DISJUNCT ADVERBS: A SCALE OF 'DISJUNCTIVENESS'

1. INTRODUCTION

The adverbial category has been described as the most peripheral one, but it is in fact a heterogeneous category, within which there are relatively integral and relatively peripheral types of adverbs. I will examine here those adverbs which are taken to be the most peripheral in the clause, namely disjuncts. I will show that the semantic and syntactic differences between the adverbs in this function warrant the recognition of a scale of disjunctiveness on a par with, say, predication and sentence adjuncts within the adjunct function.

Section two of this paper will be devoted to the semantic and syntactic arguments which justify the analysis of modality and illocutionary disjuncts (henceforth also MDs and IDs respectively) as belonging to two different layers in the hierarchical structure. It will be shown that the latter are not subject to sentence-building constraints and are thus best seen in the less structurally-dependent context of discourse. Section 3 will be concerned with the motivation for distinguishing two levels of structure within the modality group. Without adhering to any theoretical framework, mention will be made of the FG and TGG models of hierarchical structure, both of which treat all MDs as belonging to the same level. Finally, the main conclusions reached in this study are summarised in section 4.

2. MODALITY AND ILLOCUTIONARY DISJUNCTS

By virtue of their semantic contribution to the organisation of the clause, disjuncts are usually divided into two main classes: ILLOCUTIONARY disjuncts and MODALITY disjuncts (see Greenbaum 1969, Quirk et al. 1985, Espinal 1989, Dik et al. 1990). The latter specify the speaker's evaluation of the propositional content expressed in a speech act (e. g. fortunately, unexpectedly, perhaps), the former qualify the speaker's performance of the speech act (e. g. frankly, briefly, confidentially).

This distinction turns out to be one of scope, scope being defined as that which the adverb modifies. While MDs modify the proposition asserted in the performance of the illocutionary

¹ IDs are also known as "style disjuncts" (Greenbaum 1969, Schreiber 1972, Mittwoch 1976, Quirk et al. 1985), "performative adverbs" (Huang 1975, Egea 1979), "discourse-oriented adverbs" (Ernst 1984), "parenthetical adverbs" (Bartsch 1976, Espinal 1991) or "adverbiaux d'Énonciation" (Nélke 1990). For other terms used to designate MDs see section 3.

act, IDs modify the act of performing the illocution itself and thus do not constitute part of what is being asserted.

The near-paraphrase relationship obtained between the (a) and (b) sentences of examples (1)-(4) corroborates the fact that the scope of the illocutionary adverb in the (a) member of pairs (1) and (2) is the illocutionary act, whereas that of the modality adverbs in (3) and (4) is the propositional content of the clause:

- (1) a. Confidentially, I don't like him.
 - b. I tell you confidentially, I don't like him.
- (2) a. Confidentially, do you like him?
 - b. I ask you to tell me confidentially, do you like him?
- (3) a. *Unfortunately*, he didn't come.
 - b. It is unfortunate that he didn't come.
- (4) a. *Probably*, he didn't pass the exam.
 - b. It is probable that he didn't pass the exam.

The "syntactic" features which linguists commonly list to distinguish IDs from MDs, namely that the former, unlike the latter, can occur in questions, in imperative and in performative sentences, derive from this scope difference. Since IDs have the illocution in their scope they can occur with sentences displaying all types of basic illocutions. On the other hand, MDs, being themselves within the domain of the illocution, are subject to severe restrictions with regard to the type of sentence they can collocate with. Witness:

- (5) Confidentially, is she married?
- (6) **Unfortunately*, is she married?
- (7) Seriously, let's not tell anyone about this.
- (8) *Certainly, let's not tell anyone about this.
- (9) Sincerely, I promise you to study more next time.
- (10) *Fortunately, I promise you to study more next time.

That these restrictions are essentially pragmatic, i. e. depend on the illocutionary force of the sentence, and only apparently syntactic is evidenced by the fact that (11), which is a question with an MD, and should therefore be anomalous, is acceptable, because it does not have the illocutionary force of a question; rather it functions as some kind of exclamation or statement with an agreement-seeking tag:

(11) Could he *possibly* have killed his father?

Actually its meaning can be alternatively expressed in a sentence like (12):

(12) It's possible that he's killed his father, isn't it?

By taking for granted that MDs and IDs are modifiers at different levels, scholars often fail to provide the syntactic evidence that supports their hierarchical positions. It is possible, however, to postulate a difference in hierarchical structure between IDs and MDs on strictly syntactic terms. Indeed, syntactic evidence, together with the foregoing comments, will strongly suggest that IDs have very little to do with the sentence functional network, whereas MDs, despite their detached position, have a role to play sentence-internally.

In the first place, the difference in scope of English modality and illocutionary adverbs is manifest in matters of order. The examples in (13) and (14) below illustrate that the ID must precede the MD, the reverse order being ungrammatical.

- (13) Confidentially, probably she has AIDS.
- (14) *Probably, confidentially she has AIDS.

The role attributed to positional preferences in the determination of hierarchical structure in current theoretical frameworks such as FG and TGG is based on the assumption that "outer or 'higher' satellites take 'inner' or 'lower' satellites in their scope" (Dik et al. 1990: 53). Thus the precedence and scope relations illustrated in (13) and (14) are suggestive of treating the IDs as belonging to a higher level, be it the illocutionary layer in FG or C" in TGG, than the modality ones.

The second revealing difference between MDs and IDs is that the latter cannot be indirectly reported. Witness the ungrammaticality of (15) contrasted with (16) in which the modality adverb is part of the message contained in the illocution

- (15) *She said that *confidentially* John probably has AIDS.
- (16) She said that John *probably* has AIDS.

This follows from the fact that an illocutionary adverb, as opposed to a modality one, does not constitute part of what is being asserted.

In the third place, IDs, unlike most MDs, cannot occur in the focus position of a cleft sentence, e. g.

- (17) It was *probably* John who told her the truth, not his brother.
- (18) *It was frankly / honestly / briefly John who told her the truth, not his brother.

Since illocutionary disjuncts are comments on the speaker's performance of the speech act and have no bearing on the adjoined sentence, it follows that they will not occur in any structure like that in (18), which makes them refer to aspects of the content of the sentence to which they are attached. Many modality disjuncts, however, may help to focus the major information points in the clause, and this accounts to some extent for their occurrence in posi-

tions other than the initial or final ones and for their accepting the 'integrated' position, i. e. before the verb with no intonation or comma break, which is hardly possible for IDs.¹

Consider, finally, the behaviour of IDs and MDs vis-á-vis their respective clauses in German and Norwegian, which are verb-second languages. In V2 languages any initial element (apart from conjunctions), be it subject, object or adverbial, is followed by the finite verb. IDs, however, are able to counteract the V2 rule, obviously because such items are assumed to be external to the sentence proper, which itself has V2 structure with SV order (e. g. (19b) and (23b)), or alternatively has a fronted element and the verb in second place (e. g. (20) and (24)). V2 is, by contrast, optional with some modality disjuncts (e. g. (25)) and obligatory with others (e. g. (21), (22), (26)):

German:

- (19) a. *Im Ernst / Kurz und gut ist er sehr nett.
 - 'Seriously / in brief is he very nice'2
- (19) b. Im Ernst / Kurz und gut, er ist sehr nett. 'Seriously / in brief, he is very nice'
- (20) Im Ernst, gestern sah ich Peter.
 - 'Seriously, vesterday saw I Peter'
- (21) Glücklicherweise bestand Peter die Prüfung.
 - 'Fortunately passed Peter the exam'
- (22) Wahrscheinlich bestand Peter die Prüfung 'Perhaps passed Peter the exam'

Norwegian (from Swan 1989: 334, 336):

- (23) a. *Oppriktig talt / Alvorlig talt / For Ü vëre ërlig, er Timmy gal. Frank spoken / Serious spoken / For to be honest is Timmy crazy.
- Oppriktig talt / Alvorlig talt / For Ü vere erlig, Timmy er gal.
 - Frank spoken / Serious spoken / For to be honest Timmy is crazy.
- (24) Alvortig talt, henne inviterer vi ikke. 'Serious spoken, her invite we not'.
- (25) a. Heldigvis / Overraskende nok vant ikke Petter.
 - 'Fortunately / Surprisingly enough won not Petter'.
- (25) b. Heldigvis / Overraskende nok, Petter vant ikke.
- Fortunately / Surprisingly enough, Petter won not. (26) a. Sannsynligvis / Muligens / Útvilsomt likte hun det ikke.

Illocutionary disjuncts are always separated by comma intonation when in initial and final positions. That is also usually the case in preverbal position. We cannot, for example, get an illocutionary reading of briefly in (i) (i) John briefly expected to be here by midnight where the only possible reading is where it describes how long John's expecting lasted. However, honestly or frankly, for example, may retain their illocutionary reading when in preverbal position if prosodic focus is on the operator, or in copula sentences in pre-complement position: (ii) I frankly / honestly don't understand why you behaved as you did. (iii) Mary is frankly an extrovert. According to Bolinger (1972: 94) illocutionary disjuncts in such constructions are examples of disjuncts which have served as affirmation of truth and then have evolved into intensifiers.

² All the glosses will be rendered word by word.

'Probably / Possibly / Doubtless liked she it not'.

(26) b. *Sannsynligvis / Muligens / Utvilsomt hun likte det ikke.

'Probably / Possibly / Doubtless she liked it not'.

The distinct bearing of IDs and MDs with regard to inversion stresses the fact that the latter are subject to sentence-building processes while the former exist apart of those processes.

3. EPISTEMIC AND EVALUATIVE MODALITY DISJUNCTS

In the literature on MDs two distinct types of adverbs have traditionally been recognised. These are what Quirk et al. (1985: 511-512) call Group I and Group II attitudinal disjuncts. Group I adverbials, or epistemic disjuncts (e. g. probably, evidently, allegedly) express the speaker's degree of commitment to the truth of the proposition involved; the Group II, or evaluative disjuncts (e. g. fortunately, surprisingly, wisely) express the speaker's evaluative attitude towards the propositional content. By virtue of their semantic contribution to the organisation of the clause, MDs in both groups have been considered in most studies as belonging to the same level in the hierarchical structure, e.g. "attitudinal disjuncts" (Greenbaum 1969, Corum 1974, Quirk et al. 1985), "speaker-oriented adverbs" (Jackendoff 1972, 1977), "interpretation sentence-adverbs" (Allerton and Cruttenden 1974), "S-modifying adverbs" (McCawley 1988), "proposition satellites" (Hengeveld 1989, Dik et al. 1990), "operadores de O" (Espinal 1989), "adverbiaux d'énoncé" (Nélke 1990), "adverbios de modalidad" (Fuentes 1991).

There is however syntactic and distributional evidence, largely ignored in the literature so far, which may be regarded as suggestive of treating the evaluative adverbs as belonging to a higher level in the hierarchical structure than the epistemic ones.

The first syntactic distinction, pointed out in Schreiber (1971) and Bellert (1977), concerns their behaviour with respect to negation. Epistemic adverbs have no corresponding negative adverbs that would function as epistemic disjuncts, nor can they be negated independently. Thus we do not have sentences such as (27b-d), whereas we do have sentences such as (28a-b) with negative evaluative adverbs (28a), or adverbs negated independently (28b), though not all evaluative adverbs can be so negated (28c-d):

- (27) a. Improbably / Inconceivably enough, he was drunk.
 - b. *Evitably /* Unobviously, he was drunk.
 - c. *Not probably he was drunk.
 - d. *Not evidently he was drunk.
- (28) a. Unfortunately, he got involved.
 - b. Not surprisingly, he got involved.
 - c. **Unironically* /**Unoddly*, he got involved.

See however Halliday (1985: 50, 82-3), where evaluative and illocutionary disjuncts are grouped together as "Comment adjuncts", while epistemic disjuncts are analysed as "Mood Adjuncts" together with intensifiers, subject adjuncts and frequency adverbs. The former, unlike the latter, are not themselves part of the proposition.

d. *Not ironically / *Not oddly enough, he got involved.

It may be argued that a few epistemic adverbs, like those in (27a), do have negative prefixes. But as Schreiber (1971: 95) and Michell (1976: 504) have rightly pointed out, these function as evaluative and usually require 'enough', which is the typical evaluative disjunct modifier.

The fact that evaluative adverbs can be negated while epistemic ones can not, suggests that the former are more independent of the nucleus of the sentence than the latter, because they may take another negative element, *not*, independently of sentential negation.

In the second place, while epistemic adverbs can substitute for the proform of yes-no questions, i. e. yes or no, evaluatives, like IDs, must occur together with either one of them, and always precede it, as shown in (29)

- (29) Did he pass the course?
 - a. Fortunately, yes.
 - b. Surely / Possibly.

This again suggests that evaluative adverbs are more loosely attached to the nucleus of the sentence than epistemic ones, because they occur independently of substitutes for the entire (interrogative) sentences.

Positional preferences of evaluative and epistemic disjuncts may be invoked as a third argument for positing a distinction in hierarchical structure between the two. As shown in (30) and (31) the evaluative adverb must precede the epistemic one:

- (30) Unfortunately, he probably has AIDS.
- (31) *Probably, he unfortunately has AIDS.

Consider in the fourth place, their behaviour under clefting. Epistemic disjuncts, unlike evaluative ones, can be clefted if accompanied by another constituent. In this respect the latter behave like IDs:

- (32) It is *probably* John that she loves.
- (33) *It is *unfortunately* John that she loves.

This contrast is revealing in that constituents are taken to be located hierarchically closer to the head the more focal they are. Consequently, the ability of the adverb in (32) to bear focus -albeit under restricted conditions- may be viewed as suggestive of belonging to a more inner layer of structure than the adverb in (33).

The fifth difference concerns embedding. Both evaluative and epistemic disjuncts can occur in embedded clauses under assertive predicates and, in general, in such types of clauses whose cognitive content is relatively independent of the cognitive content corresponding to their main clauses, such as causal clauses and non-restrictive relative clauses. Evaluative adverbs, however, cannot occur in embedded clauses under non-assertive predicates or in em-

bedded interrogatives, while epistemic adverbs feature in both these environments. Compare (34) and (35), taken from Nakajima (1982: 348), who first pointed out this fact:

- (34) a. John said that fortunately she had won the first prize in the contest.
 - b. *John resents that she *unfortunately* failed to win the first prize in the contest.
 - c. *John asked whether she had *fortunately* won the first prize in the contest.
- (35) a. John said that she had *possibly* won the first prize in the contest.
 - b. John regrets that she *possibly* failed to win the first prize in the contest.
 - c. John asked whether she had *possibly* won the first prize in the contest.

Since embedding is an essential property of the grammar of the sentence, the fact that evaluative disjuncts cannot be carried along in some embedding processes which affect the clause they modify indicates their greater peripherality.

Finally, let us examine again their behaviour in verb-second languages. As examples (25) and (26) above illustrate, Norwegian exhibits a clear scale of disjunctiveness: with content-oriented evaluatives (see (25)), V2 is optional. With agent-oriented evaluatives and epistemic disjuncts (see (26)), there is always inversion. Moreover, the latter, unlike the former, cannot precede sentences with fronted topics and must always be followed by the verb, like non-disjuncts, in fact. Consider (36) and (37), borrowed from Swan (1989: 334-5):

- (36) Heldigvis, déd var hun ikke.
 - 'Fortunately, dead was she not'
- *Antagelig henne ba de ikke.

 'Probably her invited they not'.

In this respect (37) is exactly like (38a), which has double topicalisation:

- (38) a. *Aldri Erik har jeg métt. 'Never Erik have I met'
 - b. Erik har jeg aldri métt. 'Erik have I never met'

Most English epistemic disjuncts and agent-oriented evaluatives, are also restricted in sentences which have a topicalised element and are inverted, as the following examples illustrate:

- (39) Surprisingly / Tragically, down came the cradle, baby and all.
- (40) *Erroneously / Unwisely, down came the cradle, baby and all.
- (41) *Probably / Perhaps / Unquestionably, down came the cradle, baby and all.

¹ This might suggest a gradient of peripherality within the evaluative group. Additionally, agent-oriented evaluatives exhibit restrictions with regard to subject or, rather, agent type. According to Dik (1975), they may only occur in clauses where there is a "controlling" subject, where some decision by an animate being is implied. Whether the semantic and distributional differences between content and agent oriented evaluatives are of the calibre of intralevel differences will be dealt with in a later investigation.

The above syntactic and distributional data constitute prime evidence for positing a difference in hierarchical structure between evaluative disjuncts on the one hand and epistemic disjuncts on the other. One may now wonder whether the semantic criteria by virtue of which both groups have traditionally qualified as modifiers at the same level are disputable. In actual fact, the two groups exhibit a remarkable difference with regard to their involvement in the propositional content, the former being truth conditional, the latter not so (see however Jackendoff 1977: 61). Ifantidou (1993) uses a standard test for truth-conditionality to demonstrate this fact. It "consists in embedding the sentence which includes the adverbial into a conditional and seeing if it falls within the scope of the 'if'. If it does, the adverbial is truth conditional, if it does not it is non-truth-conditional" (ibid. 73). Let us examine the results it yields when applied to specific examples, all taken from Ifantidou. First consider

(42) Unfortunately, Mary has missed the deadline.

The question here is whether the truth-conditions of (42) are (43) or (44)

- (43) Mary has missed the deadline.
- (44) It is unfortunate that Mary has missed the deadline.

We embed (42) into a conditional (45)

(45) If Mary has unfortunately missed the deadline, she can reapply in May.

Under what circumstances does the speaker of (45) claim that Mary can reapply in May? Under the circumstance in (43) or that in (44)? Obviously under the former, not the latter. Therefore the disjunct *unfortunately* is non-truth-conditional.

Consider now epistemic adverbs such as reportedly, certainly, apparently, and so forth:

(46) Reportedly, the ball was over the line.

The issue is whether its truth-conditions are (47) or (48)

- (47) The ball was over the line.
- (48) It is reported that the ball was over the line.

We embed (46) into a conditional (49)

(49) If the ball was reportedly over the line, the matter should be investigated further.

Clearly the speaker in (49) claims the matter should be investigated further if (48) is true, not if (47) is so. Hence, *reportedly* in (44) does contribute to the truth conditions of the utterance.

The results of applying this test to other MDs are uncontroversial: MDs indicating the speaker's attitude towards the statement prove to be external to the proposition expressed by the utterance that carries them. However, MDs indicating the amount of evidence the speaker has for what s / he is saying, that is, his / her commitment to the truth of what follows, go in

quite the opposite direction: their omission from a sentence would at least partly change the truth-conditional character of the proposition expressed by the sentence.

This semantic difference between the two is reflected in the paraphrase possibilities they have. For example it is possible to use putative *should* in the paraphrases of evaluative disjuncts (51) but not in those of epistemic ones (50). If *should* is inserted into the latter, it conveys obligation and alters the meaning of the sentence radically (e. g. 50c), since this group, as has been shown above, is concerned with the factual basis of what is asserted, and not with the expression of an opinion. Compare the following examples:

- (50) a. Obviously, she is pregnant
 - b. = It is obvious that she is pregnant.
 - c. = It is obvious that she *should* be pregnant.
- (51) a. Surprisingly, she is pregnant.
 - b. = It is surprising that she is pregnant.
 - c. = It is surprising that she *should* be pregnant.

In the second place, only evaluative adverbs are amenable to the transformation "S, which is / was ADJ." (Schreiber 1971, Allerton & Cruttenden 1974), e. g.

- (52) a. *Probably*, he was drunk.
 - b. *He was drunk, which was probable.
- (53) a. Surprisingly, he was drunk.
 - b. He was drunk, which is / was surprising.

It should be noted that some epistemic adverbs, such as *obviously*, *evidently*, *clearly*, etc., are often apparently acceptable in that structure. The following example illustrates such use:

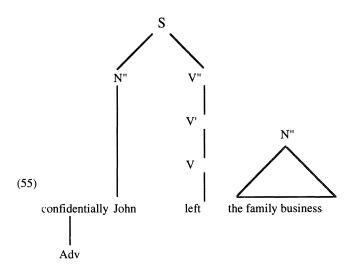
(54) He was drunk, which was / ??is obvious / evident.

Nonetheless, there seem to be some restrictions on verb / sentence meaning when *obvious* (54) but not when *surprising* (53) is used. Namely the state, event, etc. described by the sentence must be of such nature that there can be perceptual evidence (as in 54). Naturally, there are not such restrictions on evaluatives.

4. CONCLUDING REMARKS

All in all, the syntactic and distributional evidence available provides more than compelling support for the scale of disjunctiveness theory advocated throughout this study.

IDs have proved to be the most detached adverbial constituents. Actually, they show clear symptoms of their structural dissociation from the sentence they are adjoined to. Basically two types of analysis have been postulated so far to record formally the greater syntactic independence of the adverbs in question. On the one hand, within a TGG framework, Espinal (1991: 755) has proposed a multi-rooted analysis as follows:



which considers disjunct constituents as fully unattached to the sentence they co-appear with. On the other hand, FG ascribes them to the highest level of clause structure it recognises, namely the illocutionary layer, which consists of an illocutionary force indicating device, the variable (E_1) , and a proposition to which this device is applied. This variable can be specified by illocutionary disjuncts, their satellites σ_4 (see Dik 1989: 248):

(56) clause =
$$\pi_4 E_i$$
: [[proposition](σ_4)ⁿ] (E_i)

Next in the scale of disjunctiveness come those disjuncts which are in some way or other bound to the content of the sentence they refer to, i. e. evaluative and epistemic adverbs. As we have seen, the fact that these two classes of adverbials represent an aspect of the speaker's evaluation of the propositional content expressed in a speech act has led most writers to assign them to the same level of hierarchical structure. Thus for Espinal (1989: 34) they are both daughters of S' and sisters of S, as in (57):

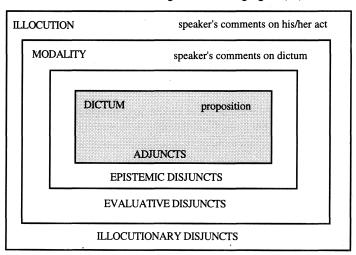
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[O' [COMP {rel ] [ {aval } ] [ {quant inter } Adv modal } Oi adv orientat subj } emf } {temp} {neg} [ N" V" ] ] Oj Oi O'
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Similarly for Jackendoff (1977: 62) the two groups qualify as V''' (=S) complements. FG, for its part, considers them satellites at level 3 of the hierarchical structure, the proposition level (see Dik 1989: 247)

(58) proposition =
$$\pi_3 X_i$$
: [[extended predication](σ_3)ⁿ] (X_i)

Yet all the evidence available argues against both these analyses. Indeed, the differences between evaluative and epistemic disjuncts expounded above constitute a sufficient argument for distinguishing between the two classes of adverbials in terms of hierarchical structure. What are the implications of this for the TGG and FG analyses of MDs just seen? As for the former, its highly stratified hierarchical structure allows us to assign evaluative adverbs to a higher layer than epistemic ones, probably I" as opposed to I'. As far as FG is concerned, it needs to be considered whether two different sublevels should be recognised within the proposition as they are within the predication (see Siewierska 1992: 425-6).

To conclude, in the light of the evidence presented in this paper, it is clear that though the overall nature of the semantic contribution that a disjunct imparts to the utterance determines its hierarchical position, semantic differences among disjuncts of apparently the same level which are accompanied by syntactic and distributional contrasts warrant at least sublevel divisions. This is the structural claim made through the following figure (59):



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