

ADVERB ORIENTATION: SEMANTICS AND PRAGMATICS

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Orientation is a well known property of some adverbs in English. Early approaches to the topic simply offered a systematisation of paraphrase relations between these adverbs and the corresponding adjectives. Current cognitive (Nakamura, 1997) and Event Logic (García Núñez, 1999) approaches have discovered simpler semantic components in adverb orientation. This study presents cases of Subject Oriented Adverbs pragmatically oriented to non explicit participants, and demonstrates that the proposed analyses in terms of simpler meaning components provide a good basis for a predictive and explanatory account of adverb orientation to both explicit and implicit participants.

Key words: thematically dependent adverbs, event adverbs, adverb scope, thematic structure, deontic modality

1. Adverb orientation

Since Jackendoff (1972), a number of adverbs in English have been cited as exhibiting the property of orientation. In very general terms, orientation can be described as the process by which the adjectival root of an adverb can be ascribed to some participant in the event modified by the adverb; furthermore, orientation is assumed to target one particular argument: sentence subject. To illustrate this introductory definition, consider sentences (1)-(4) and their respective paraphrases in the corresponding (a) sentences.

- (1) Martha willingly sent the secret files to John.
- (1a) Martha was willing to send the secret files to John
- (2) John was willingly sent the secret files by Martha.
- (2a) John was willing to be sent the secret files by Martha.
- (3) Martha wisely sent the secret files to John.
- (3a) It was wise of Martha/ Martha was wise to send the secret files to John.
- (4) John was wisely sent the secret files by Martha.
- (4a) It was wise of John/ John was wise to be sent the secret files by Martha.

As can be seen in the examples, both active and passive subjects can be targets for orientation¹.

Some authors (McConnell-Ginet 1982, Ernst 1984, Wyner 1994) have noted that orientation is a thematically rather than a syntactically based

¹ Here we omit cases of orientation to passive deep subjects like the one in (i) (paraphrased in (ii)).

- (i) John was sent the secret files wisely by Martha.
- (ii) John was sent the secret files in a wise manner by Martha.

In other words, we will focus on cases of what can be very generally classified as disjunct and preverbal adjunct occurrences of adverbs. The preverbal adjunct occurrence of *wisely* in active sentences like (iii) is ambiguous between a subject-oriented and a manner reading. Here we are interested only in the former.

- (iii) Martha wisely sent the secret files to John.

Leaving out postverbal adjunct occurrences of oriented adverbs will not affect the discussion below.

process². Sentences where adverb orientation fails to take place in the presence of a subject are taken to constitute good evidence that thematic conditions (more specifically, agentivity) rather than syntactic conditions are the key feature for orientation.

(5) * Martha reluctantly received the letter.

(6) * John was wisely seen by Martha.

2. Orientation: a semantic/ pragmatic problem

A less observed fact about these subject-oriented adverbs is that some of them can at times be oriented to participants outside the argument structure of the sentence, which is tantamount to saying outside the explicit content of the utterance. Quirk *et al.* (1981: 625-626) puts forward and discuss examples like (6) and (7), where wisdom is ascribed to some participant inferable from the context of utterance.

(7) Wisely, the meeting ended early today.

(8) Wisely, Bill's car is in a garage overnight throughout the winter.

In these examples the participants whose wisdom is highlighted by the adverb, though implicit and inferable from context, are still identifiable as the individuals who brought about the events described in the sentences, i.e., are agentive participants.

Another important thing to notice is that orientation to an implicit agent involves sentence modification, while orientation to a thematic agent involves VP modification. That is, in (7) and (8) the whole sentence is judged wise and the person who caused the event remains implicit. On the other hand, in (9) we have two possible interpretations: either the sinking of

² There is nevertheless variation among these authors as to how strong the correspondence between syntactic and thematic structure is. They are not hence equally likely to keep to the subject-orientation hypothesis.

the ship is judged as wise and Joan is the agent that caused the event, or the whole event (including the agent) is judged as wise; on the latter interpretation the agent responsible for the bringing about of the event must again be an implicit agent, someone who had Joan sink the ship.

(9) Wisely, Joan sank the ship.

It is important to notice that (7) and (8) are not suitable contexts for all types of oriented adverbs. *Willingly*, which was classified as an oriented adverb on a par with *wisely*, cannot orient to an implicit agent, as the unacceptability of (10) makes manifest.

(10) * *Willingly*, the meeting ended early today.

Any solution to the problem of orientation must be consistent with the differences and similarities between oriented adverbs. Failure to do so will necessarily mean missing the facts about the grammar/ pragmatic distinction, or those about the semantic homogeneity of adverb orientation, respectively.

On this sketchy first approximation to (7)-(10), we are, on the one hand, dealing with the thematic concepts (less so with the syntactic ones) advocated by previous theories of adverb orientation, and, on the other, resorting to a pragmatic inferential process which certainly goes beyond the limits of syntax or semantics. In so doing, we have come across the sort of general theoretical problem we want to address in this work: how can pragmatics be made continuous with grammar?, how can grammar bias pragmatic inferential processes?

It is at this point possible to set the goals of this work. First of all, it seems necessary to establish what kind of linguistic phenomenon orientation is. Is it a grammatically or a pragmatically constrained phenomenon? Should we analyse adverb orientation as a fully grammatically constrained

phenomenon, or should we let our pragmatic abilities do part of the work? Secondly, do oriented adverbs form a homogeneous class, or are there differences between them?, do these differences impinge on or determine the kind of orientation they realise?

In the next section, we assess the empirical benefits of three theoretical proposals that might in principle be able to account for the revised facts. The first two rely on a fully grammatical treatment of adverb orientation; the last one, the one we will argue for here, allows for a pragmatic treatment constrained by semantic factors.

3. Grammatically-based accounts of adverb orientation

The first theoretical possibility we will explore consists in analysing adverb orientation together with other thematic phenomena as lexico-grammatically specified. In this perspective, subject oriented adverbs (SOAs henceforth) would assign thematic properties to a number of arguments in the structure in which they appear.

This possibility has been explored in relation to adjectival modification and the thematic structure of NPs by Higginbotham (1985). He argues quite convincingly that modifiers bear a thematic grid or empty argument structure of their own which, as it were, is subordinated to the thematic grid of the lexical category they modify and borrows arguments from it.

To illustrate this position, consider two sentences like (11) and (12).

(11) Mary sank the ship.

(12) Mary willingly sank the ship.

The proposal under revision would claim that the transitive verb *sink* in (11) contains the grammatical information that its external argument is an Agent and its internal argument a Theme/ Patient. Being a lexico-

grammatical specification, failure to meet this requirement yields an ungrammatical expression.

We can now, on the basis of this sketchy presentation, hypothesise what would be the rough outlines of a lexico-grammatical treatment of adverb orientation: the thematic grid of *willingly* in (12) would contain an empty slot to be filled by a thematic agent in the argument structure defined by the predicate *sink*.

The proposal would work acceptably well for *willingly*, which, according to the reviewed facts, systematically orients to the Agent. However, it would fail to account for the orientation of sentence-modifying *carelessly* to an implicit agent.

On this basis, we can provisionally conclude that adverb orientation to a thematic Agent is encoded in the grammatical content of *reluctantly* but not in that of *carelessly*.

An alternative theoretical approach would rest on an identification of orientation possibilities and structural locations. As we have seen (cf. foot note 1) the two relevant structural locations are preverbal position and sentence position. This approach is the one adopted by Jackendoff (1972), Thomason and Stalnaker (1973), Travis (1988) or Bowers (1993). All of them have tried to account for the orientation facts on the assumption that syntactic position suffices to constrain interpretation.

Omitting details about the precise nature of the theories launched, we can see that these proposals work well in the case of preverbal adverbs (which orient to agent arguments), but can hardly provide a stable target for orientation in the case of sentence SOAs (the agent argument in the case of *reluctantly*, the agent argument or an implicit agent in the case of sentence *carelessly*).

Grammatically-based accounts of SOAs do not seem to guarantee the empirical coverage of the facts pursued in this work. In the following sections, we present a theory of SOAs which both urges an interactive view of the semantics/ pragmatics interface and yields empirical benefits in relation to the revised facts.

4. Subject-oriented adverbs and deontic modality

Nakamura (1997) from a Cognitive Grammar perspective, and García Núñez (1999) within an Event Logic framework provide accounts of adverb orientation which make use of two intimately tied concepts: thematic structure and deontic modality³. The idea is that SOAs express some kind of deontic evaluation of the events which they modify⁴. Roughly, the adverbs in (13) and (14) somehow refer to some person (the speaker in (13), the agent in (14)⁵) who judges the reported event as undesirable for some reason or other, and who is responsible for the bringing about of the relevant event.

(12) Martha foolishly put the secret files out on the kerb.

(13) Martha reluctantly put the secret files out on the kerb.

Close consideration of these constituents of adverb orientation and their grammatical realisations will lead, we believe, to a fully explanatory account of the facts and problems sketched out in sections 1 and 2 above.

³ The idea appears more clearly in García Núñez (1999) than in Nakamura (1997), for this latter author, though also identifying subject oriented adverbs with modal semantics, fails to distinguish between modal deontic target (the person who evaluates) and thematic target (the person responsible for the action).

⁴ As we are not dealing here with modalisation of non factual propositions (as is the case with modal deontic verbs), deontic modality should be understood more in its desiderative (right/wrong evaluating) than in its instrumental sense. After all, as Lyons states in relation to deontic modality, "...the so-be-it component (...) is intended to have an instrumental meaning, but it may be assumed to have developed out of, and to include, an ontogenetically prior desiderative" (Lyons, 1977: 826).

⁵ As this distinction proves crucial both for distinguishing SOAs and for the revised facts, we will, following Wyner's (1994) terminology, refer to *wisely*-type SOAs as Event Adverbs (EAs henceforth), and to *reluctantly*-type SOAs as Thematically-Dependent Adverbs (TDAs henceforth). The former adverbs are also known as agent-oriented adverbs (Frey 2000), the latter as mental attitude adverbs (Ernst 2000).

Once we accept that oriented adverbs are like deontic readings of modal verbs, we simply have to relocate concepts and categories which are well-established in modal semantics. For example, it is fairly uncontroversial that deontic modal verbs require an agent, i.e., can only operate on a proposition whose thematic structure includes an Agent, or whose processing in a context involves the presence of an agent. This can be seen in (15) (with an explicit agent) and (16) (with an implicit agent).

- (14) Martha must put the secret files away.
 (15) Martha must receive the secret files tomorrow
 (you/someone must see to it that she does).

Likewise, modal deontic verbs also imply an evaluator (a deontic source in Lyons's (1977: 824) terms). In both (15) and (16), this evaluator coincides with the speaker, as the paraphrases in (15a) and (16a), respectively, show.

- (15a) It is desirable from the speaker's point of view that Martha should put the secret files away.
 (16a) It is desirable from the speaker's point of view that Martha should receive the secret files tomorrow.

The fact that evaluators can coincide with sentence agents is not a peculiarity of oriented adverbs either. A deontic modal verb like *would rather* also implies an agentive evaluator.

- (16) Martha would rather keep the secret files in a safe place.
 (17a) It is desirable from Martha's point of view that she should keep the secret files.

A partial definition of adverb orientation can be offered at this point: it is the process through which a subject-oriented adverb selects an agent. This definition is partial because it does not account for the perceived syntactic differences in orientation. In other words, the theory will not be complete

until this new conception of orientation is shown to bear on the above reviewed syntactic constraints on orientation.

In order to explain the syntactic realisation of orientation, it is necessary to take into account the semantic type modified by the relevant adverbs. In the light of a deontic classification of oriented adverbs, the question of what state of affairs is modified by the adverb becomes a central one. As is well known, deontic modal verbs operate on propositions expressing potential or possible states of affairs (states or events). Roberts (1986: 212-213) or García Núñez (1999: 439-442) claim that TDAs and EAs modify predicates denoting actual events. A sort of complementary relation seems to obtain: deontic modality as expressed by modal verbs denotes the desirability of a state of affairs which is to be brought about by some agent; deontic modality as expressed by an oriented adverb denotes the desirability of an actual event brought about by some agent. To put it graphically, the modal force of two sentences like (18) and (19) would differ in the way shown by (18a) and (19a).

(17) Martha must burn out the secret files

(18a) Deontic pole: desirable

Evaluator: speaker

Potential state of affairs: Martha burns the secret files.

(18) Martha wisely burnt out the secret files

(19a) Deontic pole: desirable

Evaluator: speaker

Actual event: Martha burnt the secret files.

Now that the three essential components of deontic assertions have been identified, a natural explanation can be offered for the syntactic constraints on orientation. Remember the facts: both adjunct and disjunct occurrences of TDAs force thematic orientation of these adverbs to sentence agents; adjunctive EAs force the same interpretation, but disjunctive EAs

allow for thematic orientation of the adverb to an implicit agent. As we see it, the whole issue can be tackled in terms of structural scope. Let us see how.

5. Thematically dependent adverbs

If, as claimed, TDAs express the deontic evaluation of an event by an agentive evaluator, it is simply a matter of necessary fact that the agent cannot be part of the event modified by the adverb. Only in this way will the adverb manage to check the three components of deontic modality: the evaluated event, the evaluator, and the morally responsible agent. For an illustration, consider (20), its decomposition in (20a), and its informal semantic representation in (20b) (the continuous line representing the choice of evaluator, the dotted line the choice of agent).

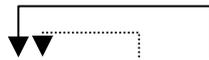
(19) Martha reluctantly burnt out the secret files

(20a) Deontic pole: undesirable

Evaluator: Martha

Agent: Martha

Evaluated event (EE): the secret files burnt out.



(20b) Martha reluctantly [_{EE} burnt out the secret files].

Regarding deontic decomposition, disjunctive TDAs are not different from adjunctive ones; i.e. (21a), the representation of (21), is identical to that of (20a).

(20) Reluctantly Martha burnt out the secret files.



- (21a)  **Reluctantly** Martha [_{EE}burnt out the secret files]

On the basis of these data, we can make the following generalisation:

- (22) Thematic orientation of an oriented adverb cannot surpass evaluation boundaries⁶.

It is still to be seen if this general constraint holds in the case of EAs, and if there is some further theoretical motivation for the constraint itself. But, before turning to these issues, it is important to notice that the constraint is empirically confirmed by new evidence. As noted by Wyner (1994: 180-184) and García Núñez (2002), TDAs can associate with focus in both their adjunct and disjunct occurrences ((21b)-(21c) show focused variations of (21)).

(21b) Reluctantly Martha BURNT OUT the secret files.

(21c) Reluctantly Martha burnt out THE SECRET FILES

⁶ Dillons (1973) puts forward examples of TDAs oriented to sentence subjects which can be interpreted agentively only pragmatically.

(i) Peter was intentionally tall.

The theory presented here would consider Peter in (i) to be as thematically agentive as it is in (ii).

(ii) Peter is being polite today.

The fact that these sentences are interpreted agentively can certainly be due to a pragmatic inferential process determining the semantic content of the utterances, but that does not change the fact that the subjects of these sentences must be interpreted agentively, thus providing a suitable structural environment for TDA orientation.

However, neither in disjunct nor adjunct position can TDAs associate with a focused subject agent (cf. (21d) below). This is particularly striking in the case of disjunctive TDAs, supposedly taking scope over the whole sentence. This demonstrates that subject agents are well outside the modifying scope of these adverbs, and that disjunct TDAs must be derivationally related to a deeper adjunct position, where they take scope over the predicate, not the sentence.

(21d) * Reluctantly MARTHA burnt out the secret files

6. Event adverbs

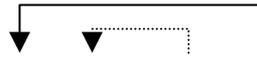
What happens with EAs? Recall that, unlike TDAs, EAs can be pragmatically oriented to an implicit agent when they are syntactic disjuncts. Is this in agreement with our working hypothesis in the previous section? We believe it is. Let us see how.

If, as alleged, EAs choose the speaker for an evaluator, this evaluator cannot be part of the explicit content of the utterance. Hence the evaluation boundaries are, so to say, outside the limits of the explicit content of the utterance. It hence becomes possible that the evaluated event coincides with the whole sentence, and that the morally responsible agent is outside the explicit content, connected to, and inferable from the evaluator's communicative intentions⁷.

Let us see how the proposed analysis works in the cases of (3) and (7) above (repeated now as (23) and (24), respectively).

⁷ Notice that we defend that this is only a possibility. The evaluation range of an EA both transcends and includes the explicit content of the utterance. This means that the morally responsible agent can be found both outside and within the explicit content of the utterance.

(23) Martha wisely sent the secret files to John.



(23a) Speaker: Martha wisely [_{EE} sent the secret files to John].

(24) Wisely, the meeting ended early today.



(24a) Speaker: Wisely, [_{EE}the meeting ended early today]

The fact that adjunctive EAs cannot be thematically oriented to an implicit agent follows quite straightforwardly from the proposed semantic framework. A semantic description like (23b) crashes because the agent *Martha* is neither the morally responsible agent required by the EA, nor part of the evaluated event. We believe this is the reason why (23) can only be interpreted as ascribing moral responsibility for the action to Martha (i.e. as in (23a)).



(23b) Speaker: Martha wisely [_{EE} sent the secret files to John]

Conversely, a sentence like (25), with Martha being part of the evaluated event, can be interpreted as ascribing moral responsibility for the action to an implicit participant (e.g. Martha's boss, who might have ordered

her to send the secret files to John). The semantic representation is offered in (25a).

(25) Wisely, Martha sent the secret files to John.



(25a) Speaker: Wisely_[EE] Martha sent the secret files to John]

Alternatively, (25) can be interpreted as ascribing wisdom to Martha, who would be held responsible for the action. Nothing in the proposed theory prevents this from happening. The problem is that *Martha* would then be both within the modifying scope of the adverb and outside it. I.e., syntactically, *Martha* would be part of the sentence modified by *wisely*; semantically, *Martha* would be the agent judged wise in relation to the sending of the secret files to John. The problem is only apparent. As (26) shows, *Martha* can be focussed only on condition that the sentence is interpreted as in (25a), not as in (23a) (i.e. with Martha as the deontic agent and outside the modifying scope of the adverb).

(26) Wisely, MARTHA sent the secret files to John.

This example reveals that the EA is a genuine disjunct (base-generated in a disjunct location) only when it takes scope over the whole sentence and ascribes moral responsibility for the event to an implicit agent. Otherwise, disjunctive EAs are, like disjunctive TDAs, adverbs moved from adjunct positions.

We can at this point refine the constraint in (22) above.

(27) Oriented adverbs modify an event and select an evaluator and an agent; the former is conventionally associated with the type of oriented adverb (TDA or EA); the latter is selected outside

the event modified by the adverb and within the scope defined by the evaluator.

7. Orientation and the semantics/ pragmatics distinction

The discussion above has shed light on the differences between oriented adverbs of the TDA and EA types. Now it is time to address the more general question of what kind of linguistic phenomenon adverb orientation is.

By trying to define a common analysis for both TDAs and EAs, we have come by a three-fold semantic analysis of oriented adverbs. On the basis of this analysis and the revised data, there are grounds for describing EAs as deictic adverbs. TDAs do not involve reference to the extra-linguistic context, but EAs do. Non-deictic, fully semantic treatments of oriented adverbs (Zubizarreta, 1982; Roberts, 1986) have built up theoretical constructs capable of handling all perceived similarities between EAs and TDAs, but have proved ineffective in relation to cases of orientation to implicit agents. The proposal advanced in (22) and refined in (27) above, sketchy and technically imprecise as it stands, has the merit of being compatible with previous approaches in terms of thematic orientation and modifying scope, and of providing a continuous, non disruptive articulation of syntactic, semantic and pragmatic aspects of adverb orientation.

The first factor determining adverb orientation to an agent is the syntactic-semantic scope of the adverb. The second factor is the deontic source of evaluation (viz evaluator), which, depending on the semantic import of the adverb, can be either grammatically (TDAs) or deictically (EAs) determined. Consequently, adverb orientation is a grammatically as well as a pragmatically constrained phenomenon. Pragmatic inferences are activated as soon as the semantic content of the adverb makes reference to contextual participants (like the speaker). The process seems not to be one way, though. Deciding about the agent to which an adverb like *wisely* orients involves resorting to grammatical information like, for example, the modifying scope of the adverb.

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