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Abstract

Taking translation mismatches between (clause or VP) coordination and non-coordinated structures (sentence sequences and syntactic subordination) as an observational point of departure, we discuss the interpretation of coordinated structures and their alternatives with a view to the relative discourse salience of (the units corresponding to) the conjuncts. We show that coordination is used somewhat differently in Norwegian than in German and English, in particular, that syntactic coordination seems to be compatible with some discourse relations in Norwegian that are blocked in German or English. We argue that this might challenge the cross-linguistic validity of the definition of discourse relations in theories like SDRT or RST. In particular, this concerns the distinction between coordinating (SDRT) or multinuclear (RST) and subordinating (SDRT) or nucleus-satellite (RST) relations and the diagnostic value of the coordination marker *and* (or its counterparts) as a signal of discourse coordination. We conclude that a more refined approach to discourse structure may be needed to account for the mapping of discourse relations onto syntactic con-

structions and lexical items across languages.

1 Introduction

This paper aims at contributing to a clarification of discourse-structural concepts like the distinction between subordinating vs. coordinating discourse relations as described in Segmented Discourse Representation Theory (SDRT) (Asher and Vieu, 2005) or nucleus-satellite vs. multinuclear discourse relations in Rhetorical Structure Theory (RST) (Mann and Thompson, 1988) and their relation to information-structural (focus vs. background) and syntactic distinctions (coordination vs. subordination) in a cross-linguistic perspective. Taking non-correspondences regarding (clause or VP) coordination in translation as an observational point of departure, we discuss the interpretation of coordinated structures as compared to non-coordinated alternatives (sentence sequences and syntactic subordination) with a view to the relative salience of the conjuncts in discourse. We are concerned with two types of translation discrepancy involving Norwegian and German or English, namely coordinated clauses translated as a sequence of sentences in the target language (TL) (Norwegian > German; Section 3.1), and syntactic subordination (adjunction) rendered as (VP or clausal) coordination in the TL (German > Norwegian, Section 3.2, and English > Norwegian/German, Section 3.3). Our data are taken from

three different parallel corpora, the Oslo Multilingual Corpus¹ (OMC), as well as two smaller corpora of non-fictional texts.

It is a well-known fact that coordination, despite its apparent syntactic symmetry (the conjuncts belonging to the same syntactic category), may encode or ‘explicate’ an asymmetrical relation at the semantic-pragmatic level. What we want to show is that that coordination tends to be exploited somewhat differently in Norwegian than in English or German: Norwegian apparently uses coordination more productively, as a kind of compensation for other grammatical resources (e.g. adjunction or non-coordinated paratactic structures) used in English or German; and Norwegian also seems to be less constrained with respect to what kind of discourse units the coordination marker can link as well as regarding the order of foregrounded and backgrounded information in a coordinated structure.

From a theoretical viewpoint our observations raise interesting questions about the correlation between syntactic coordination/subordination and coordinating/subordinating discourse relations (cf. e.g. Asher and Vieu (2005)) as well as the status of the latter across languages. Our data suggest that either the use of coordinating/subordinating discourse relations in Norwegian differs from their use in German and English, or that syntactic coordination signaled by a coordination marker (*og/und/and*) does not necessarily imply a coordinating discourse relation between the conjuncts, contrary to what Asher and Lascarides (2003) and Asher and Vieu (2005), following Txurukka (2000), seem to assume. A further – both theoretically and empirically interesting – implication of our contrastive analyses is that they shed light on the backgrounding role/function of (certain types of) adjuncts.

In Section 2 we give a brief overview of theoretical concepts to bear on our topic. Section 3 presents and discusses our translational data. Our conclusions are summarized in Section 4.

2 General concepts

2.1 Coordination, subordination, and clause linkage

Before discussing semantic and pragmatic notions we would like to say a few words about the syntactic changes found in the translation examples we are going to discuss in Section 3. In his typology of *clause linkage* Lehmann (1988) describes the options for complex sentence formation cross-linguistically along six syntactic-semantic parameters. The following three seem useful to characterize our examples and may help to relate the syntactic concepts of subordination/coordination² and hypotaxis/parataxis³ to their discourse-structural counterparts: ‘Hierarchical downgrading’ describes the degree to which a hierarchical relation between the linked segments holds (‘parataxis’ and ‘embedding’ forming the two poles of this continuum), ‘desententialisation’ refers to the degree to which the subordinate clause is expanded or reduced (with ‘sententiality’ and ‘nominality’ as its extremes), and ‘explicitness of linking’ refers to the presence/absence and type of a connective device between two clauses/segments (with ‘syndesis’ and ‘asyndesis’ at the two ends of the continuum⁴).

The examples presented in 3.1, sentential coordination translated as a sentence sequence, show only small changes as far as clause linkage is concerned, namely along the syndesis-asyndesis continuum: Since the discourse relation holding between the sentences in the translation is not ex-

² Lehmann (1988: 182) conceives *subordination* as a form of clause linkage, while *coordination* is seen as a “relation of sociation combining two syntagms of the same type and forming a syntagm which is again of the same type” and is thus not restricted to hold on clause-level only.

³ *Hypotaxis* is understood by Lehmann (1988: 182) “as the subordination of a clause in the narrow sense (which probably includes its finiteness)”, while *parataxis* refers to the coordination of clauses, with no further restrictions “on the kind or structural means of coordination. In particular, parataxis may be syndetic or asyndetic”.

⁴ Lehmann (1988: 210) points out that explicitness of linking has nothing to do with parataxis vs. hypotaxis. As examples for linking devices with decreasing explicitness of linking he mentions the following: anaphoric subordinate clause referring back to the preceding discourse (maximal syndesis), gerundial verb, prepositional phrase, connective adverb, specific conjunction, universal subordinator, and nonfinite verb form (asyndesis) (Lehman 1988: 211).

¹See <http://www.hf.uio.no/forskningsprosjekter/sprik/english/corpus/index.html>

plicitly signaled, e.g. by a discourse connective, the translation is more asyndetic than the original in these examples⁵. In the examples discussed in 3.2 and 3.3, however, the structural changes are more visible: In both cases one of the linked elements is both hierarchically upgraded (i.e. less dependent on the other) and more sentential in the translation.

2.2 Some relevant information-structural and discourse-structural notions

In the discussion of information structure and discourse relations, ‘background’ is an important but fuzzy term. As part of the so-called *focus-background* partition (Büring, 1997, Rooth, 1992), the notion of background concerns information structure at sentence level. It is commonly illustrated by question-answer sequences like (1a-b).⁶

- (1a) When did you arrive?
(1b) I arrived *yesterday evening*.
(1c) I arrived *yesterday evening* with some friends.

The part of (1b) that answers the question posed in (1a) – i.e. the adverbial adjunct – expresses focus information; the remaining part is background. Representing one option among a set of alternative answers, focus information is new information whereas the background is given from the context. In the question-answer sequence (1a-c), however, the manner adjunct *with some friends* – which is post-focal according to Lambrecht (1994) – encodes information that is new, i.e. not part of the background, but does not contribute to answering the relevant question and thus cannot be part of the focus in the strict sense either. The adjunct, in a way, answers a question that has not been asked. We suspect that, typically, this type of information

⁵ There are cases of sentential coordination translated as sentence sequences in the corpus where the discourse relation in fact is explicitly signalled by a discourse connective. In these cases the translation is more explicit/syndetic than the original, where the relation holding between the conjunct (typically a narrative/temporal-causal one) has to be inferred from the propositional content of the conjuncts (see Blakemore and Carston (2005), and Section 2.3 on which relations might be licensed in a sentential coordination without an explicit mention of it).

⁶ What follows is a very much simplified description, disregarding additional partitions like topic vs. comment (or theme vs. rheme) and the notorious ambiguity of the term focus itself; see e.g. Vallduvi/Engdahl (1996) for a very useful survey.

represents background information in the wide discourse-structural sense of that term (see below), as seems to be the case with the adjuncts discussed in sections 3.2 and 3.3. But to our knowledge, the focus-background partition – and information structure at sentence level in general – has not been thoroughly discussed with respect to sentences enriched by optional adjuncts and occurring in real discourse⁷. So we shall leave it at the level of suspicion.

The notion of background in the focus-background partition discussed above is quite different in nature from discourse-structural background. As we see it, ‘background’ or ‘backgrounding’ can be understood in (at least) two ways on discourse level, namely a) as the *discourse relation* defined in SDRT and RST, and b) as referring to *discourse subordination* in general, i.e. covering all subordinating discourse relations in the SDRT model, and all nucleus-satellite relations in RST (see below).

The *discourse relation* Background, as defined in the framework of SDRT, is taken to hold “whenever one constituent provides information about the surrounding state of affairs in which the eventuality mentioned in the other constituent occurred” (Asher and Lascarides, 2003: 460). It is generally exemplified by sentence sequences like (2) where it is the second sentence that describes a state temporally overlapping the event introduced by the first sentence; that is, S_2 conveys background description relative to S_1 – Background(S_1, S_2) (cf. Asher and Lascarides (2003: 166f., 460f.)).

- (2) Max opened the door. The room was pitch dark.

At one point, in fact, Asher and Lascarides (2003: 207f.) distinguish between two Background relations: Background₁, exemplified by (2), and Background₂, which holds when it is the first segment of a sequence that provides information about the “surrounding state of affairs” relative to the subsequent segment: Background₂(S_2, S_1). However, Asher and Lascarides do not give any examples of Background₂, and in practice, they seem to understand Background as illustrated by (2), i.e. in the narrow sense of Background₁.

⁷ Asher (1999) discusses some aspects of the relation between sentential focus and discourse focus. The issue of optional adjuncts, however, is not taken up here.

According to Asher and Lascarides (2003), the discourse relation Background is a *coordinating discourse relation*, but it differs from the prototypical coordinating discourse relation Narration by allowing a subsequent segment S_3 (e.g. *He looked cautiously around him.*) to attach to S_1 – which is a diagnostic property of subordinating discourse relations (cf. Asher and Vieu (2005)). Asher and Lascarides (2003: 166f.) overcome the difficulty by assuming that the text consisting of S_1 and S_2 “has a topic whose content is constructed by *repeating* (rather than summarizing) the contents“ of the two segments. The topic is understood as related to the background segment (i.e. S_2) by a relation called *Foreground-Background Pair* – which is classified as a *subordinating discourse relation* (p. 462). In the end, then, Asher and Lascarides (2003) have it both ways: S_2 is related to the preceding segment S_1 by a coordinating discourse relation (Background), but related by a subordinating discourse relation (Foreground-Background Pair) to the topic constructed by repeating the contents of the DRSEs assigned to S_1 and S_2 . At any rate, Asher and Lascarides (2003) concede that „[i]ntuitively, a discourse structure containing *Background*(π_1, π_2), where K_{π_1} describes a (foregrounded) event and K_{π_2} describes the (background) state, should encode the fact that K_{π_1} is the ‚main story line‘ or the foreground; K_{π_1} is the thing that ‚matters‘ in that events from subsequent utterances will be related to it“ (p. 167). Thus understood, the foreground-background distinction seems related to the distinction between „*Hauptstruktur*“ (main structure) and „*Nebenstruktur*“ (side structure) made by Klein and von Stutterheim (1987) within the so-called *Quaestio model*.

As a cover term for Background₁ and Background₂, i.e. as a discourse relation that can attach in both directions, the SDRT relation Background would also be similar to the discourse relation Background as defined in RST. In RST Background is an (asymmetric) *nucleus-satellite relation* – roughly corresponding to what is called a subordinating discourse relation in SDRT but not formally defined – where the function of what is presented in the satellite is to increase the reader’s ability to comprehend what is presented in the nucleus (Mann and Taboada, RST RelDef). Although the RST definition is not restricted to a particular order of nucleus and satellite, in typical RST ex-

amples of the Background relation the satellite precedes the nucleus (see examples on the RST webpage) (Mann and Taboada, RST analyses). This means that, after all, Background as a discourse relation is understood quite differently in SDRT and RST. In any case, the SDRT notion of Background is a narrower concept, being defined solely by way of temporal overlap between an event(uality) and a state – which makes it problematic for the analysis of non-narrative texts, i.e. texts that are not primarily structured by temporal relations.⁸

2.3 Syntactic coordination in discourse representation

Having addressed different notions of background on sentence and discourse level, the question is how syntactic coordination (sentence/VP) fits into this picture. The SDRT model seems to presuppose a strong correlation between syntactic coordination and coordinating discourse relations, see e.g. the (narrative) examples containing *and*-coordination in Asher and Vieu (2005: 604, 605, 606). In fact, Asher and Lascarides (2003: 170) follow Txurukka (2000) in assuming that “*and* is a discourse marker for a coordinating relation; it doesn’t correspond to a single rhetorical relation, but rather it signals a number of different possibilities such as Narration or Result”; Asher and Vieu (2005) apparently maintain this assumption, although they do point to data suggesting that the inference from *and*-coordination to discourse coordination may be defeasible (Asher and Vieu (2005: 598f.)). Also in text analyses based on RST – e.g. those published on the RST web site (Mann and Taboada, RST analyses) – coordinated structures (not containing other discourse markers) are typically assigned a multinuclear discourse relation, e.g. *Joint* or *Conjunction*⁹, i.e. the two conjuncts are assigned the

⁸ Still another Foreground(ing)-Background(ing) pair, related to saliency and attention, is found in the work of Talmy (e.g. Talmy 2000). To him a concept or a category of concepts like Manner (of motion) is backgrounded, i.e. less salient, if it is expressed as part of – “conflated with” – the main verb root, but foregrounded if it is encoded as an independent constituent; cf. *I flew to Hawaii last month* vs. *I went by plane to Hawaii last month* (Talmy 2000 II: 128).

⁹ *Conjunction* is not defined as a discourse relation on the “official” RST web site, but is contained in the “extMT – extended Mann/Thompson” set of RST relations in the RST tool developed by O’Donnells (RST user guide) which is widely used for text analyses across the RST community. Although

same discourse salience and they are not hierarchically related by a nucleus-satellite relation. We would like to question whether this actually always holds, and whether this appropriately represents actual discourse structure. The examples in Section 3 indicate that coordination can also be used to link elements with different salience in discourse, for example, with respect to the continuation in discourse in the following sentence.

Interesting in this context is research on coordinated vs. non-coordinated sentences within the framework of Relevance Theory (Blakemore, 1987, 2002, Blakemore and Carston, 2005), pointing out the (possibly) non-symmetric nature of coordination and showing that coordination is possible in certain cases while blocked in others. In particular, they show that using coordination instead of a sequence of non-coordinated ('full stop') sentences sends two types of signal to the reader, namely, (i) that the two conjuncts should be processed as a unit, both conjuncts functioning together as premises in the derivation of a joint cognitive effect, and (ii) that certain inferences are licensed regarding the semantic-pragmatic relations holding between them, the first conjunct always functioning as a background to the processing of the second. In narrative examples, for instance, a temporal-causal relation (of 'consequentiality', cf. Sandström (1993)) is often inferred without any explicit mention of such a relation; and a non-narrative use of coordination can be seen in argumentative examples, where the conjuncts make a joint contribution as steps in an argumentation (Blakemore and Carston, 2005). Relevance Theory does not distinguish between coordinating and subordinating discourse relations – and prefers to avoid the notion of discourse relations at all (Blakemore 2002: 167ff.) – but most of the narrative as well as the argumentative examples given in Blakemore and Carston (2005) would probably be classified as coordinating discourse relations in the SDRT framework.

not precisely defined there either, according to the developer of the tool (answer to a mail request, June 04) this relation is meant to cover constructions with "and" connectives.

3 Syntactic coordination and discourse subordination: three contrastive perspectives

What happens at the level of discourse structure when syntactically coordinated structures are translated as non-coordinated sequences of sentences, or subordinated structures are translated as coordinate, and why do translators choose these options in certain cases? In this section we present and discuss certain types of translation mismatch that might challenge the discourse representation approaches presented in Section 2.

3.1 From coordinated clauses to sentence sequences (Norwegian > German)

One case at hand is sentential coordination in Norwegian translated as a non-coordinated sequence of sentences in German. The corpus contains several examples of clause coordination in the Norwegian original such as (3) and (4) below, where coordination would sound odd in German.

In (3a) the lack of a common topic between the two conjuncts seems to block the use of coordination in the German translation (3b). A further problem is the fact that the second conjunct alone is elaborated by the sentence following the colon. In the translation the coordinated clauses are split into two separate sentences which leads to a change of the discourse structure assigned to the text: In the RST model, the German translation can be analysed as a Background relation – with (3b_[iii]) as satellite, its nucleus covering (3b_[iii]) and (3b_[iv]) –, and the span (3b_[iii])-(3b_[iv]) functioning as Elaboration to (3b_[i]). The analysis of the Norwegian original, however, would possibly have to assign a (multinuclear) Conjunction (or Joint) relation to (3a_[iii]) and (3a_[iii]), but where does this span attach to its discourse context? To the left (as Elaboration or Background of (3a_[i]) – which does not fit very well), or to the right (as Background)? But then – at least as a non-native speaker of Norwegian – one runs into problems with how to coherently interpret the sentence following the colon, since (3a_[iv]) certainly elaborates the second conjunct (3a_[iii]), but not the first (3a_[iii]). Thus, the grouping of (3a_[iii]) and (3a_[iii]) as a joint, non-hierarchical span leads to attachment problems with the following discourse segment.

Using the SDRT approach one runs into similar problems: In the Norwegian version the reader

probably first tries to interpret (3a_[ii]) as an elaboration of the preceding sentence (3a_[i]). But which relation holds between (3a_[ii]) and (3a_[iii])? In English or German the use of the coordination marker would presuppose the existence of some kind of common topic between the linked elements, but obviously Norwegian is not that strict in this respect. For the German version, an SDRT-style

analysis is less problematic: a relation of Background₁, may be assigned between the independent sentence corresponding to the first ST conjunct (3b_[iii]) and the sentence preceding it (3b_[i]), whereas the counterpart of the second conjunct (3b_[iii]) can be interpreted as elaborating sentence (3b_[i]).

(3a) Legene hadde sitt eget reisemønster, som er analysert_[i]. *Studiereiser til utlandet var viktige for profesjonell anseelse og autoritet_[ii], og totalbildet av reisemønsteret er entydig_[iii]*: Tyskspråklige universiteter var de viktigste reisemål for norske leger som ønsket videreutdanning eller spesialisering_[iv].

‘The doctors had their own travel pattern, which is analysed_[i]. *Educational trips abroad were important for professional reputation and authority_[ii], and the overall picture of the travel pattern is clear_[iii]*: German-speaking universities were the most important destinations for Norwegian doctors who wanted further education or specialisation_[iv].’

(4a) Andre problemer var ikke mindre alvorlige_[i]. *Malmforekomstene holdt ikke hva de lovet_[ii], og tapte raskt sin edelhet nedover i fjellet_[iii]*. Driften gikk med underskudd, og innskytterne trakk seg etter hvert ut_[iv].

‘Other problems were not less serious_[i]. *The ore deposits were not what they promised_[ii], and lost quickly their preciousness_[iii]*. The operation ran with deficit, and the financial supporters gradually backed down_[iv].’

(3b) Die Ärzte hatten ihr eigenes, heute analysiertes, Reismuster_[i]. *Studienreisen ins Ausland wurden als wichtig für berufliches Ansehen und Autorität angesehen_[ii]. Das Gesamtbild der Reisen ist eindeutig_[iii]*: Deutschsprachige Universitäten waren die wichtigsten Reiseziele norwegischer Ärzte, die eine Weiterbildung oder Spezialisierung wünschten_[iv].

‘The doctors had their own, today analysed, travel pattern_[i]. *Educational trips abroad were viewed as being important for professional reputation and authority_[ii]. The overall picture of the travels is clear_[iii]*: German-speaking universities were the most important destinations for Norwegian doctors who wanted further education or specialisation_[iv].’

(4b) Andere Probleme waren nicht weniger gravierend_[i]. *Die Vorkommen hielten nicht, was sie versprachen_[ii]; der Metallgehalt nahm mit zunehmender Tiefe rasch ab_[iii]*. Die Erzgewinnung war ein Zuschussgeschäft und die Geldgeber machten nach und nach einen Rückzieher_[iv].

‘Other problems were not less serious_[i]. *The deposits did not hold what they promised_[ii]; the metal content decreased quickly with increasing depth_[iii]*. The ore winning was a lossmaking business and the financial supporters gradually backed down_[iv].’

Similar problems occur in (4), where the second conjunct (4a_[iii]) should be subordinated (as an Elaboration in SDRT, and as an Elaboration or Evidence satellite in RST) in relation to the first (4a_[ii]), since the following sentence (4a_[iv]) obviously is related only to (4a_[ii]) and not to (4a_[iii]). This discourse representation is precisely what we get in the German translation (4b) – where the coordination marker *og* (*and*) is replaced by a semicolon. But which discourse structure should be assigned to the Norwegian version, where both SDRT and RST would be urged to assign a coordinating/multinuclear discourse relation to the sen-

tential coordination, blocking the right frontier (in the SDRT framework) or not providing an appropriate nucleus (in the RST framework) to attach (4a_[iv])?

The two examples above illustrate that Norwegian seems to be less restricted as to the types of elements that can be coordinated. They are evidence to the effect that the universality of the definition of discourse relations in theories like SDRT or RST is questioned. Our examples show that at least the function of the coordination marker (*og/und/and*) is not precisely the same cross-linguistically: syntactic coordination seems to be

compatible with discourse relations like Background and Elaboration in Norwegian, while blocked in German.

3.2 From VP/NP adjunction to coordination (German > Norwegian)

(5) and (6) below are typical examples of what Fabricius-Hansen (1999) has termed backward information extraction, which occurs quite frequently

(5a) Für die Trennung des Kindes von der Mutter wurden medizinische und pädagogische Begründungen angeführt und anhand einiger aus dem gesamten Zusammenhang des Wohlbefindens des Kindes herausgerissenen statistischen Daten, wie etwa die Verringerung der Säuglingssterbequote, beglaubigt. Eine perfekte medizinisch-technische Versorgung bekam die größte Bedeutung. Im Interesse der Infektionsverhütung [...] wurde die Sterilität groß geschrieben.

‘For the separation of the child from its mother medical and pedagogical reasons were given and supported by statistical data, taken out of the context of the child’s well-being, like e.g. the decline of baby mortality. A perfect medical-technical care got vital importance. In the interest of infection avoidance [...] sterility was emphasized.’

(6a) Als es feststand, daß die Alliierten nicht hier, sondern an der Kanalküste landen würden, disponierte man um und schickte alle Boote dorthin. Der Gegner, uns überhörend, faßte seine Beobachtungen präzise zusammen.

‘When it was clear that the Allies would not land here, but on the Channel coast, we reorganized and sent all the boats there. The opponent, us bugging, precisely summarised his observations.’

By choosing a coordinated structure in (5) and (6) the Norwegian translators exploit the inference mechanisms triggered by the structure (cf. 2.3, Blakemore (2002)), ‘reducing’ the first conjunct to the discourse function of ‘leading up to’ the second, i.e. entering into a consequentiality relation with the second. In this way coordination works as a backgrounding device, establishing the second conjunct as part of the ‘main story’ – equivalent to the source text. By so doing the translator compensates for the more restricted options for NP adjunction in Norwegian. The frequent use of

in translations from German into Norwegian (Solfjeld, 2004): Syntactically downgraded information encoded in an adjunct at VP level in the source sentence is rendered in a conjunct to the left of the conjunct corresponding most closely to the main predicate of the source sentence, the latter having neutral focus. (The source-text adjunct and its target-text counterpart are underlined.)

(5b) Det ble anført medisinske og pedagogiske grunner til at mor og barn skulle skilles ad, og dette ble forklart ved henvisning til statistiske data angående spedbarnas velbefinnende, som var revet ut av sin sammenheng, såsom nedgangen i spedbarnsdødligheten. En perfekt medisinsk-teknisk omsorg ble av største betydning. In-feksjoner skulle unngås [...], og steriliteten ble skjøvet i forgrunnen.

‘Medical and pedagogical reasons were given for separating mother and child, and this was explained by referring to statistical data regarding the well-being of the child, taken out of its context, like e.g. the decline of infant mortality rates. A perfect medical-technical care became of vital importance. Infections were to be avoided [...], and sterility was moved into the foreground.’

(6b) Da det nå ble klart at de allierte ikke ville lande her, men i Normandie, ble vi omdirigert dit. Motstanderne våre avlyttet våre radiomeldinger og samlet omhyggelig sammen opplysninger.

‘As it now got clear that the Allies would not land here, but in Normandy, we were redirected to there. Our opponents bugged our radio messages and gathered information carefully.’

coordination also illustrates the tendency that Norwegian prefers to organize discourse paratactically where German tends to use hypotactic/hierarchical structures (Fabricius-Hansen, 1996, 1999).

3.3 From *ing*-adjuncts to coordination (English > German/Norwegian)

Free *ing*-adjuncts are adjuncts of some sort but more ‘sentential’ and less integrated (see 2.1, (Lehmann, 1988)), than the German adjectival/adverbial adjuncts translated as a sentential

coordination in (5)-(6) above. Quite often such adjunct constructions are rendered as VP coordination in German and Norwegian (cf. Behrens (1998) for En./No.). This is the case in (7), for instance, where the *ing*-adjunct, representing backgrounded information, precedes its matrix clause and is rendered as first conjunct in both target texts.

- (7a) Then, *using a flat pack of slim steel files from his top pocket* he started to work on the softer metal of the skeleton.
 (7b) Dann *holte er einen Satz dünner Stahlfeilen aus der Brusttasche* **und** bearbeitete *damit* den Weichmetallteil des Dietrichs.
 ‘Then *took he a set of thin steel files from his top pocket* **and** worked *with it* (lit. ‘there-with’) the softmetal part of the skeleton key.’
 (7c) Så *tok han en flat pakke tynne stålfiler opp av brystlommen* **og** ga seg til å arbeide på det bløtere metallet i nøkkelen.
 ‘Then *took he a flat pack of thin steel files up from his top pocket* **and** started to work with the softer metal in the key.’

However, also when postponed to their matrix clause, *ing*-adjuncts are often subordinated from a discourse structural point of view, describing e.g. an ‘accompanying circumstance’ to the matrix clause eventuality as in (8a) – (9a). In such cases, German translations by coordination may preserve the order of the two segments but explicitly mark the relation of temporal overlap between them by adding the connective *dabei* ‘there’ + ‘by’ (i.e. ‘at the same time / on the same occasion’) in the second conjunct, as in (8b), thus blocking a (con)sequential interpretation which might otherwise be preferred. But the order of presentation may also be switched so that the first conjunct in the translation corresponds to the postponed *ing*-adjunct in the original, as in (9b) – (10b).

The Norwegian translations in (9c) – (10c), on the other hand, use coordination without changing the order of the VPs corresponding to the matrix clause and the *ing*-adjunct of the source text – and without overtly marking the temporal relation between the eventualities described in the two conjuncts. It may be objected that the translations are ambiguous and/or not particularly good. But nevertheless these examples seem to give further evidence for the hypothesis that coordination functions somewhat differently in Norwegian than in German and English. The dispensability of a marker of the temporal overlap in (8c) indicates

that Norwegian may be less biased to interpreting clause/VP coordination as a temporal sequence (in narration) than German is. And (9c) and (10c) show that Norwegian possibly is also more open to placing background(ed) information in the second conjunct, the position where focused/foregrounded information is strongly preferred in German.

- (8a) He smiled slyly, *nodding*.
 (8b) Er lächelte verstohlen **und** *nickte dabei*.
 He smiled furtively **and** *nodded thereby*.
 (8c) Han smilte litt lurt **og** *nikket*.
 He smiled somewhat slyly **and** *nodded*
 (9a) Tony went home, *taking his tool box with him*.
 (9b) Tony *griff nach seinem Werkzeugkasten* **und** ging nach Hause.
 ‘Tony *reached for his tool box* **and** went home.’
 (9c) Tony gikk hjem **og** *tok med seg verktøykassen sin*.
 ‘Tony went home **and** *took his tool box with him*.’
 (10a) Things suddenly got very tense in the bar and Dad drank heavily, *sweating*.
 (10b) Auf einmal wurde die Atmosphäre in der Bar äußerst angespannt, und Papa *schwitzte* **und** trank immer mehr.
 ‘Suddenly the atmosphere got very tense in the bar, and Dad *sweated* **and** drank more and more.’
 (10c) Stemningen i baren ble plutselig meget spent, og pappa drakk tett **og** *svettet*.
 ‘The atmosphere in the bar got suddenly very tense, and Dad drank heavily **and** *sweated*.’

4 Conclusions

We have shown that special conditions seem to hold as regards the use of sentential and VP coordination with (counterparts of) *and* in Norwegian as compared to German and English. In translations from German or English into Norwegian, coordination is often used as a compensation for language-specific – structural and stylistic – restrictions on hypotactic complexity at sentence level (3.2) and (3.3). Apparently, Norwegian is also less constrained as to which kinds of (discourse) elements can be linked by the coordination marker (3.1) and in which order the conjuncts appear (3.3). To put it the other way round, it appears that the function of the coordination marker (*og/und/and*) is not precisely the same cross-linguistically, so that e.g. syntactic coordination may be compatible with discourse relations like Background and Elaboration in Norwegian, while blocked in German or English. These observations

cast some doubt on the cross-linguistic validity of the definition of discourse relations in theories like SDRT or RST. In particular, they seem to challenge the assumption (see 2.3) that syntactic coordination with (equivalents of) the connective *and* necessarily implies a coordinating/multinuclear discourse relation.

In the framework of Tree-Adjoining Grammar, Webber and her collaborators (e.g. Webber et al. 2003, 1999) distinguish between (discourse) relations that are induced structurally by punctuation or (coordinating or subordinating) conjunctions like *and*, *although* on the one hand, and relations that are established by presupposition-bearing anaphoric adverbials like *then*, *instead*, *otherwise* on the other hand. Whereas relations of the former type hold between the interpretation of adjacent or conjoined discourse units, thus creating a (discourse) structure in the strict sense, anaphoric adverbials signal “a relation between the interpretation of their matrix clause and an entity in or derived from the discourse context” (Webber et al. 2003: 547) which may cross such structural dependencies. Webber et al. suggest that this “factored” approach may have “a better chance of providing a cross-linguistic account of discourse than one that relies on a single premise” (Webber et al. 1999 Sect. 5). Their approach does not, as we see it, offer an immediate solution to the specific problems discussed in connection with examples (3)-(4) (Sect. 3.1). But combined with a pragmatic (Relevance- or Optimality-Theoretic) framework acknowledging the impact of competition on interpretation, it may in fact provide a more flexible tool for explaining subtle cross-linguistic differences in this area.

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References

- Asher, Nicholas. 1999. Discourse and the focus/background distinction. In *Focus: linguistic, cognitive, and computational perspectives*, eds. Peter Bosch and Rob A. van der Sandt. Cambridge: Cambridge University Press, 247-267.
- Asher, Nicholas, and Lascarides, Alex. 2003. *Logics of conversation*. Studies in natural language processing. Cambridge; New York: Cambridge University Press.
- Asher, Nicholas, and Vieu, Laure. 2005. Subordinating and coordinating discourse relations. *Lingua* 115:591-610.
- Behrens, Bergljot. 1998. *Contrastive discourse: an interlingual approach to the interpretation and translation of free ING-participial adjuncts*. Oslo: University of Oslo, Faculty of Arts, Linguistics Department.
- Blakemore, Diane. 1987. *Semantic constraints on relevance*. Oxford: Blackwell.
- Blakemore, Diane. 2002. *Relevance and linguistic meaning: the semantics and pragmatics of discourse markers*. Cambridge studies in linguistics, vol. 99. Cambridge: Cambridge University Press..
- Blakemore, Diane, and Carston, Robyn. 2005. The pragmatics of sentential coordination with “and”. *Lingua* 115:569-589.
- Büring, Daniel. 1997. *The meaning of topic and focus: the 59th Street Bridge accent*. Routledge studies in German linguistics. London: Routledge.
- Fabricius-Hansen, Cathrine. 1996. Informational density: a problem for translation and translation theory. *Linguistics* 34:521-565.
- Fabricius-Hansen, Cathrine. 1999. Information packaging and translation. Aspects of translational sentence splitting (German - English/Norwegian). In *Sprachspezifische Aspekte der Informationsverteilung*, ed. Monika Doherty. Berlin: Akademie-Verlag, 175-213.
- Klein, Wolfgang, and von Stutterheim, Christiane. 1987. Quaestio und referentielle Bewegung in Erzählungen. *Linguistische Berichte* 109:163-183.

¹⁰ Project URL:

<http://www.hf.uio.no/forskningsprosjekter/sprik/english/index.html>

- Lambrecht, Knud. 1994. *Information structure and sentence form: topic, focus, and the mental representations of discourse referents*. Cambridge studies in linguistics; 71. Cambridge: Cambridge University Press.
- Lehmann, Christian. 1988. Towards a typology of clause linkage. In *Clause combining in grammar and discourse*, eds. John Haiman and Sandra A. Thompson. Amsterdam, Philadelphia: John Benjamins, 181-225.
- Mann, William C., and Thompson, Sandra A. 1988. Rhetorical Structure Theory: Toward a functional theory of text organization. *Text* 8:243-281.
- Mann, William C., and Taboada, Maite. RST analyses. RST analyses. URL: <http://www.sfu.ca/rst/02analyses/index.html>.
- Mann, William C., and Taboada, Maite. RST RelDef. RST Relation Definitions. URL: <http://www.sfu.ca/rst/01intro/definitions.html>.
- O'Donnell, Michael. RSTTool-user-guide. RSTTool -- an RST Markup Tool. Version 3.0 Users Guide. URL: <http://www.wagsoft.com/RSTTool/index.html>.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1:75-116.
- Sandström, Görel. 1993. *When-clauses and the temporal interpretation of narrative discourse*. Umeå: University of Umeå. Department of General Linguistics.
- Solfjeld, Kåre. 2004. Informationsspaltung nach links in Sachprosaübersetzungen Deutsch-Norwegisch. In *Kommunikasjon*, eds. Eva Lambertsson Björk and Sverre Vesterhus. Halden: Høgskolen i Østfold, 111-130. Also available as SPRIKreport no. 21, URL: <http://www.hf.uio.no/forskningsprosjekter/sprik/docs/pdf/ks/Solfjeld21.pdf>.
- Talmy, Leonard. 2000. *Toward a Cognitive Semantics*. Volume I: *Concept Structuring Systems*. Volume II: *Typology and Process in Concept Structuring*. Cambridge, MA: The MIT Press.
- Txurruka, I. Gómez. 2000. The Semantics of and in Discourse. Report No. ILCLI-00-LIC-9.
- Vallduvi, Enric, and Engdahl, Elisabeth. 1996. The cross-linguistic realization of information packaging. *Linguistics* 34:459-519.
- Webber, Bonnie; Knott, Alistair; Stone, Matthew, and Joshi, Aravind. 1999. Discourse Relations: A Structural and Presuppositional Account using Lexicalised TAG. *1999 Meeting of the Association for Computational Linguistics*, College Park MD, June 1999.
- Webber, Bonnie; Knott, Alistair; Stone, Matthew, and Joshi, Aravind. 2003. Anaphora and Discourse Structure. *Computational Linguistics*, 29(4):545-587.