wh to be associated with this Comp. In that framework, (3) is excluded because the wh is not directly accessible to the upstairs Comp, and the upstairs V does not enable access into a postverbal clause.

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It is of course possible to pursue the question of whether such an account can be replicated under more contemporary assumptions. However, that enterprise might turn out to be a misdirection of effort, given the difficulty of generalizing that account to the ET case, and given the point (made below in some detail) that augmenting the empirical data base shows that in any case that account did not work for the full range of relevant facts even for wh scope phenomena in Bangla adjuncts.

During our joint work in 1988 on which the Bayer (1996) analysis rests, it did not come to our attention that only some adjunct clause types in postverbal position behave as in (1). Specifically, postverbal adjuncts headed by a conjunctive participle like *Sune* 'hear-CJV = having heard', as in (5), or by a progressive participle like *dekhte* 'watch-PROG = watching', as in (6), exhibit (1)-type behaviour; this property correlates with the fact that such participles do not license a volitional nominative subject:

- (5) ke rege gEche ka-r khObor Sun-e? who angry go-PST-3 who-GEN news hear-CJV 'Who got angry on hearing news about whom?'
- (6) ke ghumiye poReche kon cEnel dekhte dekhte? who asleep fall-PST-3 which channel watch-PROG 'Who fell asleep while watching [TV programs on] which channel?'

For the purposes of this pattern, a clause with the complementizer *bole*, formally a non-finite participle form but semantically bleached, functions as a non-finite adjunct clause – it has other properties of that template, including rigid verb-finality. In contrast, the participle types that support a volitional nominative subject, such as the conditional *dile* 'give-COND', i.e. 'if.gives', the circumstantial *deWaY* 'on.giving' and the anterior *dite-i* 'as.soon.as.gives', resist the pattern of (1), as shown in ill-formed (7)- (9) below illustrating this resistance as well as the licensing of agentive subjects by such participles, and in well-formed (10)- (12), which illustrate only the nominative agent licensing:

- (7) \*ram rege ja-b-e tumi ka-ke SaRi di-le? Ram angry go-FUT-3 you who-OBJ sari give-COND 'Ram will get angry if you give whom a sari?'
- (8) \*ram rege gEch-e tumi ka-ke SaRi deWaY? Ram angry go-PST-3 you who-OBJ sari give-on 'Ram got angry when you gave whom a sari?'
- (9) \*ram beriye ja-b-e tumi ka-ke boy pherot dite-i?
  Ram leave go-FUT-3 you who-OBJ book back give-as-soon-as 'Ram will leave the moment you give a book back to whom?'
- (10) tumi ka-ke SaRi di-le ram rege ja-b-e? you who-OBJ sari giveCOND Ram angry go-FUT-3 'Ram will get angry if you give a sari to somebody – who is it?'
- (11) tumi ka-ke SaRi deWaY ram rege gEch-e? you who-OBJ sari give-on Ram angry go-PST-3 'Ram got angry when you gave a sari to someone – who was it?'

(12) tumi ka-ke boy pherot dite-i ram beriye ja-b-e? you who-OBJ book back give-as-soon-as Ram leave go-FUT-3 'Ram will leave the moment you give the book back to somebody – who is it?'

Pending a more complete analysis of the participle system of the language – not a project I can take up in this context, but readers will find van der Wurff (1989) helpful, and can expect some insight in forthcoming work by Devarati Jana – I propose the following empirical generalization relevant to the present context. Whenever a postverbal adjunct clause containing a *wh* constituent is headed by either *bole* or a 'weak' participle, one incapable of containing an agentive (volitional nominative) subject, structures like (1) are well-formed, other things being equal. (Note that *bole* itself is formally a 'weak' participle.) In contrast, whenever such an adjunct clause is headed by a 'strong' participle that can support an agentive subject, such sentences are ill-formed, and only variants that place the adjunct clause on the left are well-formed.

I could, in the name of concreteness, make some formal moves here to connect this generalization to other hypotheses now under active consideration in certain dialects of syntactic inquiry. But such ad hoc moves cannot make a viable contribution to our understanding until there is a credible analysis in place for the various types of adverbial participles. I thus present the above generalization both in order to give notice that there must be an alternative to the account of postverbal adjunct structures in Bayer (1996) – an account offered at a time when nobody had had an opportunity to take on board a fuller range of adverbial participle constructions – and to support the claim that the existence of such examples as (1) and (2) in Bangla, in contrast to the unavailability of such cases in Bavarian, is consistent with the account provided by Bayer & Dasgupta (forthcoming).

I have argued in this note that (1) is a special case, and pointed towards the phenomena that need to be investigated more carefully in order to ascertain just what type of special case it is. I suggest that (2) is a special case as well, for reasons that will come to light once (1) comes to be better understood. Readers interested in pursuing the matter in a substantivist theoretical framework are welcome to consult Dasgupta (2011); assiduous followers of the substantivist thread will probably see at once the lines along which a biaxial solution to the problem would be devised; but an exposition of biaxial syntax here would take us too far afield.

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# Is ergative case structural or inherent: Evidence from intransitive verbs

ALICE DAVISON

The ergative case on subjects has long posed a taxonomic problem, at least within Chomskyan assumptions (Chomsky, 1986). Is it structural, associated with a grammatical position, the subject (specifier of TP), or is it inherent? There are two distinct interpretations of what *inherent* case is. On one interpretation, any exceptions to ergative case making makes it an inherent case. Transitive verbs which may not have ergative case, or intransitive verbs which may, are in fact typical exceptions in many morphologically ergative languages. On the other hand, a case may not be structurally related because it is tied to a specific thematic role, such as agent, source or experiencer. Ergative case in many Indo-Aryan languages is subject to exceptions, including a small number of intransitive verbs, but I will argue below that it is not associated with the agentive thematic role. So there is a fundamental contradiction in the definition of inherent case, at least in these instances.

Ergative case marking of the transitive subject should be simply a variation on case marking, like the familiar nominative-accusative case pattern for transitive verbs. In the majority of languages with ergative case, the grammatical functions of subject and object are the same as in nominative languages; in syntactically ergative languages, the clause structure is not quite the same—it is somewhat different but not completely so (Ura, 2001). The ergative case is essentially the case of the transitive subject, like the nominative case, which in Minimalist analyses is a feature associated with Tense. So comparing nominative-accusative languages with morphologically 'shallow' ergative languages, there should be just some sort of switch of a parameter for case valuing. Within generative grammar there have been numerous and not very satisfactory attempts to keep the grammatical functions constant while varying structural case checking. See Ura (2001) for proposal which invokes several parameters which can be related to different aspects of the subject grammatical function, as well as Ura (2006), which proposes a parameter for split ergativity based on perfective aspect.<sup>1</sup>

Nominative case on subjects is clearly not theta-related and therefore nominative is a structural case associated with the specifier of TP. Subjects often have reference to agency and volition, but not always: the subject may refer to an experiencer, a cause or even a recipient, and in the passive, to a theme or patient. Ergative subjects may refer to agents, or experiencers, causes and recipients; examples may be found in a morphologically ergative language such as Hindi-Urdu (Davison, 2004). In Hindi-Urdu, the aspect marking on the finite verb

<sup>1</sup> See also Dixon (1994) for an appendix summarizing analyses of the ergative case in a variety of syntactic theories and approaches.

determines whether ergative case is realized. Hindi-Urdu and most other Indo-Aryan languages have split ergativity, so that a nominative-accusative sentence structure coexists with ergative nominative/accusative case marking.

It would seem that the subject should consistently have structural case, in the unmarked situation. Inherent case *-koo* for experiencers and the goal does occur on subjects. But there are complications in the distribution of ergative case in Hindi-Urdu, as there are in other ergative IA languages and other ergative languages of other families. Certain apparently transitive verbs lack ergative case on the subject, or have it only optionally. In HU, these verbs include *laa-* 'bring', *samajh-* 'understand', *bhuul-* 'forget', *jiit-* 'win', and *haar-* 'lose' (Montaut, 2004).<sup>2</sup> Furthermore, certain apparently intransitive (and unergative) verbs do have ergative subjects, at least optionally. Where these verb are not actually transitive verbs with cognate objects, they are exceptions to the generalization that the ergative case is the case of the transitive subject.

For example, Basque is a non-split ergative language which has some ergative intransitive verbs. In most cases, ergative case marking can be explained as some sort of transitive subject marker. But as Laka (2005) succinctly argues, there is a small number of genuinely intransitive verbs, such as *eski* 'ski' and *disdira* 'shine' (intrans.), which have ergative subject marking (Laka, 2005: 379-380). No other factors can be found to explain them away, so that they are genuine exceptions, with agentive semantic interpretation, and so both parts of the inherent case definition apply: exceptions and theta-relation.

The Indo-Aryan languages typically have some kind of ergative subject marking on transitive subjects, surveyed in detail in Verbeke (2013). The exceptions are the 'eastern Hindi' languages such as Magahi and Maithili, though the related language Kurmali has the transitive subject -e suffix (Mahto, 1989). The eastern languages Bangla and Oriya lack ergative marking, though alone among the eastern languages, Asamiya has the ergative suffix -e on transitive subjects (Verbeke, 2013). Interestingly, this subject was once found in Bangla; Verbeke cites Chatterji (1926: 741) in noting that this suffix had been lost in western Bangla in Chatterji's time but was still found in eastern Bangla. It is still found exceptionally in contemporary Bangla on human nouns which are plural and indefinite:

(1) lok-e brisTi-r por khokono-khokhono akas-e ramdhonu dakh-e people-ERG rain-GEN after sometimes sky-loc rainbow see-PRS.3sG 'People sometimes see a rainbow in the sky after rain.'

(Chatterji, 1926: 105 cited in Verbeke, 2013: 142)

Languages with ergative transitive subjects typically have ergative marking on 'unergative' intransitive verbs, sometimes showing a split marking, with ergative on all unergative verbs and nominative/absolutive on unaccusative verbs, sometimes marking intransitive verbs with volitional subjects, or fluid intransitive subject marking (Dixon, 1994). Asamiya, like other IA languages with ergative subject marking, has a small number of intransitive verbs which take ergative subjects. These include *naas* 'dance', *xator* 'swim', *haaMh* 'laugh', and *juuj* 'fight' (Amritavalli & Sarma, 2002). Other IA languages also have a small number

<sup>2</sup> See Davison (1999) for a comparison of Hind-Urdu with Marathi in which transitive verbs may lack ergative case on the subject.

of unergative verbs which optionally have ergative subjects in sentences with perfective aspect. Punjabi has *thuk-Naa* 'spit', and *nicch-Naa* 'sneeze', apparently among others which are not cited (Bhatia, 1993: 86). There are also bivalent verbs like *mil-Naa* 'meet', *laau-Naa* 'bring', and *bol-Naa* 'talk' which do not have ergative subject marking. These exceptions to transitive subject ergative marking in Punjabi look very much like the exceptional verbs in Hindi-Urdu.

The exceptional intransitive verbs in an ergative language have special import for the parameterization of transitive subject case. In Bobaljik (1993), the case of intransitive verbs subjects shows which functional projection, AGR1 or AGR1, is active, and therefore whether the language is ergative or not. Paradoxically, case on intransitive subjects determines the parameter which is responsible for the case of the transitive subject.

An exhaustive list of verbs is given in Montaut (2004: 180-181) of the intransitive, verbs which optionally allow ergative subjects. These verbs, which Montaut characterizes as 'physiological instant processes which cannot be controlled', are listed in (2):

- (2) a. chiiMk-naa 'sneeze'
  - b. khaaMs-naa 'cough'
  - c. muut-naa 'urinate'
  - d. hag-naa 'defecate'
  - e. matalaa-naa 'vomit'
  - f. Dakaar-naa 'belch'
  - g. bhauNk-naa 'bark'

The verbs (2a), (2b), (2f), and (2g) could be characterized as aspectually semelfactive, bounded but not telic (Kearns, 2011: 166-167). If these verbs are unergative, it means in general Chomskyan terms that the vP hosts a specifier which is the subject.

Many ergative subject languages have this kind of exceptional verbs which appear to be intransitive, but they may be explained as a verb which have unexpressed or incorporated cognate objects (Hale & Keyser, 1993). In fact, many of these verbs do have noun cognates (3), as do many other verbs in Hindi-Urdu. Fore example, the transitive verb *pheer-naa* 'turn' (trans.) has a related noun *pheer* '(a) turn, revolution'.

- (3) a. chiiMk f. 'a sneeze'; N-ko chiiMk aa-naa 'sneezing come to N, N sneezes'
  - b. khaaMsii f. 'a cough'; N-ko khaaMsii aa-naa 'coughing come to N; N coughs'
  - c. muut m. urine muut maar-naa 'beat urine; urinate from fear'
  - d. -
  - e. matalii f. 'nausea'
  - f. Dakaar f. 'a belch'; Dakaar lee-naa 'take a belch, belch'
  - g. bhauM m. (?) 'noise a dog makes barking, woof'

The nouns in (3) are taken, from McGregor (1993) (except for *bhauM*). They show that these nouns are not cognate objects of unergative verbs, like 'dance a dance of victory, danse a waltz' (Hale & Keyser, 1993). Rather, if they are used with a verb, it is intransitive in (3a), (3b), with a dative experiencer subject. Experiencers are non-volitional. The noun in (3f) combines with *lee-naa* 'take', to form a complex predicate which has a *-nee* subject. Even

*bhauM* 'woof' does not occur as the object of *bhauMk-naa* 'bark'. The onomatopoetic noun combines with *kar-naa* 'to do' to form a complex predicate.

(4) kuttee=nee bhauM-bhauM \*bhauMk-aa/ ki-yaa dog=erg woof woof bark-perf do-perf '\*The dog barked woof, a bark'; ok: 'The dog did barking' (R. Bhatt, R Ranjan pc.)

So the verbs in (2) do not form a class of covert transitives which take cognate objects, though there are for the most part related nouns (3). The class of optionally ergative intransitive verbs is not a class of covert transitive verbs. Even if it were, there would need to be an explanation of why the ergative case is optional.

So if the verbs in (2) are not covertly transitive, are they volitional? If so, then the ergative case on the (intransitive) subject would be an inherent case associated with the agent role. I have asked speakers of Hindi or Urdu whether dogs bark on purpose. They said that they don't, because barking is just something which dogs do, perhaps in reaction to something. In a sample of sentences with *bhauMk-naa* as a main verb provided by Peter Hook, there are both *-nee* and nominative subjects, with no discernable differences of agency. (5) is a contrasting pair, with a nominative subject (5a) and an ergative subject in (5b):

- (5) a. us=see ghooRee bidak ga-ee aur us=par kuttee bhauMk-ee 3s=from horse.m.pl shy go-pf.m.pl and 3s=on dog.m.pl bark-pf.m.pl 'The horses shied at him and the dogs barked at him.'

  (December 16, 2012, Navbharattimes. india times.com)
  - b. agar kuttee=nee bhauMk-aa hoo-taa too coorii bhii nahiiM hoo-tii... If dog.m.pl=erg bark-pf.m.pl be-impf.m.pl then robbery.f emph not be-impf.f 'If the dogs had barked, then the robbery wouldn't have happened...'

    (October 21, 2009. manojifofsblogspot.com/2009/10/blogpost\_21.html)

So it appears that = *nee* subjects of *bhauMk-naa* are not volitional in contrast to nominative/unmarked subjects.

The verbs *chiiMk*, *khaaMs*, *muut* 'sneeze, cough, urinate' denote verbs of bodily function which are not fully under an agent's control, but there is some leeway in where and when they are performed. In such cases the vector verb *lee-naa* 'take, do for one's own benefit' are used, and this verb requires a *-nee* subject. For examples, *khaaMs lee-naa* 'cough take-INF' and *chiiNk lee-naa* 'sneeze take-INF' are appropriate if one wants to avoid sneezing or coughing where it is inappropriate; for example, in someone else's face, or in certain contexts where there must be quiet (Rajesh Bhatt p.c.). The *-nee* verb *maar-naa* 'beat' combines with the optional *-nee* verb *muut-naa* 'urinate', to express a reflex action out of fear (Nespital, 1997: 1023). The transitive vector verbs *lee-naa* 'take' and *maar-naa* 'beat' which require *-nee* add a kind of choice in the first instance but not in the second, though the ergative case appears on the subject in both instances.

The optional *-nee* verbs do not in and of themselves show a consistent contrast between volitionality when *-nee* is used and non-volitionality when it is absent. This small exceptional class of intransitive, unergative verbs does not seem to be proof that the ergative case is an inherent case with a link to the agent semantic role, when used with either transitive or

intransitive verbs. Rather, these exceptions look like the usual irregular collection of ergative intransitives which turn up in many morphologically ergative languages, if not in most of them.

There is an additional possibility for some speakers. Some unergative verbs may be cases of 'fluid S' marking (Dixon, 1994: 71, 78-83). The ergative case may be used if the subject refers to a volitional actor. Butt (2006) allows for this possibility in the representation of a verb – if it is intransitive, the semantic role of agency may be present. There are just a few examples cited: the verbs *roo-naa* 'cry' (Butt, 2006: 170) and *cillaa-naa* 'shout'. The speakers I have consulted do not accept these verbs with *-nee*. But is it likely that there is some variation among speakers; for those who do use *-nee* in this way, it would be useful to see what range of verbs has this property. Another possibility suggested by Ura (2006: 130) is that agency may be added to a verb which is neutral for agency by an agentive adverb 'deliberately'. Non-*nee* intransitives like *nahaa-naa* 'bathe' (oneself) can combine with a vector verb *lee-naa* 'take, do for oneself', which is a *-nee* verb (R. Rajan, p.c.).

Many languages with ergative case on the transitive subject also have small set of exceptional intransitive verbs, which require or allow ergative subject marking. Typically, the class of such verbs found in one ergative language does not match the class of similar verbs in another language. A close examination of the small class of optionally ergative intransitives in Hindi-Urdu show no consistent association with the agent theta role, in fact the reverse. The use of the ergative seems to be completely optional, unless a transitive vector verb like <code>lee-naa</code> 'take' is combined with the verb. These transitive vector verbs are not necessarily agentive, a property consistent with the general property of <code>-nee</code> on transitive verbs.

I conclude that ergative in Hindi-Urdu case meets only the criterion of exception, but is independent of the agent theta role. To generalize, the current definition of inherent case is flawed. If uses of the ergative case in a language show exceptions, it does not automatically follow that ergative is connected to the agent theta role.

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# Merge und EFS

Urs Egli

# 1 Elementare Formale Systeme

Mit dem Ausdruck *merge* gebraucht Chomsky für das Zusammenfügen von Wörtern und Syntagmen zu Sätzen die Metapher des Verschmelzens. Damit reiht er sich ein in eine Jahrtausende alte Tradition der metaphorischen Erfassung grammatikalischer Begriffe.

Seit der griechischen Antike gibt es nämlich metaphorische Unschreibungen für das Zusammenfügen von Wörtern und Syntagmen zu Sätzen. Grammatikalische Begriffe mussten damals erst geschaffen werden und die griechischen Philosophen bedienten sich dabei ganz verschiedener Metaphern: Der berühmte Arzt und Sprachforscher Hippokrates nannte die Satzteile arthra, lat. articula 'Glieder' und assoziierte so mit den Satzteilen das Zusammenspiel der Glieder des menschlichen Körpers. Der Stoiker Chrysipp nannte die Zusammenstellung der Satzteile Syntax, ein Wort, das auch die Aufstellung einer Schlachtordnung bedeutet. Lateinisch adaptiert hieß dies constructio, Konstruktion. Eine poetischere Metapher fand Platon: Er nannte die Verbindung der Satzteile Symploke, das 'Zusammenflechten', was bei den Stoikern eher für einen Spezialfall, die Konjunktion, verwendet wurde, was wir hier conjoin nennen werden.

*Symplekein* ,zusammenflechten', *syntattein* ,zusammenstellen', oder im 20. Jahrhundert *concatenation* ,Verkettung, Zusammenfügung' und *merge* ,verschmelzen' sind also inhaltlich verwandte grammatikalische Begriffe.

Platon ist auch der Schöpfer der ersten und bekanntesten Syntaxregel des Abendlandes, die er im Dialog *Sophistes* wie folgt formulierte:

(1) Ein *logos* (ein Satz) ist geflochten aus *onoma* (einem nominalen Teil) und *rhema* (einem verbalen Teil).

Platon nannte das Beispiel *Theätet sitzt* aus *Theätet* und *sitzt*. Ein analoger englischer Satz wird uns als Beispiel dienen: *John walks* aus *John* und *walks*.

Unmetaphorisch kann man diese Regel durch einen Wenn-Dann-Satz formulieren:

(2) Wenn *John* ein nominaler Teil und *walks* ein verbaler Teil ist, dann ist die Konstruktion *John walks* ein Satz.

Eine Theorie solcher Wenn-Dann-Sätze ist in den Erörterungen von Raymond Smullyan zu den Elementaren Formalen Systemen von 1961 enthalten. Ein solches System ist eine Gruppe von Wenn-Dann-Sätzen, bei denen der Wenn-Teil auch fehlen kann. Diese Systeme nennen wir hier auch Grammatiken. Das Format dieser Grammatiken ist auch im Syntaxprogram-

mieren in der Programmiersprache Prolog verwendet. 1997 hat Annius Viktor Groenink eine praktisch identische Theorie unter dem Namen Literal Movement Grammar veröffentlicht, die leider viel zu wenig beachtet worden ist. Der Name spielt auf die Tatsache an, dass eine neue Theorie der Bewegungs-Transformationen geschaffen werden sollte, welche nicht Bäume bewegt, sondern Wortfolgen. Dieser Ursprung der Bezeichnung soll aber hier nicht verfolgt werden.

Die Regeln, die weitgehend Bestandteilen von Prolog-Programmen entsprechen, können auf folgende Art notiert werden:

(3) Satz(xy) <- Nominaler Teil(x) Verbaler Teil(y)

# 2 Minimalismus und EFS

Man kann aus der heutigen Diskussion zwei Versionen von Merge (nach Zwart, 2015) herausarbeiten, die beide in EFS wiedergegeben werden können.

- (4) Conception of Merge (1)
  - a. There is a Numeration N and a construction set N\*
  - b. There is an Operation (,Merge') such that
    - (i) Merge takes two elements x, y from N\* that belong to the simplex/complex sets A and B, and
    - (ii) combines x and y to the complex xy as an element of the complex set C.
- (5) Conception of Merge (2)
  - a. There is a Numeration N and a construction set N\*
  - b. There is an Operation (,Merge') such that
    - (i) Merge takes two elements x, y from N\* such that the first belongs to the simplex/complex set A, and
    - (ii) combines x and y to the complex xy as an element of the complex set C.

Man vergleiche die Formulierung von Merge in Trotzke & Zwart (2014), Zwart (2015), und die Besprechung von Merge in Sauerland (2015). Dabei ist der Versuch der Deutung, den ich erklären will, dadurch gekennzeichnet, dass nicht wie bei Zwart das sogenannte "Set Merge" verwendet wird, auch nicht das "List Merge" (vgl. Langendoen, 2003), sondern etwas, was ich "String Merge" nennen möchte, bei dem es um die Konkatenation von Strings geht, die bestimmten Kategorien angehören und einer neuen Kategorie zugewiesen werden.

# 3 Arikawa et al., Miyano et al. und Groenink

Die Smullyanschen Systeme sind durch zwei Entwicklungen erweitert worden, die unabhängig sind, aber erstaunlich gut zusammenpassen: Arikawa et al. (1992) haben in einer Zusatzüberlegung gezeigt, wie die regulären, die kontextfreien und die kontextsensitiven Grammatiken auf eine interessante Weise in das Smullyansche Format integriert werden können. Groenink hat 1997 durch eine Neuerfindung und Erweiterung des Formats die Sprachen und

Relationen in seinem Format der SLMG, für welche gerade in polynomial vielen Schritten,  $O(n^k)$  mit beliebig grossem k, für eine Eingabe der Grösse n entschieden werden kann, ob ein String zur Sprache oder Relation gehört oder nicht. Schon Miyano et al. (2000) und Ikeda & Arimura (1997) haben eine polynomiale Version der EFS definiert, die Hereditary Elementary Formal Systems.

Es gibt Mechanismen von Groenink und anderen, die zeigen, wie man die Adjunktion in TAG in Formalismen wie der SLMG darstellen kann (Kallmeyer, 2010). Diese nicht ganz trivialen Reduktionsalgorithmen kann man auch auf die Einordnung von Pair Merge als Erfassung der Adjunktion im Minimalismus anwenden, wenn man sie denn zulassen will. Außerdem kann man die Rekonstruktion des Minimalismus durch Stabler als lineare SLMG formulieren (vgl. Kallmeyer, 2010: 126, 164 und 169). Nebenbei wird bei diesen Reduktionen auch Tree Substitution und Tree Adjunction auf String-Manipulation umgestellt.

Um das Format von Arikawa et al. (1992) der length-bounded EFS gut mit dem Groeninkschen Format der SLMG vergleichen zu können, genügt ein Hinweis, dass es eine Form der SLMG gibt, die wir SLMG- $\lambda$  nennen, das ohne Einsetzung von  $\lambda$  auskommt. Zur Herstellung einer solchen Normalform werden alle möglichen Kombinationen von Einsetzungen von  $\lambda$  in den Regeln für die Variablen vorgenommen und daraus eine Normalform hergestellt, die nur mit Einsetzungen für Variablen ohne  $\lambda$  auskommt, wobei  $S(\lambda)$  hinzugenommen wird, wenn das Leere Wort in der Sprache ist, was man effektiv testen kann mit der alten Grammatik. Außerdem kann man die Prädikationen mit  $\lambda$  loswerden, indem man mit dem Underlining Algorithm von Ebbinghaus & Flum (2001) die reinen Einsetzungen mit  $\lambda$  fortbringt, die Regeln, in denen man Bedingungen nicht fortbringt, weglässt und Argumente mit  $\lambda$  durch Einführung von neuen Prädikaten mit kleinerer Stellenzahl beseitigt.

Interessant ist wie erwähnt die Darstellung der CSG als EFS in Arikawa et al. (1992). Arikawa et al. (1992) geben eine Charakterisierung der CSG als eine sogenannte length-bounded EFS und der CFG als eine simple and regular EFS in ihrer eigenen Terminologie. Die Charakterisierung durch Groenink (1997) ist äquivalent und parallelisiert die Chomsky-Normalform. Die allgemeine Klasse der linearen SMLG ist eine Wiedergabe der mild kontext-sensitiven Grammatiken.

Es gibt eine constituency based bottom-up derivational grammar für die Kontextfreie Grammatik, die als EFS formuliert ist. Für sie gibt es auch eine Chomsky-NF, welche die Binarität von "Merge" herstellt. Das Rewriting-Format innerhalb der Chomsky-Hierarchie ist eine voll äquivalente Darstellung und die Formate der bottom-up derivation und der top-down derivation sind dabei äquivalent. Wenn man allerdings die Semantik mitberücksichtigen will, ist das Format bottom-up vorzuziehen. Ausgeführt ist die Semantik schon in Chiang (2012). Elementar sind die beiden Formate im Kapitel 3 von Kowalski (1979) auf den Seiten 49-74 erklärt.

# 4 Anhang über die Regeltypen

$$R = A(t_1, \dots, t_p) \leftarrow B_1(s_1^1, \dots, s_{p1}^1), \dots, B_m(s_1^m, \dots, s_{pm}^m)$$

#### **Conditions on Rules**

# Rules of LMG (according to Groenink, 1997)

- R is bottom-up linear iff no variable occurs more than once in the  $t_i$ .
- R is top-down linear iff no variable occurs more than once in the  $s_i^i$ .
- R is bottom-up non-erasing iff every variable occurring in one of the  $s^i_j$  occurs in one of the  $t_l$
- R is top-down non-erasing iff every variable occurring in one of the  $t_l$  occurs in one of the  $s_i^i$
- R is non-combinatorial iff every  $s_j^i$  is but a single variable
- R is simple (a simple literal movement grammar SLMG rule) iff it is bottom-up linear, bottom-up non-erasing and non-combinatorial.
- R is a 1-SLMG) rule iff it is a SLMG rule with one-Place predicates only.
- R is a linear SLMG rule iff it is bottom-up and top-down linear, bottom-up and top down non-erasing and non-combinatorial.
- R is a linear 1-SLMG rule iff it linear and simple with 1-place predicates.

# Rules of EFS (according to Arikawa et al., 1992)

- R is variable-bounded (recursively enumerable EFS rule) iff the variables occurring in the predications of the right-hand side also occur in the predication of the left hand side.
- R is length-bounded (a CSG rule) iff
  - 1. the length of the predications of the right-hand side is less than or equal to the length of the left-hand side, and
  - 2. the number of occurrences of each variable in the predication on the right-hand side is equal to or less than the number of occurrences of this variable on the predications on the right hand side.
- R is simple iff it is length-bounded, contains unary predicates only, and all terms on the right-hand side are single variables, which are mutually distinct.
- R is regular (a CFG rule) iff it is simple and every variable in the head of R occurs at most once.

# 5 Anmerkung

Mit dem Aufsatz möchte ich Josef Bayer zu seinem 65. Geburtstag gratulieren. Ich danke ihm für die Einladung zu einem Vortrag über diese Themen und die Diskussion bei dieser Gelegenheit, auch mit Eleonore Brandner und Andreas Trotzke, die mir eine Verbesserung der Erfassung der Themen erlaubt hat. Ich danke wie immer meiner Frau Renata Egli-Gerber für viele Gespräche.

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# The Hare and the Hedgehog

GISBERT FANSELOW

0. The shifts of interest and focus in my academic life as a syntactician reflect general trends in the field of generative syntax. We started out in the eighties, now some 35 years ago, with some initial scepticism over the universalist and cognitive claims made by GB-theory, but soon this scepticism gave way to a considerable enthusiasm. Then, the time came when we felt the universalist and cognitive claims should be tested seriously, and we got involved in psycholinguistics and extended the scope of inquiry beyond German and English. And we realized how much we could gain from the analysis of dialectal data.

When I entered these fields at different times in my career, I always found Josef Bayer there, already having done respected work in the area that I tried to familiarize myself with. So, my academic relation with Josef is nicely captured by Grimms fairy tale of the hare and the hedgehog. Josef would always say "ik bün al hier"—I am already here. Josef has indeed always been at the forefront of the development in syntax.

1. There are also areas into which I have never followed Josef. Focus particles are such a domain. Bayer (1996) is the first important crosslinguistic investigation of the interaction of syntax and semantics for scalar particles, showing, among other things, the impact of branching direction on the grammar of focus particles. I have never thought about this topic deeply, but I will grab the present opportunity, and write a few lines on it.

The focus particles *nur* 'only', *sogar* 'even', and *auch* 'also' adjoin to verbal projections, but also to DPs, as shown by Müller (2005). The default hypothesis is that the particles adjoin to the XP they take scope over. This is illustrated in (1), with the particle adjoined to DP in (1a), and VP in (1b).

- (1) a. Nur Anna war nicht da. only Anna was not there  $\forall x ((\neg present(x)) \rightarrow x = anna)$ 
  - b. Sogar den K2 besteigen wird Josef nach der Pensionierung.
     even the K2 scale will Josef after the retirement
     'Josef will even scale the K2 after retirement'
     Even P, P=scaling the K2, (will (P(josef)))

Can a constituent that is semantically in the scope of the particle be extracted from the c-command domain of the particle? Is it mandatory for constituents c-commanded by the particle to leave its syntactic domain if they are not in the semantic scope of the particle?

When a formal requirement must be met, movement out of the scope of the particle has

no semantic effect. In the SOV language German, the finite verb must go to second position in main clauses. The phonetic string of (2) allows a reading in which *nur* quantifies over predicates: the alternative set consists of predicates such as *going to work*, *answering her mail*, etc., i.e. *liest* is in the scope of *nur* even though it was moved to a position above the particle.

(2) Anna liest nur [ $_{VP}$  die Zeitung  $t_{V}$ ]. Anna reads only the newspaper  $\forall P (P(anna) \rightarrow P=read the newspaper)$ 

As noted in Fanselow (1993), (3) is not only compatible with an alternative set of DPs (consisting of books like Pride and Prejudice, Lectures on Government and Binding, etc.), but also with an alternative set of properties (praying, giving to the poor, ...)—the sentence can mean that the only pious thing the priest fails to do is bible-reading.

(3) Nur die Bibel liest der Pfarrer nicht. only the bible reads the priest not  $\forall P (\neg P(\text{the priest}) \rightarrow P=\text{read the bible})$ 

Note that the VP of (3) looks like [ $_{\rm VP}$  nur die Bibel  $t_{\rm V}$ ] after liest has been moved to second position, so that the underlined material in (3) can be analysed as a remnant VP, cf. Fanselow (1993), Müller (2005).

One disadvantage of an account of the scope taking of nur in (3) with a VP [ $_{VP}$  nur die Bibel  $t_V$ ] created by remnant movement, already noted in Fanselow (1993), lies in the fact that quantification over the predicate is possible for scalar particles co-occuring with an object in the left periphery even when it is not clear which position is targeted by the necessary extraction of the verb out of VP. Thus, an interpretation analogous to (3) with an alternative set consisting of properties is also fine in (4), in which the main verb has not moved to second position (the auxiliary has done so). The required additional movement of the main verb gelesen out of VP, necessary for the creation of [ $_{VP}$  nur die Bibel  $t_V$ ], is not motivated independently, and it is not clear which position it would target.

(4) Nur die Bibel hat der Pfarrer nicht gelesen. only the bible has the priest not read

Likewise, in addition to the interpretation that Anna took everyone to school but the children, (5) allows for the reading that Anna did all her morning jobs except for taking the kids to school. An analysis of (5) along the lines proposed for (2) would require that not only the verb but also the goal PP would have to be extracted from VP in order to allow the analysis of *nur die Kinder* as a remnant VP. And in (6), the resultative/secondary predicate *weich* 'soft (boiled)' would have to leave VP, although it is, normally, immobile—since again, the alternative set may consist of properties (e.g. those that characterize a perfect waiter).

(5) Nur die Kinder hat Anna nicht zur Schule gebracht. only the children has Anna not to-the school brought  $\forall P (\neg P(anna) \rightarrow P=take the children to school)$ 

(6) Nur die Eier hat er nicht weich serviert. only the eggs has he not soft-boiled served  $\forall P (\neg P(he) \rightarrow P=serve the eggs soft boiled)$ 

Thus, it seems that the relevant derivation does not involve remnant movement in the normal sense, but rather distributed deletion as developed in Fanselow & Cavar (2002) for discontinuous noun phrases: Syntactically, the complete VP is copied to the left, but, in contrast to standard instances of movement, the deletion operation following copying does not only affect the lower copy, but also the higher one.

(7) [VP] nur die Kinder nicht zur Schule gebracht] hat Anna [VP] nur die Kinder nicht zur Schule gebracht].

With distributed deletion, VP fronting can also create a structure in which the indirect object is the only part of VP that is overtly realized at the left edge. Hence, (8) also comes with a predicate alternative set: the person talked about may be a perfect guest (he never comes too early, he never drinks too much, he is always polite, etc.) but one property is missing. The very same readings arise in (9) and (10), in which more material is realized in the left copy, and is hence missing in the right one.

- (8) Nur den Kindern hat er nie ein Geschenk mitgebracht. only the children has he never a present brought  $\forall P (\neg P(he) \rightarrow P=bring the children a present)$
- (9) Nur den Kindern ein Geschenk hat er nie mitgebracht.
- (10) Nur den Kindern ein Geschenk mitgebracht hat er nie.
- (11) and (12) illustrate that distributed deletion also affects verbal projections with a subject at the left edge: (11) can state that all the predictions of some clairvoyant came true (global warming was halted, the aliens landed on earth) with one exception. (12) can talk about someone who has realized all his plans by his twentieth birthday (become a billionaire, become the German chancellor, be awarded a Nobel prize ...), again with a deplorable exception.
- (11) Nur der dritte Weltkrieg ist nicht ausgebrochen. only the third world war is not broken out  $\forall p (\neg p) \rightarrow p =$ the third world war broke out)
- (12) a. Nur ein Mädchen hat ihn noch nicht geküsst. only a girl has him not yet kissed  $\forall p (\neg p \rightarrow p=a \text{ girl has kissed him})$ 
  - b. Nur ein Mädchen geküsst hat ihn noch nie.
- 2. In German main clauses, one constituent needs to be placed in front of the finite verb. This is a formal requirement, just like verb placement. Can a category move to the position to the left of the verb, and nevertheless remain in the scope of a scalar particle?

Imagine you booked the tour "Scary night in the forest," but all promises are broken: no bats flying around your head, no howling wolves, no ghost light appearing in the moor. You complain to the organizer. In this context, (13a) is a perfect formulation of the complaint, in which the left edge is filled by an expletive and all material that is in the semantic scope of *nur* is c-commanded by it. But (13b), (13c) are also wellformed in this context, though they may be a bit marked. They allow a reading in which *nur* affects the whole proposition. The same holds in (14) with *sogar*, which is fine in a context like this one: all predictions of some clairvoyant came true, not only the predictions about the eruption of volcanoes in Yellowstone National Park, Putin becoming a movie star, and aliens landing in New York City, but even the prediction about the pope.

- (13) a. Es haben nur Hunde gebellt. there have only dogs barked  $\forall p \ (p \rightarrow p = dogs \ barked)$ 
  - b. Hunde haben nur gebellt
  - c. Die Hunde haben nur gebellt
- (14) Der Papst ist sogar (auch) gestorben. the pope is even also died 'Even it was the case that the pope died'
- 3. Formally triggered operations such as the fronting of the finite verb and the movement of some XP to the left of the finite verb in German main clauses do not affect the scope assignment of *nur* and the other focus particles. But what about a less formal operation such as scrambling? Relevant examples can be found in (15) and (16), with the crucial readings indicated. The definite indirect (15) and direct (16) objects precede the focus particle *nur*—so if they can be in the scope of the particle, they must have been scrambled out of the VP.
- (15) Hans hat ja der Maria nur einen Heiratsantrag gemacht, und nicht Hans has PTC the.DAT Mary only a proposal of marriage made and not auch noch der Anna Blumen geschenkt.

  also additionally the.DAT Anna flowers presented
  (Hans is not a marriage impostor:) 'Hans has only made Mary a proposal of marriage, he has not in addition given flowers to Anna as a present'
- (16) Hans hat ja die Bücher nur ins Regal gelegt, und nicht auch noch Hans has PTC the books only into the shelves put and not also additionally den Kindern die Haare gekämmt.

  the.dat children the hair combed (Hans has not done all he promised:) 'Hans only put the books on the shelves, he has not in addition combed the children's hair'

There is no uniform reaction to such sentences. We sent out similar sentences (Fritz hat ja am Freitag der Maria nur ein paar Blumen mitgebracht und nicht auch noch am Samstag der Franziska einen Heiratsantrag gemacht, Fritz hat ja am Freitag der Maria nur ein paar Blumen mitgebracht, und nicht auch noch am Samstag der Franziska einen Präsentkorb) to 30 linguists

who are German native speakers by e-mail, and found that nearly half of them (13/30 and 12/30, respectively) accepted them in a forced choice task. Apparently, there is no uniform way of resolving the conflict between the factors favoring the scrambling of a DP out of VP (e.g., definiteness) and the constraint that demands parallelism between syntactic and semantic scope. A subject can also be placed in front of a focus particle yet remain in its scope, as shown by (17), in which the alternative set contains complete propositions (Wlodek sparking off fireworks, Marzena reciting a poem, Teresa cooking a perfekt dinner ...)

- (17) Bestimmt hat Derk nur ein paar Eulen gezeigt, und nicht auch noch Wlodek certainly has Derk only a couple owls shown and not also additionally Wlodek ein Feuerwerk gezündet.
  - a fireworks sparked off
- 4. 14 out of 30 linguists also accepted sentence (18).
- (18) Fritz hat ja nur am Freitag der Maria ein paar Blumen mitgebracht, und Fritz has PTC only on-the Friday the.DAT Mary a couple flowers brought and nicht auch noch einen Präsentkorb.

  not also additionally a gift basket

  'Fritz only brought Mary a couple of flowers on Friday, and not also a gift basket'

The continuation in the second conjunct might suggest that the alternative set consists of several possible presents for Mary, i.e., under this reading, *nur* would sit in a position quite far away from its scope. This could mean that elements not in the semantic scope of *nur* can remain in its syntactic scope. However, one can also assume that the alternatives are indeed properties (bringing Mary flowers on Friday, bringing Mary a gift basket on Friday, bringing Mary a cat on Friday), with the given parts of the property being phonologically unrealized in the second conjunct. It is difficult to decide between these alternatives.

5. To my ears, the examples discussed in sections 3 and 4 differ from the ones discussed earlier in the additional presence of an evaluative component. To what extent the syntactic analysis can be influenced by this component is also an issue I want to leave open here.

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# When low adverbs are high: On adverb movement in Abruzzese\*

JACOPO GARZONIO & CECILIA POLETTO

## 1 Introduction

Cinque (1999) and subsequent studies on the structural hierarchy of functional projections of the clause have considered the different observable positions of the inflected verb and of the past participle in languages like Italian as evidence that adverbs occupy specifier positions and the verb moves through head positions. The main argument in favor of the idea that adverbs do not move is that their relative order does not change independently from the position of the verbal forms. In (1) it is shown that in standard Italian the negative adverb *mica* and the aspectual adverb *più* 'no longer' always appear in the order *mica-più*, independently from the position of the inflected verb and the past participle.

- (1) a. Non hanno mica più mangiato. (Cinque, 1999: 47) not have.3pl not no-longer eaten 'They have not eaten any longer.'
  - b. Non hanno mangiato mica più.
  - c. \*Non hanno più mica mangiato.
  - d. \*Non hanno mangiato più mica.
  - e. Non hanno mica mangiato più.
  - f. \*Non hanno più mangiato mica.

Since verbal forms can surface at different structural heights, it is possible to determine their position in the hierarchy only taking into account sentences with at least two adverbs. This is shown in (2):

(2) a. Gianni (ha) saggiamente (ha) accettato. (Cinque, 1999: 49) Gianni has wisely has accepted

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- b. Gianni (ha) fortunatamente (ha) accettato. Gianni has luckily has accepted
- c. \*Gianni saggiamente ha fortunatamente accettato.

Notice that (2) also shows that free adjunction of adverbs does not explain the ungrammaticality of (2c). The range of positions where the inflected verb and the past participle (or other non-finite forms) surface varies across the Romance domain (see Ledgeway & Lombardi, 2005; Schifano, 2011, and Schifano, 2014, among many others<sup>1</sup>). The lowest position where the inflected verb can appear in standard Italian is immediately below negative mica, as it cannot appear lower than  $gi\grave{a}$  'already'. However, in many varieties of Southern Italy the order 'already'-V is the most common one. More precisely, the verb usually follows  $gi\grave{a}$  but tends to precede the other aspectual adverbs. This has clearly been shown by Ledgeway (2009) for Neapolitan. We summarize here Ledgeway's findings based on a corpus of three authors: with a simple finite verb,  $(g)gi\grave{a}$  'already' precedes the verb in 27 cases out of 39, as in (3a), while  $(c)chi\grave{u}$  'no longer' precedes it only in 4 cases out of 281 (3b), and sempe 'always' precedes it in 45 cases out of 295 (3c):

- (3) a. Già se tene contento (*Basile*, Ledgeway, 2009: 780) already REFL=keeps content 'He is already content.'
  - b. né chiù me movo a zinno (*Basile*, Ledgeway, 2009: 780) and-not no-longer me=move.1sg at nod 'I do not move at a nod anymore.'
  - c. chillo sempe m'obbligava a spusà la figlia (*Basile*, Ledgeway, 2009: 780) he always me=forced.3sG to marry the daughter 'He was always forcing me to marry his daughter.'

Thus, in most cases aspectual adverbs follow the verb, like in standard Italian:

- (4) a. non ne parlammo cchiù (*Scarpetta*, Ledgeway, 2009: 779) not of-it=talked.1PL no-longer 'We did not talk anymore about it.'
  - b. ce staie sempre vicino (*De Filippo*, Ledgeway, 2009: 780) to-us=stays always near 'He is always near to us.'

With complex verbs, aspectual adverbs are usually found after the nonfinite lexical verb, with the exception of (g)gia, which surfaces between the auxiliary and the lexical verb in 5 cases out of 8 in Ledgeway's corpus, while, for instance, (c)chiù is found in this position in 2 cases out of 20, and *sempe* in 14 cases out of 47:

(5) a. era già trasuta 'm barca (*Basile*, Ledgeway, 2009: 783) was already entered in boat 'She already boarded the boat.'

<sup>1</sup> For a theoretical discussion about the relation between verb movement and morphological richness see Belletti (1990) and Holmberg & Roberts (2012).

- b. nun ce simme cchiù viste (*Scarpetta*, Ledgeway, 2009: 783) not us=are no-longer seen 'We did not see each other anymore.'
- c. l'aggiu sempe tenute li granfe ncuollo to-him=have.1sG always kept the claws on 'I always kept my hands on him.' (*Scarpetta*, Ledgeway, 2009: 783)

Ledgeway's conclusion is that Neapolitan is different from standard Italian only in the position of adverbs with complex verbs. Considering these data in the light of Cinque's (1999) theory, there are two further possible considerations: first, in Neapolitan the finite verb is usually lower than in Italian, as it follows the adverb corresponding to 'already'; second, nonfinite verb forms seem to surface higher than in Italian, as they tend to precede aspectual adverbs (with the exception of 'already').

In this article we take into consideration the position of aspectual adverbs in another domain of Southern Italian dialects, namely Abruzzese, and compare these dialects with standard Italian and Neapolitan. Our main claim is that in Abruzzese there is no need to postulate that finite verbs are lower than in Italian. More precisely, we propose that, exactly like other constituents, adverbs can surface in the left periphery of the clause.

The article is structured in the following way: in section 2 we describe the Abruzzese data and anticipate the main points of the proposal; in section 3 we present our analysis; in section 4 we discuss some cases showing that Italo-Romance has adverbs in the CP area; section 5 contains some conclusive remarks.

# 2 Posing the problem

Many examples from the corpus of the ASIt project show that in Abruzzese varieties finite verbs, including auxiliaries, can follow low aspectual adverbs. In (6) we provide some examples from different dialects:

- (6) a. LISCIA

  Già so magnetə
  already am eaten
  'I have already eaten.'
  - b. Arielli
    Sta figurinə ggià li tinetə
    this card already it=have.2pl
    'You already have this card.'
  - c. LancianoN'angora li sa ccattata?not=yet it=are bought
  - d. Pennapiedimonte
     Angura la ∫i 'ccattota?
     yet it=are bought
     'Haven't you bought it yet?'

# Jacopo Garzonio & Cecilia Poletto

The order Adverb-Verb exemplified in (6) is marginal or even ungrammatical in standard Italian and in Northern Italian dialects, but it is not uncommon in Romance. Cinque (1999) compares standard Italian with languages where the verb surfaces after low aspectual adverbs (like in Romanian, (7a-b)):<sup>2</sup>

- (7) a. \*Nu cred mai cà e posibil (Dobrovie-Sorin, 1994: 10) not believe.1sg no-longer that is possible
  - Nu mai cred cà e posibil not no-longer believe.1sG that is possible
     'I do not think anymore that it is possible.'

In Garzonio & Poletto (2013) we considered some dialects from the Marche region that share the property of allowing the verb to surface after aspectual adverbs, as shown in (8):

- (8) a. Montefelcino
  Già ho magnèt
  already have.1sg eaten
  - Sassoferrato
     Già ho magnado
     already have.1sG eaten
     'I have already eaten.'
  - c. MACERATA

    Manco lu/lo véco

    not-even him=see.1sG

    'I do not even see him.'
  - d. Sassoferrato

    Manco ce penso

    Not-even about-it=think.1sg

    'I do not even think about that.'

As discussed in Garzonio & Poletto (2013), there are two possible explanations for this distribution. On the one hand, it is possible that these dialects are similar to the Calabrian varieties analyzed by Ledgeway & Lombardi (2005), where the verb remains in the low portion of the IP layer. However, the dialects represented in (6) and (8) lack the property of clitic interpolation, which is the main piece of evidence in favor of the idea that the finite verb is located in the low IP. On the other hand, one can assume that sentences like those in (8) are derived through constituent movement of adverbs to the pre-subject space. The two possible analyses are sketched as in (9):

<sup>2</sup> See Schifano (2014) for a more detailed picture about other Romance varieties where the verb does not surface higher than 'no longer' and 'still', like European Portuguese:

<sup>(</sup>i) A Maria (\*se recorda) ainda se recorda desta história. (Schifano, 2014: ex. 12b) the Mary herself=remembers still herself=remembers of-this story 'Mary still remembers this story.'

(9) a. [CP] = [CP] =

Even if the ASIt data cannot be used for a quantitative survey similar to the one Ledgeway (2009) has conducted on Neapolitan texts, it is possible to formulate some generalizations. The first observation about Abruzzese varieties is that only some adverbs appear regularly before the inflected verb. Negative adverbs and the adverbs corresponding to 'already' and 'yet' are very often in preverbal position, while 'no longer', 'always' and 'well' are in most cases postverbal. The distribution is exemplified in (10):

- (10) a. Negative Adverbs Adv-V
  - (i) SAN VALENTINO

    Mànghe ce pènze

    not-even to-it=think.1sg

    'I do not even think about that.'
  - (ii) Arielli
    Michə li so fattə
    not it=am done
    'I have not done it.'
  - b. 'Already' Adv-V
    - (i) SAN VALENTINO
      Ggià e magnatə
      already have.1sG eaten
      'I have already eaten.'
    - (ii) Teramo
      Tandə giuvənə e già te da mandenè na famijə so young and already has to maintain.INF a family 'He is so young and must already support a family.'
  - c. 'No longer' V-Adv
    - (i) Arielli
      Da chi lu jurnə ni li so vistə cchiù
      from that day not him=am seen no-longer
    - (ii) Pennapiedimonte
      Da chə lu jurnə ne lə su arəvi∫tə cchiò
      from that day not him=am seen no-longer
      'From that day I have not seen him anymore.'
  - d. 'Yet' Adv-V
    - (i) SAN VALENTINO
      Angure nen l'í cumbrate?
      yet not it=are bought
      'Haven't you bought it yet?'
  - e. 'Always' V–Adv
    - Lanciano
      Mamma ha semprə allavatə bbonə lə tendə də la nonna
      mum has always cleaned well the curtains of the grandmother

## (ii) Castiglione Messer Marino

Mamma ha sembrə arravetə bbunə lə toendə a la chesà də mammeuccia mum has always cleaned well the curtains at the home of grandma 'Mum has always cleaned well grandma's curtains.'

#### f. 'Well' V-Adv

(i) Teramo

Lu lavorə su lu fa bonə the job his it=does well 'He does well his job.'

This suggests that in Abruzzese (like in Neapolitan) the inflected verb moves less than in standard Italian and Northern Italian dialects (past lower adverbs like 'always' and 'well' but stopping before crossing 'already' and 'still/yet'). This points to the analysis in (9a). However, there are further elements that should be taken into consideration. Speakers of several varieties agree that a preverbal adverb, even 'already', is not compatible with a quantifier subject, which cannot be left dislocated:

#### (11) TERAMO

- a. Nisciun ha già finitə də leggə ssu libbrə nobody has already finished to read.inf this book
- b. Nisciun ha finitə già də leggə ssu libbrə nobody has finished already to read.inf this book
- c. \*Nisciunə già ha finitə də leggə ssu libbrə nobody already has finished to read.inf this book 'Nobody has already finished reading this book.'

Furthermore, the sentences in (11) also show that 'already' can indeed appear after the past participle. This order is not uncommon with the other aspectual adverbs, and is very frequent with 'no longer':

#### (12) a. Arielli

Da chi lu jurnə ni li so vistə cchiù from that day not him=am seen no-longer 'From that day I have not seen him anymore.'

b. Lanciano

Nən lə sə ccattatə angorə? not it=are bought yet 'Haven't you bought it yet?'

c. Lanciano

Mammà l'ha lavatə sembrə bonə mum them=has cleaned always well 'Mum has always cleaned them well.'

Thus, a problem similar to the one described by Ledgeway (2009) for Neapolitan arises: inflected verbs seem to be lower than in Italian, while past participles seem to be higher. More

in general, this distribution is potentially a problem for Cinque's (1999) theory: assuming that auxiliaries are generated lower than in Italian (for instance immediately under 'already' in TAnterior<sup>0</sup> or even lower), it is not clear how past participles can move across this position without violating (any minimalist version of) the Head Movement Constraint or even Relativized Minimality (Rizzi, 1990). This problem has been discussed by Bobaljik (1999) who points out that in standard Italian examples like those in (13) the past participle should not be able to move across the trace of the inflected auxiliary (13d):

- (13) a. Non hanno (mica più) mangiato (mica più) (Cinque, 1999: 47) NEG they-have not/any longer eaten not/any longer
  - b. Non hanno mica mangiato più 'They haven't eaten (any longer).'
  - c. Gianni purtroppo forse stupidamente mica gli ha più telefonato Gianni unfortunately perhaps stupidly not to-him has any longer telephoned. (Cinque, 1999: 51)
  - d. [non hanno [FP] mangiato [mica  $t_{AUX}$   $t_{PART}$  [più p più  $t_{PART}$  [VP]  $t_{PART}$  ]]]]]

More in general, these facts could be interpreted as evidence that the order of adverbs in Romance is not a product of their Merge order, but of some linear (that is post-syntactic) mechanism. We will argue, however, that the general idea proposed by Cinque (1999) is correct, and that some of the observed variation does not depend uniquely on the height of verbal forms, but also on the limited possibility of adverb movement.

# 3 The analysis

So far we have shown that some of the aspectual adverbs in Abruzzese can also appear before the inflected verb (both auxiliaries and lexical verbs). As discussed above, assuming that Cinque's theory is on the right track, this linear order might suggest that in Abruzzese inflected verbs reach a lower position than in other Italian varieties. Notice, however, that if this is the explanation, it is not clear why the adverb corresponding to 'already', which normally precedes the verb, is not found in preverbal position if the subject is a quantifier (11c). Our proposal is to consider this restriction as a piece of evidence that the preverbal position of adverbs like 'already' is to be interpreted as operator movement of the adverb to the left periphery (targeting a projection located in the Focus field and already identified by Benincà & Poletto (2004) on the basis of Rhaetoromance varieties, which have a dedicated position for lower adverbs precisely in the Focus CP domain), but the presence of another operator element, like a quantified subject, which is a potential intervener, blocks this movement, presumably for some type of Relativized Minimality effect (Rizzi, 1990). This intuition leads to the analysis represented in (14):

It should be pointed out that there is no indication that the quantifier subject in (11) and (14) is in the standard subject position (let's assume it is the specifier of TP). We leave this problem aside here, as it could be hypothesized that 'nobody' itself targets a position in the Focus layer or that there is a special position for bare quantifiers in the split left periphery. Notice, however, that if our hypothesis is correct, it has the consequence that (non-quantified) subjects are in the left periphery, presumably in a Topic projection, as they normally precede aspectual and negative adverbs when they are found at the left of the inflected verb. This is shown in (15) for standard Italian:

- (15) a. ?Gianni già è partito John already is left 'John has already left.'
  - b. \*Già Gianni è partito

In Cinque's (1999) analysis, subjects are always in the IP, so examples like those in (15) were considered further evidence that adverbs do not move and only verbal forms can be found at different structural heights. We propose to revise this view and assume that when there is an operator-like element in the left periphery (like a moved adverb), a subject preceding it is in a Topic position. This is coherent with Cruschina's (2012) Syntactic Extraposition (SE) Principle.

If low aspectual adverbs preceding the inflected verb are in the CP, one could expect some restrictions on the possibility of having two preverbal adverbs. This prediction is not easy to test, as the adverbs that can be found in preverbal position are in most cases not compatible semantically and when there are two adverbs, only 'already' can appear before the verb, while the lower ones in such cases follow the past participle:

- (16) a. Teramo
  assə già lu sa simbrə com te da fa
  he already it=knows always how has to do.inf
  'He already always knows how he has to solve the problem.'
  - Teramo
     Dapù n'ha vində chiù simbrə since-then not has won no-longer always 'He has not always won anymore.'

These examples confirm that the idea that adverbs do not move and past participles can bypass the position where auxiliaries are merged presupposes a violation of the Head Movement Constraint. On the other hand, it seems that only the higher aspectual adverbs can be moved to CP. One possible explanation for this fact is that also the inflected verb activates Relativized Minimality effects. Or, alternatively, negative adverbs and some of the aspectual adverbs share a quantificational feature that can be valued in the Focus field. The only case we found where two adverbs occur before the inflected verb involves the negative adverb corresponding to Italian *mica* and 'already'. However this combination is possible only in interrogatives:

(17) ARIELLI
Miche già ji l'a ditte a cullù?
not already to-him=it=has said to that-one
'He has not already told it to that one, right?'

In a similar way, the vast majority of cases we observed in the ASIt database where 'yet' precedes the inflected verb are questions, as in (6c)-(6d) and (10d-i). We propose that in all these cases the adverb is moved to a higher position in the CP where polar interrogative force is encoded (we label it IntP following established cartographic terminology). Notice that in some varieties the clitic negative marker has a reduced form or totally disappears when 'yet' is moved in interrogatives, as represented in (18). The analysis we propose is (19).

- (18) a. Lanciano =(6c) N'angorə li sə ccattatə? not=yet it=are bought
  - b. LancianoNən lə sə ccattatə angorə?not it=are bought yet
  - c. Pennapiedimonte =(6d)
    Angurə lə ʃi 'ccattotə?
    yet it=are bought
    'Haven't you bought it yet?'
- (19) [IntP N'angorə [FP li sə [AspContinuativeP angorə [VP ccattatə] ...]

We will come back to the relation between 'yet' and the negation in the next section.

Summarizing, we propose that in these varieties (and possibly in other Southern Italian dialects) some of the low adverbs can undergo operator movement to the left periphery of the clause, probably because they are intrinsically quantificational. Besides the observed linear order, this analysis is based on the fact that preverbal adverbs are not compatible with other operators like quantifier subjects and that in some cases the preverbal position of an adverb correlates with interrogative force. In the next section we present further evidence that in Italo-Romance there is a position for adverbs in the CP layer.

### 4 Adverbs in CP

In Garzonio & Poletto (2013) we have examined several cases of adverbs in the left periphery in Italo-Romance. In this section we illustrate some of those phenomena in order to show that so called "low" adverbs can be in the pre-subject space even if they are not contrastively focalized.

As described by Munaro (2009), standard Italian presents many cases of aspectual adverbs in initial position followed by a complementizer. It is important to stress that in these cases the adverb is not focalized. From a semantic point of view, the aspectual meaning is substituted or accompanied by an evaluative or discourse related one (Cinque, 1999, points out that adverbs can display structural and lexical ambiguities). In (20) some examples are provided:

- (20) a. Già che vai al mercato, comprami un chilo di mele already that go.2sg to-the market buy=me a kilo of apples 'Since you go to the market in any case, buy me a kilo of apples.' (Munaro, 2009: ex. 17ff.)
  - b. Sempre che studia always that studies 'He is always studying!'
  - c. Ancora che mangi?! still that eat.2sg 'You are still eating?!'

In these examples the presence of the complementizer is evidence that adverbs are located in the CP. Since the aspectual meaning is not cancelled in most cases, we assume that these sentences are derived through adverb movement from the IP to the CP. More precisely, the adverb is moved to the higher field of the left periphery, where discourse and speaker related features are encoded.

More evidence for adverb movement is provided by the diachrony of Italian. Old Italian was a verb second language, with frequent verb third and verb fourth cases (Benincà, 2006; Poletto, 2014). Adverbs, like DPs and PPs, occupied often the first position, as shown in (21):

- (21) a. ... quelle cose che già sono pervenute ... those things that already are come '...things that already came ...'
  (Brunetto Latini, *Rettorica*, 64)
  - b. Già è detto sofficientemente dell'officio e della fine di rettorica already is said enough of the duty and of the goal of rhetoric 'We already said enough about the duty and the goal of rhetoric.' (Brunetto Latini, *Rettorica*, 53)

Verb second grammar disappears in the course of the XIV century, but crucially, while preverbal non-subject DPs and PPs become rare, preverbal aspectual adverbs are still quite common through the XV and XVI centuries. This can be observed for instance in Machiavelli's work: in the first 20 chapters of "Il Principe" there are only three cases of auxiliary-subject inversion and eight cases of modal-subject inversion, while preverbal aspectual adverbs, even the "lower" ones like 'always' and 'never', are very frequent:

- (22) a. Sempre si trova dei malcontenti ... (*Il Principe*, 4) always one finds of-the displeasures 'There is always discontent ...'
  - b. Mai si troverà ingannato da lui ... (*Il Principe*, 9) never REFL will-find.3sG cheated by him 'He will never be cheated by him ...'

This residual verb second with adverbs is to be interpreted as a by-product of the progressive loss of verb movement to the higher part of the split CP (FocusP or above). In other words,

it seems that there is a dedicated position for moved aspectual adverbs in the low part of the left periphery even though V2 is not obligatory anymore.

The last example of adverbs in the CP we take into consideration is the most relevant one as it is a phenomenon already described in an Abruzzese dialect. Biberauer & D'Alessandro (2010) have discussed the peculiar distribution of <code>angorə</code> 'still, yet' in the dialect of Arielli (the ASIt data suggest that the phenomenon is present also in other varieties, like that of Pennapiedimonte). In Ariellese, <code>angorə</code> can appear both in preverbal and postverbal position. When it follows the inflected verb, it is interpreted as Italian <code>ancora</code> in similar contexts, that is as English <code>still</code>. However, if it appears before the inflected verb it corresponds to the negative polarity variant, that is to Italian <code>non</code> … <code>ancora</code> and English <code>not</code> … <code>yet</code>. Notice that there is no negative marker and the verb keeps present tense morphology even if it receives counterfactual interpretation:

## (23) Arielli

- a. Magnə angorə
   eats ANGORə
   'He is still eating.'
- Angora magna 'He has not eaten yet.'
   ANGORa eats
- c. Mə tene' 'ngorə famə to.me had.1sg angorə hunger 'I was still hungry.'
- d. Angora matene' 'fama ANGORa to.me had.1sg hunger 'I was not hungry yet.'

Biberauer and D'Alessandro explain the phenomenon in terms of reanalysis of a focalized adverb (that is moved to the preverbal space) that takes over from the complex constituent 'not yet', in a way similar to focalized n-words in Italian, which do not require the preverbal negative marker typical of Negative Concord even if they originate in postverbal position:<sup>3</sup>

- (24) a. Non vedo nessuno not see.1sg nobody 'I do not see anyone.'
  - b. NESSUNO vedo 'I see NOBODY.'

Leaving aside the reanalysis solution, which could imply that we are dealing with two separate lexical items in synchrony, a further problem for Cinque's hierarchy, the phenomenon clearly shows that adverb movement is possible in these varieties.

<sup>3 &</sup>quot;angore2 has its origins in an emphatic use of angore1, which subsequently became bleached of its emphatic connotations, with the result that it could take over from non angore ("not yet"), which became obsolete (...) As an emphatic element, angore1 may be thought of as contained within a FocusP, i.e. "sealed off" from the rest of the clause – cf. the behaviour of focused elements in Negative Concord (NC) contexts." (from Biberauer & D'Alessandro, 2010. Notice that angore2 refers to the preverbal variant, angore1 to the postverbal one).

To summarize, in this section we have briefly presented three cases of adverb movement in Italo-Romance. These phenomena cannot be ignored when dealing with adverb-inflected verb orders like those we presented in section 2: while in some cases it can be demonstrated beyond a reasonable doubt that the verb moves less than in standard Italian or in Northern Italian dialects, in other cases the possibility that adverbs reach the CP layer cannot be ruled out.

# 5 Conclusions

We have examined the relative order of verbs and aspectual adverbs in Abruzzese varieties. We have shown that some adverbs, in particular negative adverbs and 'already' appear in most cases in preverbal position. We have argued that this linear order is not automatically evidence that verbs move less in these dialects than in the rest of the Italo-Romance domain. If the relation between height of the verb in the IP hierarchy and its visible morphology is to be taken seriously, it is not clear why in these dialects the verb should move less, as the morphology is not poorer than in other Italian varieties.

It is important to stress the fact that adverb movement to the CP layer is a kind of operator movement, but it is not related to contrastive focalization. Contrastively focalized adverbs are possible also in standard Italian (25), but in the cases we have examined there is no trace of special informational interpretations.

(25) SEMPRE si è alzato tardi, non a volte always REFL is got-up late not at times 'ALWAYS he has got up late, not just sometimes.'

For this reason we suspect that preverbal adverbs target a different operator position in the left periphery, possibly a dedicated position for aspectual adverbs. Renaissance Italian data we mentioned in section 4 lead to a similar speculation. A possibility that we intend to pursue in further research is that also the inflected verb is in the CP, as it seems that other constituents cannot be inserted between a moved adverb and the verb (an issue related to the position of subjects that we discussed in section 3). If this hypothesis is correct, it can shed some light on the dynamics of residual verb second.

More in general, we think that allowing adverb movement to the CP it is possible to keep Cinque's core idea without facing the problem of HMC violations by past participle movement: if we admit that 'already' can reach the CP, an auxiliary verb to the right of 'already' is not necessarily in its Merge position (it is higher); consequently a past participle can move higher than a postverbal (that is a "not moved") 'already' without violating the HMC. The two different structures are represented in (26):

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(26) a. [CP già [FP1 ha [Aux ha [FP2 [TAnterior già [VP finitə də leggə ssu libbrə] ...] b. [CP [FP1 ha [Aux ha [FP2 finitə [TAnterior già [VP finitə də leggə ssu libbrə] ...]
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Only some aspectual adverbs can move to the CP. One possible explanation is that they have intrinsic quantificational meaning. This hypothesis has to be tested in further research, checking, for instance, if adverbs that can receive different interpretations, receive only one

of them in preverbal position, or if there are other cases of interactions between adverbs and operators.

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# Variation in Dutch COMP

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This paper discusses the presence, absence, doubling, and tripling of conjunctions in early 20<sup>th</sup> century Dutch as recoded in private letters. Josef Bayer repeatedly drew attention to the huge variation found in different languages and dialects concerning the elements that can fill the Spec-C and C<sup>0</sup> positions in embedded clauses (e.g. Bayer, 1984; Bayer & Brandner, 2008; Bayer, 2014). In earlier stages of West-Germanic languages, *wh*-elements were often immediately followed by a complementizer. The famous opening line of Chaucer's *Canterbury Tales* starts with such a sequence (1), and in the Middle Dutch Manuscript Marshall 29 similar constructions are attested (2).

- (1) Whan that April with his shoures soote... when that April with its showers sweet
- (2) a. Hoe ende *aen wien dat*men raet sueken sal how and to whom that-one advice seek shall 'How and from whom one should seek advice'
  - b. Hoe mellibeus sine vriende ontboet Ende *wat rade dat* si hem gauen how Mellibeus his friends summoned and what advice that they him gave 'How Mellibeus sent for his friends and which advice they gave him'

In Modern Dutch, single *wh*-elements like *wie* 'who' and *of* 'whether' can introduce an embedded clause, but we also find complex structures like *wie of* 'who', *of dat* 'whether' and *wie of dat* 'who', where *wh*-operators and features of disjunction and subordination are spelled out differently. Bayer (2004: 9) suggests: "If speakers vary in their own dialect, this would mean that they can use homophonous morphemes with different feature structure." We will see below that this is not the case for 'true' dialect speakers, whereas variation starts to occur in dialect-contact situations, e.g. in a speaker after extensive exposure to another dialect ('dialect mixing').

On the occasion of Josef Bayer's 65<sup>th</sup> birthday, the present paper provides examples of conjunctions in embedded declarative and interrogative sentences in 65 private letters written by two women and one man in the years 1932 to 1934:

- A = female, born and raised in a small fishing-village in the province of Noord Brabant.
- M = female, mother of B, born and raised in Amsterdam (province of Noord-Holland) and living in Rotterdam (province of Zuid-Holland) in the years 1932-1934.

B = male, born in Amsterdam, raised in Rotterdam and living in the middle of the province of Noord Brabant in the years 1932-1934.

In their letters, we find nearly 400 finite complements which are introduced with zero, one, or more complementizers. The most common conjunction that introduces a subordinate clause in Dutch is dat 'that' (3a) (N=117). After verbs that express uncertainty about the outcome of the action, we usually find of 'whether' (3b). One of the peculiarities of many varieties of Dutch is the fact that an embedded clause can be introduced by one (3), two (4), or three conjunctions (5):<sup>1</sup>

- (3) a. Ik verwacht natuurlijk *dat* je me op de hoogte houdt. (B) I expect naturally that you me up posted keeps 'Of course I expect you to keep me informed'
  - b. Vraag jij nu eens aan hem *of* hij mijn mantel opstuurt. (B) ask you now once to him whether he my coat up sends 'Please ask him to send me my coat'
  - c. Ze is nieuwsgierig *hoe* het met je gaat. (B) she is curious how it with you goes 'She wants to find out how you are'
- (4) a. Ik ben benieuwd *hoe of* het eruit ziet. (B)
  I am curious how whether it out sees
  'I wonder what it looks like'
  - b. Ik weet ook niet *waarvoor dat* dat alles goed is. (B) I know also not wherefore that.comp that.dem all good is 'I don't know either why that happens'
- (5) Ik zit nu eigenlijk nog wel in spanning *hoe of dat* het af zal lopen. (A) I sit now actually still a bit in tension how if that it end will go 'I am very anxious at the moment (to find out) how it will end'

Moreover, a complementizer can be absent in an embedded clause. In example (6), the complementizer *dat* 'that' introduces the first embedded clause *dat je hun een kaartje met hun trouwen had gestuurd* 'that you had sent them a card for their marriage'. It occurs only once and is not repeated—or empty—before the second embedded clause *(dat) zij dat leuk vonden* '(that) they liked it':

(6) Die hadden het er nog over *dat* je hun een kaartje met hun trouwen had they had it there also about that you them a card with their wedding had gestuurd en \_\_ zij *dat* leuk vonden. (M) sent and they it nice found 'They talked about it that you had sent them a card for their wedding and (that) they liked that'

<sup>1</sup> The conjunctions in examples (3)-(5) are *dat* 'that', *of* 'whether', *hoe* 'how', *hoe of* 'how', *waarvoor dat* 'why' and *hoe of dat* 'how', respectively.

In the 65 letters, we find the coordinating conjunctions *dus* 'so, therefore', *en* 'and', *maar* 'but', *of* 'or' and *want* 'because' before a V2-clause:<sup>2</sup>

- (7) Dutch coordinating conjunctions before a main finite clause<sup>3</sup>
  - a. dus 'therefore' #5
    [Ze roepen]<sub>CP</sub>, dus [ik moet ophouden]<sub>CP</sub> (B)
  - b. maar 'but' #40 [X kwam ook al om hem te halen]<sub>CP</sub> maar [hij was net weg]<sub>CP</sub> (M)
  - c. want 'because' #72 [Ik eindig]<sub>CP</sub>, want [ik moet die briefjes nog hebben]<sub>CP</sub> (B)

The conjunctions *dus*, *en* and *maar* can also be followed directly by a finite verb. The sequences *dus ik moet ophouden* and *dus moet ik ophouden* 'so I have to stop'—where the finite verb *moet* 'must' and the subject *ik* 'I' change places—are both grammatical in Dutch (cf. (7a) versus (8a)). The occurrences of *en* followed by a main V2 clause by far outnumber phrases where *en* is followed directly by a finite verb and subject (8b).

- (8) Dutch coordinating conjunctions introducing a main finite clause
  - a. dus 'therefore' #5 Zij vroeg het me,  $[dus [doe_i [ik het ook t_i]_{VP} t_i]_{IP}]_{CP}$  (B)
  - b. *en* 'and' #8

    Het klokje van gehoorzaamheid tikt weer *en* moet ik ophouden. (B)

We find the following Dutch conjunctions in embedded declarative sentences:<sup>4</sup>

- (9) Dutch conjunctions with SOV-fin order (Verb-final embedded clauses)
  - a. conjunctions of time
    - (i) eer 'before' #1 Het duurt een poosje eer we daar doorheen zijn. (A)
    - (ii) nadat 'after' #1

      Nadat je brief, die ik vanochtend ontvangen heb, van zooveel narigheid sprak, ben ik besloten om elke avond maar een praatje met je te houden.
      (B)
    - (iii) terwijl 'while' #1Ik kletterde tegen de straatkeien, terwijl mijn fiets aan de overkant van de straat terecht kwam. (B)

The general assumption is that VP and IP are head final, whereas CP is head initial in Dutch. In V2 languages, V<sup>0</sup> first moves to I<sup>0</sup>. When C<sup>0</sup> is not filled by a complementizer, the finite verb moves from I<sup>0</sup> to C<sup>0</sup> and the specifier position of CP may then be filled by for instance the subject (as in (7)) or an adverb.

<sup>3</sup> In the last column of examples (7) to (11), the numbers refer to the total occurrences of the conjunctions in question in the 65 letters.

<sup>4</sup> Note that many conjunctions seem to comprise features of location and features of subordination. The structures *nadat*, *totdat*, *voordat*, and *omdat* are historically derived from a preposition (with the respective meanings 'after', 'until', 'before', and 'surrounding') followed by the morpheme of subordination *dat* 'that'.

- (iv) totdat/tot dat 'until' #8Ik zal wachten met jou schrijven totdat je op dezen brief terug geschreven hebt. (B)
- (v) *voor* 'before' #3

  Je schreef dat je al helemaal klaar bent voor de kleine er is. (M)
- (vi) voordat 'before' #14 Het heeft nu zeker wel lang geduurd, voordat je weer een brief kreeg. (B)
- b. conjunction of reason, cause and effect
  - (i) aan-gezien 'as, since' #2
     Aangezien hij een goede kennis was zit hij er nu mee in de war. (B)
  - (ii) daar 'because' #5

    Ik kan je nu geen geld opsturen, daar mijn uitgaven deze maand nogal groot waren. (B)
  - (iii) omdat 'because' #26
     De laatste dagen heb ik het nogal druk omdat ik een massa tijpewerk heb.
     (B)
  - (iv) zoodat 'so that' #3
    We zullen toch genoeg krijgen, zoodat wij beter voor het groote kunnen zorgen. (B)
- c. conditional conjunction
  - (i) als 'if, when, in case' #67
    Dan vind ik het wel zo aardig als ik het met St. Nicolaas geef. (B)
- d. disjunctive conjunction<sup>5</sup>
  - (i) of 'whether' #13 Ik weet niet of ik Zondag kan komen. (B)
- e. other conjunctions
  - (i) als dat 'as' #1

    Ik schrijf dan iets mooiers als dat ik nu naar jou doe. (B)
  - (ii) alsof 'as if' #2
     Ik zal dan maar net doen alsof ik vlak bij je zit en een praatje met je houd.
     (B)
  - (iii) hoewel 'even though' #9

    Ik had een speentje gehaald hoewel ik er niet voor ben. (A)
  - (iv) toen 'when' #2Toen dat ding terug kwam, kwam hij met een kat in zijn bek aandragen.(B)
  - (v) wanneer 'when' #10 Wanneer ik met verlof kom weet ik niet precies. (B)
  - (vi) zoals/zooals 'as' #17
     Zoals ik je al schreef, had de hond van de Opper een bunzing gevangen.
     (B)

<sup>5</sup> There are two distinct meanings of the word *of* in Dutch. In some cases, the coordinating conjunction *of* 'or' introduces a main clause (A:  $3\times$ , B:  $13\times$ ). In other cases, the subordinating conjunction *of* 'if, whether' is used (M:  $3\times$ , B:  $10\times$ ).

Embedded clauses can also be introduced by relative d-/wh-elements. The relative pronoun die is used when the antecedent is a masculine or feminine noun referring to an object or a person (10a), whereas dat is used for neuter nouns (10b). The relative pronouns wie and wat are the corresponding forms that include a relative pronoun and its personal or non-personal antecedent at the same time (10c)-(10d). The pronoun wat has two functions: it may either be a relative that includes a relative pronoun and its antecedent, or it is an independent relative that refers to a whole clause (10e).

- (10) Dutch relative pronouns with SOV-fin order (Verb-final relative clauses)
  - a. *die* 'who, which, that' #11 ...de brief die ik van je ontvangen heb. (B)
  - b. *dat* 'which, that' #6
    Ik heb schrijfwerk dat voor 2 uur afmoet. (B)
  - c. wie 'who' #3

    Verder vroeg je ook wie hier kwam. (B)
  - d. wat 'what' #18 B schreef over D en wat die wilde wat jullie moesten doen. (M) 'B wrote about  $D_i$  and the things that  $he_i$  wanted you to do'
  - e. wat 'which' #2

    Ik probeerde de paal nog weg te duwen wat niet gelukte. (B)

When the relative pronoun is used with a preposition, we find the form *waar*. In some cases, the pronoun and the preposition stay together and in other cases the preposition is stranded. There seems to be free variation as all three letter-writers use structures with and without preposition stranding:

- (11) Dutch relative pronouns with SOV-fin order (Verb-final relative clauses)
  - a. waaraan 'of which' #1 Een hoop drukte en poeha waar je niets aan  $t_i$  hebt. (B)
  - b. waarbij 'with whom' #1 De vrouw  $waar_i$  oom B bij  $t_i$  woonde in Keulen. (M)
  - c. waarin 'in which'

    Ik kreeg een brief  $waarin_i$  hij mij zijn besluit  $t_i$  vertelde. (M) #1

    Is het huisje duur  $waar_i$  je in  $t_i$  woont? (M) #1
  - d. waarmee 'with which' #1 Ik heb me witte jurk aan  $waar_i$  ik mee  $t_i$  of de foto sta. (A)
  - e. waarnaar 'to which' #1 Ik zal de brief  $waar naar_i$  ik  $t_i$  zocht hierbij insluiten. (B)
  - f. waarop 'on which' Ik wou dat ik maar een betrekking had  $waarop_i$  we  $t_i$  konden trouwen. (B) #1 Dat was het minste  $waar_i$  ik  $op\ t_i$  gerekend had. (B) #2
  - g. waarvan 'of whom' #1 Menschen  $waarvan_i$  ik  $t_i$  verwachte dat ze me zouden helpen. (B)

h. waarvoor 'what for, wherefore'
Je zult vragen waarvoor<sub>i</sub> is dat  $t_i$ . (B) #1
Ik begrijp niet waar<sub>i</sub> dat goed voor  $t_i$  is. (B) #1

Note that in examples (9) to (11) a single conjunction introduces the embedded clause. The last example in (11) is interesting because we find a similar example where the *wh*-element *waarvoor* is followed by the complementizer *dat*: see (4b) above. Let us now consider in more detail which combinations of *wh*-elements and the neutral complementizer *dat* are attested in the letters.

With respect to the complementizer of, it is striking that A exclusively uses the complex structure of dat (N=9; e.g. (12a)), whereas B (N=10) and M (N=3) exclusively use of without dat. For B and M, the morpheme of contains the features of disjunction and subordination. For A, on the other hand, of is a morpheme of disjunction and dat is a pure subordinator. A also uses the question complementizers hoeveel 'how much' and waarom 'why' with dat:

- (12) a. Schrijf *of* dat ik komen kan. (A) write whether that I come can 'Write whether I can come'
  - b. Ik weet toch niet *hoeveel dat* ik hebben moet. (A) I know PART not how much that I have must 'I don't know anyway how much I will need'
  - c. Waarom dat dat is zal ik je zeggen. (A) why that that is shall I you say 'I will tell you why that should be the case'

It is striking that Bayer & Brandner (2008) explicitly refer to the equivalent German *wh*-words *wieviel* and *warum* which have a higher acceptance rate in Alemannic when they co-occur with the complementizer *dass* compared to other *wh*-words.

In contrast to A, M never uses question complementizers together with *dat*, i.e. for her all *wh*-elements are complexes of features including subordination. The only *wh*-element that co-occurs with *dat* in one of B's later letters is *waarvoor* 'for what, wherefore' (see (4b)). We can only speculate why B seems to vary his use of complementizers: perhaps the move from Holland where he had contact with speakers of standard Dutch to an area in Brabant with speakers who use *wh*-elements with *dat* may account for this variation.

The last case we have to look at is the variation between *hoe*, *hoe of*, and *hoe of dat*. All of them can be used to express the meaning of 'how'. The first form is never used by A, whereas it is the only form to express the meaning 'how' in embedded interrogative phrases for M.<sup>6</sup> B uses this form in the vast majority of cases and he uses *hoe of* only once in a later letter (see (4a) above). Neither M nor B ever use *hoe of dat*. A uses *hoe of* only once in the context where it is followed by the personal pronoun *dat* (presumably to avoid adjacent occurrences of *dat*); otherwise she uses *hoe of dat* (N=8).

<sup>6</sup> Note that A does use *hoe* to introduce main interrogative clauses, e.g. *Hoe komt dat?* 'how comes that?', i.e. 'Why is that the case?'.

# Janet Grijzenhout

A look at the other letters that still have to be analysed shows us that M never uses complementizer clusters, i.e. for her *wh*-complementizers may contain features of disjunction and subordination. B sporadically uses *wh*-elements in COMP together with *dat* in later letters and A consistently uses the *wh*-elements *hoeveel* and *waarom* with *dat*. Moreover, she frequently employs the structures *hoe* of and *hoe* of *dat*, i.e. for her *hoe* 'how' does not comprise a feature of disjunction, and disjunctive of does not comprise a feature of subordination.

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# Entity-denoting amount relatives: The 'smoking gun'

Alexander Grosu & Ion Giurgea

### 1 Background

Carlson (1977) drew attention to a class of entity-denoting non-appositive relatives in English, overtly characterized by a 'gap' in the existential *there* BE – XP context, as in (1a), which share a number of striking properties with degree-denoting relative constructions, as in (1b), in particular, properties that are not found with 'straightforward' restrictive relatives, as in (1c).

- (1) a. [The three students (that/\*who) there are \_\_ in the office] arrived an hour ago.
  - b. [The 250 pounds (that/\*which) you weigh ] endanger your health.
  - c. [The three students who \_\_ are in the office] arrived an hour ago.

Two of these properties, as subsequently refined by Grosu and Landman (henceforth: GL) in Grosu & Landman (to appear), are language independent: i. The complex DP immediately containing the relative is felicitous with definite or universal, but not with existential import, and ii. two relatives not separated by comma intonation may not 'stack', nor may they coordinate with proper intersective import. iii. A third property is English specific, and is illustrated in (1): the relative clause may be introduced by *that* or  $\emptyset$ , but not by *who/which*.

These shared properties, the third in particular, as well as the well-known observation that entities in the existential context appear to be locally bound, and thus not obviously available for abstraction, led Carlson to the hypothesis that data like (1a) involve relativization/abstraction over degrees, in particular, degrees that 'modify' (i.e., measure) entities. This hypothesis gives rise to a *prima facie* puzzle, which Carlson did not solve, and for which Grosu & Landman (1998) offered a solution. The puzzle is: if abstraction targets degrees, how can the complex DP denote entities? GL's proposed solution was: abstraction at the relative CP level targets a variable over ordered pairs of degree and entities they measure, the resulting abstract is mapped by an operation of Maximalization to a singleton that contains only the pair consisting of the maximal entity and the maximal degree in the input abstract (if there is such a pair, the operation being undefined otherwise), and a subsequent operation called SUBSTANCE ensures that the complex NP translates as a singleton containing the maximal entity (in which the maximal degree is implicit). Grosu & Landman (to appear) explain in detail how the assumption of Maximalization can account for the language-independent properties i.-ii. indicated in the preceding paragraph.

Subsequently to Grosu & Landman (1998), a number of authors proposed alternative analyses of data like (1a), which were evaluated in Grosu & Landman (to appear: section 5), who argued that two of them, due to Herdan (2008) and McNally (2008), rely on incorrect *empirical* assumptions, and that a third, due to von Fintel (1999), is close to their analysis, but unnecessarily more complex.

This brief paper purports to be complementary to Grosu & Landman (to appear: section 5.3), which critiqued McNally's (2008) counter-proposal. We address here a *conceptual* objection raised by McNally with respect to GL's analysis, to the effect that it is puzzling, and presumably implausible, to assume that abstraction over degrees operates in a construction that denotes entities. We will argue, on the basis of data from Romanian, which have in fact been signaled in some earlier literature (e.g. Grosu, 2013; Kotek, 2013) that the kind of construction that McNally doubted the existence of is incontrovertibly found in at least one natural language, Romanian, and must thus be allowed by UG.

### 2 The facts of Romanian

In arguing against GL, McNally noted that while who/which are typed in English as relativizers of entities, null operators are un-typed, and may thus be used as relativizers not only of degrees, but also of kinds, properties, and, of course, entities. The inventory of Romanian relativizers is different, and includes, in addition to care 'who/which', an inflected set drawn from the interrogative paradigm and typed for degrees, its forms being cât 'how-much.MSG', câtă 'how-much.FSG', câți 'how-many.MPL', and câte 'how-many.FPL'. Degree relative pronouns are the only option in the counterparts of English constructions like (1b), as illustrated in (2).

(2) [(Cele) 12 kilograme {cât/ \*∅/ \*pe care le} cântărește bagajul tău de the 12 kilos how-much ACC which CL weighs luggage-the your of mână] nu reprezintă o problemă. hand not represent.3 a problem '[\*(The) 12 kilos {that, \*which} your hand-luggage weighs] do not constitute a problem.'

Now, the degree pronouns of the kind used in (2) may also be used in entity-denoting DPs, thereby providing what we view as incontrovertible evidence for the existence in natural languages of the kind of construction deemed implausible by McNally. Before illustrating this state of affairs, we point to a property of Romanian grammar that makes it hard to illustrate exact Romanian counterparts of English data like (1a). Thus, Romanian lacks an overt dummy subject in existential constructions, so that the counterparts of the English constructions in (3a), (3b) are distinguished only by the pre- versus post-copular position of the italicized nominal.

(3) a. Doi copii (nu) sunt în cameră. two children (not) are in room 'Two children are not in the room.'

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b. (Nu) sunt doi copii în cameră. (not) are two children in room 'There are(n't) two children in the room.'

A consequence of this state of affairs is that one cannot construct an unambiguous Romanian counterpart of (1a). To see this, consider (4), and note that the gap can in principle be either pre- or post-copular.

(4)[Cei zece soldați câți ( ) sunt ( ) pe baricadă] au sosit acum o the.MPL ten soldiers how-many on barricade have arrived now one are oră. hour

'The ten soldiers that (there) are on the barricade arrived an hour ago.'

This situation does not, however, prevent us from demonstrating the existence in Romanian of the kind of construction at issue. With respect to English, it was necessary to resort to the existential context because the null operator is in principle compatible with both a degree and an entity interpretation, and the existential context blocks the entity construal. In Romanian, however, the overt degree pronoun is unambiguous, and the existence of the relevant construction can be demonstrated regardless of the position of the gap. In fact, the existence of such constructions can be demonstrated with relatives that do not include a copular construction, as in (5). Note that the fluent English translation of this example, which uses a null operator, is analytically ambiguous in a way the Romanian sentence is not.

zece studenți câți așteaptă la ușă] își pierd răbdarea. (5) [Cei the.MPL ten students how-many wait at door REFL.DAT lose patience-the 'The ten students that are waiting outside are losing patience.'

The data in (4)-(5) show clearly that involvement of degrees in the relative-internal abstraction process is compatible with an entity-denotation for the complex DP, and thus constitute the 'smoking gun' alluded to in the title. Thus, McNally's conceptual objection to GL's analysis seems unjustified.

For completeness, we note that data like (4)-(5) do not overtly demonstrate that abstraction must target pairs of degrees and entities, since the entity member of the pair posited by GL is null, as in English. It is thus in principle possible to envisage an analysis that involves abstraction strictly over degrees, the entity-denotation of the complex DP being accounted for in some other way. Such an analysis was in fact proposed by von Fintel (1999) for English data like (1a), and could be extended to Romanian data like (4)-(5). For a critique of this analysis and argumentation that it is inferior to the one proposed by GL, see Grosu & Landman (to appear: section 5.2).

We will conclude this paper by showing that data like (4)-(5) exhibit the maximalization properties of data like (1a). Maximalization was inferred by GL on the basis of the two language-independent effects noted in the first paragraph of this paper, i.e., i. infelicity of existential force for the complex DP, and ii. unavailability of stacking or coordination with proper intersective import.

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i. is illustrated with respect to both Romanian and English in (6). Note the contrast between the versions with *care* and *who*, which exhibit restrictive relatives, and the versions with  $c\hat{a}t$  and *there*, which exhibit amount relatives.<sup>1</sup>

(6) În acest birou, sunt acum [doi studenți *care/ #câți* au fost aici și ieri]. in this office are now two students which how-many have been here also yesterday "In this office, there are now [two students {*who*, *#that there*} were here yesterday as well]."

Concerning property ii., consider (7) and (8).

- (7) [Toţi turiştii care se aflau pe vapor la 3 pm (şi) care se aflau pe insulă all tourists-the who REFL found on boat at 3 pm (and) who REFL found on island la 2 pm] au ajuns târziu acasă. at 2 pm have arrived late home '[All the tourists who were on the boat at 3 pm (and) who were on the island at 2 pm] returned home late.'
- (8) [Toţi turiştii *câţi* se aflau pe vapor la 3 pm #(şi) *câţi* se all tourists-the how-many REFL found on boat at 3 pm (and) how-many REFL aflau pe insulă la 2 pm] au ajuns târziu acasă. found on island at 2 pm have arrived late home '[All the tourists that *there* were on the boat at 3 pm #(and) that *there* were on the island at 2 pm] returned home late.'

Assume for both of them the following context: The individuals a, b and c were on the boat at 3 pm and the individuals b, c and d were on the island at 2 pm. In the reduced version of (7), if there is no comma between the relatives, both clauses are restrictive, and their construal is necessarily intersective, so that the complex DP denotes the sum  $b \sqcup c$ . In the full version of (7), this intersective construal is also available, along with one obtained by the union of the two relatives, in which case the complex DP denotes the sum  $a \sqcup b \sqcup c \sqcup d$ . In (8), on the other hand, where we have  $c\hat{a}ti/there$  clauses, intersective construals are excluded, with the

Importantly, the reduced version, despite its indefiniteness, exhibits maximality, since the following continuation is disallowed: *ceilalţi cai cumpăraţi de Ion sunt din Libia* 'the other horses Ion bought are from Libya'. This construction is of a type that does not exist in English. For detailed discussion of its properties, the interested reader is referred to Grosu & Giurgea (to appear), which is also dedicated to Josef Bayer on the occasion of his retirement.

<sup>1</sup> After this paper had gone to press, we realized that the deviance of the version of (6) with  $c\hat{a}t$ , while real, is due not to indefiniteness  $per\ se$ , but to the fact that no students other than those whose presence is asserted are contextually taken into account. In (i), both versions are in principle felicitous, except that the reduced, but not the full one, is felicitous just in case the speaker assumes a context in which there are horses that Ion did not buy (so that a natural continuation might be  $cei\ pe\ care\ nu\ i-a\ cumpărat\ Ion\ sunt\ din\ Libia$  'those that Ion didn't buy are from Libya').

<sup>(</sup>i) [(Cei) nouă cai câți a cumpărat Ion] sunt din Arabia. the nine horses how-many has bought Ion are from Arabia 'The nine horses that Ion bought are from Arabia.'

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result that the full version unambiguously denotes  $a \sqcup b \sqcup c \sqcup d$ , and the reduced version is infelicitous.

Summarizing the results of this paper, we have shown that entity-denoting complex DPs whose relatives make incontrovertible use of abstraction over degrees exist in at least one natural language, and that such degrees exhibit maximalization effects within the relative CP.

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## Wià effdà daß mà nochdenggd – Koàn bessàn weàds need findn!\*

Hubert Haider

Fully filled Comps, that is, lexicalized Spec-C plus C°, in Bavarian, clause-initial and clause-final complementizers in বাংলা ভাষা (Bangla), and the directional government-seeking behavior of focusing particles are my, but not only my own, favorites for the bronze, silver & gold podium in Sepp's bibliography. My predilection is likely to be close to representativity, given the citation numbers in Harzing's PoP, which lists them in the top range of the superb three digit categories.

In his persistently progress-seeking but casually Konstanz-bound academic peregrination, Josef occasionally touched Stuttgart, which was my academic home territory in these years. In 1993, I was extremely happy to welcome "an Bayer Sepp" on an SFB-project. Unfortunately, he too soon embarked on a C4-chair at the Friedrich-Schiller-University in a town where Goethe, Schiller and the Humboldt brothers used to meet, namely at Jena, before he finally returned to his primary 'Tatort' Konstanz.

Beforehand, I had the opportunity of admiring his cool temper when he applied for a C3 position in Germanic linguistics in Stuttgart, in front of a predominantly in-competent committee, as it is typical in the humanities. There, he delivered a brilliant talk on Negative Concord in Bavarian. The first guy to pop up his arm was a professor of German literature (Literatur-'Wissenschaft') whose main field of interest has been operettas. After lengthily wording his unhappy feelings of having irrelevantly been exposed to overly complicated thoughts about a dialect of a neighboring tribe while participating in an academic event designed to find a suitable professor for unraveling the grammatical enigmas of the language of Herder, Humboldt and Heidegger, not to mention the linguistic finesses in the librettos of "Fledermaus" or "Lustige Witwe", he triumphantly announced his final and fundamental question "Was ist ein 'Knoten'"? (What is a knot?).

The Privatdozent gently replied that there is knot theory in math and that there is graph theory, which would be what he had referred to by the syntactic tree diagrams with their nodes ('Knoten') that allow differentiating the scope domains of negation accurately, - but the most dangerous nodes would be those that clutter one's brain.

<sup>\*</sup> These evidently appropriate, adequately characterizing descriptions of Sepp are selected from Ludwig Merkle (1976) Bairische Grammatik. Dtv (p.190; 155). Note that the following glossing of the Bavarian statement cannot fully capture the essential formal ingredients, that is, a doubly-filled comp in the first clause, and negative concord in the second clause: The more one comes to think of it—You won't find a better guy!

It did not help. When my opponents from the kingdoms of fiction realized that Sepp might be my favorite candidate, this was the end of his chance of getting shortlisted and my first profound lesson in the socio-pathology of academic decision-finding.

In my perception, Sepp's linguistic career is a true embodiment of empirical and theoretical linguistics in the final quarter of the twentieth century on its way to the following millennium. Starting with a dissertation on the interface between syntax and semantics, he first transformed into a clinical linguist & aphasiologist in Aachen, then molted into a psycholinguist at Nijmegen, in order to finish his academic metamorphosis as 'Privatdozent' in Konstanz again, returning to his main linguistic campground at the combat line between structural syntax and formal semantics.

There is no denying that Sepp's life-long research enterprises have elevated him to the rank of a prime candidate for the "Bayerischer Maximiliansorden für Wissenschaft und Kunst" because of his undeniable success of making Bairisch an internationally recognized idiom in the realm of grammar theory. He has not only continuously published pioneering work on the proper structural analyses of various constructions in the major idiom of Bavaria; he also distilled grammar theoretical in-sights out of these analyses that contributed to establishing Bairisch as one of the corner stones for any attempt of understanding Comp-related processes in a Germanic V2 language, next to Icelandic.

Everyone who knows Josef must know his predilection for opera. I wonder which composer would be the composer of his dreams if his biography was turned into an opera libretto. If he chose Richard Wagner "Whatever my passions demand of me, I become for the time being – musician, poet, director, author, lecturer or anything else" he understandably would be in a state of constant fear that Giacomo Rossini might be completely right "Wagner has lovely moments but awful quarter hours", which by the way, satisfactorily describes our academic environments, too.

Anyway, he would be on the safe side with Callas "An opera begins long before the curtain goes up and ends long after it has come down. It starts in my imagination, it becomes my life, and it stays part of my life long after I've left the opera house". Same with linguistics if one is gifted with the same kind of passion as Sepp always has been.

Therefore, my best wishes—*Venerabilis Senex*!<sup>2</sup>—for your imminent and uninterrupted, and in principle everlasting sabbatical period as a professor of linguistics and aria aficionado: *Fin ch'han dal vino, Calda la testa, Una gran festa, Fa' preparar.* (Don Giovanni, act 1, scene v).

<sup>1</sup> Rossini in a letter to Emile Naumann in 1867.

<sup>2</sup> It is unattested but nevertheless widely claimed that Immanuel Kant has been addressed by these words at an occasion of the academic celebration of his 50th birthday.

# Josef, lies ock! Über den coverten grammatischen Zusammenhalt von Anrede-Konstruktionen und die Grammatikalisierung von satztypenspezifischen Partikeln

Rüdiger Harnisch

Im Schlesischen gehen Imperativformen eine mehr oder weniger feste Verbindung mit *ock* ein: *wort ock a Bißel*, warte (halt) ein bisschen', *gieh ock mit*, geh (doch) mit' oder *sātok*, seht (nur)!' (Mitzka, 1964: 945).¹ Für Schlesier ist es offenbar ebenso unausweichlich, Imperative mit postverbalem *ock* zu bilden, wie es für Baiern – man kann hinzufügen: Franken, Thüringer, Sachsen – zwingend ist, bei W-Fragen die Partikel *denn* (meist nur als 'n realisiert) hinter das Verb zu setzen: *wer hot-n des glesen*? ,wer hat (denn) das gelesen?' (Bayer, 2012; Bayer, 2013).

Die titelgebende Phrase Josef, lies ock! "Josef, lies!" besteht, würde man herkömmlich sagen, aus

- dem proprialen Substantiv *Josef* in einer Art Vokativ² oder wegen fehlender morphologischer Kasus-kennzeichnung im Anredenominativ (Glück, 2005a; Glück, 2005b),
- Bei der Abfragung der Richtungsadverbien im nordostböhmischen Reichenberg (Liberec) mittels des Kurz-Fragebuchs des Sprachatlasses von Nordostbayern wurden die Formen durch Einbettung in eine Imperativ-Phrase des Typs geh/komm herunter u.ä. elizitiert. Die Gewährsleute haben dabei nahezu keinen Imperativ ohne ock gebildet in vereinfachender Transkription einige Beispiele: kumm-ok rei/runter/ehinter/har! ,komm rein/herunter/herhinter/her!', gih-ok nunter/dodafir ,geh hinunter / nach vorne!', soa-ok ar soll ruf-kumm! ,sag, er soll heraufkommen!'. Auch in den Proben schlesischer Mundart bei Dittrich (1931-1936) finden sich, einer Stichprobe nach, Imperativformen immer mit ock, z.B.: khumm åk hār ,komm her' (190), Na, wårt åk! ,Na, warte!' (197); entsprechend bei Hoffmann (1900: 51-54): do kum ɔk nu: mi:te ,da komm nur jetzt mit', ax lus ɔk hoitə ,ach lass es nur heute', kum ɔk hipʃ vi:dr ,komm nur hübsch wieder'; folgt eine zweite Imperativform, steht diese ohne ock siehe: fersuxs ɔk mi:t vermdə unt raip zə ai ,versuch's mit Wärme und reib sie ein', læ ɔk vərməs flaxbriç uf unt raip zə mi:t apotelto ai ,lege warmes Flachwerk auf und reib sie mit Opodeldok ein'; so auch gī ok on frējə ,geh nur und frage' bei Graebisch (1914: 207) und khumm åk und ieβ ,komm und iss!' bei Dittrich (1931-1936: 106).
  - Die Zusammenschreibung des Beispiels  $s\bar{a}tok$  von Mitzka deutet an, dass Imperativ und Partikel zu einer neuen Einheit, einem "Diskursmarker" der von Auer & Günthner (2005: 346) beschriebenen Art  $sag\ mal > sachma > samma$ , verschmolzen sind. Die k- statt ck-Schreibung in diesem Beispiel könnte Indiz dafür sein, dass die Partikel als Teil dieser neuen Einheit weniger betont ist als die frei vorkommende.
- 2 Der Vokativ kann "von Eigennamen [...] und aktantenbezeichnenden Appellativa [...] gebildet werden"

- der Imperativform lies des Verbs lesen und
- der Modalpartikel (MP) ock ,halt, bloß'.³

Es läge mit einer Indizierung der grammatischen Kategorien also vor<sup>4</sup>:

(1)  $\int osef_{SUBST(*3,SG)VOK} lies_{IMP(*2,PERS)SG} ock_{MP}$ 

Doch kann man hinter all diesen overt vorliegenden Kategorisierungen weitere, zum Teil ganz andere, coverte, Kategorien entdecken und Folgendes postulieren:

- Josef steht gar nicht in einem nominalen Kasus 'Vokativ' (bzw. 'Anrede-Nominativ'), sondern ist ein Substantiv der '2. Person'.
- *lies* ist gar kein reines Verb, sondern enthält in seiner imperativischen Form ein unausgesprochenes Subjektpronomen (hier *du*) mit.
- *ock* ist gar keine syntaktisch selbständige Modalpartikel (mehr), sondern ein zusätzlicher verbal-enklitischer (wenn nicht sogar verbal-flexivischer) Marker des (schlesischen) Imperativs.

Folgt man diesen Postulaten, sieht die titelgebende Phrase in annotierter Form dann in großen Teilen anders, nämlich folgendermaßen, aus:

(2)  $fosef_{SUBST.2SG} lies_{IMP(*2.PERS)SG} [du]_{2.PERS.SG} - ock_{IMP(*2.PERS)}$ 

Für die kategoriellen Ansätze in (2) lassen sich syntagmatische und paradigmatische Evidenzen vorbringen:

A. Für eine Substantivform Josef.2sg liefert syntagmatische Evidenz zum einen die mögliche nominale Erweiterungskonstruktion Du, Josef, zum andern, wenn auch ohne direkte syntaktisch-relationale Bindung, so doch als kongruent gedacht, die Substantiv-Verb-Konstruktion Josef, lies! Paradigmatische Evidenz liefert die Substituierbarkeit der Apostrophé Josef durch du: Du, lies! versus Josef, lies!

<sup>(</sup>Ehlich, 2005). Die Frage eines Vokativs im Bairischen erörtert Schnelzer (2013) und kommt zu dem Befund, dass nur phrasale, nicht aber nominalmorphologische Merkmale einen solchen andeuten. In vorliegendem Beitrag wird jedoch davon ausgegangen, dass ein Vokativ syntaktisch-semantisch vorliegen kann, auch wenn er morphologisch nicht overt symbolisiert ist.

<sup>3</sup> Zum Etymon siehe Deutsches Wörterbuch VII (1889: 1140-1141): "ocker, ockers, ockert, adv. nur, blosz, halt. ahd. ekordi, ekrôdi, ein adverbial gesetzter accusativ des adjectivs ekordi, ekrôdi, eccherôde, dünn, zart, schwach [...]; davon ist abgeleitet das adv. ekkorôdo, echerôdo, ekrôd, ecchert, echert und ockeret, ockert, okker; mhd. ockert, ocker [...]. das wort ist dann weiter mhd. zu oht, ôt (ot) und eht, êt (et), md. zu oc, og, ok verstümmelt worden. [...] Nur mundartlich noch erhalten", darunter als "schles. ock, ocke, ack, och". Im Mittel-hochdeutschen Wörterbuch I (1854: 413) wird hervorgehoben: "die partikel steht [...] 3. bei dem imperative."

<sup>4</sup> Kategorien, die in andern impliziert sind, werden bei der Indizierung in Klammern hinzugesetzt und mit \* versehen.

- **B.** Für ein unausgesprochenes Subjektspronomen *du* im Imperativ *lies* liefert syntagmatische Evidenz die Erweiterungskonstruktion *Josef*, *lies du*! oder in Inversion *Lies du*, *Josef*! Paradigmatisch kann man die Pluralvarianten dieser erweiterten Imperativ-Phrasen als Indiz anführen: *Josef*, *Ellen und Andreas*, *lest ihr*! vs. *Josef*, *lies du*! (oder dasselbe invertiert).
- C. Für einen (beinah)suffixischen Imperativ-Marker *ock* sprechen sein Grad der Obligatorik und die Enge seiner Bindung an den Verb(-Pronomen)-Komplex. Den ersten Umstand zeigt die paradigmatische Eliminationsprobe (oder Substitutionsprobe mit ): *lies*! allein ginge im Schlesischen gar nicht, zumindest nicht im unmarkierten Fall. Den zweiten Umstand zeigt die syntagmatische Insertionsprobe: zwischen *lies* bzw. *lies* + Pronominalenklitikum und wie gesehen: obligatorisches *ock* passt kein anderes syntaktisches Element: *lies-ock dan Aufsatz / lies'n-ock*, aber nicht \**lies dan Aufsatz ock. / \*lies'n später ock*.

Phrase (2) wird kategoriell durch das kontinuierende coverte Merkmal ,2. Person' zusammengehalten. Es ist vom mitzudenkenden Pronomen *du* repräsentiert, dem Substantiv inhärent und in der Kategorie ,Imperativ' sowohl des Verbs<sup>5</sup> als auch des Suffix(oid)s -ock impliziert. Pragmatischer Hintergrund dessen ist, dass die Anredeform nach Ehlich (2005) eine grammatisch "eigens ausgeprägte Form zur Realisierung expeditiver Prozeduren" darstellt:

Im nominalen Bereich werden A[nredeformen] durch den Vokativ ausgedrückt [hier fosef], im verbalen durch den Imperativ [hier lies und -ock] und die Pers.endungen, im 'pronominalen' durch die du-Deixis.

Die unter A postulierte Möglichkeit, dass ein Substantiv in Anredefunktion weder Vokativ noch Anredenominativ, sondern ein Substantiv der 2. Person sei, wird in der Literatur nicht erwogen: weder von Überlegungen zur Kategorie 'Person' her<sup>6</sup>, noch von solchen zur Wortart 'Substantiv' her. Meist ist es sogar so, dass 'Person' als eine substantivische Kategorie überhaupt nicht in Betracht gezogen wird (Pittner, 2005). Zuweilen wird 'Person' beim Substantiv nicht einmal als "Lexikonmerkmal", sondern nur als "transformationell eingeführtes Merkmal" angesetzt, das vom Verb (dort ist es frei wählbares "Subkategorisierungsmerkmal") auf das Substantiv syntaktisch übertragen werde.<sup>7</sup> Nur zum Teil finden sich Aussagen wie die, dass die ",3. Person' als konstante Wortkategorie des Substantivs aufgefasst werden"

<sup>5</sup> Donhauser (1986: 60) spricht explizit von "2. Person Sg. Imperativ".

<sup>6</sup> Etwa Schweers (2005). Thieroff (2009: 315) schreibt: "Im Deutschen werden Substantive nur für die Referenz auf das Besprochene gebraucht", dessen Kategorie die '3. Person' ist. In andern Sprachen ist das möglicherweise anders. Hier ist die Allgemeine Linguistik gefragt. Es ist bezeichnend, dass der Handbuchartikel von Thieroff von den Herausgeberinnen unter dem Titel "Person und Pronomen" vergeben worden ist, womit das Substantiv als 'person'-relevante Wortart quasi programmatisch ausgeschlossen ist.

<sup>7</sup> So etwa Weber (1980: 167). Hier scheint eine als vom Verb als obersten Knoten des Satzes ausgehende dependentielle Sichtweise durch. Auch bei Eisenberg (2013a) erscheint das "System der Personalformen" (Kap. 5.3.2) nur im Verb-Kontext, "Personkongruenz" ist in Eisenberg (2013b) nur anhand von Prädikatsnomina thematisiert.

kann<sup>8</sup>. An die pragma-syntaktische Funktion als Anredeform ist hier jedoch nicht gedacht. Dies mag eine markierte Verwendung sein, doch paradigmatische und syntagmatische Tests (siehe oben) zeigen, dass es erwägenswert ist, so verwendete Substantive als solche der ,2. Person' anzusehen.

Weniger strittig dürfte Postulat **B** sein, in imperativischen Verbformen nicht nur einen Verbal-Modus realisiert zu sehen, sondern auch ein implizites Pronomen der ,2. Person' zu erkennen.<sup>9</sup> Die singularische Imperativform kann nicht nur als Ergebnis der Subtraktion "Präsens-Indikativ-Form der 2. Person Singular minus Person-Numerus-Endung" gelten, sondern auch als Ergebnis der Subtraktion "Pronomen-Verb-Phrase minus Pronomen": du lies-[s]t > les! Universalpragmatisch ist es der unmarkierte Fall, sich mit einem Imperativ an ein kommunikatives Gegenüber zu wenden. Das braucht nach Gesetzen der Natürlichkeitstheorie formal dann nicht expliziert zu werden: "Wenn ich sage Lauf!, meine ich nicht, dass irgendjemand laufen soll, sondern dass du laufen sollst" (Everett, 2010: 377, Anm. \*).

Zur Verifizierung eines Postulats wie desjenigen unter C hat Josef Bayer für einen andern Fall, nämlich das von einer Modalpartikel zum Interrogativ-Marker von Entscheidungsfragen grammatikalisierte *denn*, reichlich Evidenz beigebracht.<sup>10</sup> Sein Obligatorizitäts-Befund sei hier einerseits, fürs Bairische, mit einer Serie von Bildkarikaturen von Ernst Hürlimann in der Süddeutschen Zeitung untermalt (siehe Anhang), anderseits mit folgendem Witz von Wilhelm Pinder, der den "behutsamen" sächsischen Humor charakterisiert und dementsprechend mit der Modalisierung durch *denn* arbeitet<sup>11</sup>:

Zwei Kinder ziehen einen recht großen Handkarren mit Grünfutter. "Was habt ihr denn da?" – "Fud-der." – "Für wen denn?" – "Fürs Vieh." – "Was habt ihr denn für Vieh?" – "Ganinschen." – "Wieviel habt ihr denn?" – "Eens." – "Ja, wenn ihr dem das ganze Futter gebt, dann wird's doch hin." – "Is schon!"

Es gibt in diesen Texten keine W-Frage, die nicht mit einem *denn* versehen wäre: direkt hinter dem W-Pronomen (*Für wen denn*?), hinter dem postverbalen Personalpronomen (bair. *Wia stehts'n bei eich*?<sup>12</sup>, sächs. *Was/Wieviel habt ihr denn*?) oder gleich am Verb (bair. *wo geht's 'n hin*?<sup>13</sup>, *wie kimmt'n er daher*?). Gesprochen darf man sich die Realisierung von Pronomen und

<sup>8</sup> Harnisch & Koch (2009: 390, Anm. 2), die dazu fortfahren: "Das wird daran deutlich, dass die explizite Wieder-aufnahme eines Substantivs durch eine substituierende Pro-Form stets in der 3. Person […] erfolgt und das Sub-stantiv in Subjektfunktion stets mit der 3. Person […] des Verbs kongruiert."

<sup>9</sup> Wratil (2013), Kap. 4.3 zum Imperativsubjekt und Kap. 4.4 zur Subjektlosigkeit des Imperativs.

<sup>10</sup> Auf der Jahrestagung der Deutschen Gesellschaft für Sprachwissenschaft (DGfS) 2014 hatten Josef Bayer und Volker Struckmeier eine AG zu "The Syntax and Semantics of Particles". Peter Auer und Yael Maschler widmeten 2011 am Freiburg Institute for Advanced Studies dem "adverb and discourse marker nu(n)" einen ganzen Workshop. Im Kurs "Typology of Questions and Answers" von Katharina Hartmann auf der Sommerschule der DGfS 2010 wurden auch "question particles" thematisiert. 2009 wurden auf einer von Theo Harden und Elke Hentschel organisierten Tagung in Bern "40 Jahre Partikelforschung: 1969-2009" gefeiert. Das Thema lebt also.

<sup>11</sup> Ruoff (2004: 94). Kursivsetzung von W-Pronomen und *denn* durch RH. Auch Sachsen liegt in der osthochdeutschen Großlandschaft, die das von Josef Bayer beschriebene Phänomen aufweist. Für die Naumburger Gegend konstatiert Weise (1900: 25, § 35 Anm.) im Zusammenhang einer etymologischen Überlegung, dass *(d)enn* gebraucht werde, "zB immer, wenn es unmittelbar auf ein Fragewort […] folgt."

<sup>12</sup> *n*-Partikel hinter dem nicht mit Apostroph abgetrennten s ,es '.

<sup>13</sup> n-Partikel gleich am Verb, wenn bair. Suffix -ts, 2. Plural angesetzt wird: geh-ts (-ts resegmentiert aus geht-ēs

Partikel auch in den sächsischen Beispielen durchaus als enklitisch vorstellen: Für wen'en?, Was/Wieviel habt'er'(e)n? Damit einher würde eine schon stärkere Grammatikalisierung als Ergänzungsfragen-Marker gehen.

Ein Gedicht aus der modernen fränkischen Dialektlyrik (Wagner, 1976: 59) zeigt die offensichtlich ähnliche Obligatorik einer andern Partikel (*amoll* ,einmal') in einem andern Satztyp (Imperativsatz wie bei schles. *ock*):

### **ZU DIENSTEN**

tu amoll a zigareddn her tu amoll a bier her tu amoll a weng a musig her tu amoll deina händ her tu amoll dei goschn her tu amoll dei brust her tu amoll dei baa ausananna

Dieses ostfränkische *amoll* gleicht dem hier beschriebenen schlesischen *ock* insofern, als beide im enklitischen Schatten des Verbs stehen und beide die Funktion eines zusätzlichen Satztypen-Markers, hier für den Imperativsatz, ausüben. <sup>14</sup> Ostfrk. *amoll* scheint jedoch semantisch noch spezifischer und noch nicht so weit grammatikalisiert zu sein wie schles. *ock*. Für das Altenburgische zum Beispiel ist in Bezug darauf beobachtet worden:

Hinzugefügt werden können zum Imperativ [...] Adverbia: *einmal* bei einmaligen Handlungen im Gegensatz zu dauernden oder sich wiederholenden: *guck einmal*! (dagegen: *lieb deine Eltern*!).<sup>15</sup>

Es gibt hier also Grade der Grammatikalisierung:

- zum einen nach Satztyp, wo in ein und derselben Sprachlandschaft nehmen wir das Ostfränkische W-Fragen mit einem stärker grammatikalisierten Marker (hier -n < denn) verbunden sind, während z.B. Imperative mit einem noch nicht (so weit) grammatikalisierten Marker (hier (a)mol) verbunden sind;</li>
- zum andern sprachlandschaftlich, wo ein und derselbe Satztyp nehmen wir den Imperativsatz mal einen stärker obligatorischen Marker nimmt (hier schles. *ock*), mal einen schwächer obligatorischen Marker (hier ostfrk. *(a)mol*).

<sup>,</sup>geht ihr' mit dem alten Personalpronomen  $\bar{e}s$ , ihr' in enklitischer Position). Statt wo geh-ts'n hin?, wo geht ihr (bair.  $\bar{e}s$ ) denn hin?' könnte aber auch wo geht's'n hin?, wo geht es denn hin?' vorliegen.

<sup>14</sup> In dem in Anm. 1 erwähnten Fragebuch findet sich in Dopplung von *denn* und *einmal* auch der Beleg nordostböhm. *gugg-ok-amol.* Er ist zusammengeschrieben transkribiert, was für einen hohen Bindungsgrad auch der zweiten Partikel spricht.

<sup>15</sup> Weise (1900: 103, § 165). Andere semantische Spezifizierungen weisen die hinzufügbaren Adverbien *nur, doch, ja* auf, die bei Weise beschrieben und mit Sätzen exemplifiziert sind. Weiß (2013: 768-769) bringt in anderm Zusammenhang seiner Behandlung der Syntax von Imperativen drei Belege aus dem Südhessischen, wo *a mo:l*, einmal' zusammen mit Pronomina der 3. Person (Typ der schaffe einmal) vorkommt.

Was die Bedingungen dieser Partikel-Setzungen in Imperativ- oder W-Frage-Sätzen betrifft, ist Verfasser (RH) bei der Arbeit an vorliegender Miszelle auf die folgende Mail-Korrespondenz über *denn/-(e)n* mit Josef Bayer (JB) am 19. März 2009 gestoßen:

- (3) **JB**: Ich schreib grade an zwei neuen Sachen[:] Die eine geht über die Partikel /denn/ und ihre Reduktion zu "-/n/" (Modell "/Wos doust-n du dou?/").
- (4) RH: [...] bin besonders gespannt auf Deinen Artikel zum enklitisierten "denn". Hatte zu dessen Semantik auch schon mal nachgedacht [...]. -n kommt ja bei Ergänzungsund Entscheidungsfragen vor, bei Ergänzungsfragen fast obligatorisch (quasi konkomitant mit dem w-Wort als Ergänzungsfragenmarker am Verb?), bei Entscheidungsfragen ist es stärker abtönend (geblieben) und "Rhetorizitätsmarker" [...].
- (5) **JB**: [...] was Du zur Obligatorik bzw. semantischen Wirkung von -n sagst ist EXAKT meine Interpretation. Ich versuche zu sagen, dass dieses -n bei W-Fragen zu einem reinen Frageindikator mutiert ist und damit seine denn-Semantik quasi an den Nagel gehängt hat. [...] Bei Entscheidungsfragen ist das anders.

Man hat es bei dieser Grammatikalisierung von Modalpartikeln zu Satztypen-Markern mit einem interessanten Effekt zu tun. Grammatikalisierung führt ja in der Regel zur Ausbildung von Paradigmatizität und Obligatorik. <sup>16</sup> Genauer gesagt führt sie

- zu einem Paradigma, das mindestens ein Oppositionspaar umfasst, z.B. eine semantisch unmarkierte/formal merkmallose Form ( $\emptyset$ ) versus eine semantisch markierte/formal merkmalhaltige Form (hier z.B. was tust' $\emptyset$  du? vs. was tust'n du? bzw. lies- $\emptyset$ ! vs. lies-ock!).
- zu einer Obligatorik, diesen semantischen Unterschied auszudrücken.

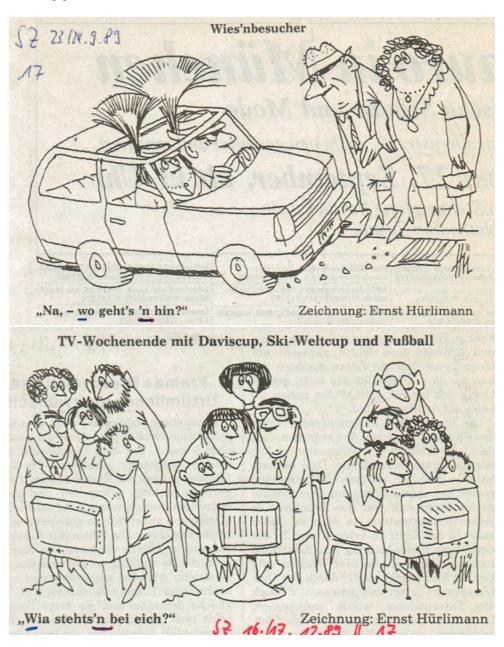
Nur hat man es hier gar nicht mit einer Opposition zu tun, die ausgedrückt werden müsste. Vielmehr kann, wie hier, eine immer frequenter werdende syntagmatische Nachbarschaft (mit W-Frage + denn, von Imperativ + ock) zu einer so starken Obligatorik führen, dass die  $\emptyset$ -Alternante des Paradigmas unmöglich wird und Grammatikalisierung nicht zu Paradigmatisierung führt. Es liegt also, wie im Klammerzusatz der Mail von RH oben angesprochen, eine obligatorische Konkomitanz<sup>17</sup> und nicht eine obligatorisch zu kennzeichnende Oppositivität vor.<sup>18</sup>

<sup>16</sup> Vgl. Nübling (2008: 239-241) und Diewald & Smirnova (2010).

<sup>17</sup> Mit Thurmair (2013) kann man sagen, dass eine satzmodusindizierende "typische Verbindung" (636) zu einer den Satzmodus identifizierenden oder ihn konstituierenden Modalpartikel werden kann, wenn nicht sogar zu einer Moduspartikel, z.B. "denn als Frageanzeiger oder *mal* als Aufforderungsindikator" (648-649).

<sup>18</sup> Das deckt sich mit dem Befund von Autenrieth (2005: 314) für einen andern Fall: "Werden die grammatikalisierten Elemente […] in ihren neuen Funktionen verwendet, so tritt ein 'freezing'-Effekt oder Verlust an Optionalität ein."

### **Bildhafter Appendix**





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# Wenn denn lizenziert ist: The German discourse particle denn in conditionals

Jana Häussler

### 1 Introduction

Discourse particles (aka modal particles) such as *wohl*, *halt*, *denn*, *ja* etc. are a typical feature of (spoken) German. They contribute to the meaning of an utterance by expressing the speaker's epistemic attitude towards the propositional content of an utterance. Discourse particles display syntactic and semantic properties which distinguish them from other expressions and make them an interesting topic for studying the syntax-semantics interface (for recent overviews, see Thurmair, 2013; Zimmermann, 2011; for a proposal as to how to derive the syntactic properties from semantics see Gutzmann 2015).

The present paper discusses restrictions with respect to clause type or sentence mood. Certain discourse particles are associated with certain clause types (Thurmair, 2013). For instance, *ja* is fine in declaratives but cannot occur in interrogatives whereas *denn* seems to be restricted to interrogatives, see (1). As illustrated in (1) and (2), *denn* may occur in both polar questions and constituent questions as well as in both root and embedded questions.

- (1) a. Josef hat ja/\*denn heute Geburtstag.
  - J. has DENN today birthday 'It is Josef's birthday today'
  - b. Hat Josef \*ja/denn heute Geburtstag?'Is it Josef's birthday today?'
  - c. Wer hat \*ja/denn heute Geburtstag? 'Whose birthday is it today?'
- (2) a. Ich frage mich, ob Josef denn heute Geburtstag hat. I ask myself whether J. Denn today birthday has 'I wonder whether it is Josef's birthday today'
  - b. Ich frage mich, wer denn heute Geburtstag hat. I ask myself who denn today birthday has 'I wonder whose birthday it is today'

Licencing of *denn* is not restricted to root questions and indirect questions but extends to dependent clauses out of which or through which *wh*-movement has taken place as shown

in (3). This property makes *denn* suitable as diagnostic for cyclic *wh*-movement (Bayer, 2012; Bayer & Obenauer, 2011; Bayer et al., to appear).

- (3) a. Wen denkst du, dass wir denn einladen sollten? who think you that we denn invite should 'Who do you think we should invite?'
  - b. Wen denkst du, dass Josef denn hofft, dass wir einladen werden? who think you that J. Denn hopes that we invite will 'Who do you think that Josef hopes that we will invite?'

### 2 Evidence for *denn* in conditionals

Beside interrogatives, *denn* can occur in another clause type, namely conditionals like (4).

(4) Ich würde mitmachen, wenn ich denn Zeit hätte. I would join in if I denn time had

'I would join in if I had time (but I don't have time)'

The occurrence of *denn* in conditionals has been rarely discussed in the previous literature (but see Brauße, 1994; Coniglio, 2011; Kwon, 2005). *Denn* in conditionals seems to be rare. Brünjes (2014) reports not a single instance of a *denn*-conditional in her corpus study (out of 500 instances of the discourse particle). Nevertheless, corpus examples with *denn* in a conditional are easy to find. See below for authentic examples taken from the internet.

- (5) Der BER, so er denn je eröffnet wird, kann nicht mehr sein als ein passabler the BER if 3sg denn ever opened will.be can not more be than a reasonable regionaler Flughafen, auf dem hauptsächlich Billigflieger verkehren. local airport at which mainly budget carriers operate 'Berlin International Airport (BER) can't be more than a reasonable local airport, mainly used by budget carriers, if it will be opened at all (which I doubt for the near future)'
  [Welt.de 2.1.15; http://www.welt.de/debatte/kommentare/article135925502/Der-BER-hat-nur-das-Zeug-zum-Regionalflughafen.html accessed May 31, 2015]
- (6) Aber auch daran kann man sich gewöhnen, falls man denn wirklich möchte. but also to this can one REFL get used if one DENN really wants 'But one can get used to this as well if one really wants to (what few do).' [http://ps.welt.de/2014/08/01/autowachstum-ungebremst-die-zukunft-braucht-groessere-strassen-oder-kleinere-fahrer/ accessed May 30, 2015]
- (7) Schüler\*innen verbringen ihre Freistunden gerne in der Schülerbücherei bei der students. fem spend their free periods gladly in the school library with the netten Bibliothekarin sofern es denn eine gäbe ... kind librarian if it denn a be. subj 'Students (male and female) like to spend their free periods in the school library with the kind librarian, if there was a school library (but there isn't)' [http://www.jusos-uep.de/2015/03/schulsozialarbeit-oder-wie-viel-ist-ein-mensch-wert/accessed May 31, 2015]

(8) Über all das könnte man reden. Wenn man es denn will. about all this could one talk if one it denn wants 'One could talk about all this. If one really would want to (but few do)' [https://www.ndr.de/info/sendungen/kommentare/Wenn-man-denn-will-kann-man-ueber-alles-reden,luegenpresse102.html accessed May 30, 2015]

Syntactically, the conditional clause containing *denn* seems often not fully integrated into the matrix clause. In many cases, it is clearly a parenthesis as in (5), occassionally marked off by dashes or brackets instead of commas. In other cases, the *denn*-conditional occurs in an extraposed position as in (6), or separated by a dash as in (7). Finally, *denn*-conditionals may occur as independent verb-final clauses as in (8). The syntactic status of *denn*-conditionals as (almost) independent clauses fits the intuition that *denn*-conditionals are illocutionary independent.

In contrast to *wh*-questions, *denn* in conditionals is only licit in the conditional clause itself, not in a clause embedded in the conditional. This contrast is illustrated in (9).

- (9) a. Wann glaubt der Aufsichtsrat, dass der Flughafen denn fertiggstellt wird? when thinks the supervisory board that the airport Denn finished will.be 'When does the supervisory board believe the airport will be finished?'
  - b. \*Der Aufsichtsrat wäre froh gewesen, wenn die Bauleitung mitgeteilt the supervisory board would glad been if the site manager reported hätte, dass der Flughafen denn noch in diesem Jahr eröffnet werden kann. had that the airport DENN still in this year opened will can 'The supervisory board would have been glad if the site manager had reorted that the airport can be opened this year.'

For sentences like (9a), Bayer and colleagues have argued that *denn* is licensed by the help of an intermediate trace of the *wh*-element moved through SpecCP of the lower clause to the left periphery of the main clause (Bayer, 2012; Bayer & Obenauer, 2011; Bayer et al., to appear). Conditionals do not involve any comparable movement and, as a result, fail to license *denn* in a clause embedded in the conditional as in (9b).

### 3 Semantic contribution of *denn* in conditionals

Semantically, *denn*-conditionals seem to be restricted to hypothetical conditionals and counterfactuals. An informal internet search yielded not a single instance of a factual conditional containing the discourse particle *denn* (out of 50 *denn*-conditionals for each of the complementizers *wenn*, *falls*, *so* and *sofern*). Brauße (1994) reports some cases of *denn* in factual conditionals including the following example from Thomas Mann (cited after Brauße, 1994: 160).<sup>1</sup>

<sup>1</sup> In factual conditionals denn usually co-occurs with schon as already noted in Brauße (1994).

(10) um aber auch mir aus dem Herzen zu sprechen, was ich doch wenigstens muß so as to but also me out the heart to speak what I yet at least must tun dürfen, wenn ich denn schon den Redner mache do may if I denn schon the speaker do 'but to speak from the bottom of my heart, what I must be free to do, given that I act as the speaker'

In (4) to (6) and in (8), *denn* expresses the speaker's doubts concerning the occurrence of issue in the antecedent. Even stronger, it tends to express that the speaker considers it very unlikely that the issue will occur (soon). In the counterfactual in (7), *denn* emphasizes that the antecedent is false. The conditional in (10), in contrast, is factual and hence the antecedent cannot be doubted. However, all instances of *denn* in conditionals have in common that they highlight the existence of alternatives. In the factual conditional in (10), the speaker underscores that he could have decided not to act as the speaker but in fact agreed. In the counterfactual in (7), the speaker points out that there is no library while there should be one.

### 4 Towards a unified semantics of denn

Under a minimalist view, one would like to subsume the semantic contribution of *denn* in interrogatives and conditionals and possibly also declaratives (see examples in Kwon, 2005) under the same meaning, and even derive this meaning from the temporal adverb *dann* ('then') which diachronically is the source for the discourse particle *denn*. The aim here is more modest. I will not present a formal semantics of *denn* but rather would like to convince the reader that the analysis sketched in the previous section can be applied to interrogatives too. The proposal makes use of a partition analysis of questions as proposed in Groenendijk & Stokhof (1984).

The transfer to polar questions is straightforward: *denn* highlights the cell of the partition that corresponds to a negative answer.

- (11) a. Kommst du denn zu der Konferenz? come you denn to the conference 'Will you attend the conference?'
  - b. Kommst du denn nicht zu der Konferenz? come you denn not to the conference 'Won't you attend the conference?'

In (11a), the speaker highlights the possibility that the addresses might not attend the conference whereas in (11b), the speaker highlights the possibility that the addressee will attend the conference, in both cases contrary to what the speaker assumed. In other words, inclusion of *denn* highlights an assumption on part of the speaker which the previous context proved to be false. (11) cannot be used in neutral context.

The transfer of the proposal to constituent questions like (12) is less straightforward.

(12) Wo laufen sie denn? where run they DENN 'Where do they run?'

With stressed *denn*, (12) is only felicitous when one possible answer was discussed in the previous context and rejected as false. Focus alternatives include the false answer and *denn* highlights exactly this one as a possible though in fact false answer. In this case, (12) can be paraphrased as *Where do they run if not at place x (as I assumed so far)?* and again the cell of the partition which *denn* singles out corresponds to the previous belief of the speaker.

When *denn* is unstressed, the cell it picks out depends on context. In a famous cartoon by Loriot<sup>2</sup>, the speaker utters (12) while unsuccessfully trying to spot horses at the race using binoculars. In this context, *denn* highlights that the horses are not where the speaker is looking at. In other contexts other cells may be highlighted. In the most trivial case, the highlighted cell is the one in which either all or none of the relevant referents in the domain have the property asked for. Consider (13) as a final example.

- (13) a. Wer möchte denn ein Eis? who wants DENN a icecream 'Who wants an icecream?'
  - Wer möchte denn kein Eis?
     who wants DENN no icecream
     'Who doesn't want an icecream?'

In (13a), *denn* highlights the cell in which none of the addressees want an ice cream whereas (13b) points to and rules out the possibility that all addresses want an ice cream, the speaker assumes that at least one person does not want an ice cream.

### 5 Conclusion

The paper provided evidence for the occurrence of the discourse particle *denn* in conditionals. I sketched a semantic analysis which applies to both *denn* in interrogatives and *denn* in conditionals. The proposal relies on a partition analysis for both sentence types (for similar consideration see Onea & Steinbach, 2012). I argued that the contribution of *denn* is to highlight one cell of the partition. In case of bipartitions, i.e. conditionals and polar questions, *denn* highlights the cell which corresponds to the closest possible world in which the relevant proposition is false. In the case of n-partitions, i.e. constituent questions, it depends on context which cell *denn* singles out. If the reasoning outlined here is on the right track, it would also explain why *denn*-sentences cannot be uttered out of the blue.

<sup>2</sup> Loriot based this cartoon on a sketch by Wilhelm Bendow and Franz Otto Krüger.

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## Josef: Felicitation and some reminiscences

K. A. Jayaseelan

First, some memories. My friendship with Josef Bayer dates from 1984. I presented a paper at the 1984 GLOW Colloquium which was held at the University of Copenhagen. It was the first paper I had presented at a major conference, and I remember my nervousness as I read the paper. But the audience was very kind—more kind than convinced, I now think! Josef introduced himself to me after the paper and we quickly became friends. At his invitation I visited him at his home in Aachen—where he had a job at that time—and I met his wife. Maybe I was surprised to see that he had an Indian wife, and I understood his special connection to India. We have been friends ever since that first meeting. I believe, nearly every time the Bayers visited India, they have come to Hyderabad and paid me and Amrit a visit at our home. In 1992, when we organized an International Summer School in Syntax (ISIS) at the Central Institute of English and Foreign Languages, Hyderabad (which is my place of work—now renamed English & Foreign Languages University), Josef Bayer was—along with Tanya Reinhart, Jacqueline Gueron, Jean-Yves Pollock, and other luminaries—one of the "star" teachers.

I have leaned on Josef's support in my research. There is a special quality about his work that I value. He is conservative, in a way that I think of as typical of European scholarship. European scholarship has as its background Philology, Indo-European studies, comparative Sanskrit-Germanic studies and so on, and also linguists like Otto Jespersen. It is this accumulated wealth (and burden) of knowledge that makes European scholarship conservative. I have generally found that if Josef plumbs for a new idea or proposal in Linguistics, one can be sure that it is right. I am on the other hand impulsive and tend to go for new ideas perhaps too easily. Josef has sometimes acted as ballast for my ship, which is light in many respects.

We have differed regarding some major ideas. Thus I believe, Josef Bayer did not adopt the idea of antisymmetry when it was proposed; this was possibly because a good bit of his work was premised on the idea of the directionality of the head-complement relation, cf. his habilitation thesis for the University of Konstanz (Bayer, 1990) which formed the basis for his important book *Directionality and Logical Form: On the Scope of Focusing Particles and Wh-in-Situ* (Bayer, 1996). But then this book—ironically—acted as a stimulus for some important and far-reaching developments in the complex of ideas that we identify with the "antisymmetry camp." Trying to account for Bayer's detailed observations about the scope facts of German focusing particles, Richard Kayne came up with the proposal of remnant movement (Kayne, 1998). This latter idea has been the basis for a great deal of research

relating to word order and structure, and has led to new explanations and insights. (In my own work, I used remnant VP movement to generate the VO vs. OV difference in word order between languages.)

But Josef Bayer (again)—as far as I know—never "bought into" remnant movement.

One of the strong areas of research in European linguistics is the investigation of dialect syntax. Thus there is an important initiative to map the dialect geography of Dutch that is based in the University of Utrecht. Similarly, Italian linguists have been examining Italian dialects. Josef Bayer's interest in German dialectal data was the origin of one of his first papers to receive widespread attention, "COMP-Node in Bavarian Syntax" (Bayer, 1984). This was one of the early papers to shake our faith in the neat picture of COMP as consisting of a single phrase, a head and a specifier; this picture went unquestioned for a long time in linguistic debate, although it was dictated entirely by English data (cf. the idea of the "doubly-filled COMP"). The attempt to understand better the full complexity of this area of clause structure led directly to Luigi Rizzi's proposal to split C into several phrases. Which in turn was the beginning of cartography, one of the main thrust areas of contemporary linguistic research.

I bring this matter up for a more personal reason, namely to mention how Josef's interest in dialect data and in the left periphery quite incidentally benefited my research. In his paper "Decomposing the Left Periphery: Dialectal and Cross-Linguistic Evidence" (Bayer, 2004), he discusses some data from "colloquial substandard Dutch" which he cites from an earlier paper by Eric Hoekstra:

(1) Ze weet [wie [of [dat [hij had willen opbellen]]]]. she knows who if that he had wanted call 'She knows who he wanted to call.'

Note the 'who – if – that' sequence in the left periphery of the embedded clause. I remember how I gleefully "jumped at" the Dutch data, for it provided some support for a claim that I had been pushing for some time but without much success, namely that 'if' is underlyingly present in the C-domain of English constituent questions (Jayaseelan, 2012).

I already spoke of Josef's "Indian connection". His wife being a Bangla (Bengali) speaker, he turned to advantage the presence of this native speaker competence in the home to produce some of the most important work on Bangla syntax in the generative framework. Possibly he was the first to observe some theoretically challenging scope facts about the *wh*-elements of Bangla (unless of course they had been noted in Probal Dasgupta's Ph.D. thesis done at NYU in 1980, which is a treasure house of observations about Bangla; Dasgupta, 1980). Finite complement clauses in Bangla can appear in two positions: the canonical position of the Direct Object which is to the immediate left of the matrix verb, or a right-extraposed position. A *wh*-phrase in the extraposed complement can only have a clause-internal (narrow) scope, while a *wh*-phrase in a clause in the canonical position exhibits the expected scope ambiguity. He proposed an explanation of this fact in terms of directionality: Bangla being a head-final language, canonical government is to the left; and any phrase or clause which is right-extraposed is governed in the "wrong" direction, and this makes it an island. (I attempted to assimilate the Bangla/Hindi scope facts to Malayalam scope facts and proposed an alternative

explanation in terms of movement to focus in Jayaseelan, 2003 but I will not describe my solution here.)

Some of Josef's most recent research is on Bangla, see his joint paper with Probal Dasgupta on Bangla particles (Bayer & Dasgupta, forthcoming).

Let me take this occasion of his 65<sup>th</sup> birthday felicitations, to wish Josef Bayer many years more of active research!

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# In search of *wh*-in-situ in Romance: An investigation in detective stories\*

Georg Kaiser & Stefano Quaglia

### 1 Introduction or a personal note

It is well known that languages differ with respect to the position of the *wh*-element in constituent questions. While in many languages these questions are generally formed by the fronting of the *wh*-element to a sentence-initial position, other languages require the *wh*-element to remain in what seems to be its canonical position, i.e. in situ. One generally distinguishes a third type of languages forming constituent questions either by fronting the *wh*-element or by leaving it in situ.

It is also well known that Josef Bayer feels a strong affection for question formation with *wh*-phrases in situ (cf. Bayer, 1996; Bayer, 2006; Bayer & Cheng, forthcoming). This is certainly one of the reasons—among others—why he likes Bangla, a language with (almost) obligatory *wh*-in-situ. Interestingly, there is another language for which Josef feels a strong affection, namely Italian. This is remarkable, since Italian is a language that generally does not allow *wh*-in-situ. What is also remarkable is that Josef maintains this affection by reading Italian detective stories by authors like Loriano Macchiavelli.

Given these affections and contradictions and given that the authors of this paper feel a strong affection for Romance languages—one of the author actually being a native speaker of a Romance language, namely Italian—, our purpose is to provide a search on wh-in-situ questions in some Romance detective stories. Since French is known as a language that optionally allows for wh-in-situ, our study is based on a series of French detective stories, written by Jean-Claude Izzo, which will be compared with the translations into other Romance languages, namely Italian, Spanish, and Portuguese. The goal is to look for differences between these languages with respect to the use of the wh-in-situ option and to compare these results with the observations and explanations which have been made in the literature on (optional) wh-in-situ questions in Romance so far.

### 2 wh-in-situ questions in Romance: A brief state of the art

Romance languages are generally described as belonging to the language type instantiating obligatory *wh*-fronting in (information-seeking) constituent questions. The in-situ option is

<sup>\*</sup> We are grateful to Simon Dold and Janina Reinhardt for helpful comments on a previous version of this paper as well as to Barbara Krisl-Kaiser for her helpful support when building our corpus.

normally considered to be restricted to multiple questions and echo questions. Yet, it has long been observed that Colloquial French stands out in optionally allowing the *wh*-element to remain in situ in information-seeking questions (Aoun et al., 1981; Cheng & Rooryck, 2000). Similar observations have been made with respect to (European and Brazilian) Portuguese (Ambar & Veloso, 2001).

- (1) a. Jean a acheté quoi? John has bought what 'What did John buy?'
  - b. Jean a vu qui?John has seen whom 'Whom did John see?'
- (2) a. O João comprou o quê?

  DET John bought DET what
  'What did John buy?'
  - b. O João viu quem?

    DET John saw whom
    'Whom did John see?'

Both languages are therefore classified as 'optional *wh*-in-situ languages' (e.g. Kato, 2013). Although it is still far from being clear what exactly triggers the *wh*-in-situ option in these languages (Bayer & Cheng, forthcoming), it has been acknowledged that "optional" *wh*-in-situ is constrained by restrictions which do not exist in "real" *wh*-in-situ languages (Cheng & Rooryck, 2000). There is, however, some disagreement with respect to the exact determination of the syntactic and discourse-pragmatic constraints on this kind of questions.

As for syntactic conditions, most authors agree that *wh*-in-situ (without echo-interpretation) is not possible in the scope of sentential negation (Shlonsky, 2012: 243; Mathieu, 2004: 1093):

- (3) a. \*Il ne voit pas qui? he NEG sees not who
  - b. Qui est-ce qu'il ne voit pas? who is-this that he NEG sees not 'Who doesn't he see?'

In addition, most authors argue that *wh*-in-situ is excluded in embedded questions (Shlonsky, 2012: 245) as well:

- (4) a. Jean a vu qui? John has seen who
  - b. \*Tu te demandes Jean a vu qui. you refl.2sg wonder John has seen who
  - c. Tu te demandes qui Jean a vu. you refl.2sg wonder who John has seen 'Who doesn't he see?'

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However, the ban on *wh*-in-situ does not extend to all dependent clauses. In particular, some authors claim that the in-situ option is allowed in embedded contexts when the matrix verb is non-intensional, i.e. factive (compare (5a) vs. (5b)) (Boeckx et al., 2001: 59):

- (5) a. Jean sais que Marie a acheté quoi?

  John knows that Mary has bought what

  'What does John know that Mary bought?'
  - b. \*Jean pense que Marie a acheté quoi? John thinks that Mary has bought what 'What does John think that Mary bought?'

Other authors assume that the varying acceptability of ex-situ and in-situ questions in embedded contexts is not due to the matrix verb type, but rather to diatopic or diaphasic variation (Mathieu, 2004: 1092). Discussing a controversial example provided by Bošković (2000: 64) where the embedded sentence is introduced by an non-factive matrix verb, Bayer & Cheng (forthcoming) contend that this example is "quite natural in everyday conversation" at least for young French speakers:

(6) ?\*Jean et Pierre croient que Marie a vu qui? John and Peter believe that Mary has seen whom 'Whom do John and Peter believe that Mary saw?'

A similar piece of data is also provided for Portuguese by Pires & Taylor (2009: 202) without further comments:

(7) O Bill acha que a Sue comprou o quê?

DET Bill thinks that DET Sue bought DET what 
'What does Bill think that Sue bought?'

As far as the interpretive dimension is concerned, some authors claim that *wh*-in-situ questions are only felicitous if certain discourse-pragmatic conditions are met. With respect to French, it has been claimed that *wh*-in-situ is associated to a stronger presupposition by the speaker than it is the case in ex-situ questions. This explains why the answer in (8a) is considered to be inappropriate (Coveney, 1989: 96; Chang, 1997: 42-46; see also Cheng & Rooryck, 2000):

- (8) a. Q: Marie a acheté quoi?

  Marie has bought what

  'What has Marie bought?'
  - b. A: \*Rien. Nothing
  - c. Q: Qu'est-ce que Marie a acheté? what INT Marie has bought 'What has Marie bought?'
  - d. A: Rien. Nothing

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Similar observations have been made for Portuguese by Ambar (2002) and Pires & Taylor (2009). Other authors, however, do not mention any such requirement (Shlonsky, 2012 for French; Kato, 2013 for French and Brazilian Portuguese). Mathieu (2004: 1100) presents some counterexamples taken from the internet, which according to him show that "not all dialects/registers of French contain in-situ wh[-]phrases that are presuppositional:"

- (9) a. Q: Vous faites quoi exactement dans la vie? you make what exactly in the life 'What do you do exactly for a living?'
  - b. A: En ce moment rien. J'avais un mi-temps chez MacDonald.[...] in this moment nothing I had a half-time at MacDonald 'Nothing at the moment. I had a half-time job at MacDonald.'

Pires & Taylor (2009) also concentrate on discourse-pragmatic conditions, which they model in terms of a "Common Ground" requirement. Descriptively, they identify four types of questions, corresponding to different configurations, which allow (non-echo) *wh*-in-situ. Interestingly enough, they claim that this holds not only for optional *wh*-in-situ languages, but also for English, which is usually not considered to belong to the optional in-situ type. The typology sketched out by Pires & Taylor (2009) is reported in detail in what follows:

- a. '[+specific] questions', i.e. questions which "request more specific information about something mentioned immediately prior" (Pires & Taylor, 2009: 203):
  - (10) a. A: I made desserts.
    - b. B: You make what ↑kind of desserts↓?
- b. 'Expect-questions', i.e. questions "when further questioning for new information is expected, as in legal questioning" (Pires & Taylor, 2009: 203):
  - (11) a. B (Attorney): Tell me what happend on January 1st, 2005 at 4 pm.
    - b. A (Defendant): I was driving along Andrews Avenue.
    - c. B: And you were driving in which ↑direction↓?
- c. 'Reference-questions', i.e. questions asking for "a paraphrase or repetition of an immediately prior antecedent" (Pires & Taylor, 2009: 204)
  - (12) a. A: I did not sell those strange pictures.
    - b. B: You didn't sell what ↑↓ strange pictures↓?
- d. Questions requiring a particular extra-linguistic context. Pires & Taylor (2009: 204) provide the example in (13), which can be used felicitously in a daily routine mother-daughter conversation where the daughter is asking for extra pocket money:
  - (13) B (mother): So, you want how much today?

According to Pires & Taylor (2009: 204), these four question types share one crucial property, namely that "the set of possible answers [...] is part of the Common Ground," which can be informally described as knowledge shared by both speaker and hearer (see also Bayer & Obenauer, 2011 for the relevance of common ground with respect to the use of German discourse particles like *denn* in questions).

A further discourse factor has been mentioned by Jiménez (1997) with respect to Spanish (see also Uribe-Etxebarria, 2002; Etxepare & Uribe-Etxebarria, 2012: 253). According to the author, the wh-element may remain in situ provided that the question is associated with a presupposition that contains a variable ranging over a restricted set already provided by the discourse. This is exemplified by (14), where the value for the variable is picked up from the set of referring expressions {huevos, leche, café}:

- (14) a. A: Fuimos a la tienda a comprar huevos, leche y café. Mi madre went.1pl to the store to buy eggs milk and coffee my mother compró los huevos.

  bought the eggs
  'We went to the store to buy eggs, milk and coffee. My mother bought the eggs.'
  - b. B: ¿Y tu padre compró qué? and your father bought what 'What did your father buy?'

Incidentally, the same seems to hold for Italian:

- (15) a. A: Per l'esame di Latino devo leggere Virgilio, Orazio, Seneca e Cicerone for the exam of Latin must.1sg read Virgil Horace Seneca and Cicero 'For the exam I have to read Virgil, Horace, Seneca, and Cicero.'
  - b. B: E adesso stai leggendo (che) cosa? and now are.2sg reading what thing 'And what are you reading now?'

Even for German it has been observed that *wh*-in-situ is not only restricted to echo-questions *stricto sensu* and multiple *wh*-questions. Bayer (2006: 378) argues that a question like (16a) "also seem[s] to function as normal information-seeking question [...] under certain circumstances." On the other hand, Reis (2013: 107) notes that what Pires & Taylor (2009) call 'expect-questions' is actually possible in German, too, as shown in (16b).

- (16) a. Der Hans hat wen gesehen?

  DET John has whom seen

  'Whom did John see?'
  - b. Sie haben den Angeklagten geSEHen? Und dann sahen Sie, dass er WO you have the defendant seen and then saw you that he where haltmachte? stopped

'Did you see the defendant? And then, did you see where he stopped?'

Interestingly, Reis (2013) provides arguments for classifying questions like (16b) as a sub-kind of echo-questions. But she acknowledges that the exact status of these questions is still controversial.

In sum, our brief overview allowed us to identify two major research threads in the current literature on wh-in-situ in Romance languages. On the one hand, a number of contributions are devoted to Romance 'optional wh-in-situ languages', i.e. Colloquial French and Portuguese. Both languages are considered on a par in allowing both ex-situ and in-situ strategies in order to form constituent questions. It is systematically pointed out that the latter strategy is only licit in certain syntactic environments. Nonetheless, there is some disagreement about what the exact environments are. On the other hand, the phenomenon of wh-in-situ has been investigated with respect to other Romance languages, too. Although these languages are generally assumed to allow wh-in-situ only in echo and multiple questions, some authors have shown that wh-in-situ is indeed allowed if certain discourse-pragmatic conditions are met. These results, if empirically confirmed, may well lead to the hypothesis that wh-in-situ is an option actually displayed by all wh-fronting languages, albeit under more severe non-syntactic requirements.

We believe that both research threads would benefit from extensive empirical research. For example, scrutiny of large corpora may be a highly profitable tool for investigating variation both within a single language and across languages. In this paper, we carry out a little corpus study based on parallel texts in order to prove that such a method would indeed help clarifying some highly debated or unclear issues found in the literature.

In particular, given limitations in space, we would like to explore the following research questions:

- i. Can any (qualitative and quantitative) differences be noticed between French and Portuguese, i.e. the Romance languages considered to be 'optional *wh*-in-situ' languages?
- ii. Are the syntactic restrictions on *wh*-in-situ in French confirmed?
- iii. Do we find wh-in-situ in Spanish and Italian? If yes: under which conditions and with which kind of interpretation?

In what follows, we illustrate the method adopted for our empirical study and present its most interesting results.

### 3 In search of wh-in-situ in Romance detective stories

Our investigation is inspired by Hans-Georg Obenauer's talk on the occasion of Josef Bayer's 60<sup>th</sup> birthday, where he investigated the uses of 'wh-the-hell'-like constructions in English and French by comparing some detective stories of John Le Carré in English and French.

As a basis for our corpus, we took the three detective novels *Total Khéops*, *Chourmo*, and *Solea* written by Jean-Claude Izzo (1945–2000), a French novelist from Marseille. The novels have been published in the mid-1990s and are known as the 'Marseille Trilogy'. The main character is a former policeman who is faced with several criminal cases happening

in Marseille and its surroundings. The novels contain a high number of dialogues written in Colloquial French. Other parts, in particular those where the narrator tells the story or reports interior monologues, are written in Standard French.

We built our corpus as follows. We first extracted all constituent questions from the three original French novels. We then turned to the book translations into Italian and Spanish and extracted again all constituent questions. We did the same for Brazilian Portuguese, but since a Portuguese translation only exists for the first novel, we could integrate only *Total Khéops* in our corpus. We classified the data according to the distinction between finite and non-finite matrix and dependent clauses. We subsequently analyzed the questions with respect to the position of the *wh*-element, distinguishing between ex-situ and in-situ. Multiple questions in which one *wh*-element appears in situ were classified as in-situ. We finally marked the questions according to the type of *wh*-phrase: subject, direct object, indirect object, prepositional or adverbial phrase.

The results of the analysis are listed in table 1 and table 2.

	<i>wh</i> -in-situ	wh-ex-situ	total
French	142 29.4%	341 70.6%	483
Italian	3 0.6%	450 99.4%	453
Spanish	2 0.4%	456 99.6%	458

Table 1: Matrix finite questions featuring a *wh*-element in all three novels

	<i>wh</i> -in-situ	<i>wh</i> -ex-situ	total
French	51	95	146
	34.9%	65.1%	
(Brazilian)	3	131	134
Portuguese	2.2%	97.8%	
Italian	1	135	136
	0.7%	99.3%	
Spanish	0	132	132
	0.0%	100.0%	
English			

Table 2: Matrix finite questions featuring a wh-element in Total Khéops

What catches the eyes first is the huge quantitative asymmetry between French on the one hand and Italian, Portuguese, and Spanish on the other. This finding is quite striking if,

as claimed in the literature, Portuguese can be truly classified as an 'optional wh-in-situ language' on a par with French. The immediate question, then, is what factors are responsible for the observed difference in frequency. Two hypotheses can be formulated. Either French and Portuguese differ as far as the stylistic conditions for the use of the in-situ option are concerned, or Portuguese actually instantiates a language type that is closer to Italian and Spanish.

As far as the latter languages are concerned, the number of wh-in-situ does not even reach 1% of all constituent questions found in the respective sub-corpora. Given that two examples in Italian and one example in Spanish are instances of multiple wh-questions, we are left with only one wh-in-situ question for both languages. Note that both examples are the translation of the very same sentence.

- (17) Sei rimasto per questo? Avrei potuto...
  be.2sG stayed for this have.cond.1sG could

  Avresti potuto cosa? Piazzarti qui ad aspettare lo squillo del have.cond.2sG could what place.cl.refl.2sG here to wait the ringing of-the telefono? Come ora.
  telephone like now
- (18)- No te has quedado sólo por eso, ¿no? Yo podría haber ... NEG CL.REFL.2SG have.2SG stayed only for this no I can.cond.1SG have - ¿Podrías haber ué? ; Haberte encerrado aquí, mientras que esperabas can.cond.2sg have what have.cl.refl.2sg in-locked here while that waited el teléfono? Como ahora. a que sonara to that ringed.subj.past.3sg the telephone like 'Did you stay because of this? I could have ... What could you have done? Lock yourself in here, waiting for the telephone to ring? Like now.'

As for the interpretation of these questions, our intuition is that they are not real information-seeking questions but rhetorical questions. As a matter of fact, in the following utterance the speaker provides himself the (in his opinion) only possible value for the wh-phrase  $cosa/qu\acute{e}$ . Thus, in both the Italian and the Spanish sub-corpus we did not find a single wh-in-situ question with an authentic information-seeking illocutionary import.

Now turning to Portuguese, three instances of *wh*-in-situ questions have been found in the sub-corpus, which only consists of the novel *Total Khéops*. Since one of these is a multiple constituent question, we will discuss only the remaining two instances:

(19) Olhei meu vizinho nos olhos. Os outros pararam de bater nas paredes looked.1sg my neighbor in-the eyes the others stopped to beat in-the walls do vagão. Estava claro que a coisa se complicava. Eles me of-the coach was clear that the thing REFL.2sg complicated they CL.ACC.1sg. cercaram, cada vez mais perto. surrounded every time more close

- Qual é a sua, cara? Não está gostando de quê? Do rap? Da nossa cara?
   what is det yours guy neg is liking of what of-the rap of-the our face
   I looked my neighbor in the eye. The others stopped beating on the walls. This was serious now. They pressed around me.
- "What are you talking about, man? What is it you don't like? Rap? Our faces?"
- (20) Yasmine veio juntar-se a nós. Deslizou o braço sob o de Kader e Yasmine came join.Refl.3sg to us. slipped the arm under DET of Kader and abraçou-o de leve. Carinhosamente. Kader sorriu para ela. Um sorriso embraced.cl.3sg.acc of light tenderly Kader smiled at her a smile apaixonado.

loving

Você vai ficar quanto tempo ainda? – perguntei a Kader.
 you will stay how-much time still asked.1sg to Kader.

'Yasmine joined us. She slipped her arm into Kader's, and snuggled up to him. Tenderly. Kader smiled at her. A loving smile.

"How much longer are you staying?" I asked Kader.'

As regards (19), this question could be considered as an instance of question type exemplified in (14), where the value for the variable is picked up from a given restricted set. The only difference, we contend, is that in this case the set is provided by the speaker himself after uttering the question. The question (20), on the other hand, can be interpreted as corresponding to type d. in Pires & Taylor's (2009) typology. In this particular case, Kader and Yasmine, respectively the brother and the best friend of Leila, victim of an assassination, meet up and hold a brief conversation after Leila's funeral. Importantly, Kader lives in Paris and not in Marseille, where the funeral takes place. Asking a question such as the one in (20) is indeed part of routine small-talk in the extra-linguistic context of meeting a person who pays a visit.

In sum, all the instances of (non-multiple) *wh*-in-situ questions we found in the Italian, Portuguese, and Spanish sub-corpora seem to be licensed by special discourse-pragmatic configurations. As far as French is concerned, by contrast, our results clearly suggest that this language is far more liberal in this respect. This is illustrated by the following dialogue, where *wh*-in-situ questions, marked in boldface, are formulated out of the blue.

- (21) Ça va?
  - Je fis oui de la tête, fermai les yeux. Malgré la faible lumière, j'avais du mal à les garder ouverts. Elle enleva le gant de mon front. Puis elle le reposa. Il était de nouveau froid. C'était bon.
  - Il est quelle heure? je dis.
  - Trois heures vingt.
  - T'as une cigarette?

Elle en alluma une et me la mit entre les lèvres. J'aspirai, puis amenai ma main gauche pour l'ôter de mes lèvres. Ce seul mouvement me déchira le ventre. J'ouvris les yeux.

- Tu fais quoi là?
- Fallait que je te voie. Enfin quelqu'un. J'ai pensé à toi.
- T'as eu mon adresse où?
- Le Minitel.

### Georg Kaiser & Stefano Quaglia

"Are you alright?"

I nodded, and closed my eyes. Despite the dim light, I found it hard to keep my eyes open. She took the glove off my forehead. Then put it back. It was cold again. It felt good.

"What time is it?" I asked.

"Twenty after three."

"Got any cigarettes?"

She lit one for me and put it between my lips. I sucked on it, then lifted my left hand to take it out of my mouth. It was a small movement, but it gave me an excruciating pain in my stomach. I opened my eyes.

"What are you doing here?"

"I had to see you. I mean, I had to see someone, and I thought of you."

"How did you get my address?"

"Minitel."

Our little investigation also enabled us to further study the distribution of in-situ *wh*-phrases in French. In particular, two results merit mention. We found three cases of *wh*-in-situ in the scope of negation. But upon closer examination, though, all these questions turned out to have either an echo or a rhetoric interpretation. On the other hand, we found two cases of *wh*-in-situ in an embedded clause taken as a complement by a non-factive verb. One of them corresponds to Pires & Taylor's (2009) d. type. The other one, though, does not appear to be bound to any particular pragmatic restrictions:

- Guitou, le plus jeune de ses trois garçons, avait fugué. Vendredi matin. Sans laisser de mot, rien. Il avait seulement piqué mille francs dans la caisse du magasin. Depuis, le silence. Elle avait espéré qu'il l'appelle, comme quand il partait en vacances chez ses cousins à Naples. Elle avait pensé qu'il reviendrait le samedi. Elle l'avait attendu toute la journée. Puis tout le dimanche. Cette nuit, elle avait craqué.
  - Tu penses qu'il est allé où?
  - Ici. À Marseille. (Chourmo 43)

'Guitou, the youngest of her three boys, had run away. Friday morning. Without leaving anything written. He had just taken a thousand francs from the shop's cash register. Afterwards, the silence. She had hoped that he would call her up, just like when he used to leave for holiday to go to his cousins in Naples. She had hoped that he would come back on saturday. She had waited for him the whole day. Then the whole sunday. That night, she had broken down.

"Where do you think he went?"

"Here. In Marseille."

This result provides positive evidence for the acceptability of a highly debated construction, namely *wh*-in-situ appearing in a CP subcategorized for by a non-factive verb.

### 4 Conclusions

In this little contribution, we have shown that *wh*-in-situ is a quite natural strategy in Colloquial French, while it seems to be quite unusual and more heavily pragmatically restricted in Romance languages like Italian and Spanish. Quite strikingly, Portuguese seems to be oriented to the second language type, and not to French, contrary to what is usually claimed. *wh*-in-situ in French, on the other hand, seems to require less special discourse-pragmatic conditions.

We hope that both the spirit and the results of our investigation will prove useful for future research on *wh*-in-situ in Romance in general and in French in particular. But of course, we more heartily hope that this little investigation will have pleased Josef Bayer as much as investigations in detective stories usually please him.

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### Happy Birthday, dear Josef!

JAKLIN KORNFILT

What brought Josef and me together was our interest in syntactic theory and cross-linguistic "unexpected constructions", and more specifically, our interest in locality and its (apparent?) violations. We met at a GLOW conference in Girona, in the mid-1980'ies, where I gave a paper on an intriguing and little-researched Turkish construction, which I dubbed "Infinitival Double Passives" (IDPs), and which I analyzed, at the time, as a long-distance application of "NP-movement", in one fell swoop, from the direct object position of an embedded infinitival clause with a passive predicate, to the matrix subject position of the root clause with a Control predicate—a predicate also bearing passive morphology:

(1) Üniversite-ler (polis tarafından) kuşat-ıl-mağ-a başla-n-dı university-pl police by surround-pass-inf-dat begin-pass-past 'It was begun to surround the universities (by the police)' (Literally: 'The universities were begun to be surrounded (by the police)')

Josef approached me after my talk, pointing out a likewise somewhat mysterious and little-studied construction in German, in which the direct object of an embedded infinitival clause appears to have moved in the subject position of the root clause, as a result of apparent "NP-movement" in a passive construction, i.e. in a rather similar way to the Turkish construction in question; also, just like in Turkish, the root verbs that allow for this "long passive" construction in German are essentially Control verbs. One obvious difference between the two constructions, however, is that in Turkish, both predicates, i.e. the infinitive and the matrix Control verb, bear passive morphology, while in the German construction, only the root Control verb does:

dass der Wagen [PRO in die Garage zu fahren] vergessen wurde that the car.nom into the garage to drive forgotten was '...that it was forgotten to drive the car into the garage' (Literally: '...that the car was forgotten to drive into the garage')

The infinitival clause with which the matrix subject is associated in (2) can also be "extraposed":

(3) dass der Wagen vergessen wurde [PRO in die Garage zu fahren]

The joint work that started from those discussions yielded a few joint conference talks and three related co-authored papers (Bayer & Kornfilt, 1990; Bayer & Kornfilt, 1991; Bayer &

Kornfilt, 1994). In addition, working with Josef inspired me to publish a couple of singly-authored papers on the Turkish construction, in particular Kornfilt (1996).

The ultimate outcome of this work, in a nutshell, was that the difference in the morphological marking of the passive in the two languages signals an important syntactic difference between these constructions: The German construction is viewed as a special case of a more general phenomenon of long-distance scrambling; this type of scrambling is treated in our joint work as the result of base-generating in the matrix a constituent of the domain traditionally viewed as an (infinitival) embedded clause. The motivation for this base-generation stems from arguments showing that scrambling (at least in its 'long' version) is neither an instance of A-movement, nor an instance of A'-movement, thus leading us to our base-generation account. This brings up the question of how to capture the thematic relationship between the surface (and base-generated) subject of the construction and the infinitival verb, which is not local to it, but which assigns a thematic role to it.

The solution for this problem that we proposed was a mechanism of Complex Category Formation (CCF), whereby for German, the complex category in question consists of I and V, with I as the head of the derived entity. This complex category projects jointly into a complex phrasal category. All the licensing properties (including Case) of V are kept intact in the projection(s) of V, within these complex projections. Again, for German, V and I are jointly visible at the mother node.

With respect to "long passive", our work treated the class of Control verbs that allow the long passive construction as Raising verbs that can trigger CCF. The subject which is thematically related to the infinitival verb is base-generated in the matrix in this construction, just as the corresponding scrambled constituents in general. With respect to the long passive in (2) and (3), we wrote, in Bayer & Kornfilt (1994):

"The verbal projection (of *fahren*) within the embedded clause will be non-maximal, since on of its arguments (i.e. *der Wagen*), is missing from that clause. The matrix verb *vergessen* can govern the embedded verb; consequently, the embedded verb *fahren* can pass on its features to the VP-node dominated by *vergessen*." (Bayer & Kornfilt, 1994: 46-47)

And, now turning to the difference mentioned earlier between the German long passive and its Turkish counterpart, namely that in the German construction, there is only a single passive morphology:

"Since the two verbs are co-present at one syntactic node, they can be jointly affected by passive morphology, which explains why that morphology is found on the matrix verb only. The matrix-I, also co-present in the node where the projection of the embedded V is completed, causes the nominative marking of the 'scrambled' NP." (Bayer & Kornfilt, 1994: 47)

The contrasting (yet similar) Turkish long infinitival passive, with its double passive morphology, must thus be analyzed differently, so as to account for this contrast, while also explaining the long-distance nature of the "passive". Taking Bayer & Kornfilt (1994) and the

German long passive as a point of departure, I claimed in Kornfilt (1996) (and against the approach taken in that GLOW presentation that brought Josef and me together) that the Turkish Double Infinitival Passive was the result of two short instances of DP-movement (or, in the parlance of those days, of NP-movement), rather than of one "long" (yet local) movement in a "restructured" complex construction. Crucially, this phenomenon is not a sub-case of what would correspond to scrambling, but is indeed a Case-driven movement, applied locally, but twice, thus explaining the double passive morphology. Tied to this are also arguments showing that the infinitival verb and the matrix control verb do not form an indivisible verbal complex, and are able to be separated (in contrast to other instances in Turkish of tight verbal complexes). This, then, explains both the common properties between the German and the Turkish constructions ("long" passive, with the infinitival verb's direct complement showing up as the matrix subject), while also shedding light on the differences, both with respect to observation and with respect to derivation.

It would have been very difficult for me to have reached these conclusions about Turkish, if I hadn't had the prior joint work with Josef to consult and to compare to.

Needless to say, while being engaged in this collaborative work, we became personal friends, sharing other interests—within linguistics (the syntax of German and Germanic, the interface between "narrow" syntax and information structure) and music (we both play the piano), sharing what was old and familiar to one of us (Wagner in the case of Josef, Brahms in my case) but rather new, and perhaps a bit strange and incomprehensible to the other; while I learned to appreciate at least some of Wagner, I am very happy to say that some of the works of Brahms I was able to share with Josef did kindle a good deal of appreciation on his part.

With all his various interests (neurolinguistics, processing, syntactic theory, theoretically informed typology, music, as well as good food and even cooking), Josef will probably be even busier after his 65th birthday than he has been until now.

Josef—Happy Birthday, and congratulations on a wonderful career, and on having been a fantastic role model not only for your students, but also for us, your friends and colleagues!

Jaklin

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### Designed to be free\*

Masayuki Oishi

### 1 Introduction

Biolinguistics takes the natural place of human language (or to put it more specifically, a generative procedure) as being within an individual human being, in fact a part of nature. Hence language may well be expected to be organized and governed in accordance with the natural principles or laws of nature. Along the line of the Galilean interpretation and characterization of nature, linguistics has taken a similar view of its target of inquiry.

The Galilean view of the natural world entertains the idea that nature is simple and optimal, and in fact perfect, and hence it is expressible by mathematics, in effect by an intensional model, even though the model does not cover all the phenomena: multum non multa. (For certain intuitive ideas behind the shift of interest and inquiry, see some 'dialogues' by Salviatus and Sagredus on the 1st day, Sagredus on the 3rd Day, Salviatus on the 2nd and 3rd Days, among many.) A natural phenomenon is then attributed to the interactions, or conspiracies, of mathematically defined properties. In this sense the mathematical explanation, eliminating internal, arbitrary as well, stipulations, tries to show that the properties of a natural object (or explanandum), e.g. its form and mechanisms, do satisfy the 'conditions' imposed externally by nature itself on them, in accord with the natural principles, much like argued and shown insightfully in Thompson (1942). Being designed to be in conformity with the natural principles entails that the object meets those external conditions in a 'principled', simple, optimal and perfect way.

To make a claim about language is to put forward it about nature. If we keep to the biolinguistic inquiry, assuming human language is a natural object with a principled design, we are well justified in regarding the language as being studied from the Galilean, or normal, view of science, as the methodological naturalism argues. The Strong Minimalist Thesis (SMT) claims that language is perfect in satisfying the external conditions externally imposed on it, and it is an attempt to show that such natural principles are actually at work in every aspect of its design and functioning, exploring the extent to which the thesis holds. In this regard, human language is supposed to be an 'optimal' system and to provide the 'optimal' solution to the conditions imposed both as a natural object and as a generative system embedded in

<sup>\*</sup> Some portions of what follows were presented at my talk at Keio University, April 29, 2015. On the general, particular as well, topics and issues discussed here, I have benefited fruitful discussions with Josef Bayer, Noam Chomsky, Nobu Goto, Hisatsugu Kitahara, Takashi Toyoshima and Shigeo Tonoike on various occasions, all of whom I thank. The present essay, though short, is dedicated to Seppi in homage to his long support and friendship, recalling, among others, how we spent the historically hottest days in having chats about linguistics and some other things.

relevant performance systems. As a natural object, human language must employ minimal, or simple, and hence quick, computation mechanisms (e.g. free Merge) on the one hand, and the syntactic object that the system generates must be interpretable at least at two performance systems (e.g., availability of relevant labels) on the other. Imposing on the generative system any further conditions other than these, such as a condition on applicability, input, or output of a generative procedure Free Merge, would be an easier way in some cases, as argued in Larson (2015) and Goto (2015) for example, but it is no more than an arbitrary stipulation, and it would make up another different game if we assume an easy stipulation while keeping to SMT. The so-called minimalism is an attempt to answer SMT, not to complex the system by adding arbitrary stipulations, at the current stage of inquiry.

Free Merge is designed to have two eventual functions. One is structure building (External Merge), whereas the other is "displacement" (Internal Merge). The generative mechanism takes on the flavor of absolute simplicity and when it fails to define some structure, a reasonable venue to pursue is an attempt to reanalyze, or look at, the structure, in terms of the general operation, but not to employ unprincipled subsidiary conditions which are often introduced and induced just for descriptive adequacy: Tinkering method, or "modification" of free Merge as often alleged, is not what we want.

A tinkering, or alleged "explanation" with recourse to such extraneous, and hence unprincipled, mechanisms falls outside of the minimalism or ordinary science of language, a step forward to a mere description as well as a departure from a real explanation of nature. As a case against such alleged conditional addition to the Galilean simple interpretation of a single linguistic operation, I would like to take a brief look at the nature of the simplest Merge as proposed in Chomsky's POP(+) system (Chomsky, 2014; Chomsky, 2015), putting the focus on its N-ary.

### 2 No Condition on Free Merge

The POP(+) system proposes that Merge is all free:

- (1) Merge:
  - a. (Set-)Merge, forming  $\{X,Y\}$ , where X=X,XP, and Y=Y,YP.
  - b. (Pair-)Merge, forming  $\langle X, Y \rangle$ .

Merge takes two (discrete) syntactic objects X, Y, forming a single two-membered set  $\{X, Y\}$ , (1a), externally (External Merge) or internally (Internal Merge), where X, Y can be a simplex or a complex. Merge also generates the so-called adjunction structures (1b).

The system has opened a principled way to introduce many interesting (re-)analyses to familiar cases. Take for example an NP modified with a genitivized NP (John's book). Under the standard X-bar theory it has a shape where the genitivized NP is dominated by an entire NP or a maximal projection of head N and it is a sister to an intermediate projection of the head:  $[N^{max}] = [N^{max}] = [N^{max}$ 

book" above: it is an intermediate projection. Then this particular element PRO cannot be the same projection as the pronominal anaphor in control constructions, which is surely a weird situation. The intuition will be readily reconciled with if we follow the notion of free Merge, as suggested in Oishi (2015b) and Oishi (2015a). In fact we can now reanalyze the absolute genitive NP as falling under case (1b) above if it involves pair-Merge: Free Merge (John's, PRO) =  $\langle$ John's, PRO $\rangle$ , where PRO in the SO is now all the same as the one in control constructions. Since it is a case of the so-called adjunction structure, the label of this SO will be either that of genitivized NP or PRO, but PRO is chosen as a label (at a stage where the label of the SO is necessary) for selectional reason.

The output of Merge is always a singleton with two members:  $\{X,Y\} = |SO|$ . In the case of External Merge, such a derived singleton is seen in the condition on the left element (the one to be rewritten) of a classical device of PSRs. The very nature of the output of Merge, whether Internal or External, can be a realization of what Merge effects in syntactic derivation, namely it may be regarded as a manifestation of minimizing syntactic derivations generally, which must be at work for 'quick computation'.

It should be noted that Internal Merge does not take a single SO as its input, in the same way as External Merge takes care of two SOs in an obvious fashion. In this respect, one might stipulate that Merge, whether internal or external, must always be binary. This move, however, is not a desirable stipulation because the situation in question is a general case where Merge just cannot do anything when it has a singleton as its input and the derivation terminates at the stage. (Even a self-adjunction cannot be singulary.) If (External) Merge takes a single SO as its input, the derivation terminates at the very point, and the rest is silence; or the derivation has reached a root. Then Merge with a single SO as its input is not a matter of a terminological oxymoron.

One might suggest that a logically possible ternary structure would be the so-called across-the-board (ATB) cases,  $[X \dots Y \dots Z]$ , where X is the moved element, and Y, Z are its traces. Notice here that the derived ATB structure, unless it is generated multi-dimensionally, should be of the form  $\{X, \{\dots, \{\dots Y, \{\dots, Z\}\}\}\}$ , which represents a binary structure which falls under case (1a). As far as an operation involves two 'positions' (one locus Y and the other target X), which in fact are now understood as two 'SOs', the operation is binary even if a relevant structure looks like involving ternary SOs: N-ary is just a combination of binary relations. (This might imply that there would be no such thing as Form Chain, or Inside-Operations, in principle.)

If External Merge is designed to be free to process multiple (i.e. more than three) SOs as its inputs, such a version of Merge has the larger strong generative capacity ( $C_S$ ), with multiple/flat branching structures included, meaning that a language displays a hierarchical structure in one domain and a flat, non-hierarchical, structure in the other. Notice that their weak generative capacities ( $C_W$ ) are all the same (cf. Oishi, 1990).

### (2) Weak/Strong Generative Capacities:

- a.  $C_{S(Free\ Merge)} < C_{S(Conditioned\ Merge)}$
- b.  $C_{W(Free Merge)} = C_{W(Conditioned Merge)}$

Indeed, whether this case exists or not is an empirical question, but it must be noted that if External Merge takes more than three SOs as its inputs and generates flat structures, along with hierarchical ones, it certainly puts a heavier burden on language acquisition. Note that this is a question of how the generative system is organized as a whole, since 'flat' structures are in fact generated by 'first' Merge. And interesting is that such flat structures are later modified and incorporated into a hierarchical structure somehow through derivation actually. So an optimal strategy is to go with a version of free Merge, a null hypothesis, unless otherwise supported, continuing to assume that our language is simple and minimal.

In this context we may note two cases with an apparent multiple branching, flat, structure. One is a double object construction, or three-place predicate construction generally. If a double object construction is surely analyzed as a multi-layered (hence hierarchical) shell structure with a single object for each layer, External Merge is eventually binary here too. This implies that the dative construction in German, as seen in Bayer et al. (2001) and Bayer (2008), must be different phenomena even though it is referred to as such with the same terminology. Another suspicious, or more interesting, case would relate to a structural coordination with two conjuncts, of the form, "X & Y", as discussed in Chomsky (2014) and Chomsky (2015). Such structures have been reanalyzed as originating from a set with two conjuncts that is initially flat. The structure is then converted into a hierarchical structure: External Merge of the initial two-membered set and a coordinate conjunction feeds Internal Merge of one conjunct for labeling. This line might be extended to a coordination with three conjuncts, with no extraneous condition on the number of the SOs that Merge can take care of. Suppose that External Merge happens to take three SOs as its inputs. As a first Merge, the operation defines a single set with those ternary SOs, which is inevitably flat, but this set undergoes successive application of Merge for labeling, resulting in two-membered sets. Even in this case Merge is likely to be free again.

### **3 Summary**

To recapitulate what we have seen here, we may suppose that for any applications of Merge, the number N of its inputs and output need not be stipulated, which may be two surprising properties in a sense. In the case of output, it may be that the property relates to a kind of minimal, and quick, computation. We leave open the exact characterization of the nature of the concept quick computation, just mentioning that the concept may be more provably a part of the 3rd factor principles and less provably a part of UG. As for its inputs, it just follows from free Merge, and other aspects of syntax. If this is a tenable reasoning, language need not refer to the value of N-ary, whether on its input or output, in fact it should not, naturally. Such a reference is superfluous, a departure from perfection, like gilding the lily. These speculations will suggest that Merge is designed to be free.

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### Superfluous z in Swiss German

MARTIN SALZMANN

### 1 Introduction: zu marks the right edge

In an important contribution to the syntax of German *zu*-infinitives, Bayer et al. (2005) have pointed out the importance of marking the right edge of infinitival constructions by means of the particle *zu*. When occurring in intraposed position, the function of the particle is to enable status checking with the matrix verb, which is assumed to require adjacency at PF. Evidence for this comes from the observation that once an extraposed constituent intervenes, the result is ungrammatical:

(1) Ich habe mich {ok dafür} zu entscheiden {\*dafür} versucht. I have me it.for to decide.INF it.for tried 'I tried to decide on it.'

Further evidence for the importance of marking the right edge can be found in a construction involving so-called displaced zu: As a generalization, the particle zu always attaches to the last verbal element of the verb cluster. If the order in the verb cluster is descending, we find zu in the expected place, namely marking the verb that is immediately dependent on the zu-selector (the matrix verb in this case):

(2) Standard German, 3-2-1 Er dachte, das Buch [lesen<sub>3</sub> können<sub>2</sub> zu müssen<sub>1</sub>]. he thought the book read.inf can.inf to must.inf 'He thought he had to be able to read the book.'

Crucially, however, if the order in the cluster is ascending or at least partially ascending such as 1-3-2, as is the norm with Standard German Aux-Mod-Inf clusters, *zu* appears displaced as it occurs before the final verb of the cluster even though this verb is not immediately dependent on the *zu*-selector (in this case the complementizer/preposition *ohne* 'without'):<sup>1</sup>

In what follows, I assume that displacement is a grammatical phenomenon, contra Merkes (1895), Bech (1963), Haider (2011). For arguments that it is grammatical, see e.g. Meurers (2000) and Vogel (2009). Things are particularly clear in varieties such as Swiss German (and others) where verb clusters are usually ascending; displacement is the default in these varieties, and numerous examples can be found both in traditional descriptions as well as in the theoretical literature, cf. Hodler (1969: 560), Weber (1987: 560), Weise (1900: 154), Comrie & Frauenfelder (1992), T. Bader (1995: 22), Cooper (1995: 188f.).

(3) STANDARD GERMAN, 1-3-2
?ohne es mich [haben<sub>1</sub> prüfen<sub>3</sub> zu lassen<sub>2</sub>]
without it me have.inf verify.inf to let.inf
'without having let me verify it'

Interestingly, the version with zu being placed before V1, viz., the hierarchically highest verb of the cluster and thus the element immediately dependent on the zu-selector, is strongly ungrammatical:

(4) Standard German, 1-3-2, V1=non-finite

\*ohne es mich [zu haben<sub>1</sub> prüfen<sub>3</sub> lassen<sub>2</sub>]

without it me to have.inf verify.inf let.inf

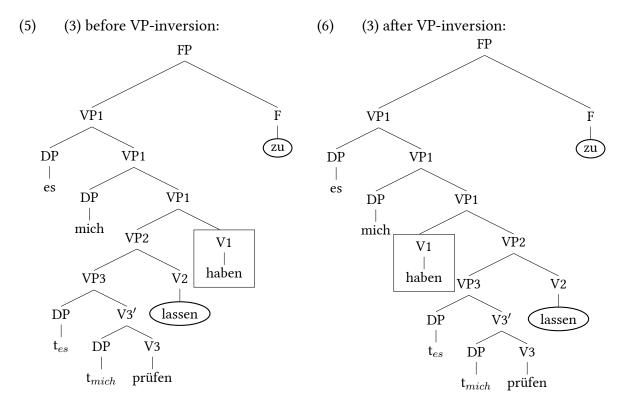
'without having let me verify it'

Bayer et al. (2005) interpret this as an indication of the strength of the requirement to mark the right edge of the infinitive construction with the relevant status feature. While, as detailed below, my assumptions about displaced zu differ in a number of respects from the authors, we will encounter further evidence for the importance of marking the right edge of infinitival XPs.

### 2 Deriving displaced zu

In previous work, Salzmann (2013a), Salzmann (2013b), I have derived displaced zu as follows: The basic idea is that z(u) is an independent syntactic element that is associated with its host post-syntactically by means of Local Dislocation, an operation that applies to linear structure and is constrained by adjacency (cf. Embick & Noyer, 2001). z(u) is inserted into a clause-final head and therefore always comes last in the verb cluster. In case there is reordering in the verb cluster, i.e., if we find (partially) ascending clusters, we get the effect of displacement. My assumptions about verb clusters are the following: First, all verbal elements are labeled as V (even though some may be functional). Second, complements of restructuring predicates are VPs while those of non-restructuring predicates are CPs. In other words, the size of the complement determines its transparency, see e.g. Wurmbrand (2007). Third, zu occupies a functional head F above VP, see also Den Dikken & Hoekstra (1997: 1062). Fourth, the default linearization is left-branching, which leads to descending verb clusters and a clausefinal functional head F. Fifth, ascending cluster orders are derived by means of PF-operations, viz., VP-inversion as in Haegeman & van Riemsdijk (1986) and reordering cluster formation as in Salzmann (2013a) and Salzmann (2013b).<sup>2</sup> The derivation of (3) is illustrated by the following tree diagrams:

<sup>2</sup> Importantly, the same results can be obtained if the default linearization is right-branching and left-branching/descending structures are derived by PF-operations as long as the functional head F is clause-final (for a comparison, see Salzmann 2013b, for general arguments in favor of a right-branching base, see Salzmann 2013a).



(5) illustrates the configuration after the default linearization. At this point, we are still dealing with a hierarchical structure. Standard German (like many other German varieties) has the (limited) option of ascending orders, which in this case are derived by means of VP-inversion. Concretely, V1 inverts with its sister VP2, leading to (6). In a next step, after vocabulary insertion, this structure is converted into a linear string. This leads to the order V1-V3-V2-zu. Now the properties of zu come into play: Since it is a prefix, it requires a host. As is standardly assumed for such late PF-operations, zu affixes onto and inverts with the adjacent verbal element, i.e. undergoes Local Dislocation. This is illustrated in (7) (note that the brackets are only used for purposes of illustration, no hierarchical structure is present at that point):

(7) 
$$[_{FP} [_{VP1} V1 [_{VP2} [_{VP3} V3] V2]] zu] \Rightarrow [_{FP} [_{VP1} V1 [_{VP2} [_{VP3} V3] zu+V2]] ]$$

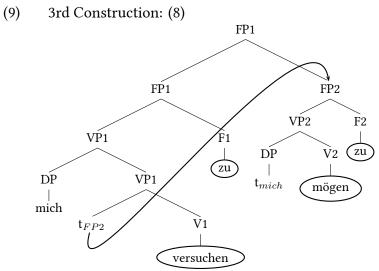
This implies that displacement is just a side-effect of cluster-reordering. It results when head-finality meets a head-initial verb cluster. There is thus no displacement as such, *zu*-placement simply always targets the last verbal element of the cluster because it is inserted into a clause-final head F.

### 3 Adjunction vs. complementation

Importantly, displacement is only found in verb clusters and Verb Projection Raising (VPR), but crucially not in the 3rd Construction: As the following example shows, zu ends up on V1 (there is a second zu on V2 because V1 selects a zu-infinitive as well).

(8) ohne mich [VP1] \*(zu) versuchen $_1$  [VP2] t $_{mich}$  zu mögen $_2$ ]] without me to try.INF to like.INF 'without trying to like me'

Crucially, this pattern can be derived if the non-finite clause is not a complement of the matrix verb at surface structure. A way of achieving this is extraposition (as in the traditional remnant extraposition analysis of the 3rd Construction, but the same result can also be obtained by means of leftward movement of the non-finite clause followed by leftward remnant movement):<sup>3</sup>



After linearization, *zu*-placement then derives the correct result:

(10) without 
$$[_{\text{FP1}} [_{\text{FP1}} [_{\text{VP1}} \text{ me } [_{\text{VP1}} t_{FP2} \mathbf{z} \mathbf{u}_1 + \text{try}_1]]] [_{\text{FP2}} [_{\text{VP2}} \mathbf{z} \mathbf{u}_2 + \text{like}_2]]]$$

This shows that displacement diagnoses a fundamental structural property, viz., complementation, while the absence of displacement is a signature of adjunction/non-complementation:

 $\begin{array}{l} displacement \rightarrow complementation \\ non-displacement \rightarrow adjunction/non-complementation \end{array}$ 

### 4 Superfluous z in Swiss German

We are now ready to turn to a phenomenon that strikingly shows the relevance of marking infinitival clauses with zu. It surfaced during a study on zu-placement in clusters displaying a 2-1-3 order. Unlike the other five logically possible orders (1-2-3, 1-3-2, 3-1-2, 3-2-1, 2-3-1), this order is unattested with most types of verb clusters (such as Aux-Mod-Inf, Mod-Mod-Inf or Mod-Aux-Part) and has often been argued not to exist (cf. Seiler, 2004; Wurmbrand, 2004;

<sup>3</sup> As shown in Salzmann (2013b), deriving the 3rd Construction by means of PF-inversion fails as both *zus* would end up on V2.

Barbiers, 2005; Abels, 2011). Crucially, however, it is completely unmarked in certain Swiss German clusters involving perception verbs, benefactives, and inchoatives as V2 taking a bare infinitive as V3 (cf. also Lötscher, 1978: 3, 9):

#### (11) Swiss German

 $\label{eq:wennmemol} \begin{tabular}{ll} wenn me mol agfange_2 het_1 richtig rauche_3 & ... \\ when one once started has really smoke.INF \\ \begin{tabular}{ll} 'once one has started to smoke regularly ...' & www.festzeit.ch/viewpic.php?id=2407951&showall=true \\ \end{tabular}$ 

Before concluding that 2-1-3 clusters exist after all, an alternative explanation needs to be considered: The 2-1-3 order is just as unmarked in the 3rd Construction (which is similar in other respects: V2 is a participle and more or less lexical; furthermore, there can be non-verbal material between V1 and V3):

### (12) STANDARD GERMAN, 3rd Construction

dass er dem Hans versucht $_2$  hat $_1$  t $_{dem\ Hans}$  die Uhr zu stehlen $_3$  that he the.dat John tried has the watch to steal.inf 'that he tried to steal John's watch'

Crucially, displaced *zu* can now be used as a diagnostic to determine whether the two constructions are structurally similar or not. If the Swiss German 2-1-3 clusters are proper verb clusters, they should show displacement; if, instead, they are an instance of the 3rd Construction, we should find no displacement. The result is clear: while there is no displacement in (12), the Swiss German 2-1-3 clusters show displacement:

### (13) a. Standard German

ohne dem Hans versucht<sub>2</sub> \*(zu) haben<sub>1</sub>, die Uhr zu stehlen<sub>3</sub> without the.dat John tried to have.inf the watch to steal.inf 'without having tried to steal John's watch'

#### b. Swiss German

 $\mbox{... zum glücklich drüber sii, niä agfange}_2 \mbox{ ha}_1 \mbox{ z rauche}_3! \\ \mbox{to happy about.it be.Inf never begin.prt have.Inf to smoke.Inf} \mbox{'to be happy to have never started smoking'}_{\mbox{https://www.facebook.com/Radio24/posts/10151574652070814)} \mbox{}$ 

This implies that the 2-1-3 clusters bear the hallmarks of complementation and thus behave like regular verb clusters. As a consequence, theories of verb clusters must be more powerful than claimed in some of the previous literature, i.e., they must be able to generate all six logically possible orders, like e.g. the mechanisms proposed in M. Bader & Schmid (2009) or Salzmann (2013b).

Interestingly, while the version without displacement is unacceptable for all speakers, cf. (14a), some speakers accept a version where there are two zus even though only one zu is selected (by the preposition ohni), cf. (14b):

### (14) Swiss German

a. ?\*ohni en ghört<sub>2</sub> z ha<sub>1</sub> singe<sub>3</sub>

adjunction

b. ?ohni en ghört<sub>2</sub> z ha<sub>1</sub> z singe<sub>3</sub> without him heard to have.INF to sing.INF 'without having heard him sing'

The positioning of z seems contradictory at first sight: Given that there is a z before V1, one seems to be dealing with non-complementation/adjunction of VP3; on the other hand, given that there is a z before the last verb of the cluster, there seems to be displacement and thus complementation of VP3. Since these are incompatible structure assignments, this cannot be correct. I would instead like to propose that we are dealing with adjunction/extraposition of VP3 (which given (13b) thus seems to be optional). This motivates z on V1. The second z can then be understood as a last resort device to rescue an adjoined/extraposed bare infinitive. To derive the pattern, I will make the following assumptions: Extraposition as such is in principle optional; it is not triggered by a designated feature but rather by an optional generic edge-feature, cf. Assmann & Heck (2013). Whether the output of extraposition is grammatical or not is governed by surface constraints. Descriptively, extraposition is barred with bare infinitives and obligatory with zu-infinitives and finite CP-complements. Note that I thus follow Bayer et al. (2005) in assuming that what look like intraposed zu-infinitives/finite CPs are actually displaced/scrambled XPs which thus occupy a derived position. Accounting for this generalization is non-trivial. I would like to propose that this pattern is a reflex of the Williams Cycle (Williams, 1974) when applied to selection. The Williams Cycle in its original formulation refers to movement operations: once a movement operation has targeted a high position, the displaced constituent cannot move on and land in a position that is lower on the functional sequence. This bars e.g. long scrambling, viz. movement to SpecvP via SpecCP. I would like to argue that the German extraposition pattern can be understood along similar lines if the Williams Cycle is adapted to phrase structure composition (at least in the verbal domain) and applies at surface structure: it prevents a verb from selecting a complement that is higher on the functional sequence. Complements involving an FP or CP layer are thus not licensed as surface complements of V. By extraposing those to a higher functional position, e.g. vP or CP, the clash in the functional hierarchy can be avoided. Bare infinitives, however, are licensed in their base position because they are of the same type as their selector (viz. V, I am assuming that the complement does not contain any functional projections above V). They are not licensed, however, in adjoined position because there, a clash in the functional sequence obtains as well: They would be structurally higher than an element higher on the functional sequence, thereby leading to a clash.  $^4$  Crucially, superfluous z in Swiss German can now be considered a repair strategy: by adding a functional layer, the extraposed constituent is of the same type as its host, thereby avoiding a clash on the functional sequence.<sup>5</sup>

<sup>4</sup> The constraint is to be interpreted as requiring that the extension of the tree by means of adjuncts must involve categories at least as high on the functional sequence as the host. It remains to be determined how fine-grained the constraint actually is. Perhaps, CPs have to be extraposed to CP while it is sufficient to extrapose FPs to vP; perhaps it is sufficient to extrapose both to vP; this would imply that there is just a broad functional/lexical dichotomy at work. I leave this for future research. Another question I will have nothing to say about is why the constraint should only be operative in languages like German but not in other languages.

<sup>5</sup> Clearly, this repair operation is very limited; one normally does not find an extra *zu* with bare infinitival complements, e.g. after modals: \*weil er wollte [ein Buch zu lesen] 'because he wanted to read a book'

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Perhaps, the repair operation in Swiss German is parasitic on the z that is already present in the structure. I will leave this for future research.

#### Martin Salzmann

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# "I'm not sure what kind of a ban that FIFA has in mind" and other uncertainties of modern life\*

Manuela Schönenberger

### 1 Introduction

Several decades ago, Chomsky & Lasnik (1977) stipulated the doubly-filled COMP filter according to which the co-occurrence of a wh-constituent and a complementizer is banned. In those days, COMP was a single position that could either contain a wh-constituent or a complementizer, but not both. Nowadays two positions, SpecCP (hosting maximal projections) and C (hosting heads), correspond to what was once referred to as COMP. There is thus no a priori reason why a wh-constituent in SpecCP could not co-occur with a complementizer in C, since these two elements do not compete for the same position. Indeed, many languages exist that violate the doubly-filled COMP filter. In some, doubly-filled COMPs (DFCs) are obligatory, e.g. West Flemish (see Haegeman, 1992) and in others, DFCs are optional, at least to a certain extent, e.g. Bavarian and Alemannic (see Bayer & Brandner, 2008a; Bayer & Brandner, 2008b; Penner & Bader, 1995 for Bernese Swiss German; Schönenberger, 2010 for St. Galler German/Lucernese) and Belfast English (Henry, 1995). In yet others, they seem to be banned, e.g. German and English, but this may be due to normative pressure, since earlier stages of these languages allowed them (see e.g. Zwicky, 2002: for DFCs in present-day English).

The argument made in this paper is that prosody is the driving force behind the phenomenon of DFCs. The focus is on DFCs in Alemannic, but some data from English that seem relevant to the discussion will also be reported. The paper is organized as follows: Section 2 reviews Bayer & Brandner's experimental data and introduces their structural account. Section 3 summarizes my own work on naturalistic data from another Alemannic dialect that is spoken in eastern Switzerland and outlines a prosodic account. Section 4 discusses some data from present-day English, which seem to imply that prosody might play a role, as well as the length/complexity of the wh-constituent. Section 5 presents new data from the eastern Swiss-German dialect, which further support the argument that DFCs might be governed by prosody, despite challenging my earlier assumptions.

<sup>\*</sup> This English example with a doubly-filled COMP (DFC) is attributed to Bert Millichip (BBC Radio 4) by Radford (1988: 500) and is cited in Zwicky (2002: 221). FIFA, the international governing body of association football (soccer), is based in Switzerland, as are speakers of Swiss German who cheerfully use DFCs, unconstrained by FIFA bans and normative pressure from outside influences

### 2 A structural account of DFCs in experimental data from Alemannic and Bayarian

Bayer & Brandner (2008a) and Bayer & Brandner (2008b) studied the distribution of DFCs in Lake Constance Alemannic and Middle Bavarian based on judgement data. The participants of the study were asked to rate sentences that were read to them, on a scale from 1 ("I would use such a sentence in my dialect") to 6 ("I would never use such a sentence in my dialect"). The sentences varied with respect to the type of wh-constituent and to whether they contained dass. In general, the informants rejected DFCs with short wh-constituents ("wh-word I": wer 'who', wen 'who.ACC', was 'what', wie 'how' and wo 'where'), but accepted DFCs with long wh-constituents ("wh-phrase": wh-DP and wh-PP). Shortish wh-constituents termed "wh-word II" (warum 'why', wieviel 'how much' and wem 'who.DAT') were also often accepted with dass. Bayer & Brandner (2008a: 93) note that "short wh-words" can co-occur with dass if they are contrastively focussed, because these focussed wh-words then have "a richer syntactic structure". One of the problems they note is that all of the informants, who are native speakers of the relevant dialect, are also native speakers of German, in which DFCs are banned. It is thus not clear to what extent, if any, German influenced the informants' judgement of DFCs in the dialect.

Bayer & Brandner develop a structural account for the distribution of DFCs. The following assumptions are central to their analysis: short wh-items have a hybrid status; short wh-items contain a 'latent C-feature'; clauses need to be typed. Short wh-items have an ambivalent syntactic status as they are wh-operators and complementizers at the same time. Because they compete for the same syntactic position as complementizers they generally do not co-occur with dass. Wh-items like warum 'why', wieviel 'how much' and wem 'who.DAT', which is monosyllabic but bears a case-feature, are taken to involve phrasal structure just like full wh-phrases. And just like full wh-phrases they can co-occur with dass. Generally, clauses need to be typed as <interrogative>, <declarative> etc. In the case of wh-clauses, the wh-phrase merges with TP at some point in the derivation in order to endow it with an interrogative feature. A short wh-item can activate a latent C-feature in an embedded context, thus blocking the insertion of dass for economy reasons. Since this C-feature is latent, a short wh-item does not need to discharge it. This is crucial, or else verb movement would be blocked in root contexts. Some of the technical details still need to be worked out, but the core idea that short wh-items are complementizer-like is appealing. Moreover, the authors adduce evidence in favour of the head-status of these short wh-items in Alemannic and Bavarian, and they point out that in some languages short wh-items have been grammaticalized as complementizers.

### 3 A prosodic explanation of DFCs in spontaneous production data from Alemannic

In Schönenberger (2010) – my work – spontaneous production data from an eastern Swiss-German dialect that is spoken in Wil and is referred to as St. Galler German are presented. The occurrence of a DFC is seen as dependent on whether the wh-constituent consists of two

or more syllables. The data clearly support the hypothesis that DFCs are used with polysyllabic wh-constituents only and that they are obligatory. However, the data come from a small number of speakers (n=3), who produce many examples with monosyllabic wh-constituents (1/116 with a DFC) but relatively few with polysyllabic wh-constituents (27/27 with DFC). Data from another dialect (Lucernese) are also discussed. These were obtained in a longitudinal acquisition study that also examined child-directed speech. The data from two of the three Lucernese speakers who interacted with the child look just like those from the speakers of St. Galler German, but they produced few examples. There is much more data from the third speaker-the child's mother-but these look quite different. While the vast majority of her examples with monosyllabic wh-constituents do not contain a DFC (396/397), many of her examples with polysyllabic wh-constituents do not contain a DFC either (46/108). The following is advanced as a possible explanation: "It is [...] noticeable that she often speaks particularly clearly when addressing the child, which might subtly distort the data. If prosody is indeed relevant to the occurrence of DFCs then clear speech might influence the overall prosodic structure" (Schönenberger, 2010: 48). This is an idea I wish to expand on in Section 5. My primary assumption then was that in Swiss German "the organization of linguistic material into prosodic units of trochaic feet" is preferred (Schönenberger, 2010: 47). Note that the combination of dass + weak pronoun results in a trochaic foot, as does the combination of (an unstressed) monosyllabic wh-constituent + a weak pronoun. The following generalizations were derived:

- (1) a. If the wh-phrase and the following constituent form a prosodic unit–a trochaic foot–DFCs are excluded.
  - b. If the constituent following the wh-phrase is a clitic, which cannot be integrated into the prosodic structure of the wh-phrase, a complementizer must be inserted. The clitic and *dass* form a trochaic foot.
  - c. In all other contexts, DFCs may be optional in Lucernese, while in St. Galler German they are obligatory with all non-monosyllabic wh-phrases.

If prosody does play a role, then the stimuli used in Bayer & Brandner's acceptability judgement task may present another problem. The participants in their study may not have received the stimuli with exactly the same prosody because the test sentences were read out rather than having been previously recorded and the recording played back. But even if this had been done, how can one avoid biases in the oral presentation of potentially unacceptable stimuli e.g. a long wh-phrase without *dass*? If prosody does play a role then even subtle differences in 'input' prosody may influence an informant's judgement.

### 4 DFCs in present-day English

Zwicky (2002) lists 29 examples with DFCs that were produced by speakers of different varieties of English. Six of the 29 examples are from Radford (1988). In all 29 examples the wh-clause is finite and the wh-constituent consists of more than one word. Some judgement data from speakers who occasionally produce DFCs were also obtained, albeit informally. While a DFC is judged as more or less acceptable in (2a), it is judged as unacceptable in (2b)

and (2c). Note that the wh-constituent in (2c) just like that in (2a) consists of more than one word. Thus the occurrence of a DFC is not only dependent on whether the wh-constituent consists of several words, but also on what Zwicky labels as the *Lexical Head Restriction*: "In the XP [...WH], the WH word is (part of) a modifier of a lexical (not grammatical) word from the category N (or A)" (Zwicky, 2002: 230).<sup>1</sup>

- (2) a. (?) I know from what box that you took it.
  - b. \*I know what that you took it from.
  - c. \*I know *from what that* you took it. (from Zwicky, 2002: 228; diacritics added by MS)

Zwicky refers to work by Seppänen & Trotta (2000), who examined a very large database of mainly British English—the British National Corpus and the Cobuild *Direct* Corpus, totalling approximately 150 million words. They found only 90 examples of DFCs. Unexpectedly, quite a large number of these involved single-word wh-constituents (25 items), as in (3a) and (3b). Seppänen & Trotta observe that this is much rarer than in contexts with multiword wh-constituents: although single-word wh-constituents are generally predominant (an estimated 84%), they account for only 27% of all DFCs. However, the speaker of example (3a) hesitates, indicated by *er*. The speaker may use *that* in *when that* as a substitute for something he has in mind and is still thinking about, e.g. the occasion or the car park. This would then *not* be an example of a DFC.

- (3) a. If I recall er when that er the King Street car park was given to the town ...
  - b. I don't know *why that* you go for a certain colour (from Seppänen & Trotta, 2000: 171)

Beatrice Santorini also collected examples of DFCs, most of which she overheard, and which are listed on her webpage<sup>2</sup>. Only in 4 of her 84 examples with DFCs does the wh-constituent consist of a single word. Santorini comments briefly on each of the four ("no marked intonation on why"; "no marked intonation on how", and "high-low-high intonation on why"; "high-low-high intonation on how"), but does not comment on the examples with multi-word wh-constituents.

What do these data tell us? DFCs are possible in English. They do not occur with high frequency and they appear to be optional for speakers who allow them. Beatrice Santorini's comment on single-word wh-constituents may imply that the production of a DFC in this context is unexpected especially with neutral intonation, while the production of a DFC with multi-word wh-constituents is not dependent on any kind of special intonation. As in the case of Bayer & Brandner's study, it is unclear whether the influence from the standardized language keeps the occurrence of DFCs in check. Moreover, it is unclear what role prosody plays.

<sup>1</sup> A native speaker who has just crossed my path told me that even without *that* "from what" in (2c) sounds much worse than "from what box" in (2a). He would have used "from where".

<sup>2</sup> http://www.ling.upenn.edu/~beatrice/examples/doublyFilledCompExamples.html (last accessed on May 19th 2015)

### 5 More data from St. Galler German that may support a prosodic explanation

In the project "Studying Variation in Syntax: A parsed corpus of Swiss German" (SNF project no. 146450)³ we are collecting data from native speakers of St. Galler German–all speaking the local dialect of Wil–by conducting informal interviews. These interviews are recorded and then transcribed. Our goal is to compile a tagged and parsed corpus of this dialect in order to study language variation and language change. To this end, an interviewer who also speaks the local dialect conducts interviews with informants who can be classified into three age groups (elderly speakers (>70), middle-aged speakers (45–55) and young speakers (20–30)). So far 12 interviews (ca. 18 hours of audio data) have been transcribed and checked for consistency, totalling about 200000 words. These transcripts contained 338 finite wh-clauses that are potentially compatible with a DFC.⁴ The wh-constituents introducing these wh-clauses are classified into monosyllabic, listed in (4a), and polysyllabic, listed in (4b), in the order of decreasing frequency. As expected, monosyllabic wh-constituents occur much more often than polysyllabic ones (257 vs. 81).

- (4) a. Monosyllabic wh-constituents wie 'how' (111×); wa 'what' (90×); wo 'where' (33×); wenn 'when' (14×); wär 'who.nom' (9×)
  - b. Pollysyllabic wh-constituents worum 'why' + wiso 'why' (20×); wie x 'how x' (17×), wivil 'how much' + wi vil X 'how many X' (13×); wohär 'from where' + wohii 'where to' (10×); wa för X 'what kind of X' + weli X 'which X' (10×); P wa 'P what' + P wäm 'P whom' (P = preposition) (11×)

The distribution of DFCs in these wh-clauses is summarized in table 1. As can be seen from the table, the generalizations in Schönenberger (2010) still obtain: if the wh-constituent is monosyllabic no DFC is used, and if the wh-constituent is polysyllabic a DFC is used. However, there are now several counterexamples to both of these generalizations.

In all 11 examples in which a monosyllabic wh-constituent co-occurs with *dass*, the wh-constituent is stressed, marked in small CAPS in the examples in (5). Since *bischt* is also stressed in example (5b), *dass* may have been used to provide an unstressed syllable between two stressed syllables.

(5) a. Es chunt uu druf aa, woo dass i gòò. it comes extremely there on where that I go 'It depends a lot on where I go.'

<sup>3</sup> This project is supported by the Fonds National Suisse (FNS) for a period of three years (2014–2016) by a grant to Eric Haeberli at the University of Geneva.

<sup>4</sup> We asked some of the informants after the interview to translate German sentences into Swiss German. These were presented in written form. Several of the sentences contained wh-complements. Although the informants readily produced DFCs during the interview, they were much more reluctant to do so in this translation task. Still, when they did, they were more likely to produce them with longer wh-constituents than with short ones.

	wh=mono +DFC	wh=mono -DFC	wh≠mono +DFC	wh≠mono -DFC
Age 20-30 (n=1)	5	20	6	0
Age 45–55 (n=10)	6	179	57	5
Age > $70 (n=4)$	0	47	11	2
Total	11 (4.3%)	246	74 (91.4%)	7

Table 1: Distribution of DFCs in wh-clauses with mono- and polysyllabic wh-constituents

b. ...chunt immer druf aa, woo dass bischt ... comes always there on where that are.2sg 'it always depends on where you Are'

Similarly, in 4 of the 7 examples in which a polysyllabic wh-constituent does not occur with a DFC the wh-element is stressed, as in (6a). Two of the remaining three counterexamples were produced by a dialect speaker who has been living in Northern Germany for over 25 years and whose spouse is also from the area. His dialect may have been influenced by German and he may therefore no longer produce DFCs as 'liberally' as he would if he had stayed in the Swiss-German speaking area. In one of his examples without a DFC he used German womit 'with what' instead of the Swiss-German equivalent mit wa. The last counterexample, shown in (6b), has a rather unusual stress pattern. The speaker produced a DFC in the first worum-clause, in which sii 'she' und dää 'this' are stressed, but she did not do so in the second worum-clause, in which haisst 'call' is stressed.

- (6) a. Jawoll Wiilerdialäkt, waiss i ger nöd, *durch* was sich dää achli uszaichnet yes Wil-dialect know I really not through what itself that a-bit distinguishes
  - 'Right. The dialect from Wil, I really don't know what distinguishes it.' ... sòndern eren persöönleche Iidruck vom David, worum dass sii DÄÄ b. her personal David why but impression of that she this schöö findet, worum s HAISST, dass er schöö isch oder so schpeziell. beautiful finds why it says that he beautiful is or "...but her own impression of David, why she considers нім beautiful, why people say he is beautiful or so special'

Example (6b) is particularly intriguing, because it challenges previous assumptions: worum dass is not followed by a clitic, while worum (without dass) is. In the first wh-clause dass may provide an unstressed syllable between worum, in which word stress falls on the second syllable and the stressed pronouns SI and DÄ (cf. example (5b)). In the second wh-clause worum shows the same word-stress pattern, but it may be able to host the clitic s 'it' because unlike other clitics the clitic s is a lightweight (does not amount to a syllable).

I have not presented an analysis because anything I might say about prosody is treading on thin ice. Still, I hope to have shown that prosody plays an important role. Moreover, these new data show that not only does the stress pattern within the wh-constituent have an impact on whether a DFC is produced, but so does the stress pattern in the immediately following material.

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### How many Ps in a pod? A few remarks on the status of P in the pool of syntactic categories

Henk van Riemsdijk

Being one of those P-afficionados who has been trying to stir up the P-soup<sup>1</sup> for more than 42 years now, attempting to gain some insight into the still quite mysterious properties of the category P, interesting publications on P/PP always attract my interest. A particularly welcome contribution was the article 'On the Syntax of Prepositional Phrases' (Bayer & Bader, 2007). I use the present opportunity to make a few remarks about properties of various kinds of P that were partly prompted by this insightful article, the central issue of which is the contradistinction between P as the head of a lexical projection and P as a functional element.

Some properties point in one direction, and some in the other. The question really is whether the two sets of apparently opposing properties can somehow be made compatible. Let us start by listing some of the apparently opposing properties.

### P as a lexical head

- PPs can often appear more or less alone, e.g. as predicates of small clauses or as adjuncts to nouns (with Mary in the hospital, the base camp halfway up on the slope of Mt. Everest).
- P can be a case assigner, more or less like a verb.<sup>2</sup>
- While P is pretty much a closed class item (languages like English or German do have somewhere around 120 lexical items that should be classified as P)<sup>3</sup>, it is nevertheless

<sup>1</sup> My first paper on the topic was written in 1973 and bore the title 'The Dutch P-Soup'. It has remained unpublished as it was a first step on the road that would eventually lead to my dissertation/book (van Riemsdijk, 1978).

<sup>2</sup> There is one important difference. The cases assigned by P are oblique cases, while those assigned by V are (mostly) grammatical cases. In particular, there are reasons to believe that a prepositional accusative has properties that are different from direct object accusatives. There are also reasons to believe that datives in the domain of P are default cases while indirect object datives are not. See van Riemsdijk (2012). For more evidence along these lines, see Bayer & Bader (2007).

<sup>3</sup> I am assuming that adverbs are not a syntactic category but rather a functional one. In other words, Ps, As and Ns can function as adverbs.

fairly easy to create new ones such as pending the outcome of the elections, these problems notwithstanding/notwithstanding these problems, re those remarks you made, we'll have dinner chez my parents, etc.

• P can create a c-command domain preventing the object of P to be a controller of some clausal complement outside that PP:  $I_i$  live with a woman<sub>i</sub> [PRO<sub>i/\*i</sub> to water my plants].

#### P as a functional head

- P is sometimes transparent to selectional relations. This can be seen, for example, in pseudopartitives. By saying *I drank a glass of wine* I mean that I drank wine, not that I drank a glass that happened to contain wine. But by saying (\*)*I drank a glass with wine* I seem to imply that I drank the glass as well as the wine. Hence English *of* in pseudopartitives is transparent to selection and best viewed as a functional head in a nominal projection (see below). Indeed a functional preposition like *of* is generally absent in Dutch, German and many Scandinavian languages.
- In so-called prepositional objects the semantics of the preposition is extremely bleached and the choice of the P is mostly unpredictable, as in English *wait for* vs. Dutch *wachten op* (on).
- P may sometimes be more like an instantiation of case, a free morpheme that expresses something that other languages express by means of (usually oblique) case, as with the locative cases of Finnish. Take *minä menen kauppaan* (I am going (in-)to a shop), where the suffix –(h)an in *kauppaan* expresses what English expresses with the preposition (*in-*)to. See van Riemsdijk & Huijbregts (2008) for discussion.
- In prepositional object constructions, the object may sometimes be a controller of a PRO in a complement clause, as in *I rely on you*<sub>i</sub> [PRO<sub>i</sub> to solve the problem].
- There is sometimes more than one prepositional element inside a single PP. This is unexpected if P can only be a lexical head, as lexical heads are unique in their (extended) projection. A typical example is found in Dutch and German circumpositional constructions. Take German *er springt auf das Dach hinüber* (he jumps across onto the roof). Here the first P (*auf*) determines the endpoint of the movement while the second P (*hinüber*) defines the orientation of the movement: not up, not down, but across. See van Riemsdijk (1990) and van Riemsdijk (2012) for more discussion.

Without necessarily contradicting the approach sketched in Bayer & Bader (2007), I want to use this opportunity to point out that the system I have developed in a number of publications is able to account in a simple and transparent way for the dual nature of the category P. Indeed, it was designed to account for two types of dual behavior of P/PP. On the one hand, there is the fact that P/PP is the most versatile of the four major categories N,V,A, and P. PPs can take a maximal projection of any one of the four as its complement, while the other three are severely restricted in that N cannot take NP complements and V cannot take bare

VP complements while A is often even more restricted. Inversely, PP can be the complement of any of the others. On the other hand, there is the fact that P vacillates between the status of a lexical and a functional head, as stated in the Bayer & Bader article cited earlier and as briefly summarized above. In my earlier publications, I had stressed the first of these dualities and in this brief note I want to expound the second one.

The analysis of the system of categorial heads and projections that I presented in van Riemsdijk (1998) was based on earlier work by Jane Grimshaw (1991, 2005) and myself (van Riemsdijk, 1988; van Riemsdijk, 1990). What we agreed on and took to be central to an account of the categorial system was the idea of Categorial Identity which boils down to the observation that in an extended projection there is one lexical head and potentially several functional heads, and that all these heads have the same categorial signature. In other words, the functional shells around a noun are all headed by nominal elements. Similarly, the functional heads in an extended V-projection are verbal in nature. I had also claimed in my (1990) article on functional prepositions that the same thing was true for the functional shells around a lexical P-head. My other basic tenet was that the plus- and minus-values of the categorial features [±N,±V] are not equally strong. In fact I explicitly assumed a mono-valued, a privative system of categorial features in my (1988) paper to express this asymmetry. Unfortunately, in van Riemsdijk (1998) I used (misguidedly, I now believe) the binary feature system in which I had to stipulate the asymmetry.<sup>4</sup> But in view of the fact that the system as outlined in the (1998) article is the most explicit and detailed, I'll use the main features of that account here.

Starting<sup>5</sup> with Vergnaud's (2008) case filter, which we may for the sake of convenience abbreviate as \*N-NP, and Longobardis (1980) parallel observation that \*V-VP the idea that there is some kind of abstract haplology (indeed, an OCP-effect) underlying the interactions of categories in the categorial system has been haunting the minds of a number of syntacticians. Hoekstra (1984) proposed to generalize the above filters (\*N-NP and \*V-VP) to what he called the Unlike Category Constraint \*XX (where X ranges over N, V, A, and P). But this is both too strong and too weak. It is too strong because PPs can be complements to P which would constitute a violation of \*XX. And it is also too weak because APs cannot be the complements of N or V. I therefore proposed an alternative filter or constraint in van Riemsdijk (1988) which intended to express the asymmetry in the categorial system. I called it the Unlike Feature Constraint (UFC). Translated into the binary feature system that I adopted in the (1998) article, the UFC can be stated as follows.

(1) The Unlike Feature Constraint (UFC):  

$$[+F_i]^{\circ} - [+F_i]^{\max}$$
 where  $F_i = N$  or  $V$ 

The reader can easily ascertain that this formulation will by and large make the right predictions in that it excludes N-NP and V-VP and also the impossibility of both N and V to take AP as their complement while at the same time predicting that P/PP, which has only negatively specified features ([-N,-V]), can occur anywhere and can take any kind of complement.

<sup>4</sup> In van Riemsdijk (to appear) I sketch a research program aiming at developing a system of categorial features that is fully privative and which incorporates the basic insights that I tried to express in the (1998) article.

<sup>5</sup> Both can really be seen as developments of Ross' Double-ing Constraint (Ross, 1972).

A second property of the system that I proposed was that, in contradistinction to Grimshaw's (1991; 2005) ideas, I assume that each extended projection has one lexical head, potentially several functional heads at intermediate projection levels, but only one maximal projection node at the very top.

The third and last property that I will briefly introduce here is what I called No Value Reversal. The relevant part of this principle, the one that concerns the categorial features, is stated as follows.

### (2) No Value Reversal (NVR):

Within a single projection, the following holds:

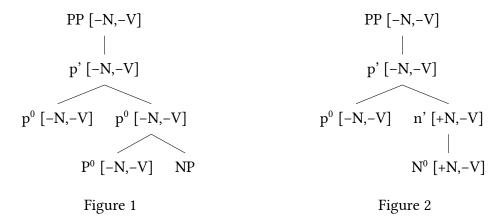
\*[+
$$F_i$$
] where  $F_i$  ranges over N,V  $\mid$   $[-F_i]$ 

This is, in some sense, a weakening of the Categorial Identity Thesis (CIT) in that it does allow categories that are differently specified for the categorial features  $[\pm N, \pm V]$  to build the spine of a maximal extended projection. Notice, however, that this weakening is in reality another effect of the asymmetry of the plus and minus values of the features. What the NVR actually says is that, going from bottom to top in a projection it is possible to 'lose' a plus value for N or V. What this means in effect is that an N-projection [+N, -V] may have an [-N, -V] outer functional shell. Similarly, a V-projection may also have a [-N, -V] outer functional shell. This is precisely what we should want. First, as noted above, prepositional objects act as if they were single extended projections in that it is the lexical head N that is selected by V, unhindered by the presence of a (functional) P. Similarly, following Emonds' (1985) insight that CPs are really PPs, the extended projection of a lexical V may be topped off at the outermost shell(s) as a PP.

In short, there are, under this type of system, two main types of PPs.<sup>6</sup> The first type is a maximal P-projection of a lexical P, as in figure 1, and the second type is a maximal P projection of a lexical N-head, as in figure 2.<sup>7</sup>

I use the notation I adopted in my (1990) article, inspired by the introduction of vP. In other words,  $n^{\circ}$  and  $p^{\circ}$  are functional heads of the types [+N,-V] and [-N,-V] respectively. Similarly n' and p' are intermediate projections.

There is, of course a third major PP-type, viz. a maximal P-projection of a lexical V-head, but this type has remained outside of our considerations in this short note.



Prepositional objects typically have the structure in figure 2 while independent PPs are represented as in figure 1. We can now run through the lists of properties of the two types to see how they are accounted for.

#### P as a lexical head

- A standalone PP generally has a meaning determined by the semantic features of its head. Despite the more or less closed class character of Ps, this makes it plausible to say that they are listed in the lexicon in much the same way as nouns and verbs.
- In figure 1 it is immediately clear that a lexical P can assign case.
- In a structure like the one given in figure 1, it is clear that the NP is the object of the lexical P. The NP is a maximal projection node in its own right and hence a node that defines a c-command domain. This will prevent the N in the object of a P from c-commanding anything outside its containing NP, and hence from controlling any PRO-subjects in the domain of the containing VP.

#### P as a functional head

- Selection of a nominal head across a (functional) P inside a structure like figure 2 is straightforwardly possible, as the lexical N-head is the head of the PP that constitutes its maximal projection node.
- The semantic bleaching of prepositions in prepositional objects is expected as it is typical of functional heads more generally.
- The p°s in the outer functional shell of N in structures like figure 2 are free morphemes in the few examples we have discussed, but as pointed out above the very same types of heads specifying, for example, an orientation of a motion can be expressed by bound morphemes in other languages, in which case we tend to refer to them as case affixes.
- Given that the N in structures like figure 2 is the head of the maximal P-projection, it is natural that the phrase that it heads (that PP) can exercise control of the interpretation of PRO-subjects in the containing VP.

• The existence of structures with multiple P-heads such as circumpositional PPs is straightforwardly accounted for in terms of structures such as figure 2.

I conclude that, while not, perhaps, fully compatible with notions of bare phrase structure such as those entertained in minimalist theories, there is much to be said in favor of pursuing the line of research I have been following over the past two and a half decades. As pointed out above, maintaining the binary feature system in my (1998) article was a mistake, and I intend to explore ways in which an element theory approach (one using privative features) such as the one I envisaged in my very first paper on these issues (van Riemsdijk, 1988) can yield a more transparent and technically simpler account of the insights summarized above (cf. van Riemsdijk, to appear).

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## Griaßde Sepp! Josef, Bavarian, and linguistics

HELMUT WEIG

### 1 1984: COMP in Bavarian syntax

The year 2737 after the creation of the Eternal City has brought not only the realization that Huxley's utopia is possibly more realistic than Orwell's is (it is the year when commercial television started in Germany) but also amazing insights into Bavarian grammar and syntax. Josef Bayer believed to have proven that "Bavarian conforms to the rules and principles that have been proposed to belong to Universal Grammar" (Bayer, 1984: 211) – and of all things, he furnished proof for it on the basis of phenomena that otherwise were (and partly still are) part of the collection of curiosities of dialects, namely:

### **Doubly-filled COMP**

- (1) a. I woas ned wer daß des tõa hod (=8a in Bayer, 1984) I know not who that this done has
  - b. Der Hund der wo gestern d'Katz bissn hod (=10a in Bayer, 1984) the dog which that yesterday the-cat bitten has

#### AGR-in-COMP

- (2) a. Du bis daß-st kummst (=50b in Bayer, 1984) you until that-2SG come-2SG
  - b. Ihr/es bis daß-ts kummts (=50e in Bayer, 1984) you until that-2PL come-2PL

Today, both phenomena belong to the core of relevant objects of investigation in modern syntax – a development that has been promoted by Josef's seminal study on COMP in Bavarian syntax.

In my contribution, I will focus on greeting formulas in Bavarian. As I will show, their syntax is related to AGR-in-COMP which has been the object of a considerable amount of studies (cf. the references in Fuß, 2014) since its treatment in Bayer (1984). Inflected complementizers are a syntactic peculiarity of Continental West Germanic dialects (Weiß, 2005a), where they show a certain extent of variation. Although they are restricted in most dialects

to the 2sg (and/or PL), there also exist dialects with complete paradigms, especially in West Flemish, but also in Eastern Middle and High German dialects. One of these is the dialect of the well-known Sechsämterland (at least to readers of Eckhard Henscheid), a variety of North Bavarian, which lacks overt inflectional markers only in the 1 and 3sg—just like modal verbs do:

- (3) a. wálst because.2sg
  b. wáln 1pl
  c. wálts 2pl
  - d. wáln 3pl

### 2 Bavarian greetings

Bavarian is known for its special forms of greetings among which *Griaß de/enk*¹ (*God*), lit. 'Greet (i.e. bless) you-sg/pl God', and *Pfiat de/enk* (*God*), lit. 'Protect you-sg/pl God', may be the most famous ones.² Both are abridged versions of optative expressions (*es grüße/behüte dich/euch Gott* 'God may greet /protect you') and are used in everyday life mostly without any religious connotations. In their short forms *Griaß/Pfiat de/enk* (which is mostly used), they consist of a finite verb in C<sup>0</sup> and an object pronoun in the so-called Wackernagel position (WP). They do not show C-agreement, though inflected complementizers are at least diachronically connected with the WP, because the agreement markers used to inflect complementizers had their origin in subject clitics in the WP where they were reanalyzed as (part of the) inflectional morphology of the verb (Weiß, 1998; Weiß, 2005a; Weiß, to appear). However, among younger speakers of Bavarian, there have emerged new greeting forms—and this development has to do with C-agreement (as I will show).

As observed and reported in Zehetner (2000), there are new greeting formulas used by younger generations of speakers of Bavarian. This development is (probably<sup>3</sup>) restricted to the plural whose forms are given in (4a), (4b):

- (4) a. Griaßts eich greet.2PL you.2PL b. Pfiats eich protect.2PL you.2PL
- 1 In Bavarian, *enk* is the original dative/accusative form of the 2PL, which is normally replaced by *euch* in the speech of younger people (cf. (4a), (4b)).

<sup>2</sup> Another curious expression is *Guad enk Nachd*, lit. 'good you.pl night', i.e. 'I wish you a good night', because it contains, to my knowledge, the only example of a proper Wackernagel clitic in Bavarian, i.e. a second position clitic—note that the Wackernagel position in German (dialects) is rather the third position (Weiß, to appear).

<sup>3</sup> Though the existing singular form *griaβde* could be analyzed also in a way which would render it analogous to the plural forms in (4a), (4b), namely as *griaβ-st-de* (cf. Zehetner, 2000: 118, fn. 57), there is, however, no comparable form with *pfiat*, i.e. *pfiatsde* is not attested (Zehetner, 2000). This makes it plausible that the respective development is indeed confined to the plural.

These greetings are semantically somewhat strange, because literally they are requests to greet or protect oneself. However, the verb used in the formula for to say good-bye (*pfiat*) is by no means part of the active lexicon of Bavarian speakers today. The form *pfiat* derived from the verb *behüten* (through schwa elision and assimilation of /h/ to /f/) which has also gone lost in its original form.<sup>4</sup> I would therefore like to propose that *pfiat* is no longer a verb for younger speakers of Bavarian, but rather a lexeme comparable to the interjection *gel(l)* which can also be inflected like a complementizer (as already noted in Bayer, 1984: 246). A kind of corroboration for this suggested parallel can be seen in the fact that the interjection *gel(l)* also inflects only in the plural (Weiß, 1998):

- (5) a. gel'ts Interj.2PL
  - b. gel'ns Interj.Honorific

The inflection on the interjection is so to speak addressee-oriented and not so much marking agreement with a subject. I would like to propose that the inflection occurring on the lexeme *pfiat* in (4b) is of the same kind: it is more an addressee than a subject agreement marker.

Since the verb *griaßen* 'greet' is still part of the Bavarian lexicon, it is clear that we must look for another explanation for the development of (4a). As Zehetner (2000) noted, there is an interesting variant, namely *griaß-t enk* 'greet-t you.pl', which is a kind of missing link between *griaß enk* and *griaßts eich*. According to Zehetner (2000), this form could be an "analogische Angleichung an *Pfiat eich*," which means that the development of *griaßts eich* (4) occurred in analogy to *pfiats eich* (4b). That means, *griaß-* in (4a) is also no longer a verb, and the inflection marks the addressee rather than subject agreement.

One implication of this explanation is that the new greeting formulas would not so much be requests to greet or to protect oneself. However (and unfortunately), it does not provide an explanation for why this development was restricted to the plural.

### 3 Thank you

Thanks to Josef's work (among others), linguistics is concerned with dialect syntax. None of his minor achievements, however, is that Bavarian figures so prominently among German dialects within linguistics. In 2014, thirty years after Josef's study on COMP in Bavarian, a whole volume on Bavarian syntax (Grewendorf & Weiß, 2014) was published only containing linguistic contributions. For many of the contributors, Josef's work was the main inspiration to start investigating Bavarian in this way, that is to take the apparent oddities of this dialect as reflecting deeper regularities of a natural language. So it was for me: My own work on Bavarian syntax was constantly inspired by Josef and his deeply universal approach to investigate Bavarian—which is the mother tongue of both of us!

Josef, in this sense I would wish that you will stay with us for a long time. Please don't say to us and to linguistics: *Pfiat enk!*—nor *Pfiats eich!* 

<sup>4</sup> Since the schwa in prefixes like *be*- is obligatory deleted in Bavarian, *be*-verbs are not productive at all—in contrast to German (Weiß, 2005b).

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### The domain of quantifier raising

Susi Wurmbrand

Many years ago, when I was a student in Vienna, Josef taught a course on LF there. This was my first serious contact with scope and LF, and although I then couldn't imagine that I would once be working on such topics myself, Josef had instilled my interest in covert matters. After a semester of LF, Bengali, a trip to Venice, and lots of Ringsgwandl, Josef had become one of my mentors who wrote recommendation letters for grad school for me, and he remained that throughout the years. *Danke, Josef, und alles Gute zum 65er!* 

Josef's and my linguistic interests have overlapped in several areas. Other than covert syntax, we both engaged extensively in restructuring and infinitives, and recently (for me), in the relation between syntax and parsing. This short note speculates about a possible new connection in these areas. In particular, building on Josef's experimental work (Bayer et al., 2005; Schmid et al., 2005) on restructuring infinitives in German where it is concluded that restructuring infinitives are preferentially parsed as mono-clausal configurations, I suggest that this is also the case in English (despite the different directionality), and that *quantifier raising* (QR) can be seen as an indicator of the processing load involved.

A standard claim about the locality of QR is that it is clause-bounded. Examples such as (1) are often considered to be unambiguous.

- (1) a. #Someone said that every man is married to Sue.  $\forall > \exists$  (Fox, 2000: 62)
  - b. #Someone said that Sue is married to every man.  $\forall > \exists$  (Fox, 2000: 62)
  - c. I told someone you would visit everyone.  $*\forall > \exists$  (Johnson, 2000: 188)
  - d. A technician said that John inspected every plane. \* $\forall$  >  $\exists$  (Cecchetto, 2004: 350)

Clause-boundedness effects for QR have always been puzzling. At least three issues arise. First, such judgments are not absolute but gradient and relative, and, as often stated in footnotes, speakers do sometimes allow inverse scope across finite clauses. Second, as shown in (2a), (2b), QR crucially differs from overt A'-movement (wh-movement, topicalization) in that the latter can escape from finite clauses via successive cyclic movement, raising the question why covert movement obeys different locality constraints from overt movement. Third, when scope in antecedent contained deletion (ACD) contexts is considered, QR out of finite clauses appears to be generally possible. Since examples like (2c) allow a large ellipsis antecedent as indicated, assuming QR is required to resolve ACD, such examples must involve QR of every committee + the relative clause to a position above the matrix verb, thus across a finite clause boundary.

- (2) a. It's Mary that I told someone \_\_ you would visit \_\_. (Johnson, 2000: 188)
  - b. What did a technician say \_\_ that John inspected \_\_? (Cecchetto, 2004: 350)

John said that you were on every committee that Bill did say that you were on.
 QP > [said that you were on [every committee that Bill did say that you were on]]
 (Wilder, 1992)

An even greater area of variation is found when QR out of infinitives is considered. While Hornstein (1994), Hornstein (1995), and Cecchetto (2004) state that QR is only possible out of restructuring infinitives, which are assumed to involve mono-clausal configurations, this claim is contested by Kennedy (1997), Moulton (2007), as well as most native speakers. Examples such as (3) (Kennedy, 1997: 674) allow inverse scope, although only *try* and *intend* would typically be considered as restructuring predicates. With respect to these examples, Kennedy writes: "although QR is in general clause-bounded, it can move quantified DPs out of nonfinite clauses (possibly as a marked option) [...] Each of these sentences has an interpretation in which the embedded quantifier has wide scope with respect to the indefinite subject of the matrix clause."

- (3) a. At least two American tour groups **expect** to visit every European country this year. [41]
  - b. Some agency **intends** to send aid to every Bosnian city this year. [42]
  - c. At least four recreational vehicles **tried** to stop at most AAA approved campsites this year. [43]
  - d. Some congressional aide asked to see every report. [44]
  - e. More than two government officials are **obliged** to attend every state dinner. [45]
  - f. A representative of each of the warring parties is **required** to sign every document. [46]
  - g. At least one White House official is **expected** to attend most of the hearings. [47]

As in finite contexts, ACD with wide ellipsis resolution and resulting wide scope of the ACD containing QP is again possible for most speakers.

- (4) a. Tim believes the students to know everything Joe does [believe the students to know].
  - b. A middle school teacher claimed to be about to catch each problem student John did [elaim to be about to catch].  $\forall > \exists$  (Cecchetto, 2004: 388, ex. 93)

The existing accounts of the clause-boundedness of QR derive the effect from Scope Economy.

(5) Scope-shifting operations (SSOs) cannot be semantically vacuous (Fox, 2000: 3).

Assuming that each step of QR must be motivated semantically, successive-cyclic movement through Spec,CP (required to meet locality) is excluded since that step violates *Scope Economy*. To allow QR in ACD contexts, Cecchetto (2004) defines semantic motivation as: (i) scope over another QNP, (ii) resolving a type mismatch, (iii) solving an infinite regress problem in an ACD configuration. This approach thus derives the difference between (1) and (2), with the exception of the speaker variation. As for infinitives, the situation is not so clear. Restructuring infinitives are assumed to lack a clausal domain (in particular a CP), whereas non-restructuring infinitives involve a CP. The lack of clause-boundedness effects in

restructuring thus follows, but the behavior of non-restructuring infinitives is unaccounted for. Theoretically, the analysis raises the question of why semantic motivation includes ACD resolution, but not, for instance, scope over an intensional verb.

I therefore speculate about a different approach to the clause-boundedness puzzle here. The basic idea is that clause-boundedness effects are only apparent and the ACD contexts reflect this. More specifically, there is no Scope Economy restriction and successive-cyclic QR across finite and non-restructuring clause boundaries is allowed syntactically. Instead the difficulty associated with constructing non-clause-bound inverse scope interpretations is attributed to increased processing costs calculated based on the complexity of the structure, similar to Anderson's (2004) Processing Scope Economy.

Some interesting evidence for this view comes from scope differences in infinitives. Based on the results of two pen-and-paper questionnaires (which follow an experimental design used by Anderson, 2004), Moulton (2007) shows that QR out of non-restructuring infinitives is possible, but more difficult than QR out of restructuring infinitives (*try*). Crucially, the latter is also significantly more difficult than QR in simple predicates, giving rise to the following scale:

(6) easy ... simple predicates > restructuring *inf* > non restructuring *inf* > finite... hard

I propose that this scale of difficulty tracks the complexity of the structures involved, in particular, the number of steps that are required for QR under the assumption that QR, like other A'-movement, applies successive-cyclically. An illustration is given in (7), with a hint of the syntax proposed for different types of infinitives in other works (Wurmbrand, 2014; Wurmbrand, to appear). In contrast to overt movement, QR involves a retrospective search in parsing, which incurs the higher processing cost for QR than for overt successive-cyclic movement.

- (7) a.  $[_{VP} QP ... [_{VP} ... QP...]]$  simple predicate
  - b.  $[_{VP} QP [_{VP} ...V [_{VP} QP ... [_{VP} ...QP ...]]]]]$  restructuring
  - c.  $[_{vP} QP [_{VP} ...V [_{XP} QP ... [_{vP} QP ... [_{VP} ...QP ...]]]]]]$  non-restructuring
  - d.  $[_{vP} QP [_{VP} ...V [_{CP} QP ... [_{XP} QP ... [_{vP} QP ... [_{VP} ...QP ...]]]]]]]$  finite

Lastly, the improvements noted for ACD can be related to the fact that the simpler syntactic derivation (small ellipsis resolution) is disfavored by the aux mismatch in ACD contexts (see Cecchetto, 2004, for the same claim for Italian). As shown in Syrett & Lidz (2011), in contexts without an aux mismatch, ACD does also pose significant difficulties.

- (8) a. A middle school teacher claimed to be about to catch each problem student John did [elaim to be about to catch].  $^?\forall > \exists$  (Cecchetto, 2004: 388, ex. 93)
  - b. ACD high antecedent: For every problem student x, such that John [ $_{\text{VP2}}$  claimed to be about to catch the problem student x], a middle school teacher claimed to be about to catch the problem student.
  - c. \*ACD low antecedent:
    A middle school teacher claimed to be about to catch each problem student John
    was [about to catch]

Attributing the distribution of QR across different clausal domains to processing difficulties rather than 'hard' syntactic constraints captures the availability of QR as diagnosed by ACD, the variability in judgments, the gradient difficulty of QR, and allows a uniform approach to the locality of A'-movement including QR.

Lots of details have obviously been left open here. Perhaps one of the most relevant questions related to the works on infinitives in German is the question of whether the scale in (6) also exists in German, not just for QR but for any of the restructuring properties that have been investigated. Restructuring infinitives are typically treated as mono-clausal configurations in the sense that they lack CPs and TPs. However, there is disagreement regarding the question of whether restructuring involves a configuration which is essentially identical to a simple predicate (a truly complex V predicate) or a slightly larger embedding configuration as, for instance, given in (7b). The ideas and new direction presented in this short note may allow us to develop further tests to probe this question.

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# Dutch between German and English (in honor of Josef Bayer)

JAN-WOUTER ZWART

I am grateful for this opportunity to thank Josef Bayer for his friendship, humor and wisdom displayed in abundance during our joint careers, now spanning the better part of three decades. Throughout these years, our scientific interests have remained very well aligned, making it difficult to select a topic to address in this gratulatory contribution.

One of the issues that occupied us both in the 1990s is the apparent difference in head-complement order between languages as closely related as English (VO) and Dutch/German (OV). As is well known, the surface typology (OV vs. VO) is based on the position of the verb relative to its noun phrase object in embedded clauses, leading to the conclusion that Dutch and German are OV-languages, contrasting with English VO (Koster, 1975). In my dissertation, I pointed out that Dutch (and German likewise) overall looks quite head-initial, at least much more so than consistent head-final languages like Turkish and Japanese (Zwart, 1993).

This was based on the position of the head relative to its complement in all phrases other than VP, including the functional projections TP, CP and DP. All West-Germanic languages have head-initial complementizers and determiners, have complement PPs following nouns, adjectives and adpositions, and noun phrase complements (predominantly) following adpositions (see also Zwart, 1994; Zwart, 1997). Part of the attractiveness of the analysis of verb-second in subject-initial main clauses as targeting T (Infl) rather than C, first argued for by Travis (1984), was that it aligned TP with the other functional projections (and most lexical projections) in clearly displaying head-initial structure.

This state of affairs led me to reconsider the position of clausal complements, which follow the verb in embedded clauses, traditionally thought to be the result of a rightward extraposition movement. However, since we know that noun phrase objects in Dutch and German undergo leftward scrambling (pace Bayer & Kornfilt, 1994), we might conjecture that the complement clause actually reveals the base position of the verb's complement, removing the VP's anomalous status in terms of headedness.

It is in the context of this discussion that I'd like to return to Josef Bayer's turn of the century article 'Basic order: a significant difference between English VO and German OV' (Bayer, 2000, going back to a talk of June 1995). In this article Bayer takes up the discussion of the status of the German complement clause, arguing against extraposition while still maintaining the basic head-final status of the German VP. In Bayer's analysis, the complement clause is base-generated to the right of the verb, while the position of the verb's comple-

ment (i.e. to the left of the verb) is occupied by a pronominal correlate, erased in the modern language (a plausible diachronic scenario for which Bayer refers to Hermann Paul).

While this development was arguably common West-Germanic, the erasure of the pronominal correlate in the English VO-language made it easy to transfer complement status to the embedded clause, as both the clause and the correlate were to the right of the verb. But in Continental West-Germanic, where the clause and the correlate were not likewise harmoniously aligned, the complement clause remained opaque for subextraction, as appearing on the 'wrong side' of the verb in Bayer's analysis (conceived in the framework of Chomsky, 1986). (Actually, the analysis identifies the VP dominating CP as the barrier for extraction, something I will abstract away from here. Bayer argues that apparent A'-movement out of German complement clauses should be seen as chain composition in the sense of Koster, 1987 rather than as movement proper; see also Bayer, 1996: chapter 7.)

In the article under discussion (Bayer, 2000), Bayer adduces additional arguments in support of this analysis of CP-opacity in German, involving three remarkable differences between English and German. My contribution here is to clarify the position of Dutch in this spectrum. The conclusion is that Dutch sides more with English than German with respect to the noted differences, raising a question about the connection with basic order.

The first observation is the ambiguity of English (1), absent from German (2) (Larson, 1990).

- (1) I saw Mary in New York before she claimed that she would arrive
- (2) Ich sah Mary in New York bevor sie behauptete dass sie ankommen würde

The ambiguity is that *before* may identify a point prior to the claiming or a point prior to the arriving. The latter interpretation is not available in German (Bayer, 2000: 54).

It seems to me, however, that both readings are available in Dutch (3).

(3) Ik zag Marie in New York vóór ze beweerde dat ze er zou zijn I saw Mary in New York before she claimed that she there would be

In Larson's analysis, the preposition *before* takes a CP-complement with an empty operator in its specifier position, originating from either the higher or the more embedded complement clause. In Bayer's analysis, the opacity of the CP in German would block the empty operator movement, explaining the absence of the reading where *bevor* 'before' is construed with the arriving event. But Bayer's analysis would predict Dutch to side with German here, contrary to fact.

The second observation concerns the range of interpretations of polysyndetic disjunction (involving *either* ... *or*...) in examples like (4) for English and (5) for German.

- (4) Sherlock pretended to be looking for either a burglar or a thief
- (5) Sherlock gab vor entweder nach einem Einbrecher oder nach einem Dieb zu suchen

In (4), the scope of *either* can be narrow (either a burglar or a thief), wide (either looking for a burglar or looking for a thief), or widest (either pretend to be looking for a burglar or pretend to be looking for a thief). As Bayer (2000: 55) notes, widest scope is not available in German. Referring to the analysis of Larson (1985), Bayer relates the range of interpretations

to LF-movement of the scope indicator (*either*), which is more restricted in German because of the opacity of CP.

The Dutch counterpart is given in (6)-(7), with the preposition either (as in English) preceding or (as in German) following the scope indicator  $\delta f$  'or' (the acute indicating emphasis).

- (6) Sherlock gaf voor naar óf een inbreker óf een dief op zoek te zijn Sherlock pretended to or a burglar or a thief to.be.looking
- (7) Sherlock gaf voor of naar een inbreker of naar een dief op zoek te zijn Sherlock pretended or to a burglar or to a thief to.be.looking

It seems to me that the range of interpretations of (6)-(7) is the same as indicated for German (5) by Bayer. However, if Schwarz (1999) is correct that polysyndetic disjunction involves no LF-movement but ellipsis, the contrast between English and Dutch/German needs to be rethought. The readings in English (4) can be the result of ellipsis of various sized categories in the second disjunct:

(8) Sherlock pretended to be looking for either a burglar or (Sherlock pretended (to be looking for)) a thief

The absence of the widest scope reading in Dutch and German could then be explained by the circumstance that the sentences in (5)-(7) do not allow for an elliptical reading that includes the matrix clause material in the ellipsis site. This is certainly related to word order, but not necessarily in terms of order related opacity.

The third observation concerns the lifted Principle C effect in examples like (9).

(9) I told  $her_i$  that the concert was attended by so many people last year that [the soprano]<sub>i</sub> became quite nervous (indexed elements interpreted as coreferential)

According to Bayer (2000: 58), the Principle C effect remains in place in the German counterpart:

(10) \*Ich erzählte ihr $_i$  dass das Konzert von so vielen Leuten besucht wurde, dass [die Sopranistin] $_i$  ganz nervös wurde

Following Guéron & May (1984), Bayer assumes that (9) incurs no Binding Theory violation because the phrase so [that the soprano became quite nervous] many people undergoes Quantifier Raising to a position where it would no longer be c-commanded by her. This would then be blocked in German because of the opacity of the CP.

In Dutch, it seems to me that the effect of (9) can be easily replicated:

(11) Ik vertelde haar $_i$  dat er zo veel mensen zouden komen dat [de sopraan] $_i$  I told her that there so many people would come that the soprano behoorlijk nerveus werd quite nervous became

This is unexpected if the relevant factor explaining the English-German contrast is basic order induced opacity.

I rather think that the absence of a Principle C effect in (9)/(11) should be understood in the context of conditions identified in Bolinger (1977) as making 'noun repetition', preferably avoided, more acceptable. As Bolinger observes, a noun can be repeated if certain distracting factors create a need to reidentify the topic. For example, including *then* in (12), punctuating a different event structure, seems to lift the Principle C effect (see Zwart, 2015, for more examples of this type).

(12) He<sub>i</sub> lost the book and \*(then) John<sub>i</sub> found it again

In (9), the circumstance that we are referring to different events (this year and last year) may bring in a distractor of exactly this type. It would be interesting to see, then, if including the element *letztes Jahr* 'last year' in (10) would render the example more palatable.

Contrary to expectations, then, Dutch does not appear to side with German in these three phenomena, which Bayer (2000) adduces as further evidence for opacity as a function of the noncanonical position of CP with respect to V. Only the interpretation of polysyndetic disjunction conforms to the expected pattern, but here the facts follow without reference to opacity effects if the later analysis of Schwarz (1999) in terms of ellipsis is adopted.

I am not convinced, then, that the German/English contrasts in Bayer (2000) can be explained as a function of basic order differences, but obviously for a fuller understanding of the relevant phenomena, we would need more time.

I wish my dear friend Josef Bayer the best of everything in his retirement years.

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