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The syntax and semantics of subject-oriented adverbs

A proposal for a new classification

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Supervisor: prof. dr. Miriam Taverniers



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Chapter 1

Within the field of English syntax, peripheral constituents such as adverbs have traditionally been a slightly underrepresented object of study. Even more neglected are those adverbs that have been repeatedly termed “subject-oriented” in the literature. Even though their name has been well established among those scholars that have tried to look into these adverbs, there has not been much consensus on their classification and the description of their syntactic behaviour. Some examples of subject-oriented adverbs are presented in (1.1).

(1.1) *foolishly, tactfully, gladly, bitterly, serenely, purposely, willingly*

It has been established that the interpretation of these adverbs is influenced to a large extent by the position they take in the clause. On the whole, subject-oriented adverbs have a very specific reading pattern, though not all adverbs in this class behave in exactly the same way.

In this study I aim at enhancing the current classification of subject-oriented adverbs precisely by paying close attention to the way their interpretation arises and proposing a new model of classification altogether. In my opinion, their reading pattern is such a vital characteristic of their behaviour that any attempt at a full description of these adverbs must necessarily start by investigating their reading pattern –something which to my knowledge has not adequately been done in any research so far. Therefore, I will critically assess three contemporary frameworks and argue that they in turn they each neglect fundamental properties of their syntactic-semantic behaviour. I will also try to show how these frameworks can be situated in two different theoretical approaches to subject-oriented adverbs in general, viz. monosemous and polysemous adverbial theories. Both of these approaches contain a number of flaws, and therefore I will propose a new theoretical stance in order to understand how their behaviour may be explained.

Furthermore I will argue that another type of adverbs needs to be drawn into the new model I will propose: subject-oriented adverbs seem to be able to adopt the properties of speaker-oriented adverbs like *fortunately*, and I believe this should be represented in their classification to fully understand the way their interpretation arises. In the end, it will become clear that subject-oriented adverbs cannot be delineated in large semantically

motivated subtypes – as many frameworks have nonetheless attempted – and that, instead, their individual properties should be respected to come to an adequate description of subject-oriented adverbs as a whole. With regard to methodology, it is important that I have, where possible, made use of the judgment of native speakers of English to determine the exact behaviour of the adverbs under discussion.

This study is structured as follows. Chapter 2 establishes what is regarded as subject-oriented adverbs and how the reading pattern of these adverbs functions. Additionally, this chapter will discuss the description of subject-oriented adverbs in the works of Ernst (2002, 2003), Huddleston & Pullum (2002) and Geuder (2002). Chapter 3 critically evaluates the classification of these scholars and formulates some proposals for a new theoretical approach. Subsequently, I will investigate the reading pattern of a range of individual adverbs in order to further demonstrate the inadequacy of current classifications. In chapter 5 the possibility of a transition from subject-oriented to speaker-oriented adverbs is explored. The penultimate chapter brings together all results and theoretical assumptions and proposes a new model for the classification and analysis of subject-oriented adverbs. Finally, chapter 7 summarizes the main findings and indicates possibilities for further research.

Chapter 2

Since the 1950s, delineating and describing subject-oriented adverbs has proven to be a question with no straightforward answer. In this chapter, I will try to give an outline of the current state of affairs. Section 2.1 presents a general account of subject-oriented adverbs and discusses some significant syntactic and semantic features. Sections 2.2-2.4 summarize the classification and treatment of these adverbs in three influential contemporary frameworks, respectively those of Ernst (2002, 2003), Huddleston & Pullum (2002) and Geuder (2002).

2.1 Generalities

For a first and approximating overview of subject-oriented adverbs I will make use of the comprehensive overview in Taverniers & Rawoens (2010). Their framework-free approach uses an interesting labelling system that I will adopt in my attempt at a more fine-grained description. (2.1) summarizes their sub-classification of oriented adverbs.

(2.1) FORTUNATELY-TYPE ADVERBS

e.g. *luckily, oddly, fortunately, regrettably, apparently*

WISELY-TYPE ADVERBS

e.g. *cleverly, wisely, foolishly, intelligently, carefully, tactfully*

ANGRILY-TYPE ADVERBS

e.g. *angrily, sadly, happily, proudly, serenely, bitterly, calmly*

WILLINGLY-TYPE adverbs

e.g. *willingly, reluctantly, intentionally, purposely, inadvertently*

Each subtype is named after its most significant representative as discerned in the literature. This is in fact an important step forward. As Austin, Engelberg & Rauh (2004) indicate in the introduction to their volume of collected articles, adverbial classes have traditionally been labelled according to some semantic property. I believe that this system has inadvertently contributed to the fact that current descriptions have only been able to grasp the semantics of subject-oriented adverbs in very general lines. The system used by Taverniers & Rawoens (2010) is more neutral since it does not need to resort to semantic properties in naming a subtype of these adverbs.

Before I go into more details, it is important to give a general idea of what distinguishes these types semantically and functionally. FORTUNATELY-type adverbs are traditionally taken to provide an evaluation by the speaker about the complete proposition. Though they are not a sub-class of subject-oriented adverbs, they will be important for the research at hand. WISELY-type, ANGRILY-type and WILLINGLY-type adverbs together constitute the complete class of subject-oriented adverbs. Just as FORTUNATELY-type adverbs, WISELY-type adverbs express a judgement by the speaker, but in this case the judgement applies both to the event and the agent of the event. Taverniers & Rawoens (2010) term this class “evaluative oriented adjuncts”.

Within subject-oriented adverbs, the ANGRILY-type and WILLINGLY-type adverbs form the subset of what can be called psychological adverbs, although they are not recognized as a group in many frameworks. The former type is referred to as “mental-state oriented adjunct” in Taverniers & Rawoens (2010) as they express the mental state of the subject vis-à-vis the event denoted by the verb. WILLINGLY-type adverbs are “volitional oriented adjuncts” describing the willingness or volition of the agent with respect to the event. (2.2)-(2.5) give an example of each of the types discussed, respectively.

- (2.2) Fortunately, the Anderlecht defence was able to withstand the pressure of the opposing strikers.
- (2.3) The prime minister foolishly believed his party hadn’t lost any voters since the last election.
- (2.4) Karen proudly told her parents the good news.
- (2.5) The MPs reluctantly accepted the new guidelines.

Taverniers & Rawoens (2010) also give a selection of paraphrases to check the expected meaning of these adverbs. The paraphrases are listed in (2.6)¹.

¹ Taverniers & Rawoens (2010) do not extensively discuss FORTUNATELY-type adverbs and do not give an appropriate paraphrase for this type. The proposal in (2.6a) is therefore my own.

- (2.6) a. FORTUNATELY-TYPE ADVERBS
 'It is ADJ that X...'²
- b. WISELY-TYPE ADVERBS
 'It is ADJ of X to...' or 'X is ADJ to...'
- c. ANGRILY-TYPE ADVERBS
 'X is ADJ when...'
- d. WILLINGLY-TYPE ADVERBS
 'X is ADJ when/in...'

Note that there is (almost) no difference between the paraphrases in (2.6c) and (2.6d). The difference should however be clear through the opposition mental state vs. volition in ADJ. In any case these paraphrases are to be considered as provisional tests. In many cases these are not completely satisfying and one has to resort to other devices in order to check the semantic contribution of the adverb. They are however a very useful tool, as the paraphrases in (6) correctly describe the meaning of the adverbs in (2.2) – (2.5):

- (2.2) b. It is fortunate that the Anderlecht defence was able to withstand the pressure.
- (2.3) b. It was foolish of the prime minister to believe his party hadn't lost any voters.
- (2.4) b. Karen was proud when she told her parents the good news.
- (2.5) b. The MPs were reluctant in accepting the new guidelines.

For now, these fundamentals should be sufficient to understand the basics of subject-oriented adverbs. I will now elaborate on some more intricate syntactic-semantic aspects, in which the position an adverb occupies will appear to be of fundamental importance. To avoid any possible misunderstandings regarding the terminology of these positions, I will first describe the terms in the way I will be using them. In the research at hand I have mainly excluded from the discussion phonologically disintegrated positions. Hence, all adverbs mentioned are considered as phonologically integrated in the clause, except where otherwise mentioned (or, in examples, indicated by separating the adverbs from the clause with a comma). Throughout this paper, three of these clause-internal

² With ADJ being the property denoted by the adverb's adjectival base, and X the agent/subject of the clause.

positions receive special attention: front or pre-auxiliary position, pre-verbal position, and post-verbal position. Examples of these positions are given in (2.7) – (2.9) respectively.

(2.7) Sara's brother calmly had told me about the birth of his son.

(2.8) Sara's brother had calmly told me about the birth of his son.

(2.9) Sara's brother had told me about the birth of his son calmly.

I want to stress that pre-verbal position as in (2.8) refers to the position immediately before the full verb. *Calmly* in (2.7) also precedes a verb, but I call this position pre-auxiliary because I want to maintain the distinction between an auxiliary and a lexical verb. Note that 'position' is better understood as a zone in the sentence instead of a fixed spot: for example, as (2.10) shows, post-verbal adverbs can occupy different positions relative to other phrases occurring after the verb.

(2.10) Sara's brother had told me calmly about the birth of his son.

An additional difficulty is provided by the term 'front position', for two reasons. Firstly, front position can coincide with pre-verbal position when there is no auxiliary, as in (2.11).³

(2.11) Sara's brother calmly told me about the birth of his son.

Secondly, there is also another front position distinguished in the literature (also referred to as initial position), with the adverb preceding the subject while still being phonologically integrated. An example is provided in (2.12).⁴

(2.12) Calmly Sara's brother had told me about the birth of his son.

I will not be using front position in this way. Adverbs in front (or pre-auxiliary) position are always taken to appear after the subject, or in any case not as the first phonologically integrated element in the clause.

With this terminology in place I can turn to a number of syntactic-semantic characteristics. One salient property of subject-oriented adverbs is their distinct reading

³ Evidently, since there is no auxiliary, there is also no pre-auxiliary position.

⁴ Initial position is sometimes, though not in the research at hand, also applied to refer to the phonologically disintegrated sentence-initial position, as in (i) below:

(i) Calmly, Sara's brother had told me about the birth of his son.

pattern. The position they occupy in a sentence strongly influences their meaning, as will be discussed in the following paragraphs. But even though there is a certain agreement among scholars on the basics of this syntactic-semantic interrelation, the details are nothing less than highly contested and, indeed, constitute one of the major reasons why so many frameworks and categorizations have not yet been able to fully grasp the semantics of this category of adjuncts.

Essential for a semantic description of subject-oriented adverbs are the seminal studies by Austin (1956) and, especially, Jackendoff (1972). Both theories pointed to the interpretative constraints imposed by word order variation at a time that the research on adverbs was still learning to walk on its own feet. Austin's (1956) analysis indicates that pre-verbal position of the adverb prefers a participant-oriented interpretation of the adverb, while post-verbal position seems intuitively linked with a manner reading. Jackendoff's (1972) discussion of adverbs draws heavily on this approach, but adds some key insights. In his work adverb classes are distinguished according to the possibility of occurrence in different syntactic fields (front, pre-verbal, and post-verbal). One of these distributional classes is able to occur in all three positions and shows a change in meaning according to position. Within this class there is a two-fold distinction: "speaker-oriented" adverbs switch between a manner and a speaker-oriented reading, subject-oriented adverbs display a variation between a manner and a participant-oriented interpretation.⁵

To explain this syntactic-semantic interdependency Jackendoff's (1972) generative theory has to resort to projection rules, which can broadly be defined as rules which make explicit the point of attachment in the deep sentence structure and, thus, the link between syntactic position and the constituent of which the adverb predicates. Subject-oriented adverbs in front position predicate of the subject; in post-verbal position they describe the manner in which the event denoted by the verb takes place; when in pre-verbal position, both readings (with different structural representations) are applicable.

The large body of research on adverbs in general and subject-oriented adverbs in particular that has developed in recent decades, has many times corroborated this reading

⁵ It is however not entirely clear how this sub-class is delineated. For example, Jackendoff (1972:57) includes *carefully* in his example paraphrases for subject-oriented adverbs, but in his discussion of possible projection rules *carefully* is in one example sentence analyzed as predicating over the proposition and the speaker, which is unexpected for a subject-oriented adverb in his framework.

pattern. However, fine-tuning the theory has proved much more difficult than the above outline predicts as the pre-verbal position soon proved to be rather problematic. As I have discussed, the term has been used both for the position immediately preceding the lexical verb and the position just before the auxiliary. However, it is essential to distinguish these positions since the ambiguity only arises when the adverb immediately precedes the lexical verb, as shown in the following examples.

- (2.13) a. James gladly prepared dinner for his mother.
b. James gladly has prepared dinner for his mother.
c. James has gladly prepared dinner for his mother.

In (2.13a) and (2.13c), *gladly* is positioned immediately before the lexical verb, which is finite in (2.13a) and non-finite in (2.13c). Sentence (2.13a) can mean both ‘James was glad to prepare dinner’ (i.e. a subject-oriented reading) and ‘John prepared dinner in a glad way’ (a manner reading). Both interpretations are also possible in the case of (2.13c). This double interpretation is however not readily available in (2.13b): only the subject-oriented reading is appropriate here.

Additionally, Jackendoff (1972) notes that auxiliary clusters give rise to some unexpected syntactic-semantic problems. I cannot affirm nor deny whether this is typical of the complete class of adverbs, but in any case it is important to keep in mind that these assumptions, including the pre-verbal ambiguity, have been and still are subject to discussion. In chapters 3 and 4, I will try to show that a new approach to the description of these adverbs, recognizing the specific lexical-syntactic differences within adverbial classes, is a first crucial step towards a full understanding of their behaviour.

One of the problems that such a new approach must be able to address is the long-standing debate on the specific orientation of the adverbs under discussion. Jackendoff (1972) was the first to argue that the passive-sensitivity of these adjuncts is prime evidence of their orientation towards the surface subject: as the construction of a sentence changes from active to passive, the orientation of the adverbs shifts from the subject of the active clause to the subject of the passive clause, as illustrated in (2.14)-(2.15) and (2.16)-(2.17) (taken from Jackendoff 1972: 82).

- (2.14) The doctor cleverly has examined John.
- (2.15) John cleverly has been examined by the doctor.
- (2.16) The police carelessly have arrested Fred.
- (2.17) Fred carelessly has been arrested by the police.

In all of these sentences, active and passive, *clever* or *careless* is attributed to the subject. In (2.14) the property denoted by the adverb is assigned to the doctor; in (2.15), the passive counterpart of (2.14), the NP *the doctor* has become a *by*-phrase describing the agent, and hence is no longer the subject. The new subject is *John*, who is indeed the participant deemed clever in (2.15). The same observations apply to the pair (2.16)-(2.17).

A bulk of research (e.g. Thomason & Stalnaker 1973; McConnell-Ginet 1982; Wyner 1998; Geuder 2002; García Núñez 2002) has substantiated and confirmed Jackendoff's claim that these adverbs are oriented towards the surface subject of the clause, but equally as much research has shown that, again, this account leaves many questions unanswered. Jackendoff's analysis indeed contains a number of flaws which indicate that passive-sensitivity is in itself insufficient to describe the orientation. The following examples (taken from García Núñez 2002: 300) provide an interesting illustration of those flaws. (2.20) and (2.21) are the paraphrases to (2.18) and (2.19) respectively.

- (2.18) Martha wisely sent the secret files to John.
- (2.19) John was wisely sent the secret files by Martha.
- (2.20) It was wise of Martha/Martha was wise to send the secret files to John.
- (2.21) It was wise of John/John was wise to be sent the secret files by Martha.

Paraphrase (2.20) seems to be perfectly correct, and according to García Núñez, who supports the passive-sensitivity analysis, (2.21) must necessarily be correct as well. However, it is my firm belief that most native speakers would intuitively feel that *wisely* is in (2.19) attributed to Martha in sending John the files.⁶

As a full analysis of the orientation would lead me too far astray of my central concern, I will not elaborate on the matter here. Nonetheless, it is important to keep these problems in mind when trying to scrutinize the wealth of semantic differences these adverbs show in spoken and written language.

⁶ This was confirmed by my two native informants.

In the next sections, I will zoom in on three attempts to describe these adverbs within a coherent framework. I will only present the essentials of their analysis and will limit myself to those parts that concern my own outset of a better understanding of subject-oriented adverbs. For other extensive discussions on the syntax and semantics of (subject-oriented) adverbs, I refer to the works of Bartsch (1976), Thomason & Stalnaker (1973), Jacobson (1978), Wyner (1994), and Frey (2002, 2003), and the volumes of collected articles by Austin, Engelberg & Rauh (2004) and Lang, Maienborn & Fabricius-Hansen (2003).

2.2 Ernst (2002, 2003)

Of the three frameworks under discussion Ernst (2002, 2003) gives the most detailed description of how adverb interpretation arises. His aim is to build a theory that can predict the interpretation of an adverb in every sentence position by combining lexical features and a minimum of compositional syntactic-semantic rules. The classification is very traditional in the sense that Ernst essentially adopts the same approach as Greenbaum (1969) and Jackendoff (1972), but the strength of his work lies in its combination of this approach with neo-Davidsonian event semantics. The lexicosemantic features of adverbs are described in terms of the way they select an FEO (Fact-Event Object) argument, i.e. events or propositions as arguments selected by the adverb. As an illustration of how such analyses work, consider example (2.22a) and its semantic representation in (2.22b).

- (2.22) a. Steven passed the test.
 b. $[_E P(e) \& \text{Agt}(e,s) \& \text{Th}(e,t)]$

(2.22b) reads: There is an event (E/e) of passing (P), with the agent (Agt) of the event being Steven (s) and the theme (Th) being the test (t). As can be seen, every operator in the semantic representation is appointed a number of arguments, e.g. the operator *Agt* takes an event and another participant that is assigned the agent role. In the same way, adverbs can select an event or proposition.

- (2.23) a. Steven proudly passed the test .
 b. $[_E' [_E P(e) \& \text{Agt}(e,s) \& \text{Th}(e,t)] \& \text{PROUD}(e,s)]$

In (2.23) the primary event (E) of Steven passing the test is here modified by the adverb *proudly*, constituting E'.

The class of adverbs that I am concerned with is, in Ernst’s framework, part of the class of “predicational adverbs”. Figure 1 visualizes the class of predicationals as delineated in Ernst (2003). The typical properties of predicationals, according to Ernst (2003: 314), are summarized under (2.24).

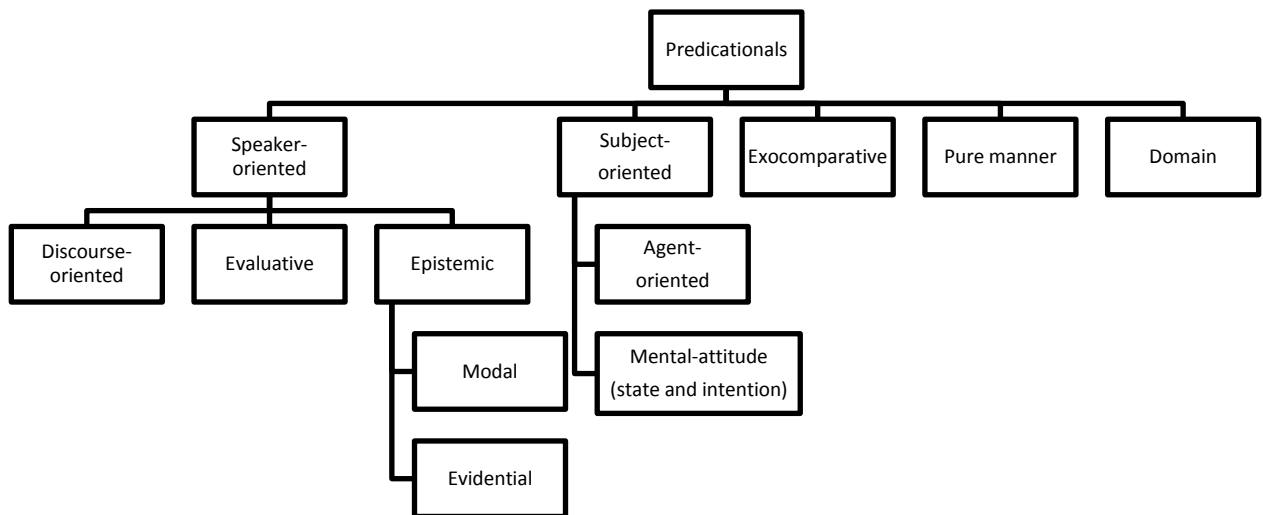


Figure 1. Predicational adverbs and subclasses (Ernst 2003)

- (2.24) a. They come from open classes.
 b. They are built up from an adjective stem plus the suffix *-ly*.
 c. They take a proposition, fact, or event as one of their arguments.
 d. Most predicational adverbs have a dual reading pattern, i.e. they are either interpreted as a clausal adverb or a manner adverb.

A defining feature of agent-oriented and mental-attitude adverbs is that they both have one argument in common with the verb, usually the subject – hence their classification as subject-oriented adverbs. The difference between these two subclasses is in the first place a purely lexicosemantic one: agent-oriented adverbs reflect the speaker’s judgement of the agent⁷ with respect to the event, whereas a speaker uses mental-attitude adverbs to describe the mental state of the subject during the event. In other words, agent-oriented adverbs articulate a subjective judgement by the speaker, and it is perfectly possible that other speakers express other judgements. Mental-attitude adverbs on the other hand

⁷ Therefore Ernst (2002, 2003) calls them agent-oriented. However, note that agent is here not taken to be the thematic role of agent in the sentence, but every entity in the sentence that can control the situation. I believe this may be a first and important recognition in solving the problem of passive-sensitivity.

describe a relatively more inherent quality of the subject referent. As a result, these classes differ in two ways, which will be explained in further detail below: (i) the way they assign the adjectival predicate lying at the basis of the adverb (referred to as P_{ADJ} by Ernst), and (ii), since predicational typically map their FEO argument on a gradable scale with respect to the feature denoted by their adjectival base, the comparison class of their clausal readings (i.e. the other events or states of affairs to which one of the adverbial arguments is compared in order to deem the subject or agent P_{ADJ}). The features and interpretational patterns of these adverbs are discussed in detail in the following paragraphs.

Agent-oriented adverbs (corresponding with WISELY-type adverbs) express a subjective judgement about the agent on the basis of his/her actions. Therefore Ernst (2002: 55) takes (2.25) to be the semantic template for the clausal reading of these adverbs. The sentence in (2.26) serves as an example.

(2.25) ADV (e) = e [_{REL} warrants positing] P_{ADJ} in agent.⁸

(2.26) Catherine foolishly believed the words of her mother-in-law.

As the template predicts, the event in (2.26) allows us to judge Catherine to be foolish. In this case, as for all clausal readings of agent-oriented adverbs, the appropriate comparison class is made up by all other events that the agent could have done: Catherine could have distrusted her mother-in-law, she could have contested her words, etc. Of all of these possibilities, believing her mother-in-law's words was the more foolish one and therefore allows us to deem Catherine foolish.

The manner interpretation, reflecting some overt manifestation of P_{ADJ} with respect to the event, reads as follows:

(2.27) ADV (e) = e [_{REL} manifests] P_{ADJ} in agent.

(2.28) John answered the question brilliantly.

Ernst (2002: 56) however notes that the relation “manifest” in (2.27) should be taken as meaning “shows typical properties of”, which in my opinion is indeed a more precise description of the manner reading. In (2.28) there is no way of telling whether John is truly brilliant but the way he answered the question leads us to think that he might be – because

⁸ [_{REL} X] expresses the relation between the event, P_{ADJ} and the agent.

he shows typical properties of *brilliant*. In this case, what is mapped onto the scale of *being brilliant* is not all other events that John could have taken part in at that time, but the different ways of entering into this event of answering a question, or, in other words, different answering events. Thus, for manner readings the comparison class consists of other events of the same kind. In other words, the comparison class for manner readings consists not of different events but of different specific events – always the same basic event, but specified in other ways and therefore different as a whole – hence the label “SpecEvent” in Ernst (2002).

As mentioned, mental-attitude adverbs differ from agent-oriented ones in the way they assign P_{ADJ} to the subject and the implicit comparison made. Mental-attitude adverbs however fall into two categories, state (ANGRILY-type) and intention mental-attitude (WILLINGLY-type) adverbs,⁹ which crucially also differ in the relationship they posit between the event, P_{ADJ} and the subject (but not in their comparison class). For state adverbs, Ernst (2002) proposes the template in (2.29); intentional adverbs take the reading in (2.30).

(2.29) e [_{REL} is accompanied by] a greater degree of P_{ADJ} in Experiencer (subject) than the norm for Experiencers.

(2.30) e [_{REL} is intended with] a greater degree of P_{ADJ} in Experiencer (subject) than the norm for Experiencers.

(2.31) Carrie sadly told Olivia the news.

(2.32) Sam reluctantly offered them a drink.

In (2.31) the telling event is accompanied by a state of sadness worth mentioning since the degree of sadness is higher than the norm. Sam’s intention when offering a drink in (2.32) has a high degree of reluctance. What I have just done is assign P_{ADJ} by comparing it to other states (2.31) or intentions (2.32) that the subject could have experienced. Apparently, the comparison class here is not defined by any FEO argument, as is the case for agent-oriented adverbs, but by the Experiencer.

In post-verbal position, with the appropriate reading being the manner reading, state and intention adverbs fit into the outline in (2.33):

⁹ Ernst (2002) assigns these names because of their most salient reading, but notes that state adverbs can sometime take an intentional reading and vice versa.

- (2.33) e [_{REL} manifests] a greater degree of P_{ADJ} in Experiencer (subject) than the norm for Experiencers and SpecEvents.
- (2.34) Samuel accepted his resignation proudly.

The comparison class is determined by both Experiencers and SpecEvents: Samuel's accepting the offer in (2.34) shows typical properties of being proud, and the degree to which those properties can be discerned is higher than the norm.

Table 1 summarizes the classification of subject-oriented adverbs according to Ernst (2002, 2003).

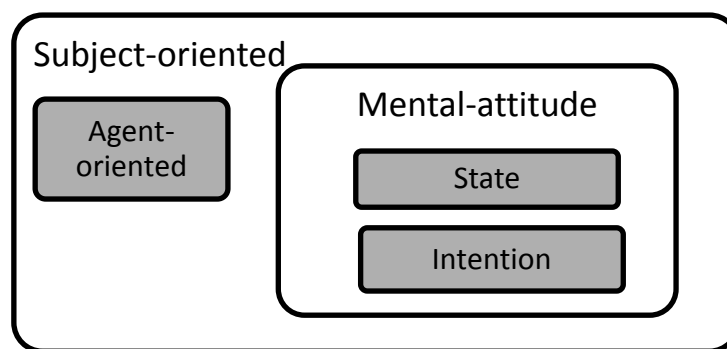


Table 1. Subject-oriented adverbs (Ernst 2002, 2003)

The class of subject-oriented adverbs consists of three subtypes: agent-oriented (WISELY-type), state mental-attitude (ANGRILY-type) and intentional mental-attitude (WILLINGLY-type) adverbs. The latter two types constitute one class, not only because of their lexicosemantic vicinity but also due to the fact that they have the same comparison classes: (the state or intention of other) Experiencers for the clausal reading of these adverbs, and (the state or intention of other) Experiencers and SpecEvents for the manner reading of these adverbs. The comparison class of agent-oriented adverbs is made up of other events in general for their clausal reading and SpecEvents for their manner reading.

Notwithstanding the close bond between state and intention mental-attitude adverbs, the relation between P_{ADJ}, the event and the subject-referent (either the Agent or the Experiencer) expressed by the clausal readings of subject-oriented adverbs is different for all three subtypes. As a manner adverb, the three subtypes posit the same relation.

2.3 Huddleston & Pullum (2002)

The classification found in *The Cambridge grammar of the English language* (Huddleston & Pullum 2002) is an example of what I would like to term a monosemous adverbial theory. For now it will suffice to give a brief description of such theories; in chapter 3 I will discuss the theoretical and practical implications in more detail. Monosemous adverbial theories question whether (2.35) – (2.37) contain the same adverb *cleverly*. They argue that the different readings are the result of inserting different, homophonous adverbs. The above sentences would then contain two different adverbs with their own distinct meaning, one with a participant-oriented meaning and the other with a manner reading. The ambiguity of (2.36) is explained by the fact that in pre-verbal position both adverbs are appropriate.

(2.35) Sally cleverly had left the room.

(2.36) Sally had cleverly left the room.

(2.37) Sally had left the room cleverly.

In the same vein, Huddleston & Pullum (2002) classify *carefully* and *happily* in (2.38)-(2.40) as manner adjuncts proper: it is indicated that many of these adverbs can have other meanings as well, which accounts for the reading pattern and the evaluative use of *happily* in (2.40).

(2.38) We examined the damage carefully. (Huddleston & Pullum 2002: 670, 3.iii.a)

(2.39) She smiled happily. (Huddleston & Pullum 2002: 672, 8.vi.a)

(2.40) Happily, I was able to get my money back. (Huddleston & Pullum 2002: 672, 8.vi.b)

For the research at hand, it is therefore more interesting to look at how the adverbs with a clausal reading (as Ernst calls it) are classified. One of those clausal readings is here in fact analysed as a special kind of manner adverb. Huddleston & Pullum (2002) allow for a category of “secondary manner adverbs”, which contains adverbs whose adjectival base refers to feelings or moods – i.e. ANGRILY-type adverbs, psychological adverbs referring to a mental state. For this kind of manner adverbs the other use they may have still heavily relies on a manner reading. That other use is therefore categorized as a secondary manner adverb

in this framework. (2.41) and (2.42) provide some examples of this distinction (Huddleston & Pullum 2002: 672).

- (2.41) PRIMARY MANNER ADVERBS
He shouted angrily at them.
He peered gloomily at her.
She smiled serenely.

- (2.42) SECONDARY MANNER ADVERBS
Angrily, he stormed out of the room.
Gloomily they packed their bags.
Serenely she led the premier onto the stage.

This being said, the general semantics of ANGRILY-type adverbs are fully established. In this framework their clausal (or: participant-oriented) readings are taken to be closely related to their manner reading, which clearly distinguishes them from WISELY-type and WILLINGLY-type adverbs; they in turn are categorized as “act-related adjuncts”. This class is subdivided into those adverbs that involve a subjective evaluation of the act by the speaker (“subjective subtype”, viz. WISELY-type adverbs) and those that do not (“volitional subtype”, viz. WILLINGLY-type adverbs). What sets the subjective subtype apart from evaluative adverbs like *fortunately* and *luckily* is that in addition to this evaluation of the act, the speaker also makes an evaluation of the actor.

- (2.43) The doctors fortunately were able to remove the tumour.
(2.44) We wisely didn't tell mother anything about the operation.

In (2.43) the central event is deemed fortunate according to the speaker, but this cannot be predicatively or in another way attributed to any of the participants involved in removing the tumour. *Wisely* in (2.44) however refers both to the event – ‘it was wise not to tell her’ – and the actors – ‘it was wise *of us* not to tell her’.

An overview of the classification found in Huddleston & Pullum (2002) is presented in table 2.

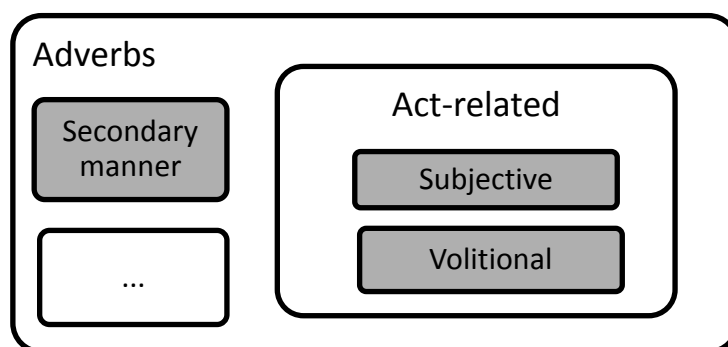


Table 2. Non-manner adverbs (Huddleston & Pullum 2002)

In this account, the three types of adverbs under discussion are not recognised as constituting one group of adverbs. Secondary manner (ANGRILY-type), subjective act-related (WISELY-type) and volitional act-related (WILLINGLY-type) adverbs are analysed as separate categories within a wide framework containing all kinds of adverbial types. Note that these terms apply to what Ernst calls the clausal reading of the adverbs in focus of this study. Because of the theoretical outset of Huddleston & Pullum, the manner adverbs are taken to exist independently from these clausal adverbs.

Secondary manner adverbs are differentiated from act-related adverbs since their meaning relies heavily on the manner adverb proper of the same form. Act-related adverbs involve an evaluation of the act and the actor by the speaker. Within this type there is a subdivision according to whether this evaluation is subjective or not.

2.4 Geuder (2002)

Firstly, I must note that Geuder's (2002) dissertation on event adverbs is far too complex and extensive for the purposes of the present study. For example, Geuder describes at length the semantic structure of depictive constructions and the adjectives underlying subject-oriented adverbs. I have limited the overview below to those aspects that are immediately relevant to a classification of the adverbs under discussion, but much of what I have left out from Geuder's account in fact amounts to a very revealing and relatively new picture on the semantic structure of subject-oriented adverbs.

Interesting about this study is the fact that it uses some completely different criteria for distinguishing adverb classes than those that are traditionally found in the literature. Primarily, it focuses on the alternations between (x-predicating) adjectives and (e-

predicating) adverbs.¹⁰ Geuder identifies the following (non-exhaustive) set of types of x-predicates that alternate with adverbial forms:

(2.45) Properties connected to psychological conditions

- a. *intelligent, careful*
- b. *reluctant*
- c. *sad, angry*

Other, external properties

- a. *beautiful*
- b. *heavy*
- c. *slow*

(Geuder 2002: 10)

Oriented adverbs, the adverbs in focus in his study, have the special characteristic that they retain individual-related semantic components of their underlying adjectival form.¹¹ For Geuder (2002), three types of x-predicates have that kind of oriented adverbial counterpart: *intelligent*, *sad*, and *heavy*. Their adverbial forms make up three classes of oriented adverbs: “resultative” adverbs (e.g. *heavily*), “agentive” adverbs (e.g. *intelligently*) and “transparent adverbs” (e.g. *sadly*). Geuder (2002: 11) notes that “orientation is always to be understood as orientation to an individual.”¹² Hence, much of his study is devoted to contriving precisely how the individual-related semantics of these types of adjectives underlie the three classes of oriented adverbs. The remainder of this section will elaborate on Geuder’s views regarding *intelligent* and *sad*, whose adverbial forms are Geuder’s representatives for the categories that I have called WISELY-type and ANGRILY-type adverbs. *Heavy* will not receive further discussion because Geuder is to my knowledge the only scholar to distinguish such a class and I am primarily concerned with the central types of subject-oriented adverbs.

Geuder also recognizes that all classes of oriented adverbs have a dual reading pattern. X-predicating adjectives denoting psychological-emotional states yield manner

¹⁰ X-predication and e-predication refer to predication of individuals and events respectively.

¹¹ These contrasts with x-predicates that are understood on the basis of their e-predicate counterpart (e.g. *slow*) and other cases where there is a rather loose bond between both.

¹² I have stuck to this relatively general and unspecified description of orientation since Geuder (2002) does not really go into much further detail on this point. Essential is the alternation between x-predication and e-predication, but beyond this his conception of orientation is not very clear.

adverbs and transparent adverbs. These transparent adverbs correspond to the non-manner use of ANGRILY-type adverbs. They are termed “transparent” since they are “transparent with respect to their adjectival base” (Geuder 2002: 22), i.e. their meaning is closely and systematically related to the meaning of the underlying adjective. For adjectives like *intelligent* or *stupid*, reflecting a disposition of an individual, manner adverbs and agentive adverbs (the non-manner use of WISELY-type adverbs) can be constructed. The latter of these mirror transparent adverbs in that they have a clear relation with respect to the meaning of the underlying adjective. Crucially, manner adverbs differ from transparent and agentive adverbs in this respect. They evidently retain certain semantic components of the x-predicating adjective, but the exact relation between that adjective and the manner adverbs is relatively obscure: they do not describe some state, quality or evaluation of an individual but some aspect of an action in which an individual plays a certain role.

Stupid and *stupidly* serve as paradigms for the class of agentive adjectives and adverbs. The term refers to the centre of orientation in Geuder’s views, which is the agent thematic role. As a first approximation to a new classification, it is indicated that these agentive adverbs have a lot in common with evaluative adverbs (FORTUNATELY-type adverbs), a subclass of speaker-oriented adverbs as delineated in Bellert (1977). Geuder (2002) unites agentive and evaluative adverbs under the header “factive adverbs”: they have similar paraphrases with a factive *that*-clause.

- (2.46) a. Sam stupidly shut the door.
b. That Sam shut the door was stupid.
- (2.47) a. Nelson fortunately realised his mistake in time.
b. That Nelson realised his mistake in time was fortunate.

In both (2.46) and (2.47), the paraphrase entails that the matrix clause in the (a) sentences is true: on the basis of the paraphrases it can be ensured that Sam indeed shut the door and that Nelson indeed realised his mistake in time. This factivity is the crucial difference with modal adverbs, which also have a *that*-paraphrase.

The difference between both subclasses of factive adverbs is lexical in nature, and is most clearly discernible in their adjectival base. I retake the above examples to illustrate this.

Firstly, agentive adjectives select prepositional phrases headed by *of*, whereas evaluative adjectives take *for*-PPs – as evidenced by the examples given in (2.48) and (2.49).

(2.48) It was stupid of Sam / *for Sam.

(2.49) It was fortunate *of me / for me.

Apart from formal aspects of the *for/of*-PP, there is also an important difference regarding the content of the clausal complement of these classes. Agentive adverbs specifically need an agentive event (i.e. an event that is able to be controlled by an individual) within the *that*-clause. The individual denoted in the PP then takes the agent role, as in (2.50).

(2.50) It was stupid of Sam_i that he_i shut the door.

Since Geuder sets out from a recurring alternation between adjectives and adverbs, it can be inferred that this difference of selecting agentive events will also be a decisive difference between the agentive and evaluative adverbs.

With this delineation in order, the question still remains how the x-predicate *stupid* gives rise to two adverbial forms, one being the agentive variant and the other the manner adverb. Geuder explains this by positing that the alternation between x- and e-predicates only renders the agentive variant, with the manner adverb being derived from that agentive adverb. Whereas agentives target main events, the manner adverb predicates of properties of subevents. As a result, entailment patterns of the type in (2.51) can always be constructed (Geuder 2002: 173).

(2.51) a. John stupidly accepted all of Jim's demands.

b. -> John negotiated stupidly.

The agentive adverb in (2.51a) describes the whole main event of accepting the demands (e.g. without trying to get a lower price). The (b) sentence, containing a manner adverb, holds by virtue of the a sentence. The manner adverb does not say that the act of negotiating is stupid by itself (to construe that meaning one would need an agentive adverb), but that a certain subevent of the negotiation, in this case John's immediately accepting all demands,

was stupid – as is said in (2.51a).¹³ For this analysis, Geuder adopts the view of cognitive psychology in which in our minds an event takes the form of a script with different possible ways of being brought about.¹⁴

Let me now turn to transparent adverbs, also called psychological adverbs as they refer to a psychological state.¹⁵ Interestingly, this class includes some adverbs that do not refer to a psychological state but are rather physiological in nature, e.g. *hungrily*. Geuder (2002) posits that the state referred to is thus either emotional or motivational. Again Geuder is quite unique as such motivational adverbs are neglected by most similar frameworks in recent years.¹⁶ I will also not go into these motivational adverbs, since Geuder indicates that they are unacceptable in final position and cannot be stressed. I believe that these syntactic and phonological restrictions prove that motivational adverbs are in an important respect different from psychological adverbs. And even though Geuder tries to account for their specific features, his analysis is not really convincing – at least not convincing enough to take up these adverbs in the focus of this study.

A special attribute of psychological adverbs is that they have some dependency relation between the state expressed by the adverb and the event. Geuder explains this relation in terms of psychological causation. Consider the following sentences:

(2.52) John gladly returned home. (Geuder 2002: 195, 37)

(2.53) She proudly showed me the pictures.

In both (2.52) and (2.53), a cause-effect relation can be attested. In (2.52), returning home is what makes John glad. In (2.53), this relation can be read in two ways: either she was proud

¹³ I want to indicate however that this entailment pattern however cannot be reversed. ‘John negotiated stupidly’ can also mean that accepting all of Jim’s demands was in fact not that stupid, but rather a clever move (e.g. because that way he could count on the subconscious goodwill of Jim in further business arrangements), as (i) shows:

(i) John negotiated stupidly which was a brilliant move.

In this case, it cannot be said that ‘John stupidly accepted all of Jim’s demands’: the paraphrase in (ii) is not a logical conclusion of (i).

(ii) It was stupid of John to accept all of Jim’s demands.

¹⁴ Geuder (2002: 172) gives the example of cooking rice: this can be done by cooking it in an open pan, using cold water and a covered pot, etc.

¹⁵ Note that this class only comprises ANGRILY-type adverbs, not WILLINGLY-type adverbs. This point will be taken up later.

¹⁶ However, the fact that Geuder (2002) discusses only one such motivational adverb, viz. *hungrily*, at least raises some doubt about his account.

because she showed the pictures, or she showed the pictures because she was proud. In any case, this psychological relation requires a (partial) cotemporality between state and event.

For the manner reading of these adverbs, Geuder uses *sad(ly)* as a representative. Unfortunately, this adverb shows some atypical behaviour – as I will show in the following chapters. Nonetheless, the manner adverb is taken to maintain a metonymical relation to the underlying adjective: it is predicted that the state expressed by the x-predicate will somehow be reflected in the bodily expression of the individual during the event. Note that here as well the manner adverb is derived from the other adverbial form, in this case the transparent adverb.

Table 3 presents the delineation of oriented adverbs in Geuder (2002).

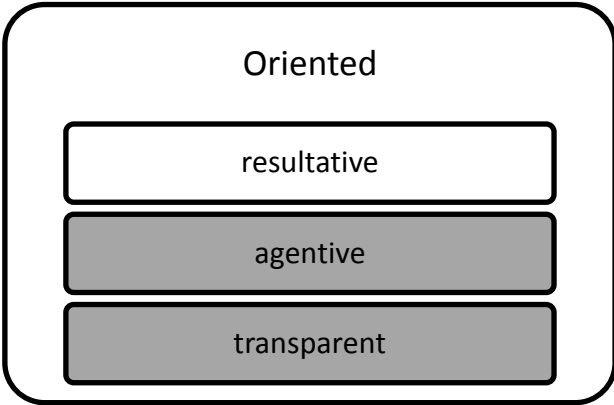


Table 3. Oriented adverbs (Geuder 2002)

Geuder’s (2002) classification investigates oriented adjuncts by scrutinizing the relation between x-predicating adjectives and e-predicating adverbs. Two types of oriented adverbs in the Geuderian sense are interesting to the study at hand: agentive adverbs (e.g. *intelligently*) and transparent adverbs (e.g. *sadly*). What makes them oriented is that the individual-related semantics of the underlying adjectival forms is in some way reflected in the semantics of these adverbs. Specifically, the participant-oriented reading of these adverbs is the adverbial form which shows a regular alternation with its corresponding x-predicating adjective. The manner reading is derived from the participant-oriented reading.

Chapter 3

The previous chapter described a general typology of what is traditionally delineated as subject-oriented adverbs, and pointed out some important syntactic-semantic properties like the contested point of orientation and the dual reading pattern. Additionally, I discussed three specialized frameworks that categorized subject-oriented adverbs in very different ways. In this chapter I wish to show that all three of these frameworks essentially fail to capture the wealth of syntactic-semantic characteristics of these adverbs in certain respects, and elucidate the claim that a more fine-grained categorization should be pursued. Section 3.1 evaluates the discussed frameworks; section 3.2 discusses the description and delineation of subject-oriented adverbs from a more general theoretical point of view.

This chapter will ultimately result in a number of unanswered questions, to which I will come back after chapter 4.

3.1 Comparing the different frameworks: problems, comments, inconsistencies

The outline of sections 2.2-2.4 provided little more than a brief summary, but nonetheless it is clear that the differences in delineation are vast. Below, I retake tables 1-3, but I have changed the names of the categories within the respective frameworks to the more general names as discussed in section 2.1.

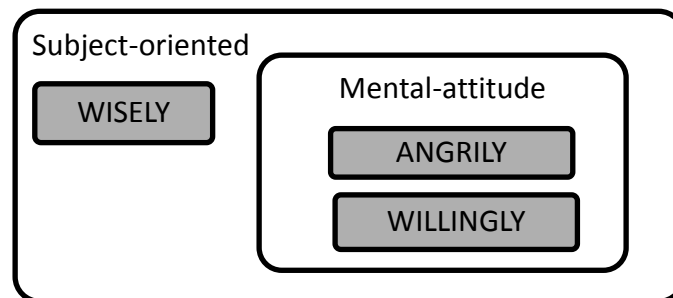


Table 4. Subject-oriented adverbs (Ernst 2002, 2003) (2)

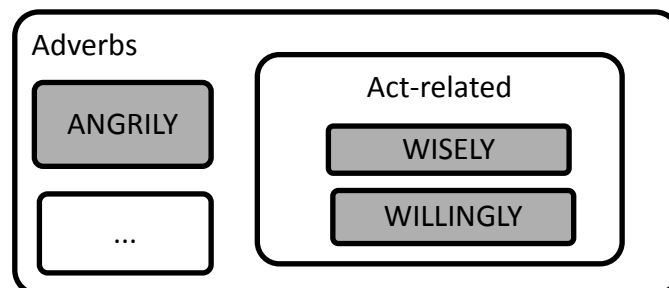


Table 5. Non-manner adverbs (Huddleston & Pullum 2002) (2)

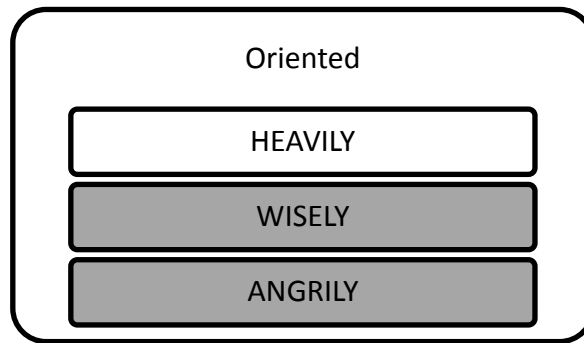


Table 6. Oriented adverbs (Geuder 2002) (2)

The difference is very clear. In the investigated frameworks WISELY-type, ANGRILY-type and WILLINGLY-type adverbs are grouped in three very different ways, which is in the first place a result of the very distinct delineation principles used by these scholars. I shall evaluate each of these in turn to show that none of them in fact holds the definitive solution.

For Geuder (2002), there is a class of oriented adverbs that ultimately differ from others in two respects: they are oriented towards an individual, and their individual-related semantics is derived from the underlying x-predicating adjective. Unfortunately, as may have become clear from section 2.4, these guidelines are rather infelicitous and, as a result, it is very unclear what specifically sets these oriented classes apart from other adverbial categories. Firstly, it is not obvious at all what orientation towards an individual really means, and this criterion is also not further qualified. A crucial assumption appears to be that the individual is act-internal, which would account for the exclusion of speaker-oriented adverbs like *fortunately*.

Secondly, I question whether the essential alternation between x-predicating adjective and e-predicating adverb is a well-suited criterion for distinguishing adverb classes. Geuder concludes that the manner adverb is derived from the agentive or transparent adverb, so that the only real alternation consists between agentive or transparent adverbs on the one hand and their respective underlying adjective on the other hand. However, this view must be adjusted when considering that at least some adjectives appear to have a pattern similar to their adverbial counterpart.

- (3.1) The brilliant inspectors decided to approach the case from a different angle.
- (3.2) The chief congratulated the inspectors on their brilliant investigation.

Geuder claims that the agentive adverb *brilliantly* takes its individual-related semantic components from the agentive adjective *brilliant*, as in (3.1). The manner variant would then be derived from that agentive adverb. (3.2), with *brilliant* predicating over the deverbal noun *investigation*, proves that this is an oversimplification. The most salient reading of (3.2) is one which says that the inspectors investigated the case in a brilliant way. It can be expected that, if one wants to keep the basis of a regular alternation between adjective and adverb, the manner use of *brilliantly* will semantically depend on this adjectival variant instead of the agentive adverb. This manner use of the adjective is triggered by the fact that it predicates of a deverbal noun. I therefore assume that, if such a regular alternation between adjectives and adverbs is pursued, one must acknowledge the existence of a ‘manner’ adjective *brilliant* which targets the event properties of its nominal head.

This correction allows for a completely different alternation between adjective and adverb. The adjective *brilliant*, and semantically similar adjectives, can be expected to appear in (at least) two uses: either as an agentive adjective, focusing on a quality of an individual, and manner adjectives, primarily modifying event properties of a noun. The adverb *brilliantly* shows comparable uses, which will be derived from the corresponding uses of the adjective.

It seems safe to say that the analysis raises some doubt about how precisely these categories are delineated, why certain categories are excluded, and – and this is certainly one of its essential shortcomings – whether or not certain adverbs are included in the class of oriented adverbs. With the current study in mind, I focus on the difference between on the one hand ANGRILY-type and WISELY-type adverbs and, on the other hand, WILLINGLY-type adverbs. In Geuder (2002) there is no way of knowing how close these classes are semantically or syntactically. In fact, even ANGRILY-type and WISELY-type adverbs are only treated by means of a rather narrow range of adverbs, which eventually leads to a very limited analysis (see also Piñon 2009). One could question to what extent these adverbs are adequate representatives of this class – and in the case of *sadly*, which is taken as one of the representatives of ANGRILY-type adverbs in Geuder (2002), it will become clear further in this study that it is clearly not a prototypical member of its class.

In any case the view proposed by Geuder (2002), based on individual-orientation and a regular adjective-adverb alternation, ranks ANGRILY-type and WILLINGLY-type adverbs within the same category, even when the delineation is not entirely clear. This vicinity is the

most striking difference when compared to the framework of Huddleston & Pullum (2002). Again, the criteria¹⁷ employed in aligning the different adverbial classes are in need of some adjustment. The first caesura between the three classes under discussion differentiates between secondary-manner adverbs (ANGRILY-type adverbs) on the one hand and (subjective and volitional) act-related adverbs (respectively WISELY-type and WILLINGLY-type adverbs) on the other hand. The biggest problem in Huddleston & Pullum (2002) lies exactly in the assignment of these semantic labels, which on closer inspection appear not to be mutually exclusive at all, blurring the line between ANGRILY-type and WILLINGLY-type adverbs.

Secondary manner adverbs are semantically close to manner adverbs proper, since it is expected that whatever quality is denoted by the adverb will be obvious in some way through the behaviour of the agent, that is, the manner in which the agent carries out the act. Act-related adverbs relate in the first place to the act denoted by the verb. Evidently, these are criteria from very different orders. The former category is largely evaluated in terms of how the information becomes available to the speaker, whereas the latter one is described in terms of the entity its members predicate of. Here the problem of delineating adverbs classes on a semantic basis becomes immediately clear.

Two questions are in order. To begin with: I see no problem in postulating that the information offered by ANGRILY-type adverbs will often become available through the way in which the act is performed, but can the same not be said for WILLINGLY-type adverbs? I reckon that there is little difference between both classes on this point. Secondly: in what way is the relation to the act different for ANGRILY-type adverbs; in other words, what exactly is the difference between so-called act-related and ANGRILY-type adverbs? This matter will be taken up in more detail in chapter 4, but for now it can be said that with respect to the theoretical arguments in Huddleston & Pullum (2002) it is very hard to put your finger on any concrete differences other than the given fact that WISELY-type adverbs are the only category to involve a subjective judgment by the speaker. As this objective evaluation is absent for both the ANGRILY-type and WILLINGLY-type adverbs, one is left with no tangible discrimination between those classes in Huddleston & Pullum (2002).

¹⁷ I only discuss the criteria for the non-manner variants here, since the manner variants are all grouped together.

The flaws in Geuder (2002) and Huddleston & Pullum (2002) are largely absent in the framework provided by Ernst (2002, 2003). First and foremost, there are persuasive and mostly irrefutable arguments for the delineation of each class. Furthermore, since his work covers a very wide range of adverbial classes, there is less uncertainty about the inclusion or exclusion of certain adverbs or adverb classes; and above all, his sub-classification of subject-oriented adverbs is intuitively very attractive. I do not want to argue that intuition is a very strong argument, but nonetheless I feel that when one wants to split up both classes of psychological adverbs into two distinct categories, one needs to put forward very strong and incontestable linguistic support for this claim – something which I have not yet encountered in any work.

Indeed, it feels most natural to acknowledge that WISELY-type, ANGRILY-type and WILLINGLY-type adverbs constitute one group, but also that the two latter types have a much closer bond than any other two types in this group. Therefore I feel inclined to accept Ernst's classification as one of the most successful up till now, without implying that the works of Geuder (2002) and Huddleston & Pullum (2002) are without merit or that Ernst (2002, 2003) can be regarded as the definitive description of adverbs. On the contrary: Geuder's alternation between adjectives and adverbs provides a fresh and very interesting take on adverbial classification; Huddleston & Pullum's stressing of the manner conveying a mental state is certainly a point that should not be overlooked; and Ernst's theory itself contains a number of observations that inevitably show that the way adverb classification has been handled ever since the 1960s has only resulted in the recognition of large, overly heterogeneous chunks of adverbs.

Ernst's (2003) description of predicational adverbs serves as a good example for this problem. For convenience, I retake figure 1 and the typical properties of predicationals from

(2.18) below:

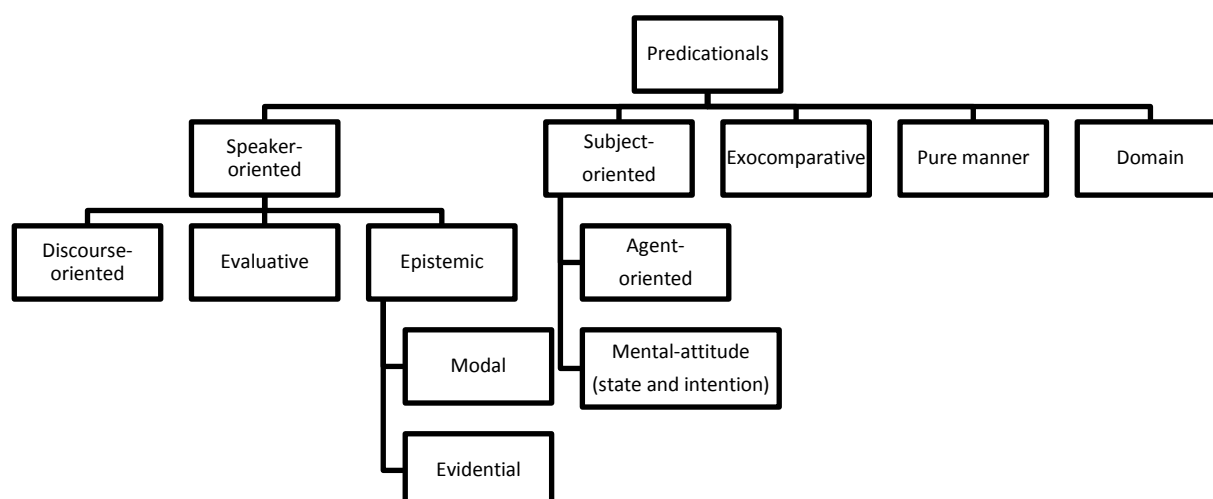


Figure 2. Predicational adverbs and subclasses (Ernst 2003) (2)

- (3.3) a. They come from open classes.
b. They are built up from an adjective stem plus the suffix *-ly*.
c. They take a proposition, fact, or event as one of their arguments.
d. Most predicationals have a dual reading pattern, i.e. they are either interpreted as a clausal adverb or a manner adverb.

As is immediately obvious from figure 2, the class of predicationals embraces a wide variety of adverbs, both semantically and syntactically speaking. My problem does not lie in the notable heterogeneity of this class, but rather in the heterogeneity of its description. That is to say, an adequate sub-classification always needs to start from the identification of a few large groups; but that also means that there should be as little discussion as possible about the way those groups are split up. In this case however, the exact demarcation proves to be rather loose. Consider the first 'typical' property of predicational adverbs. The notion of an 'open class' is in itself problematic, but when applied to adverbs it seems to become almost useless because, as this study will eventually try to show, it is an almost inherent quality of adverbs that they form small subsets with very own characteristics. Pure manner adverbs for example are not an open class, since in English only a limited set of adverbs is restricted to a manner reading only. Modal adverbs cannot possibly be said to form an open class either; on the contrary, they probably constitute one of the most impenetrable adverb classes in English. For modal adverbs, the properties in (3.3) prove even more insufficient. Many modals are not derived from an adjectival stem (e.g. *perhaps*), and the dual reading pattern

is completely absent: modal adverbs only have clausal readings. This latter criterion is neither applicable to pure manner adverbs, since they never have a clausal reading.

I repeat that here it is not so much the classification that is problematically heterogeneous, but the description. However, when this large group of predicational is broken down in smaller classes, the theory does fail to capture the enormous diversity in syntactic-semantic behaviour.

(3.4) Edna had proudly walked onto the stage to collect her prize.

(3.5) Tom had sadly not won the prize.

(3.4) and (3.5) show that *proudly* and *sadly* behave in very different ways. In (3.4) the adverb *proudly* asserts that Edna was proud; thus, it describes some mental state of the subject. *Sadly* in (3.5) however takes the meaning of an evaluative adverb (FORTUNATELY-type), and is used to express that the course of events as a whole was sad. Note that this subjective evaluation of the event is traditionally taken to be the major difference between FORTUNATELY-type and ANGRILY-type adverbs. Nonetheless, *proudly* and *sadly* are often analysed as members of the class of ANGRILY-type adverbs – see e.g. Geuder (2002: 193) and Ernst (2002: 54).¹⁸

The above comments on *sadly* are not new. Ernst (2002) noted that certain adverbs – *sadly*, but also *curiously* and *thankfully*, among others – have somewhat deviant semantics. However, the point I want to pursue in this study is that these deviances are not to be seen as small exceptions. Many subject-oriented adverbs diverge from the prototypical syntactic-semantic compartment of their class and tend to drift between different classes of traditional classifications. Domain adverbs provide a good illustration of this claim. Domain adverbs (Ernst 2003: 319-320) usually specify the domain to which a certain statement applies, and thus the domain with extent to which the statement holds.

(3.6) Politically, they have worked hard since then.

¹⁸ Geuder (2002) however avoids examples of the type of (3.4). His examples only contain post-verbal *sadly*. In Ernst (2002) as well, *sadly* is not used in examples as (3.4). But that does not change anything about the fact that *sadly* is evidently not a prototypical ANGRILY-type adverb at all. I should additionally remark that Ernst (2002) does not mention *proudly* in his analysis of mental-attitude adverbs. My problem at this point is evidently not the inclusion of *proudly* within this class, but the inclusion of *sadly* – which is explicitly described as mental-attitude adverb in Geuder (2002: 54).

Politically in (3.6) is clearly a domain adverb: the subject's working hard is evaluated against the background of politics. The subject's working hard holds with regard to the political arena. However, when a domain adverb takes a degree modifier such a semantic analysis is impossible and the adverb becomes agent-oriented.

(3.7) Very politically, they have worked hard since then.

The adverbial phrase *very politically* entails the assertion of a certain quality of the agent on the basis of his or her actions, and must therefore be an agent-oriented adverb.

Class shifts as the one described above show that adverbs cannot neatly be fit into one single category. In language practice they show typical properties of one class but share many properties with others. Traditional theories have constantly tried to account for these small semantic similarities by describing them as peripheral phenomena. I will propose a new classification embracing these subtle differences as system-internal. Once such a view is adopted, a more dynamic adverbial theory automatically emerges. However, before I can begin laying bare the dividing lines of such a new categorization, I need to clarify what kind of theory would be able to describe (subject-oriented) adverbs in the best way possible. Therefore, the next section will address some theoretical issues of more general nature.

3.2 Towards a dynamic theory of adverbs

Since I aim at coming to a more refined classification of (subject-oriented) adverbs¹⁹, some theoretical motivations are in order. As is clear from the previous sections, there has not been one straightforward way of building a theory of adverbs.

The most important question is how an adverb class must be distinguished from others; that is, which criterion should be used to draw the dividing lines. One possibility is syntax: just as in Jackendoff (1972), it might be considered that the first and foremost criterion is the variety of syntactic positions an adverb may occupy. Such an approach is undoubtedly not very successful since it neglects the wealth of adverbial meanings that may be expressed in one position. Still, a purely semantic description is not the right way either. Building a theory based on the central meaning of the adverb (or the underlying adjective)

¹⁹ 'Subject-oriented adverbs' is a semantic notion, but I continue using it because it is the traditional name for the category of adverbs that I want to study, even though it is a problematic notion.

may seem a very logical course of action, but that is precisely the reason why most traditional research has resulted in the negation of different shades of grey within adverbial classes.

The only possible conclusion is that a theory of adverbs should be established on the crossroads of syntax and semantics. Both fields must go hand in hand, because they are both an integral part of the behaviour of an adverb: an adverb is always found in a certain position with a certain meaning. And as I have already showed, the syntactic position greatly influences the interpretation of subject-oriented adverbs. Additionally, Ernst (2003) assumes that the opposite, the semantics influencing the syntactic possibilities, is equally true. It appears that WISELY-type and ANGRILY-type/WILLINGLY-type adverbs differ in the position that they can take in structural representations of a sentence. Ernst relates this to a specific semantic property: WISELY-type adverbs are “subjective”, i.e. they express a gradable scale and the speaker maps the member of the event or proposition comparison class to this scale in a subjective judgement. Psychological adverbs do not involve a subjective judgement, but rather articulate an objective measurement of the participant’s mental state or willingness. Ernst proposes that, for adverbs, every syntactic difference can be related to such a small semantic difference. In effect, this would mean that syntax and semantics shape each other. I am convinced that a full description of adverbs must necessarily start from this syntax-semantics interface.

So far it has become clear that a more precise classification needs to evaluate both the syntactic and semantic properties of an adverb. A vital question then is what should be considered an adverb, i.e. a lexical entry denoted as an adverb. At this point I want to draw the distinction between monosemous and polysemous adverb theories.²⁰ Consider the following sentences.

(3.8) The senator tactfully had addressed his party members.

(3.9) The senator had tactfully addressed his party members.

(3.10) The senator had addressed his party members tactfully.

²⁰ I have adopted these terms from Coleman (2012), who uses them slightly differently with respect to the semantics of verbs.²⁰

The ways of addressing the attested reading pattern can be divided into two categories. The first one (e.g. Jackendoff 1972; Ernst 2002) posits that in sentences (3.8)-(3.10) we are dealing with the same adverb, which can take different but related meanings. In general terms, such theories conclude that the position of the adverb triggers a certain reading pattern: pre-auxiliary position favours a subject-oriented reading, post-verbal adverbs receive a manner interpretation, and the pre-verbal position is ambiguous between those two. This is what I call a polysemous analysis of adverbs: one form corresponds to a range of related semantic realisations.

As discussed in section 2.3 monosemous adverbial theories (e.g. Huddleston & Pullum 2002; Piñon 2009) analyse (3.8)-(3.10) by positing two homophonous adverbs. The above sentences would then contain adverbs of the same form, but because of their distinct meaning these adverbs are taken to constitute different lexical entries: (3.8) contains the subject-oriented adverb *tactfully*, whereas in (3.10) the manner adverb *tactfully* is found. It is assumed that sentence positions only allow certain types of lexical entries to be inserted: subject-oriented adverbs can only occur in pre-auxiliary position, manner adverbs only in post-verbal position. Pre-verbal position allows for the insertion of either of these adverbs, which accounts for the ambiguity of (3.9).

The problem with monosemous theories is that they lack a couple of generalizations. With respect to the adverbs under discussion, there is a very regular and recurrent relation between the clausal and the manner adverb. This regularity is completely lost when one posits that they nonetheless constitute different lexical entries. Still, many scholars opt for exactly this analysis, and I presume that there is justifiable reason for this. It seems to me however that the most important reason to adopt a monosemous stance is the dissatisfaction with the other option (e.g. Piñon 2009). It is indeed somewhat fuzzy to assume that a certain sentence position triggers a semantic reading without giving a strong argumentation for this triggering. In the next paragraphs, I will propose two approaches that make acceptable the claim that sentence position can influence the reading of a certain adverb. Strangely enough these approaches have to my knowledge not been actively applied to shed light on the behaviour of subject-oriented adverbs.

A first important insight is offered by a more pragmatic approach. In the maximally unmarked and therefore active English sentence, both the subject and other thematic information have their rightful place at the beginning of the clause. Adverbial information like manner modification (though certainly not all adverbials) can prototypically be found further in the clause, very often after the main verb (especially long adverbials). An unmarked sentence may in this way be said to consist of two zones (or poles): a front zone where the subject may be expected to appear, and an end zone where most manner adverbials will be found. It seems this information structure may be applied to account for the reading pattern of subject-oriented adverbs. Towards the beginning of the clause thematic information (and thus also the subject) may be expected to occur. Manner adverbials will appear towards the end of the clause. An adverb placed in front of the subject will receive a participant-oriented reading as it has entered the area of the thematic information. Adverbs placed at the other end of the clause will be interpreted as manner adverbs, since these are usually found here.

This rigid ordering of information (and the linking with interpretational patterns) is evidently formulated too rigidly: the position before the full verb seems to be a grey area where both types of information can appear. However, the auxiliary and the full verb seem to act as thresholds: before the auxiliary, only adverbs referring to thematic information (the subject) are appropriate, and after the full verb only manner interpretations of subject-oriented adverbs are appropriate. The inadequacy of the manner interpretation in pre-auxiliary position or the participant-oriented interpretation in post-verbal position thus follows from the standard information structure. To an adverb placed between the subject and the verb, two interpretations apply, as it can belong to either 'pole' of the clause: it is situated sufficiently close to the first part of the clause as to be part of the thematic information

To illustrate the importance of unmarked information structure, I want to discuss an example from Dutch, a language whose sentence structure does not allow for a participant-oriented/manner ambiguity in pre-verbal position. In Dutch as well as in English, the subject or thematic information is found at the beginning of the sentence. However, the two parts of the verbal constituent make up two verb poles: the finite verb (V_1) can be found in second place, the verb complement (V_2) near the end of the clause. The area between V_1 and V_2 is

again subdivided in different parts, so that the placement of most phrases is subject to a range of rules and principles (Vandeweghe 2004).

With the finite verb always in second position, only one phrase can precede V_1 . In other words: no adverb can be placed in the ambiguous position between the subject and the lexical. If the adverb precedes the verb, the subject is placed after V_1 and thus outside the prototypical area for thematic information. Since the adverb has pushed the subject out of the thematic zone to take this position itself, pre-verbal adverbs in Dutch are never ambiguous because of their pre-verbal position: they are always participant-oriented. The three possible adverb locations are illustrated in (3.11), (3.12), and (3.13).

(3.11) **Wijselijk** *opende* *Tom* *de* *deur*.
wisely opened Tom the door
'It was wise of Tom to open the door.'

(3.12) *Tom* *opende* **wijselijk** *de* *deur*.
Tom opened wisely the door
'It was wise of Tom to open the door.'

(3.13) *Tom* *opende* *de* *deur* **wijselijk**.
Tom opened the door wisely
'Tom opened the door in a wise way.'

It is not my aim to posit a theory of adverb interpretation solely based on information structure, although it is an efficient and economic way of explaining the way polysemous adverb theories work. The economy is the result of the fact that there is no need to assume additional mechanisms: sentence structure is already a well-accepted part of linguistic analysis.

The second approach I want to propose is based on the Construction Grammar model as developed by Adele Goldberg (1995, 2003, 2005) because it offers some neat explanations and arguments that I wish to extrapolate to the domain of adverbs. Construction Grammar refutes polysemous theories like that of Pinker (1989; in Coleman 2012), who claims that the sentences in (3.14) all contain the verb *kick*, but every time with a distinct meaning.

- (3.14) a. Pat kicked the wall.
b. Pat kicked Bob black and blue.
c. Pat kicked the football into the stadium.
d. Pat kicked at the football.
e. Pat kicked Bob the football.
f. The horse kicks.
g. Pat kicked his way out of the operating room.

Polysemous theories need to assume seven distinct meanings for the verb *kick* in (3.14a)-(3.14g), e.g. ‘to deliberately hit something or somebody in a swinging motion of the leg’, ‘to deliberately bring something or somebody in another state with a swinging motion of the leg’, ‘to give something a new place with a swinging motion of the leg’, etc. Construction grammar presumes that the verb *kick* in each of the above sentences is exactly the same, and that the difference in meaning arises from the combination of this single verb *kick* with a particular argument-structure construction: a transitive construction in (3.14a), a resultative construction in (3.14b), a caused motion construction in (3.14c), etc. Important here is that a construction is taken to have a meaning of its own, a meaning that is not brought about by any other argument taking part in the construction. As a result, there is no need to assume seven different realisations of this one verb *kick* in (3.14).

The attractiveness of Construction Grammar lies in the assumption that not only verbal patterns, but our complete knowledge of a language consists of constructions. Even words and morphemes are considered constructions. In spite of this, the research on this model has mostly been confined to the realm of verbal constructions. I think it might be interesting to explore the possibilities of similar analyses for adverbs. However, it is clear that there are several pitfalls. Huddleston & Pullum (2002) note that *bitterly*, at first sight a clear member of the class of ANGRILY-type adverbs, is also used as a degree adverb.

- (3.15) She bitterly resents the way she has been treated.

At this point, I see no way of accounting for this occurrence by any constructional generalisation. I have no knowledge of other subject-oriented adverbs that can function as degree adverbs, and certainly the number is too limited to pursue the path of a generalising rule in which the degree meaning is brought about by the combination of *bitterly* and a

particular construction. It seems that this example immediately defies a constructional approach to adverbs. Moreover, it appears that *bitterly* in (3.15) challenges every polysemous theory of adverbs. I propose that this problem may be resolved in other ways, as I will argue later. In any case it is true that Construction Grammar is not without its flaws (see for example the very revealing article on polysemous constructions by Croft 2003), but this does not mean that it is useless for a theory of adverbs. I therefore take the liberty to use the main theoretical points of Construction Grammar and add some refinements to them, so that my proposal is eventually indebted to Construction Grammar without it being a completely constructional proposal.

One constructional approach to adverbs is a study by Boogaart (2009) on the Dutch adverb *straks* ('later', 'next'). Its primary meaning is purely temporal, but in addition there is a modal variant of the adverb which asserts a possibility that is negatively evaluated, with the temporal meaning bleached to a great extent. Even though the most logical assumption would be to posit two different adverbs, the modal *straks* having developed out of the temporal adverb by metaphorical extension, Boogaart (2009) shows that both can be analyzed as the same lexical entry, with the modal meaning being derived from the construction in which the adverb appears. The modal meaning has indeed developed out of the temporal one; the result however is not the existence of two separate lexical entries but the emergence of a construction in which the adverb receives a modal meaning. In Constructional Grammar this is not unexpected: a language is seen as a constructicon, a set of constructions of different types; many of these constructions have genealogical relations, and constructions are often analysed as daughters or sisters of other ones.

Boogaart's (2009) study demonstrates the theoretical strengths of the constructional approach. Although it seems that in Dutch there are two adverbs *straks* with two distinct yet historically related meanings, it is possible to account for the semantic difference with the use of a single lexical entry. Not only does this add to the economy of the lexicon, but it also captures an important generalisation: in Dutch similar adverbs like *dadelijk*, (*zo*) *direct* and

zo meteen (all three meaning approximately ‘immediately’) seem to be able to enter in the modal construction as well, be it less frequently.²¹

I am convinced that the strongest possible theory makes maximal use of such possible generalisations. With respect to subject-oriented adverbs, the aim of capturing as many generalisations as theoretically and practically possible relates first and foremost to the alternation between the participant-oriented and the manner reading. My aspiration is to account for these two readings by positing one single lexical entry, as in Ernst (2002) and Geuder (2002). It is obvious that there is a high level of semantic similarity between clausal and manner readings, and it is most logical to account for this by assuming one single adverb that can be inserted in different sentence positions. To make this claim more plausible I have described two approaches that are able to account for the perceived fact that a position triggers or selects a certain reading.

It is tempting to analyze the two readings of subject-oriented adverbs as two constructions which each have a very rigid word order – in general terms, one construction adding a clausal meaning and the other a manner meaning – but caution is in order. Certainly it would be an efficient analysis, but cases like *sadly* seem to provide counterevidence. Whereas for most adverbs in the classes under discussion the clausal reading comes down to a subject-oriented interpretation, *sadly* takes an evaluative reading in pre-verbal position. So it is at least clear that a constructional approach cannot account for the full range of semantic shades without resorting to other mechanisms. What such mechanisms might be, will be taken up after the detailed description of subject-oriented adverbs put forward in chapter 4.

The reason why an approach based on principles of Construction Grammar is so appealing is because it combines the strong suits of polysemous and monosemous theories. The adverb is left with one single central sense and enters into a syntactic structure with only this one meaning (as in monosemy), but the insertion of the adverb in the structure yields different semantic outcomes triggered by sentence position (as in polysemous theories). Additionally, Construction Grammar asserts that what you see is what you get. The construction as it appears in surface form allows language users to understand and exchange the meaning of that surface structure. My feeling is that much research up till now has not

²¹ It seems to me that the use of these adverbs in this modal construction is a phenomenon that occurs more in the Dutch of the Netherlands than in that of Flanders.

been able to adequately describe the syntactic-semantic qualities of adverbs precisely because those scholars are not primarily concerned with semantics. Attested semantic differences are traced back and checked against what is presumed about deep sentence structure. The conclusions about deep structure are then used as a criterion for adverb categorization.²² I believe that before anything decisive can be said about adverbs in deep sentence structure, scholars must try to know as much as possible about how these adverbs act on the surface. Language in practice is after all always a surface form and people in conversation understand each other through surface forms of language. Evidently, since the meaning is clear from surface form, the best theory is one that allows language users to correctly predict the interpretation of adverbs without the need for explanations based on deep sentence structure.

²² Ernst (2002: 11-12) briefly discusses some of these theories, e.g. Alexiadou (1997) and Cinque (1999).

Chapter 4

In the previous chapter I argued that a more fine-grained and dynamic classification of subject-oriented adverbs should be pursued. The theoretical basis for this new approach must try to account for the syntactic-semantic features of these adverbs and analyze their behaviour without assuming different lexical entries for subject-oriented and manner adverbials. Furthermore, it is important that syntactic-semantic phenomena are understood through surface structure, since that is the way language appears in practice. In this chapter I will try to propose such a classification for the group of adverbs that is traditionally termed subject-oriented adverbs. Although this is still a limited set of adverbs, it is inevitable that my proposal will inherently contain a number of shortcomings.

Firstly, it may seem like a paradox to build a maximally motivated classification while the adverbs in focus – WISELY-type, ANGRILY-type and WILLINGLY-type adverbs – may appear somewhat randomly collected in one group. However, I believe that the previous chapters have sufficiently demonstrated that the syntactic-semantic features of WISELY-type, ANGRILY-type and WILLINGLY-type adverbs are related to each other closely enough as to motivate this focus.

Secondly, I have narrowed the scope of my research to *-ly* adverbs with neutral sentence stress. The effects of intonation on the interpretation of adverbs are vast, but I have chosen not to include them here. Since my proposal will essentially be little more than a first approximating step, I am convinced that this does not nullify my findings.

A third problem is what syntactic-semantic properties should be evaluated. I will restrict my research to what I think is the most striking feature of subject-oriented adverbs: the reading pattern in non-subordinate clauses. I have in addition confined my evaluation to phonologically integrated sentence positions, although I will very briefly take a look at the phonologically unintegrated sentence-initial position in the case of some ANGRILY-type adverbs.

Finally, the interpretation itself of subject-oriented adverbs is open to much debate. Throughout my research I have evidenced that both the semantic and the syntactic acceptability of adverbs in certain sentences can be highly contested. Even more than usual

in linguistic practice, intuition must be highly distrusted when dealing with adverbs. In this respect it is striking that many renowned scholars are not native speakers of English and yet most of them have always relied on their own intuitions about the English language. I am not in any way saying that their level of English is poor, but when it is obvious that even native speakers have severe difficulties in evaluating the meaning and acceptability of these adverbs, it is at least problematic that – to my knowledge – not any researcher has systematically applied extensive corpus research or studied the intuition of native speakers or the possibility of regional variation.

The reason I stress this final difficulty is because during my research I have struggled heavily with the correct interpretation of these adverbs. Often I noticed that I tended to accept a certain reading, not because I was certain it was acceptable in English but because it sounded tolerable in my native language Dutch. At other times I was paradoxically enough inclined to approve too much as a result from my research. When you study these adverbs too long, you are eventually able to construe acceptable interpretations for completely unacceptable sentences. To avoid these problems as much as possible, I have called in the help of two native speakers for the research presented in this chapter.²³ Of course, any mistakes remain my own.

Some methodological issues require special attention. The adequacy of the participant-oriented and manner reading were verified on the basis of a number of paraphrases. For the manner reading, the paraphrase in (4.1) will be applied.

(4.1) Manner reading: “X did Y in an ADJ way”.

(With ADJ = adjectival predicate underlying the adverb; X = subject of the clause; Y = event)

²³ An English mother, currently living in Belgium, and her son. The mother, now approximately 53 years old, grew up in Askam-in-Furness (Cumbria) and came to Belgium in 1989. Her son was born and raised in Belgium but grew up bilingually and still often visits his family in Askam-in-Furness. He is now approximately 21 years old.

For the participant-oriented reading, ²⁴the three types in focus need a different paraphrase. For WISELY-type adverbs, I have used the traditional paraphrase in (4.2). The clausal reading of ANGRILY-type adverbs was tested with paraphrase (4.3).

(4.2) WISELY-type: 'It was ADJ of X to Z.'

(4.3) ANGRILY-type: 'X was ADJ when Y.'

For WILLINGLY-type adverbs it is difficult to find a comparable paraphrase since their adjectival bases are used slightly differently than those of ANGRILY-type adverbs. Using the same paraphrase would surrender clauses like (4.4), which sounds rather odd. The objective of the paraphrase test is merely to check whether the subject can be said to show the property denoted by the adverb, i.e. an attitude on a scale of volition. Therefore I propose the very general paraphrase in (4.5), which suffices to check the volitional attitude in the subject.

(4.4) Scott was purposeful in making dinner.

(4.5) WILLINGLY-type: "X wanted to Y." / "X did not want to Y."

It would have led me too far to check the syntactic-semantic properties of an extensive list of adverbs for each type. I have limited my research to the sets of adverbs described in (4.6).

(4.6) WISELY-type: *wisely, cleverly, tactfully, stupidly, intelligently, carefully*

ANGRILY-type: *angrily, sadly, happily, gladly, proudly, resentfully, bitterly*

WILLINGLY-type: *willingly, reluctantly, intentionally, purposely, inadvertently*

The first part of this research focuses on the readings the adverbs under discussion can take. After that I will discuss how the possible readings work – i.e. how the adverb assigns a certain property to a participant, an event or the way the event is carried out – and where the differences between classes can be sought. Finally, I address some additional problems that will turn up in the first two sections and are in need of explanation.

²⁴ I have continued to call the participant-oriented reading of WISELY-type adverbs agent-oriented, as I suspect that Ernst's (2002) views on this matter are essentially correct.

4.1 Evaluating the reading of the different adverbs

I start with the reading pattern of those adverbs termed “evaluative oriented adverbs” in Taverniers & Rawoens (2010). I will however not call them WISELY-type but CLEVERLY-type adverbs, since it will become clear in the following lines that *wisely* is actually not a prototypical member of this class, in contrast to *cleverly*.

- (4.7) a. Franklin cleverly had told his girlfriend about last night.
b. It was clever of Franklin to tell his girlfriend about last night.
- (4.8) a. Franklin had cleverly told his girlfriend about last night.
b. It was clever of Franklin to tell his girlfriend about last night.
Franklin told his girlfriend about last night in a clever way.
- (4.9) a. Franklin told his girlfriend about last night cleverly.
b. Franklin told his girlfriend about last night in a clever way.

(4.7)-(4.9) show that the interpretation of *cleverly* works as is expected for this type of adverbs. In pre-auxiliary position (4.7) the adverb is clearly agent-oriented, whereas in post-verbal position (4.9) it specifies the manner in which Franklin told his girlfriend about that night. Finally, pre-verbal *cleverly* (4.8) is ambiguous between those two readings. *Tactfully* behaves in exactly the same way as *cleverly*.

All other investigated adverbs of this type deviate from this expected behaviour. For *wisely* and *stupidly* the manner reading is ungrammatical or at least very unnatural. (4.10)-(4.13) provide some examples.

- (4.10) a. The boy had wisely helped his old grandmother.
b. It was wise of the boy to help his old grandmother.
†The boy had helped his old grandmother in a wise way.²⁵
- (4.11) *The boy had helped his old grandmother wisely.
- (4.12) a. Some students had stupidly lied to their teacher.
b. It was stupid of the students to lie to their teacher.
†Some students had lied to their teacher in a stupid way.
- (4.13) ?*Some students had lied to their teacher stupidly.

²⁵ In the current research the symbol † is used to mark a paraphrase which does not properly reflect the meaning of the sentence but is still an acceptable sentence.

In my opinion there is little wrong with a manner reading of *wisely* or *stupidly*, but both my informants were absolutely positive that it sounds very odd in English (*stupidly*) or that it was completely unacceptable (*wisely*). What is strange about this impossibility is that the manner paraphrases are in themselves acceptable sentences. The problem thus comes down to the fact that the adverb cannot be applied to construe a manner reading whereas it is perfectly possible to do something in a stupid or wise way. How this problem may be accounted for will be dealt with later in this chapter. I first want to continue evaluating the interpretational possibilities of all adverbs, so that any possible answer can immediately be checked for other adverbs with deviant behaviour.

Intelligently appears to be another problematic case. Consider the following sentences.

(4.14) *John intelligently had left the room.

(4.15) ?John had intelligently left the room.

(4.16) ?John had left the room intelligently.

Because my informants were unanimous and very self-confident in the evaluation of the above sentences, I take it that (4.14) – (4.16) are at least not generally accepted in English. This does not mean that *intelligently* is not an agent-oriented adverb: (4.17) and (4.18) are perfectly acceptable utterances in British English.

(4.17) a. Sarah intelligently answered her teacher's question.

b. It was intelligent of Sarah to answer her teacher's question.

Sarah answered her teacher's question in an intelligent way.

(4.18) a. Sarah answered her teacher's question intelligently.

b. Sarah answered her teacher's question in an intelligent way.

Crucially, *intelligently* is still impossible before an auxiliary, as in (4.19).

(4.19) *Sarah intelligently had answered her teacher's question.

In the case of *carefully* both readings are applicable when the adverb appears in pre-verbal position (4.20), but the manner reading is easily recognized as the most pertinent option. In post-verbal position (4.21) the manner reading is appropriate, as expected.

- (4.20) a. Noel had carefully explained the problem to his parents.
 b. It was careful of Noel to explain the problem to his parents.
 Noel explained the problem in a careful way to his parents.
- (4.21) a. Noel had explained the problem carefully to his parents.
 b. Noel explained the problem in a careful way to his parents.

Just as *intelligently*, this adverb is excluded from pre-auxiliary position as illustrated in (4.22).

- (4.22) *Noel carefully had explained the problem to his parents.

Of the adverbs of the ANGRILY-type, only *angrily* itself shows the typical syntactic-semantic pattern. It should be noted that, pragmatically, this adverb feels somewhat strange in pre-auxiliary position, but not to the extent that it becomes ungrammatical. Examples are found in (4.23)-(4.25).

- (4.23) a. My sister angrily had thrown the cup out of the window.
 b. My sister was angry when she threw the cup out of the window.
- (4.24) a. My sister had angrily thrown the cup out of the window.
 b. My sister was angry when she threw the cup out of the window.
 My sister threw the cup out of the window in an angry way.
- (4.25) a. My sister had thrown the cup out of the window angrily.
 b. My sister threw the cup out of the window in an angry way.

Two other adverbs, *proudly* and *resentfully*, have the same reading pattern but are, supposedly again for some pragmatic reason, almost completely unacceptable in pre-auxiliary position.²⁶ The subject-oriented reading however comes out nicely immediately before the full verb. So, with regard to their semantics there is no difference with *angrily*. (4.26)-(4.28) present examples for *proudly*, (4.29)-(4.31) illustrate the case of *resentfully*.

- (4.26) ?*Pete Campbell proudly had presented his new line of summer clothing.
- (4.27) a. Pete Campbell had proudly presented the new line of summer clothing.
 b. Pete Campbell was proud when he presented the new line of summer clothing.
 Pete Campbell had presented his new line of summer clothing in a proud way.

²⁶ Once more, my informants were very clear and unanimous in their evaluation.

- (4.28) a. Pete Campbell had presented his new line of summer clothing proudly.
 b. Pete Campbell had presented his new line of summer clothing in a proud way.
- (4.29) [?]President Clinton resentfully had admitted his sexual relationship with Monica Lewinsky.
- (4.30) a. President Clinton had resentfully admitted his sexual relationship with Monica Lewinsky.
 b. President Clinton was resentful when he admitted his sexual relationship with Monica Lewinsky.
 President Kennedy had admitted his sexual relationship with Monica Lewinsky in a resentful way.
- (4.31) a. President Clinton had admitted his sexual relationship with Monica Lewinsky resentfully.
 b. President Clinton had admitted his sexual relationship with Monica Lewinsky in a resentful way.

Gladly on the other hand cannot occur post-verbally. In this case the unacceptability is not just the result of a pragmatic feature. This adverb can apparently not be construed to express a manner meaning, as shown in (4.33b). In pre-verbal position the only possible interpretation is subject-oriented.

- (4.32) a. The CEO gladly had accepted Bill's resignation.
 b. The CEO was glad when accepting Bill's resignation.
- (4.33) a. The CEO had gladly accepted Bill's resignation.
 b. The CEO was glad when accepting Bill's resignation.
 †The CEO accepted Bill's resignation in a glad way.
- (4.34) a. *The CEO had accepted Bill's resignation gladly.

Bitterly as well is problematic in a manner interpretation, but is evidently very different from *gladly*. Although the manner interpretation is highly inappropriate, the adverb can occur in post-verbal position – but it takes a subject-oriented reading in this position. In pre-verbal position it can seem somewhat awkward, but I believe this is again a case of pragmatics.

- (4.35) a. Gloria bitterly had left the meeting without saying goodbye.
 b. Gloria was bitter when she left the meeting without saying goodbye.

- (4.36) a. Gloria had bitterly left the meeting without saying goodbye.
 b. Gloria was bitter when she left the meeting without saying goodbye.
 †Gloria left the meeting in a bitter way without saying goodbye.
- (4.37) a. Gloria had left the meeting bitterly without saying goodbye.
 b. Gloria was bitter when she left the meeting without saying goodbye.
 †Gloria left the meeting in a bitter way without saying goodbye.

The manner paraphrase is an acceptable sentence, but it obviously does not represent the meaning of the adverbs in (4.36a) or (4.37b). The fact that *bitterly* in (4.37a), with the adverb in post-verbal position, can be interpreted as subject-oriented will be in need of some explanation.

Finally, *sadly* and *happily* are completely different from all other adverbs in this class. It is true that their adjectival base denotes a mental state, but in their syntactic-semantic behaviour they fall out of the class of ANGRILY-type adverbs. That means that when *sadly* and *happily* are put together with other lexical units to form a clause, the mental state participates in the semantic build-up in a way that is not typical of ANGRILY-type but of FORTUNATELY-type adverbs. (4.38) illustrates the behaviour of *sadly*.

- (4.38) a. Art Spiegelman sadly discovered that his father had destroyed his mother's diaries.
 b. †Art Spiegelman was sad when he discovered that his father had destroyed his mother's diaries.
 †Art Spiegelman discovered in a sad way that his father had destroyed his mother's diaries.
 It is sad that Art Spiegelman discovered that his father had destroyed his mother's diaries.

Art Spiegelman, the creator of the acclaimed graphic novel *Maus*, was indeed sad when he discovered that his father had destroyed those precious documents, but that is not the meaning expressed by (4.38a) – and neither does it express that Spiegelman discovered this in a sad way. The only possible reading is one expressing an external evaluation, where the speaker articulates a subjective opinion about the complete proposition. It is furthermore

remarkable that *sadly* has no dual reading pattern at all: the post-verbal occurrence of *sadly* in (4.39) is rather strange.

- (4.39) *Art Spiegelman discovered sadly that his father had destroyed his mother's diaries.

The same can be said about *happily*. In the position before the full verb, *happily* only expresses an external judgement, not a state of the subject or the way in which the subject performs an action, as shown in (4.40). Note that, for *happily*, it is impossible to construct an evaluative paraphrase of the type 'it is X that'. In post-verbal position, as in (4.41), *happily* is very infelicitous, if not ungrammatical.

- (4.40) a. Leonard had happily walked away at that moment.
b. †Leonard had been happy when he had walked away.
†Leonard had walked away in a happy way at that moment.
It was good that Leonard had walked away at that moment.
- (4.41) *Leonard had walked away happily at that moment.

Nonetheless, there are some differences between *sadly* and *happily*. The first concerns the pre-auxiliary position: only *happily* can occur here, again conveying a subjective external judgement that is actually typical of FORTUNATELY-type adverbs.

- (4.42) *Leonard sadly had walked away at that moment.
(4.43) Leonard happily had walked away at that moment.

(4.42) can only work when the adverb receives comma intonation, disintegrating it phonologically from the rest of the clause. This is not necessary for *happily* in (4.43). The second difference relates to another phonologically disintegrated position, the front position, in written language separated from the rest of the clause by means of a comma.

- (4.44) Sadly, Leonard walked away at that moment.
(4.45) Happily, Leonard walked away at that moment.

I feel that it is far more natural to use *sadly* (4.44) in this front position than *happily* (4.45), although it is certainly not ungrammatical.²⁷

Finally, it must be noted that *happily* can in some cases still occur post-verbally, as in the following example taken from Huddleston & Pullum (2002: 672, 8.vi.a)

(4.46) She smiled happily.

The above discussion of CLEVERLY-type and ANGRILY-type adverbs has shown a number of unexpected problems which need to be accounted for. WILLINGLY-type adverbs are no exception to this, although it seems there is less variation. Firstly, as shown in (4.47) and (4.48), all adverbs can be interpreted as subject-oriented in pre-auxiliary position.

(4.47) a. Glenn willingly/intentionally/purposely had made an appointment with the doctor.

b. Glenn wanted to make an appointment with the doctor.

(4.48) a. Sarah reluctantly/inadvertently had told Colin's secret to his girlfriend.

b. Sarah did not want to tell Colin's secret to his girlfriend.

Moreover, all of the investigated adverbs of this type allow the subject-oriented reading in every position, even post-verbally. This is illustrated in sentences (4.49) and (4.50).

(4.49) a. Sally dropped her cup of coffee willingly/intentionally/purposely this morning.

b. Sally wanted to drop her cup of coffee this morning.

(4.50) a. The defender reluctantly/inadvertently kicked the ball over the back line.

b. The defender did not want to kick the ball over the back line.

The manner reading on the other hand divides this type of adverbs into two groups. The first group (with *willingly* and *reluctantly*) can take a manner interpretation in pre-verbal and post-verbal position (in addition to the subject-oriented reading), the other one (*intentionally*, *purposely*, *inadvertently*) never takes a manner interpretation – see examples

²⁷ My reservation towards (4.44) can also be a result from the fact that I would not necessarily exclude a subject-oriented reading for pre-verbal *happily*. For my informants however there was absolutely no way of interpreting pre-verbal *happily* as a subject-oriented adverb, so I have trusted their judgments here.

(4.51) and (4.52). Note that the paraphrase test for the manner reading for this group results in a sentence that does not make much sense either.

- (4.51) a. Carol and her sister had fulfilled their task willingly/reluctantly.
b. Carol and her sister had fulfilled their task in a willing/reluctant way.
- (4.52) a. Somebody had broken the small window intentionally/purposely/inadvertently.
b. †Somebody had broken the small window in an intentional/purposeful/inadvertent way.

4.2 Describing the reading of the adverb classes

In order to uncover what properties account for the attested differences, it is vital to know as precisely as possible what must be considered the standard that some adverbs deviate from. This section therefore explores more deeply the participant-oriented and manner readings of those adverbs that have a clear dual reading pattern. Whether or not they represent the standard case can be evaluated later. My analysis is based for a great part on the description in Ernst (2002,2003) – which is inevitable due to the quality and thoroughness of his description – but adds some key points.

The participant-oriented reading of all three types involves mapping a property of an individual on a gradable scale, but next to this there are some important differences between CLEVERLY-type adverbs and both types of psychological adverbs. I start with the discussion of the former type. P_{ADJ} is assigned to the agent through a subjective judgement by the speaker on the basis of what the agent does in comparison to other things he/she could have done. Interestingly, the evaluation can also be more specific: in (4.53), the adverb *cleverly* is not an evaluation of the speaking-event (= what Jack does) but of the fact that he spoke in a certain manner.

- (4.53) Jack cleverly had spoken to his mother in a polite way.

An important property is the spatiotemporal relation between the adverb and that what is evaluated. P_{ADJ} is invested upon the agent for his/her actions at a certain time and the investment of this property is only true – or at least as true as a subjective judgement can be – with regard to the event and thus with regard to the spatiotemporal properties of

the event. This means that the spatiotemporal properties at least comprise those of the adverb – but they are not necessarily identical. Jack in (4.53) can still be considered clever after the completion of his actions, since his actions allow the speaker to believe he is clever. Note however that the cleverness is at this time still only valid with regard to the way he had spoken to his mother.

The relation is thus one of partial cotemporality. It is interesting that Geuder (2002: 194-196) postulates a similar relation between ANGRILY-type adverbs and the verb. It indeed seems that there is a partial overlap between the spatiotemporal properties of ANGRILY-type and WILLINGLY-type adverbs on the one hand and the event on the other hand in examples (4.54) and (4.55).

(4.54) Grant angrily threw the newspaper in the litter bin.

(4.55) All colleagues willingly had taken part in the small survey.

The state of mind of the subject referent is not completely dependent on the event. In (4.54) Grant's anger can still continue after the event in which he threw away the newspaper. Similarly, the willingness in (4.55) was probably already a property of the colleagues before they had taken part in the survey.

The manner reading works largely similarly across categories, although this does not mean that all adverbs apply it in the same way – as was already clear from section 4.1. In the manner reading one of the possibilities of carrying out the event is evaluated. P_{ADJ} is assigned to this specific way of carrying out the event because the agent 'shows typical properties' of P_{ADJ} (Ernst 2002: 56). This relatively straightforward analysis of the manner reading does however not paint the complete picture. There is an important difference between CLEVERLY-type adverbs and psychological adverbs with regard to the attribution of P_{ADJ} to the subject. For adverbs of the CLEVERLY-type, the manner reading does not need to imply that the agent actually is P_{ADJ} . In (4.56), the manner use of the adverb *cleverly* does not mean that Sammy is always clever, as evidenced by (4.57).

- (4.56) Sammy sometimes solves problems cleverly.
- (4.57) a. Sammy sometimes solves problems cleverly, but on the whole he is not a very bright kid.
- b. Sammy sometimes solves problems in a clever way, but on the whole he is not a very bright kid.

The same thing can be said about the manner use of ANGRILY-type adverbs, which equally does not necessarily imply that the subject is P_{ADJ}, but there is nonetheless an important difference.

- (4.58) a. My neighbour returned my barbecue angrily.
- b. My neighbour returned my barbecue in an angry way, as if he was angry.
- (4.59) My neighbour returned my barbecue angrily, but he wasn't really angry.

It is not necessary that the neighbour in (4.58a) is angry, but it is in any case highly probable. For ANGRILY-type adverbs, doing something in a P_{ADJ} manner always means that it is done as if the subject referent was P_{ADJ}. It is not a necessity that the subject is P_{ADJ}, but unless the contrary is explicitly expressed – as in (4.59) – the adverb is prototypically interpreted in this way. When comparing (4.56) and (4.58a), I feel that the adverb *cleverly* much less implies this participant-oriented reading than *angrily*.

For WILLINGLY-type adverbs, the probability for the manner reading to entail the participant-oriented reading is even higher.

- (4.60) a. Joan read the book willingly.
- b. Joan read the book in a willing way, as if she really wanted it.

It is highly unlikely that the way in which Joan read the book in (4.60) expressed a relatively high degree of willingness on her part when she actually did not want to read the book. This predicts that (4.61) feels somewhat strange:

- (4.61) Joan read my book willingly, although she did not want to.

Even though there is no difference across categories with regard to how P_{ADJ} is assigned to an entity in the clause in the manner reading, there is evidently a clear difference involving the implications of the manner reading. ANGRILY-type adverbs and

especially WILLINGLY-type adverbs almost always seem to imply their subject-oriented reading. For WILLINGLY-type adverbs this tendency is the strongest. I propose to attribute the feature [+internalization] to the adverbs in both classes of psychological adverbs: adverbs that have this property show a tendency of the external manifestation (the manner reading) of P_{ADJ} to imply that it is also internally experienced (the participant-oriented reading). This does not mean that there is a strict dichotomy, where CLEVERLY-type adverbs would have the feature [-internalization], because this would mean that the manner reading of CLEVERLY-type adverbs never implies the participant-oriented reading. Rather, the classes can be ranked on a continuum, with WILLINGLY-type adverbs being located more towards the positive end and ANGRILY-type adverbs approximately in the middle. CLEVERLY-type are best not located at the outer end of the negative side, because even though the manner adverb in (4.56) does not necessarily imply that Sammy is a clever boy, it would be logical to assume that he is a smart kid, given that he is able to solve problems in a clever way. Figure 3 presents this continuum.

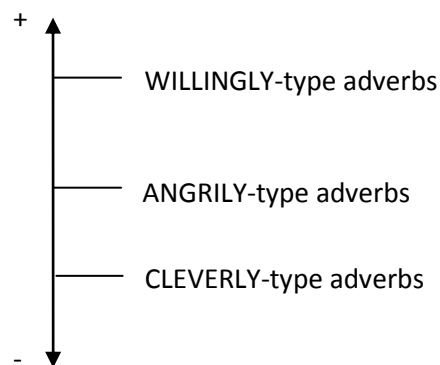


Figure 3. Continuum of internalization

4.3 Explaining the problems and differences

Assuming that the description in the previous chapter is correct, it is time to try to account for all adverbs that have shown to behave in different ways. It may seem at this point that most problems can be clarified by means of one or two exception rules, but I am certain that such an approach would again deny the many syntactic and semantic nuances of these adverbs. *Gladly, bitterly, sadly, happily, wisely, stupidly, intentionally, purposely* and *inadvertently* are all problematic when forced in a manner reading, but trying to explain the behaviour of these adverbs all at once, with one explanation, would be too simplistic. Some of these adverbs may still occur post-verbally although not with a manner reading, and *sadly*

and *happily* tend more towards FORTUNATELY-type adverbs and are therefore best analyzed differently than *gladly* and *bitterly*. The following analysis will therefore have to resort to a number of explanations, but I am confident that it is exactly there that the strength of my proposal lies.

I start with the behaviour of those volitional adverbs that for some reason cannot be interpreted as manner adverbs according to my informants, viz. *intentionally*, *purposely* and *inadvertently*. The only possible reading for them would be a subject-oriented one, in all three positions. In other words, these adverbs always describe the volitional attitude of a subject, i.e. a part of the internal experience of the subject. In the same vein, the manner reading in general may be taken as an external experience or manifestation of P_{ADJ}: the subject shows P_{ADJ} towards the outer world in the way he/she performs the action denoted by the event. The inappropriateness of the manner reading in the case of *intentionally*, *purposely* and *inadvertently* may therefore be explained by assuming that these adverbs have the feature [-externalization]. This would mean that the volitional attitude expressed by these adverbs is only (and always) an inner experience and that the adverb cannot express the outer realisation of this inner experience, i.e. the manner reading. There are however two problems with such an analysis. The first is that this feature actually says nothing more than 'it cannot receive a manner reading', and thus gives no real explanation for this restriction other than a lexically-defined restriction rule.

Secondly, I doubt whether there can really be no externalization of this volitional attitude in the case of *intentionally*, *purposely* and *advertently*. Consider the following sentence (4.62).

(4.62) Maggie let the cup fall to pieces intentionally.

Although it is true that (4.62) necessarily means that Maggie wanted to let the cup fall to pieces (according to the speaker) this does not mean that there is no outer realisation of the volitional attitude. For example, it might be the case that she did not in any way try to catch the cup as it was falling, or maybe her facial expression did not express any surprise on her part. Both these possibilities express her volitional attitude towards the outer world,

because they indicate to the people around her that it was intentional.²⁸ The problem obviously does not lie in the impossibility of an externalization of the inner experience.

When my informants judged the sentences containing these adverbs, they responded that the adverb cannot be interpreted as ‘in an intentional/purposeful/inadvertent way’ because those properties exist only in your head. I assume that the solution must be sought in the absence of a true manner reading, by which I mean a manner reading that does not necessarily require that the subject is also P_{ADJ}. A pure manner reading after all applies only to the way in which the action is performed, not the subject. As I have shown a manner reading may *imply* that P_{ADJ} is also true of the subject, but it never *requires* it.²⁹ For *intentionally*, *purposely* and *inadvertently* however there is always an inner experience, even when the adverb also expresses the way in which the action is performed. So the absence of a manner reading must be reformulated as the absence of a true manner reading. This is shown in (4.63) and (4.64).

(4.63) The principal fired our biology teacher willingly, but we know that he actually did not want to.

(4.64) *The principal fired our biology teacher intentionally, but we know that he actually did not want to.

Whereas the manner reading of *willingly* is in any case possible (though it may appear a little strange) while denying that the principal was really willing to fire the teacher, this is certainly impossible for *intentionally*.

²⁸ Note that this external manifestation is not articulated when the adverb appears in pre-auxiliary position – examples are shown in (i) and (ii). I therefore assume that it must be the post-verbal position that triggers this semantic layer, which comes down to a manner meaning.

- (i) a. Maggie intentionally had let the cup fall to pieces.
b. Maggie wanted to let the cup fall to pieces.
†Maggie let the cup fall to pieces in an intentional way.

- (ii) a. Maggie intentionally is letting the cup fall to pieces.
b. Maggie wants to let the cup fall to pieces.
†Maggie is letting the cup fall to pieces in an intentional way.

²⁹ Even though I proposed assigning the feature [+internalization] to adverbs like *angrily* and *willingly*, these still have the possibility of a pure manner reading: the manner reading does not require the subject-oriented reading in absolute terms, there is only a tendency to imply the subject-oriented reading. On the other hand, it seems to be a precondition of the manner reading of *intentionally* that the adverb is also interpreted as subject-oriented.

This can easily be explained by assuming that these adverbs have the feature [+internal], meaning that the property denoted by the adverb is always experienced internally, even when it also expresses the outer realization. This analysis avoids the pitfalls of my first proposal (assigning them the property [-externalization]) because it has more explanatory power. The feature [+internal] does not just imply that a true manner reading is impossible, but it explains why and is in effect the cause of the impossibility. The property denoted by the adverb is always also internal, and therefore it is impossible to have a manner reading without saying that the property also holds for the subject. In addition, it ties in neatly with a previous theoretical assumption. In section 4.2, I argued that the different types of adverbs may be ranked along a continuum with respect to the degree in which the manner reading of the adverbs of that type imply that the property is also true of the subject. The property [+internal] is nothing more than a result from the fact that adverbs such as *intentionally* have their place at the outer end of the positive side. Their manner reading *always* implies that P_{ADJ} is a quality of the subject. Figure 4 presents the continuum with the addition of these adverbs.

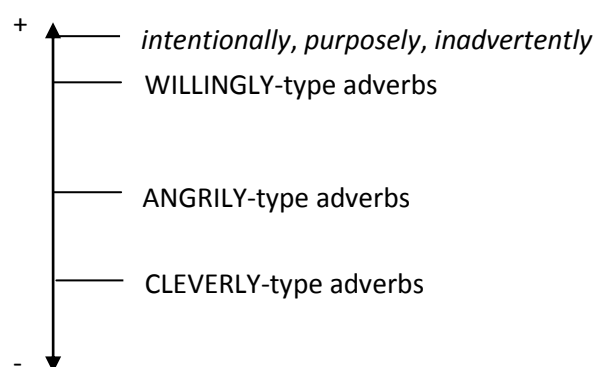


Figure 4. Continuum of internalization (2)

The same analysis may be applied to the behaviour of the adverb *bitterly*. As I have shown above, my informants reported that a manner reading is highly doubtful in both pre-verbal and post-verbal position, and that a subject-oriented reading was evidently mandatory in every case. The reason for this is the same as for *intentionally*, *purposely* and *inadvertently*: you cannot do something in a bitter way without being bitter. This shows that *bitterly* may be analysed in the same vein. The problem is not the absence of a manner reading, but the compulsory presence of a subject-oriented reading even when a manner reading is pursued.

If *bitterly* is indeed analysed as having the lexical property [+internal], this immediately raises another question: is this merely a property that any lexical item may take, or is there a closer connection between *bitterly* and adverbs like *intentionally*? In other words, the appointment of this property may indicate an important cross-category classification that severely challenges the traditional view on these adverbs. I will not reflect on the theoretical repercussions of this analysis at the moment but will take them up later again, in chapter 6. I do not want to jump to hasty conclusions, and therefore it is vital to get a more complete picture of these adverbs before evaluating the theory as a whole.

For *bitterly* as well as for a range of other adverbs – *proudly*, *resentfully*, *angrily* – I remarked that the pre-auxiliary position is a marked option, resulting in somewhat strange sentences (in the case of *angrily* and *bitterly*) and even straightforwardly unacceptable utterances (*proudly*, *resentfully*). Again this is a cross-category observation: *intelligently* and *carefully* as well are impossible in pre-auxiliary position.

In section 4.1 I imputed this restriction to a pragmatic factor. It is probably possible to try to relate this restriction to a lexical feature as well – which in turn may also pose problems to widespread ideas on adverb categorization – but I doubt whether it could throw more light on the workings and the interrelations of these adverbs. Instead, I take the restrictions to the pre-auxiliary position to be a natural result of the simple fact that speakers of English do not normally place subject-oriented adverbs before the auxiliary (if there is one).³⁰ Even for adverbs which are unarguably acceptable in pre-auxiliary position, it is obvious that they appear much more frequently immediately before the full verb in sentences with an auxiliary.³¹ Therefore I do not feel the need to try to explain this restriction in explicitly semantic terms.

The behaviour of *intelligently* is however not yet fully explained by this pragmatic factor. Below I retake examples (4.14)-(4.18) as (4.65)-(4.69).

(4.65) *John intelligently had left the room.

(4.66) ?John had intelligently left the room.

³⁰ My intuition on this matter was confirmed by my informants. In judging sentences with a pre-auxiliary subject-oriented adverb, they often expressed a reluctance to put the adverb in that position, not because it was unacceptable but merely because it sounded less natural than in pre-verbal position.

³¹ The corpus research that will be dealt with in chapter 5 also showed that *wisely* has through all stages of English appeared much less frequently in pre-auxiliary position, although it was always an acceptable option.

- (4.67) ?John had left the room intelligently.
- (4.68) a. Sarah intelligently answered her teacher's question.
 b. It was intelligent of Sarah to answer her teacher's question.
 Sarah answered her teacher's question in an intelligent way.
- (4.69) a. Sarah answered her teacher's question intelligently.
 b. Sarah answered her teacher's question in an intelligent way.

It seems *intelligently* can only appear in sentences where the verbal predicate necessitates a heightened level of cognitive control. It may be the case that John's leaving the room in (4.64) is the result of a mental process in which he convinced himself of the fact that this course of action was intelligent in some way. Nonetheless, leaving the room is not an action which by itself conveys a chain of thought. On the other hand, answering a question very openly reflects an idea, a thought or in any case something which you have considered in your mind.

I suppose this high level of cognitive control is a lexically defined context-restricting feature of the adverb *intelligently*. It can only act as a modifier in clauses which expect the subject referent to think something through.

There are still two groups of subject-oriented adverbs whose behaviour cannot be predicted with the above explanations. The first comprises the adverbs *sadly* and *happily*, the second *wisely*, *stupidly* and *gladly*. The adverbs in the former group seem to have gone through a transition in which their interpretation shifted towards the judgement typical of FORTUNATELY-type adverbs. This shift involves a change in scope. ANGRILY-type adverbs only modify a part of the clause (they modify a participant and/or the event denoted by the verb), but FORTUNATELY-type adverbs take scope over a whole proposition. In the same way, *sadly* and *happily* evaluate a complete proposition, as in (4.70) and (4.71).

- (4.70) a. The grave of the pharaoh was sadly pillaged in the late 18th century.
 b. It was sad that the grave of the pharaoh was pillaged in the late 18th century.
- (4.71) a. A couple of school boys happily alerted the police in time.
 b. It was good that a couple of school boys alerted the police in time.

Ernst (2002: 75-76) shows that FORTUNATELY-type adverbs can be divided into two sets according to their reading pattern: one set of adverbs ("pure evaluatives", e.g.

unfortunately, surprisingly) only has the evaluative reading, the second set (“dual evaluatives” e.g. *oddly, appropriately*) has both an evaluative and a manner reading. On this view, *sadly* and *happily* would be ranked among the pure evaluatives, since they also appear to have no manner reading, as discussed in section 4.1.

Wisely, stupidly and *gladly* are also in want of a manner reading, though not in the same way as *intentionally, purposely* and *inadvertently*, which are clearly acceptable in post-verbal position. *Wisely, stupidly* and *gladly* however are ungrammatical in that position, and as yet there is no clear reason why. I suspect that this may be related to a shift similar to that of *happily* and *sadly*, though this is for the moment nothing more than a premature assumption. Nonetheless, I feel that the elusiveness of their behaviour in some way allows me to search for a common factor governing their syntactic-semantic behaviour, even though *gladly* is an ANGRILY-type adverb and the other two are CLEVERLY-type adverbs. Revisions to this postulation may at any point appear necessary, but for now I want to pursue the path of one general explanation. As a first proposal, I suggest that these adverbs may be going through the same shift as *happily* and *sadly*, and that the loss of their manner reading is the first step of a grammaticalization path from ANGRILY-type to FORTUNATELY-type adverbs. The next chapter will address the possibilities and probability of this proposal.

Chapter 5

Chapter 4 formulated a number of proposals in order to explain the difference in reading patterns found among the investigated subject-oriented adverbs. It appeared that many of the problems could be solved by defining a small number of lexical features and ranking the adverbs on a scale on the basis of the degree in which their manner reading implies the subject-oriented reading. Additionally, I remarked that pre-auxiliary position is always a somewhat marked option, which in turn also helped to explain the unacceptability of some adverbs in this position. However, the behaviour of a couple of adverbs – *wisely*, *stupidly* and *gladly* – is still in want of clarification. The peculiarity of their syntactic-semantic properties is the unacceptability in post-verbal position. Equally impossible in this position are *happily* and *sadly*. On the basis of their lexical meaning they should be ranked among ANGRILY-type adverbs, denoting a mental state of the individual, but the way they enter into the interpretational lay-out of a clause shows that they have gone through a transition: these adverbs now do not express an objective truth about the subject's state of mind but rather a subjective evaluation of the proposition as a whole, just like FORTUNATELY-type adverbs. In this transition, *happily* and *sadly* seem to have lost their manner reading and the ability to appear in post-verbal position.

I therefore presume that the unavailability of a manner reading and the post-verbal appearance in the case of *wisely*, *stupidly* and *gladly* may be the first step in a transition similar to that of *sadly* and *happily*. Since I believe it should be possible to address the behaviour of *wisely*, *stupidly* and *gladly* with one mutual explanation, this chapter will focus on one adverb only, viz. *wisely*. To affirm my claim that these adverbs are going through a shift towards FORTUNATELY-type adverbs, section 5.1 will first present the results of a corpus research in which I investigate whether post-verbal position has always been unacceptable for *wisely* or whether it is a more recent phenomenon. Section 5.2 addresses the problem from the angle of predicate classification. Finally, section 5.3 combines the results of the first two sections to evaluate the theoretical possibility of a transition towards FORTUNATELY-type adverbs.

5.1 Post-verbal *wisely*?

If I assume that *wisely* has gradually lost a manner reading and, accordingly, the ability to appear post-verbally, that means I need to prove that there was a time when *wisely* could indeed occur in this position. It seems a simple corpus research could provide all the answers here, but that is definitely not the case. Instead, a range of unavoidable problems arises. Firstly, since adverbs have traditionally been somewhat neglected in the study of English syntax, there is to my knowledge no corpus which has been compiled specifically for the study of adverbs. Hence, the number of adverbs attested in corpora is always rather small, and one can argue that this misrepresentation may give rise to a bit of an incomplete picture. In addition, I am for the purposes of the current study only interested in subject-oriented adverbs in non-subordinate clauses, which further limits the number of useful appearances in corpora.

Furthermore, a corpus research is in fact a very unreliable tool for investigating interpretations. For this study I could only check the availability of the manner reading through the post-verbal acceptability of *wisely*. The inference at this point is that the syntactic-semantic properties of subject-oriented adverbs as described in the previous chapters have existed through all stages of English, so that a post-verbal adverb always received a manner interpretation. I am fully aware of how problematic this inference is, but I believe this problem may be overcome. Certainly the oldest stages of English had a relatively free word order – Old English was after all still in part an inflected language – and the syntax-semantic relation is without any doubt a later development. This means that the further in time – in other words: the closer to our time – post-verbal *wisely* can be attested, the more it feeds into the assumption that *wisely* is currently going through a shift towards FORTUNATELY-type adverbs.

Three corpora were used to perform the research presented in this section:³² the Helsinki Corpus (HC), the Corpus of English Dialogues (CED) and the Corpus of Late Modern English Texts Extended Version (Clmetev). The Helsinki Corpus renders data from c. 730 to 1710, subdivided in 11 periods as shown in table 7 (taken from Kytö 1996).

³² I would like to thank Tine Defour of the English Department at the University of Ghent, who extracted the data from the different corpora and helped me with the translation of some Old English and Middle English search results.

(5.8) Yes, he forbore; and he was wise to do so, otherwise he had been soundly beaten.

[?]Yes, he forbore; and he did so in a wise way, otherwise he had been soundly beaten.

But even though (5.6) indicates that the syntactic-semantic pattern was not as strict yet, with the subject-oriented reading also possible in post-verbal position, (5.5) and (5.7) leave little doubt regarding the possibility of a post-verbal manner reading.

Additionally, the Clmetev contained a relatively large number of post-verbal occurrences of *wisely* in Late Modern English, in Clmetev 1 (1710-1780) as well as in Clmetev 2 (1780-1850) and Clmetev 3 (1850-1920).³⁵ Examples of each of these sub-corpora are given below in (5.9)-(5.14).

(5.9) The wisest man sometimes acts weakly, and the weakest sometimes wisely.
(Clmetev 1, 1771)

(5.10) If, after all, we must with Wilmot own, The cordial drop of life is love alone,
And Swift cry wisely, "Vive la Bagatelle!" The man that loves and laughs, must
sure do well. (Clmetev 1, 1734)

(5.11) He will, I am persuaded, judge and act for himself more wisely in future.
(Clmetev 2, 1801)

(5.12) But that man, Sir, does not act wisely, if, feeling like a good citizen, he use
these arguments which favour the enemy. (Clmetev 2, 1838)

(5.13) But, with reference to the specific end which they had in view, they saw
clearly and decided wisely. (Clmetev 3, 1867)

(5.14) Everywhere in this field one must go wisely or fail. (Clmetev 3, 1903)

Again, it is questionable whether *wisely* is used as a manner adverb in these data, but I feel that a subject-oriented reading sounds very implausible in the above sentences. Anyway, *wisely* has apparently always been possible to appear in post-verbal position, at least up to the beginning of the 20th century. Some reservation is nevertheless in order. The texts in the

³⁵ The number of occurrences of *wisely* in pre-verbal and post-verbal position is as follows (pre-verbal/post-verbal): 19/5 in Clmetev 1, 19/13 in Clmetev 2, and 15/15 in Clmetev 3. Only in the first sub-corpus there is a striking difference, but on the whole no major difference in occurrence can be indicated. Therefore I believe post-verbal *wisely* was not yet a marked option.

Clmetev all represent literary language instead of spoken dialogue, so one must keep in mind that already in their own time these sentences may have sounded rather formal. Still, I feel that many of the examples of the Clmetev would today only be positively evaluated in very formal written language, and that in spoken language they would certainly be disapproved. Then again, it should not come as a surprise that these sentences would still be acceptable in very formal language nowadays: as could already be noticed in the data from the CED, with respect to the syntax-semantics interrelation sentence structure with regard to subject-oriented adverbs has not changed greatly since the stage of Late Modern English and thus it may be expected that the shift in acceptability of post-verbal *wisely* has been a very slow and gradual process.

Even though there are a number of problems and restraints in trying to detect the occurrence of post-verbal *wisely* as a manner adverb through a diachronic corpus research, I think it is safe to assume that *wisely* was at a certain time able to occur after the verb with a manner meaning – without this guaranteeing that the syntactic-semantic interrelation was as strict as it seems to be today for the majority of subject-oriented adverbs. This would in effect mean that *wisely* has through the years gradually lost the ability to occur post-verbally, as I assumed at the end of chapter 4.

5.2 Stage level and individual level predicates

The individual/stage level distinction was first developed in the work of Milsark (1974) and Carlson (1977). Predicates can be split up into two classes according to their temporal extent and essentialness. Stage level (SL) predicates predicate over a “space-time slice” of an individual (Carlson 1977: 128). In other words, SL predicates express a temporary property, holding only for the extent of a certain stage. Because of their temporary character these properties may quickly change without this fundamentally altering the referent of the predicate. Individual level (IL) predicates on the other hand articulate relatively more permanent and more essential properties of the referent. Being of a more stable nature, changes in these features also involve a more substantial transformation of the referent. Sentences (5.15) and (5.16) provide examples of SL and IL predicates respectively:

(5.15) Quinn walked through New York.

(5.16) Monica hated her father.

In (5.15) walking through New York is a transient property of Quinn: it captures the properties and actions of a space-time slice of the complete individual Quinn. At that stage in his life, Quinn was indeed walking through New York, but that is only true of that particular stage. Before and after this stage, it is inferred that Quinn was busy with other things. Contrarily, (5.16) expresses a property of Monica that is not bound to a specific time and place. She hates her father throughout her life, making this a more permanent feature of Monica – even though it may be argued that she probably was not born hating him, her hate still lasts for an extended period of time.

It has been reported that a number of syntactic phenomena are sensitive to this distinction between IL and SL predicates, see e.g. Carlson (1977), Milsark (1974), Kratzer (1995), Stump (1985), Manninen (2001), McNally (1994), and Jäger (1996, 1999, 2001). Firstly, as shown in (5.17) and (5.18), IL predicates are excluded from existential *there*-sentences.

(5.17) There are firemen available.

(5.18) *There are firemen altruistic.

Perception reports are also only possible with SL predicates: see (5.19) and (5.20).

(5.19) John saw the president naked.

(5.20) *John saw the president intelligent.

Sentences with bare plural subjects allow different interpretational patterns depending on the predicate. SL predicates can render both an existential and a generic reading – e.g.(5.21) – whereas IL level predicates can only be interpreted generically in this construction – e.g. (5.22).

(5.21) a. Firemen are available. (Kratzer 1995: 125, 2a)

b. There are some firemen who are available.

All firemen [as a category] are available.

(5.22) a. Firemen are altruistic. (Kratzer 1995: 125, 2b)

b. †There are some firemen who are altruistic.

All firemen [as a category] are altruistic.

Lifetime effects can be observed with a past tense in clauses with an IL predicate.

(5.23) Ross was intelligent.

(5.24) Zoë was sad.

Whereas (5.24), with the SL predicate *be sad*, simply means that there was a space-time slice of Zoë that can be described as sad, (5.23) seems to imply that Ross is now dead. The tense of clauses with an IL predicate appears to be related not to the predicate but the existence of the subject. Finally, only SL predicates can be combined with locative and temporal adverbials, as evidenced by (5.25)-(5.28).

(5.25) Zoë was sad at home.

(5.26) ?? Ross was intelligent at home.

(5.27) Zoë was sad yesterday.

(5.28) ?? Ross was intelligent yesterday.

The IL/SL distinction is however no absolute dichotomy. Carlson (1977) indicated that predicates may be ambiguous between the two readings. Sentence (5.16), here repeated as (5.29), may also be construed with the meaning that Monica hated her father only for a small amount of time, e.g. because she wasn't allowed to go to her best friend's party. On this reading, *hated* is not an IL but an SL predicate.

(5.29) Monica hated her father.

That context is vital is also shown by Kratzer's (1995: 125) example of the ambiguity of *having brown hair*. This is normally conceived of as a relatively permanent property, and thus as an IL predicate. However, if the subject has a habit of dying his or her hair every two weeks, him or her having brown hair is merely a transitory state expressed by an SL predicate.

Manninen (2001: 3) further breaks down the dual opposition by locating an intermediary possibility in between IL and SL. She observes that sentences like (5.30) and (5.31) are not ambiguous between a temporary and a permanent reading, but between a temporary and a habitual reading.

(5.30) John smoked grass.

(5.31) John drank whisky.

Both these sentences can be easily interpreted in two ways. The first possibility asserts that there was a stage in which John was smoking grass or drinking whisky. But (5.30) and (5.31) can also articulate a habit of John: John regularly smokes grass, or drinks whisky on a regular basis. It seems that the two-fold distinction must be corrected. Manninen (2001) proposes that the IL/SL distinction can be maintained, but IL predicates should be seen as falling apart into two categories: habitual predicates and property predicates. Crucially, such a habitual predication is in essence still an IL-predicate: it is true of the subject referent over an extended period of time, but only through a generalization over regularly recurring stages of John smoking grass or drinking whisky – whereas property predicates express a continuous property. That this continuity is not required in the case of habitual IL predicates is evidenced by the observation that the recurrent stages involved can alternate with stages where John did not smoke grass or drink whisky without the habitual reading becoming void. As long as there is a regular pattern of smoking grass or drinking whisky, this can be described as a habit of John. Property IL predicates like *intelligent* can however not be intersected by non-intelligent stages.

Following the analysis of Manninen (2001) predicates can be distinguished as in figure 5.

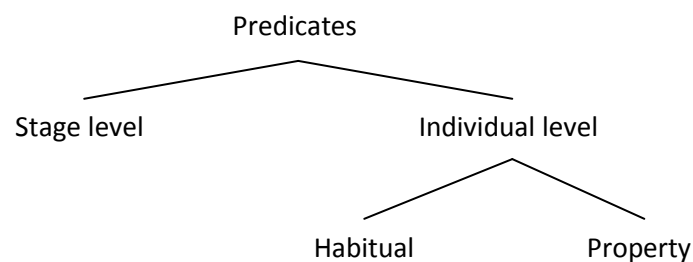


Figure 5. Predicate distinctions in Manninen (2001)

Different proposals have been studied to account for this three-fold distinction. Kratzer (1995) and Diesing (1992) argued that SL predicates have and IL predicates lack a Davidsonian argument which locates them in a particular space and time. Manninen (2001) additionally discusses the suggestion of Carlson (1977) and Chierchia (1995) to posit a special

operator *Gen*, which is able to differentiate between SL predicates (which are never generic) and IL predicates and in English appears as a null adverb. The problem with these approaches is that they only allow a distinction between SL and IL predicates, leaving the habitual-property sub-classification of IL predicates in Manninen (2001) unexplained. Manninen (2001) herself offers quite an interesting solution, within a Minimalist framework. I will present it here in a relatively framework-free way. She suggests the difference between the three readings may be sought in two lexical features, the eventive feature [\pm event] and the habitual feature [\pm hab]. These are assigned to the different types of predicates as in table 8.

Property		[-hab]
Habitual	[+event]	[+hab]
Stage level	[+event]	[-hab]

Table 8. Lexical features of different types of predicates

In this approach, the differences between the three categories are reduced to combinatorial possibilities of two lexical features. These are however not necessarily already a part of the lexical entry of the predicate, but can be assigned to the predicates as they appear in the linear structure of the clause.³⁶

Manninen’s system neatly explains the ways in which a predicate may appear in different clauses with different readings. Property IL predicates do not have a the feature [+event] in their lexical entry but can obtain that feature, in which case they will be interpreted as SL predicates. Other predicates may be [+event] already in the lexicon, but their interpretation depends on whether they are assigned [+hab] or [-hab]. Manninen (2001) also indicates that property IL predicates may, context allowing, in special cases be read as habitual IL predicates, for example in (5.32).

(5.32) John is usually intelligent (but today he is behaving like a moron).

(Manninen 2001: 8, 20a)

³⁶ This move is, within a Minimalist framework, facilitated by assuming intermediate stages between the lexicon and the final assimilation within the clause. I suppose that any constructional approach – or in the current study: an approach based on Construction Grammar without being explicitly Constructional – may account for this move by presuming that these features can be added to the predicate by the construction they appear in.

However, I feel that her analysis on this matter is not entirely satisfying. The *but*-clause in (5.32) does not question whether John is intelligent today – which in effect would cause *intelligent* to be interpreted as a habitual IL predicate, since his being intelligent would then be a relatively permanent property which can be intersected with stages at which this property is not true of him – but whether John is intelligent at all. In other words, the content of the *but*-clause expresses the speaker’s doubts on whether there is reason to assume that John actually is not intelligent on the whole but only acts sometimes in a way which seems to indicate that he is intelligent. The same analysis can be applied to Manninen’s (2001) other example, here presented as (5.33).

(5.33) John usually loves Mary (but today he has been behaving in a cruel and indifferent and unloving way towards her). (Manninen 2001: 8, 20b)

All in all, I see two main patterns in which predicates may switch between different readings: property IL predicates may be interpreted as SL predicates, and other predicates may be ambiguous between a habitual IL and a SL reading.³⁷

To return to the topic of the research at hand, I believe that some light may be shed upon the transition – regarding their syntactic-semantic behaviour – of some adverbs to FORTUNATELY-type adverbs by incorporating this theory of predicate classification. More specifically, I believe that the possibility of the transition could be described and explained by categorizing the adjectives underlying subject-oriented adverbs in terms of the distinction between SL, habitual IL and property IL predicates.³⁸ Categorizing the adverbs themselves is pointless, since they are all stage level predicates, both on their participant-oriented and manner reading, because they are bound to a specific time and place. That the manner reading is located in a specific time and place is evident: it serves to describe in what way a

³⁷ However, I feel that for most property IL predicates an SL reading is impossible or at least highly marked, for example in (i) (Manninen 2001: 6, 13a).

(i) John was intelligent.

(ii) John behaved in a really stupid way yesterday, but today he was intelligent.

(ii) is Manninen’s (2001: 6) SL reading of (i), but I think that she neglects the vital difference between being P_{ADJ} and showing P_{ADJ} in one’s actions. I think that it is perfectly possible to be intelligent and do stupid things at the same time. After all, being intelligent does not mean that you employ your intelligence in every single action.

³⁸ Leferman (2011) also argues that predicate classification helps to understand the properties of subject-oriented adverbs. However, I disagree with him in his analysis of the difference between the agent-oriented and the manner reading of ANGRILY-type adverbs: in his view, subject-oriented adverbs are [+eventive] but [-temporal], manner adverbs are [+eventive] and [+temporal]. As will become clear, I assume that both the subject-oriented and manner readings have a limited temporal extent.

certain action was performed or in what way an event has taken place. Thus, the adverb only holds to the temporal and spatial extent of the event. As participant-oriented adverbs, CLEVERLY-type adverbs adopt the spatiotemporal properties of the event denoted by the verb. The participant-oriented reading of ANGRILY-type and WILLINGLY-type adverbs is relatively independent of the spatiotemporal features of the event, but still expresses a temporal property: their spatial and temporal extent is only significant relative to that of the event.

(5.34) Kenneth willingly started mowing the lawn.

(5.35) Kenneth was willing to mow the lawn.

In (5.34) the adverb *willingly* is only relevant to describe the volitional attitude of Kenneth with respect to his actions. (5.35) on the other hand focuses on his willingness only. Roughly, the contribution of *willingly* in (5.34) and *willing* in (5.35) can be paraphrased as in (5.36) and (5.37) respectively.

(5.36) Kenneth was willing to mow the lawn at that time/then.

(5.37) Kenneth was willing to mow the lawn at that time/then.

or: Kenneth was always willing to mow the lawn.

Whereas the adverb *willingly* as in (5.32) is necessarily of a temporal extent only, the adjective *willing* can express both transient and more permanent properties.

What causes subject-oriented adverbs to always be SL predicates is the fact that they are secondary predicates: they are not the primary predicate of the clause but only support that primary predicate. The underlying adjectives however can be used as primary predicates. Therefore it is more revealing to take a closer look at the adjectival predicates.

There seems to be a striking difference between the default and secondary readings of the predicates underlying the different types of subject-oriented adverbs. CLEVER-type adjectival predicates are in the first place IL predicates.

(5.38) Darren is clever.

(5.39) My sister is careful.

Just like *intelligent, clever*, as in (5.38), is a property IL predicate expressing a relatively permanent property of Darren. In (5.39) the carefulness of the subject is also an enduring characteristic, but in this case there can be stages at which the subject is not careful without this making (5.39) untrue. *Carefully* is thus a habitual IL predicate in (5.39). The adjectival bases of other CLEVERLY-type adverbs – *tactfully, wisely, sensibly, stupidly, ...* – are also IL predicates. In some cases these may be interpreted as SL predicates, e.g. in (5.40).

(5.40) My sister was careful when she had to answer the policeman's questions.

ANGRY-type and WILLING-type adjectival predicates are primarily SL with an optional habitual IL reading. This is surely a matter of interpretation and context, but in my opinion the predicates in examples (5.41) and (5.42) are primarily used to describe transient characteristics of the referent's mental state or attitude.

(5.41) Elizabeth is angry.

(5.42) Elizabeth is willing to go to the zoo.

(or: Elizabeth wants to go to the zoo.)³⁹

In (5.43) and (5.44) the addition of the adverbs *always* and *usually* result in a habitual reading.

(5.43) Elizabeth is always/usually angry.

(5.44) Elizabeth is always/usually willing to go to the zoo.

(or: Elizabeth always/usually wants to go to the zoo.)

That these adverbs cannot be forced into a property IL reading is evidenced by the fact that the adverb *always* in (5.43) and (5.44) creates a habitual reading. Saying that Elizabeth is always angry does not mean that there has not been one moment when she was not angry. She is just grumpy the majority of the time. The same can be said about her willingness to go to the zoo. She may have been unwilling to go to the zoo yesterday, but still it can be true that she is always willing to go to the zoo.

Interestingly, the adjectival bases of FORTUNATELY-type adverbs have the same reading pattern as those of psychological adverbs. Their most salient interpretation is SL, but

³⁹ There is certainly a semantic difference between the two clauses in (5.42), but the fact remains that the volitional attitude in both clauses will by most people be interpreted as being of a temporary nature.

a habitual reading is possible as well. An example can be found in (5.45), with (5.45b) illustrating the SL reading and (5.45c) the habitual reading.

- (5.45) a. Kelly was fortunate to have a husband like him.
b. Yesterday, Kelly was fortunate to have a husband like him.
c. On the whole/in general, Kelly was fortunate to have a husband like him.

I assume that the common reading pattern of these adjectival predicates is the factor – or one of the factors – that facilitates the transition from ANGRILY-type adverbs to FORTUNATELY-type adverbs. If this is true, the absence of this factor in the case of CLEVERLY-type adverbs disrupts my proposal that adverbs like *wisely* may be going through the transition towards FORTUNATELY-type adverbs.

5.3 Wisely: an adverb in transition or not?

Although *wisely* indeed seems to be going through a stage in which it is gradually losing its possibility to occur after the verb and to be interpreted as a manner adverb, it seems that this change may be different from the shift to FORTUNATELY-type adverbs I assumed for adverbs like *sadly* and *happily*. As I have described, the underlying adjectival predicates of ANGRILY-type adverbs – to which *sadly* and *happily* belong on the lexicosemantic side – have the same reading pattern as the adjectival predicates of FORTUNATELY-type adverbs but differ vastly from those of CLEVERLY-type adverbs.

The question that remains is then still the same as the one at the beginning of this chapter: why is *wisely* unacceptable as a manner adverb? It may seem a little strange – and my solution is certainly nothing more than a speculative idea, open to debate – but I think the explanation must still be sought in a transition towards FORTUNATELY-type adverbs. The reading pattern of the underlying adjectival predicates may cause some problems, but there is another factor at play which in turn helps to clear the path towards FORTUNATELY-type adverbs. As Ernst (2003) argues, both FORTUNATELY-type and CLEVERLY-type adverbs are subjective. Whereas ANGRILY-type adverbs need to lose their objective nature in order to obtain the syntactic-semantic properties of FORTUNATELY-type adverbs, subjectivity is already a property of CLEVERLY-type adverbs.

It may be expected that the transition from a subjective judgement of a participant to a subjective judgement of the complete proposition can occur rather fluently. Nonetheless, the problems with regard to the underlying predicates remain. Therefore, it is a reasonable claim that *wisely* may indeed be going through a shift towards FORTUNATELY-type adverbs similar to the shift of *sadly* and *happily*, but at the same time one must bear in mind that the difference in underlying predicates may be translated into a reluctance of CLEVERLY-type adverbs to go through this transition. This reluctance may have two outcomes: *wisely* may take longer to go through the complete shift, or will not go through the complete shift at all and will come to a halt somewhere along the way – e.g. in the current phase where only the manner reading is lost.

Chapter 6

The previous two chapters have formulated a number of explanations to account for the diverse behaviour of a set of subject-oriented adverbs. Therefore, I now return to the theoretical framework I developed in chapter 3. I will try to show how the mechanisms of chapter 4 and 5 may be implemented in that theoretical proposal. Section 6.1 discusses some general theoretical implications, and 6.2 discusses how the classification of subject-oriented adverbs should be addressed.

6.1 Theoretical implications

I proposed a theoretical approach to adverbs based on the idea of language as a construction, a network of interrelated constructions, as in the Construction Grammar model outlined by Goldberg (1999, 2003, 2005). This allows explaining the reading pattern of subject-oriented adverbs by positing only one lexical entry which enters in different constructions while maintaining the same semantic contribution, thus avoiding the pitfalls of both mono- and polysemous theories. The research discussed in chapter 4 and 5 showed that this theoretical outset must integrate two elements that help to elucidate the syntactic-semantic behaviour of subject-oriented adverbs, both synchronically and diachronically.

Firstly, some adverbs have special lexical features which interact with the clause structure in which they appear. For example, *angrily* and *willingly* may both appear in a construction in which the adverb is found in some position after the verb. As I described in section 4.2, the manner use of both adverbs has a tendency to imply the subject-oriented reading, but this tendency is stronger in the case of *willingly*. As a result there is a small difference in the post-verbal interpretation of these adverbs even though they appear in the same construction. In the same vein, *intentionally* will cause the same construction to necessarily imply that the subject is also P_{ADJ}. The main difference between CLEVERLY-type adverbs and ANGRILY-type/WILLINGLY-type adverbs result from the fact that the latter types have some lexical feature asserting their objective nature. CLEVERLY-type adverbs on the other hand are always subjective when they appear in the clause.

Secondly, shifts such as grammaticalization processes can extend the syntactic-semantic possibilities of adverbs or change their syntactic-semantic behaviour altogether. More precisely, there seems to be a possibility for subject-oriented adverbs to broaden their

scope and adopt the syntactic-semantic properties of evaluative FORTUNATELY-type adverbs. Two main components can be distinguished in this process: the loss of a manner reading (and, consequently, the impossibility to occur post-verbally) and the move from modification of a participant (in the clausal readings of subject-oriented adverbs) to modification of a complete proposition. In the case of ANGRILY-type adverbs, the latter step additionally involves a shift from a relatively objective to a subjective judgement.⁴⁰ The behaviour of adverbs as *wisely*, *stupidly* and *gladly* can easily be explained by assuming that they are currently going through this transition or have been stranded somewhere along the way.

Note however that the loss of the manner reading is no absolute requirement. As Ernst (2002: 75-76) indicated there is a group of “dual evaluatives” (e.g. *oddly*, *appropriately*) which still have a manner reading. In the discussion of *happily* in section 4.2, I additionally remarked that this adverb may in some exceptional cases still have a manner reading, in contrary to *sadly*.

The question then is: what exactly changes in this shift towards FORTUNATELY-type adverbs? Is it the lexical entry, or is it the construction in which they appear? The latter option is evidently somewhat problematic, since that would entail that the sentences in (6.1) and (6.2) are completely different clausal constructions.

(6.1) The shopkeeper fortunately stayed at home.

(6.2) The shopkeeper angrily stayed at home.

However, assuming that a change in the lexical entry is the only reason for the transition is equally unsatisfying. ANGRILY-type adverbs indeed shift from an objective to a subjective judgement – and I assume objectivity and subjectivity are lexical features – but CLEVERLY-type adverbs are already subjective.

Two options remain. In the first option it must be posited that the ability to predicate over either a part of the clause or the whole proposition is lexically defined. In this case, the change would be completely lexical. The other option is that the transition involves both a lexical and a constructional shift. Lexically, the adverb needs to lose the feature that is

⁴⁰ I have left WILLINGLY-type adverbs out of the discussion here, since there are for the moment no linguistic data that suggest that these adverbs can also take the characteristics of FORTUNATELY-type adverbs.

responsible for its objective nature, if there is such a feature. The constructional conversion is rather tricky, because it in effect means that there is an important difference between (6.1) and (6.2). I will try to show that both options are possible.

I assume that constructions with subject-oriented and FORTUNATELY-type adverbs must be understood as an intricate network of many slightly more and slightly less “schematic” (Goldberg 2005) constructions. Schematicity refers to the number of empty/undefined elements within a construction. For example, take the constructions in (6.3) (taken from Coleman 2012: 15).

- (6.3) a. kick the bucket
b. take <someone> to the cleaner’s
c. Subj V Obj₁ Obj₂

The major difference between these constructions is the number of empty slots. The expression *kick the bucket* in (6.3a) contains no empty slots and is therefore less schematic than (6.3b), where the slot for the direct object can be filled randomly as long as the constituent refers to a human being. The outline of the ditransitive double-object construction in (6.3c) is maximally schematic: all arguments and constituents are still open.

Clause constructions with subject-oriented and FORTUNATELY-type adverbs can be conceived of as in (6.4). Options a-c represent pre-auxiliary, pre-verbal and post-verbal position respectively.⁴¹

- (6.4) a. Subj Adv Aux V
b. Subj (Aux) Adv V
c. Subj (Aux) V Adv

At this point, the first and second option for explaining the transition towards FORTUNATELY-type adverbs diverge. If the modificational abilities of adverbs are lexically defined, the transition towards FORTUNATELY-type adverbs has no bearing on the construction the adverb appears in except for the inability to occur post-verbally. The scope of the adverb is defined in its lexical entry, and this accounts for the difference between CLEVERLY-type and FORTUNATELY-type adverbs.

⁴¹ The constructions in (6.4) are no full versions but only contain the relevant constituents.

However, if the transition is indeed a combination of lexical and constructional changes, some additional explanation is in order. When filled out with the appropriate constituents, construction (6.4b) may render both (6.1) and (6.2). However, the meaning of those two sentences is evidently very different. Therefore (6.4b) must have a number of ‘daughters’ which differ in the scope they appoint to the adverb, as in (6.5b).

- (6.5) a. Subj (Aux) Adv V, with Adv taking scope over Subj or V.
b. Subj (Aux) Adv V, with Adv taking scope over the proposition as whole.

The constructions in (6.5) are slightly less schematic than the ones in (6.4), because the adverbs in the daughter constructions are more defined (i.c. in terms of their scope).

In this case, the construction is responsible for the scopal properties of the adverb. The adverb is only able to appear in one construction: CLEVERLY-type, ANGRILY-type and WILLINGLY-type adverbs occur only in (6.5a), FORTUNATELY-type adverbs only in (6.5b). Furthermore, the combination of every single adverb with this construction again constitutes its own daughter construction. (6.6) sums up a number of these daughter constructions. Note that the scopal properties of every adverb within the construction are thus in a way separately defined for every construction.

- (6.6) a. Subj (Aux) cleverly V, with Adv taking scope over Subj or V.
b. Subj (Aux) angrily V, with Adv taking scope over Subj or V.
c. Subj (Aux) willingly V, with Adv taking scope over Subj or V.
d. Subj (Aux) fortunately V, with Adv taking scope over the proposition as whole.

The constructional leg of the transition towards FORTUNATELY-type adverbs is then basically a change in the scopal restrictions of the construction. In this way, it may be argued that *sadly* went from the construction in (6.7a) to the one in (6.7b).

- (6.7) a. Subj (Aux) sadly V, with Adv taking scope over Subj or V.
b. Subj (Aux) sadly V, with Adv taking scope over the proposition as whole.

Which of these explanations (the lexical one, or the lexical-constructional one) is most adequate is open to debate. As I pointed out, adverbs have been rather underrepresented in the research within Construction Grammar, and as a result in this model there is not (yet) much theoretical background to motivate a preference for one or

the other option. In any case it should be clear that changes in the syntactic-semantic possibilities of adverbs (or better: of adverbs appearing in a particular construction) can occur at any time.

I expect a similar change is the cause of the fact that, as noted in chapter 3, *bitterly* can occur as a degree modifier in combination with certain predicates, as shown in (6.8).

- (6.8) a. It was bitterly cold in the afternoon.
b. My colleagues bitterly regretted their behaviour.
c. Stacy's mom was bitterly disappointed with her daughter.

To account for the post-verbal interpretation of *bitterly*, I argued that the same solution may apply to *bitterly* as to such adverbs as *intentionally* and *purposely* (see pages 57-58). Their manner reading always requires the subject-oriented reading as well. It seems that, in its syntactic-semantic properties, *bitterly* is very close to those adverbs describing a mental attitude of the subject. This means that on both readings the adverb asserts that the subject is bitter, i.e. that he or she does not like the event at all. In other words: both in the participant-oriented reading and the manner reading, *bitterly* involves a strongly negative evaluation of the event in the mind of the subject.

I believe this strongly negative evaluation is still recognisable in clauses with *bitterly* as a degree adverb, albeit in a slightly different form. *Bitterly* seems to occur as a degree adverb only in clauses which express an unpleasant state of affairs, like in (6.8). The intensifying factor of the negative evaluation however has shifted to an intensified reading of the predicate. The strong discomfort of e.g. (6.8a) is caused by the fact that it is not just cold but bitterly (or: really) cold. The use of *bitterly* as a degree adverb is therefore probably a construction that is diachronically derived from the construction in (6.9).

- (6.9) Subj (Aux) bitterly V, with Adv taking scope over Subj or V.

6.2 Classification

It has certainly become clear that the categorization of subject-oriented adverbs is in want of revision. Up till now, no research has been able to adequately delineate these adverbs internally. All in all, the major problem with traditional classifications appears to be the fact that the syntactic-semantic behaviour of adverbs within the delineated subtypes was still

diverse. Therefore, I argued that any attempt at classifying these adverbs must start from an intensive study of their reading patterns. The results presented in chapters 4 and 5 demonstrated that such a study is able to lay bare a number of interesting and undeniably important properties of these adverbs, which should be taken into account in any classification. On the whole, the behaviour of subject-oriented adverbs cannot be captured by delineating them in a number of purely semantically motivated groupings.

Firstly because adverbs like *angrily* and *sadly* are often taken to be part of the same class of adverbs (“mental-attitude adverbs”, “primary/secondary manner adverbs”, “transparent adverbs”, etc.) while it should be clear by now that their syntactic-semantic behaviour is very different: *sadly* expresses a subjective judgement of the speaker about a complete state of affairs, whereas *angrily* expresses either an objective truth about the mental state of the subject or the manner in which the event is performed. Similarly, many other adverbs within one class have shown to behave in distinct ways – e.g. *wisely* and *cleverly*, *angrily* and *bitterly*, etc.

Secondly, there seems to be very little difference between adverbs describing a mental state of the individual and those denoting a volitional attitude. Evidently, there is a small lexicosemantic difference since the former type has no immediate bearing on the willingness of the subject, but nonetheless I think that this may better be captured by means of a continuum than by strictly dividing them in two groups.

- (6.10) a. He proudly went home.
b. He gladly went home.
c. He willingly went home.

In the subject-oriented reading of the adverbs in (6.10) I see a cline in the level of willingness expressed by the adverb. *Proudly* is not really asserting that the subject really wanted to go home, but it does not express a reluctance either. The same can be said about *gladly*, but this adverb expresses a little bit more volition: if you are glad to go home, you are in a sense also willing to go home – which comes very close to (6.10c).

Additionally, I argued that all subject-oriented adverbs may be situated on a scale with respect to the level at which their manner reading implies their subject-oriented

reading (I proposed to call it the continuum of internalization, see page 54). In this view, the difference between ANGRILY-type and WILLINGLY-type adverbs is rather small. It also appeared that adverbs like *bitterly* and *intentionally* may both be situated at the positive end of this scale, which further blurs the line between these two types of adverbs.

All in all, I think the best classification should recognize the individuality of each adverb and, as a result, denounce the attempt to group them in large subtypes. Therefore, terms as ‘ANGRILY-type adverbs’ are only useful at a very general or schematic level. A maximally detailed description will probably show that for each single adverb its own lexical features are crucial for its syntactic-semantic behaviour.

I propose a new model of classification based on a small number of properties. Firstly, I feel that the continuum of internalization is vital for such a new model. Secondly, I feel that another class of adverbs needs to be drawn into the classification: FORTUNATELY-type adverbs.⁴² The reason is very simple: both CLEVERLY-type and ANGRILY-type adverbs appear to be able to shift towards a subjective judgement of the proposition at large. This shows the proximity of these evaluative FORTUNATELY-type adverbs to subject-oriented adverbs, and I believe this should be reflected in an adequate classification. Thirdly, because adverbs like *fortunately* and *cleverly* are subjective whereas *angrily* and *willingly* are not, this should also be taken into account. Figure 6 presents the new model.

⁴² Although I have not looked at this category in detail, I am confident that the term ‘FORTUNATELY-type adverbs’ is, just like ‘ANGRILY-type adverbs’ nothing more than a general name for a group of adverbs that show vast differences in syntactic-semantic behaviour.

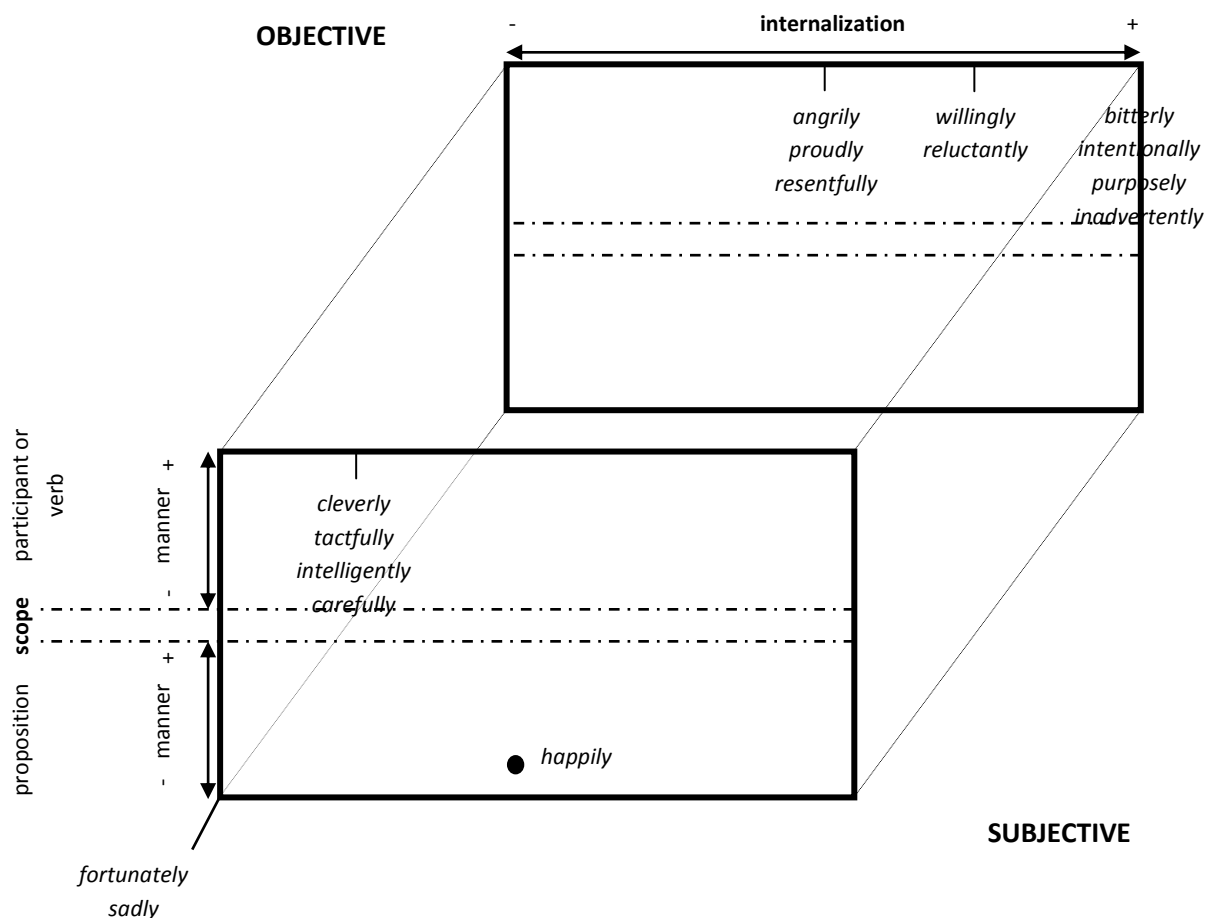


Figure 6. New model of subject-oriented adverbs

All subject-oriented adverbs and evaluative adverbs like *fortunately* may be situated in this model, which takes the form of two distinct but related rectangles. The same properties apply to both triangles, but the one contains subjective adverbs and the other objective adverbs.

The continuum of internalization is represented horizontally, as an x-axis. The vertical continuum, on the y-axis, is a way of capturing the shift towards FORTUNATELY-type adverbs. The y-axis shows the scopal properties of an adverb as well as the possibility of a manner reading. I think the scopal shift have an intermediary stage where an adverb may, in its non-manner reading, for a certain (possibly short) time span be able to apply both to the proposition and the participant, depending on the clause in which the adverb appears. Therefore the y-axis is divided into three parts, correlating with the three scopal possibilities in the non-manner reading: only a participant, only the proposition, or both (depending on

the clause). Within each of these three stages, there is a continuum that represents the possibility of a manner reading.⁴³

One theoretical problem remains. When an adverb has no manner reading, what then is its position vis-à-vis the internalization continuum? I see two solutions. In the first one the adverb is given the value on the x-axis which it would have if it did have a manner reading. The problem with this solution is that it is evidently highly hypothetical. I favour the second solution, which involves situating the adverb on the outer left side of this continuum, i.e. on the y-axis (so that its value on the x-axis is 0). This is not entirely correct, since not having a manner reading does not equal a manner reading with no tendency towards internalization. Nonetheless, the value of the adverb in the y-axis shows that there is no manner reading, which makes its value on the x-axis irrelevant, and therefore I believe that this solution can be used as a convention.

Figure 7 shows the position of *wisely* and *stupidly* in the new model, assuming that these adverbs still have a manner reading in very formal speech.⁴⁴ A possible future position of *wisely* and *stupidly*, showing their position when they have lost their manner reading completely, is shown by (*wisely*) and (*stupidly*). Some adverbs shown in figure 5 have been omitted for matters of simplification.

⁴³ Although it is not shown in figure 6, I expect that this manner continuum also applies to the intermediary stage.

⁴⁴ I have not studied *stupidly* in enough detail to be certain of its exact position. Therefore, I tentatively assign it the same position as *wisely*, even though I am fully aware that this may not be entirely correct.

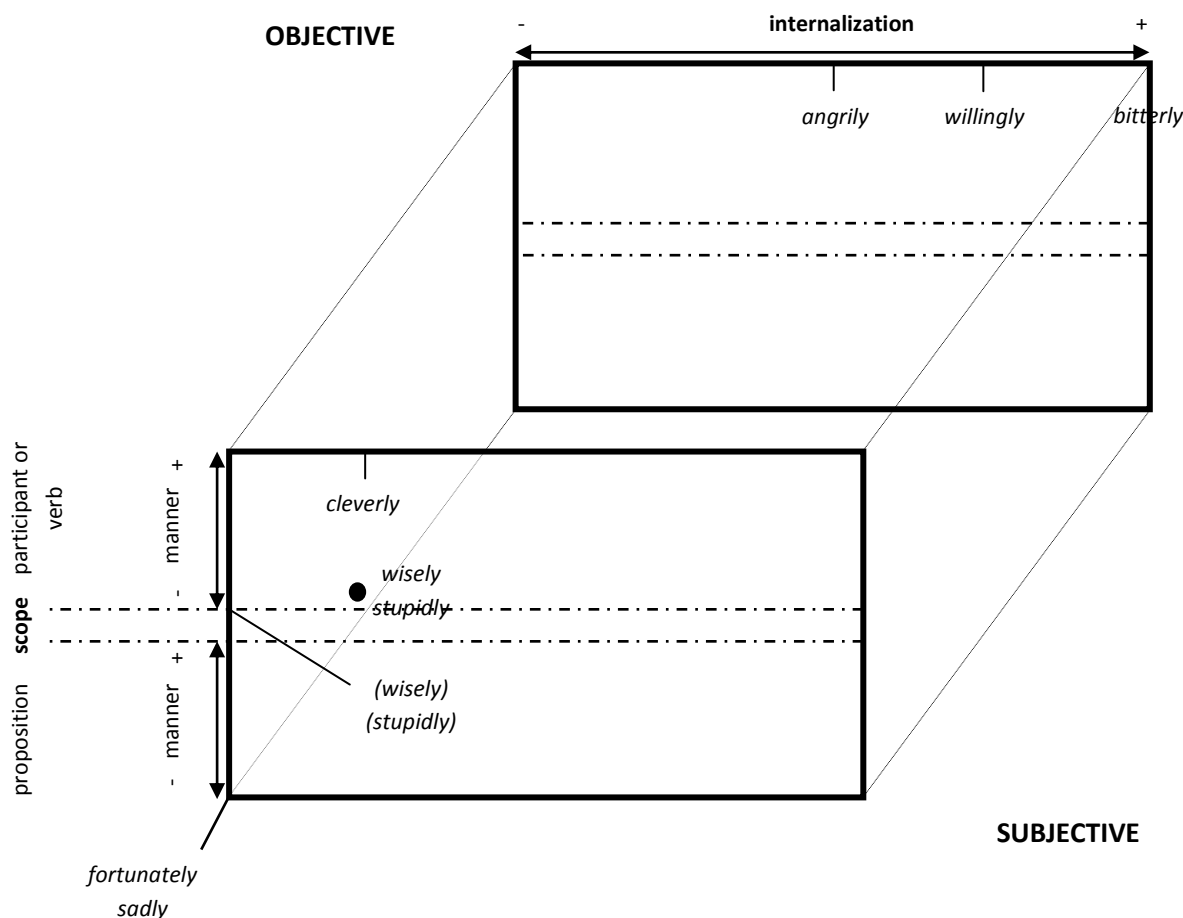


Figure 7. New model of subject-oriented adverbs (2)

Observe that this figure is not a combination of two two-dimensional shapes. It is a three-dimensional figure, including a z-axis in addition to the other two axes. The z-axis captures the shift from objective to subjective that an adverb like *gladly* will probably go through. As I described above, I think that the scopal change may occur gradually and that an adverb may at a certain point have different scopal properties according to the specific clause in which it appears. This means that depending on the clause, the objective or subjective nature of the adverb may also vary. So when the value of the adverb on the y-axis is found somewhere in the zone of the intermediary scopal stage, the adverb's position in the z-axis is found somewhere in between the two outer rectangles. Figure 8 presents the new model with the addition of *gladly* in its current position and a possible future position of *gladly* – shown as *(gladly)* – in between the objective and subjective rectangles.

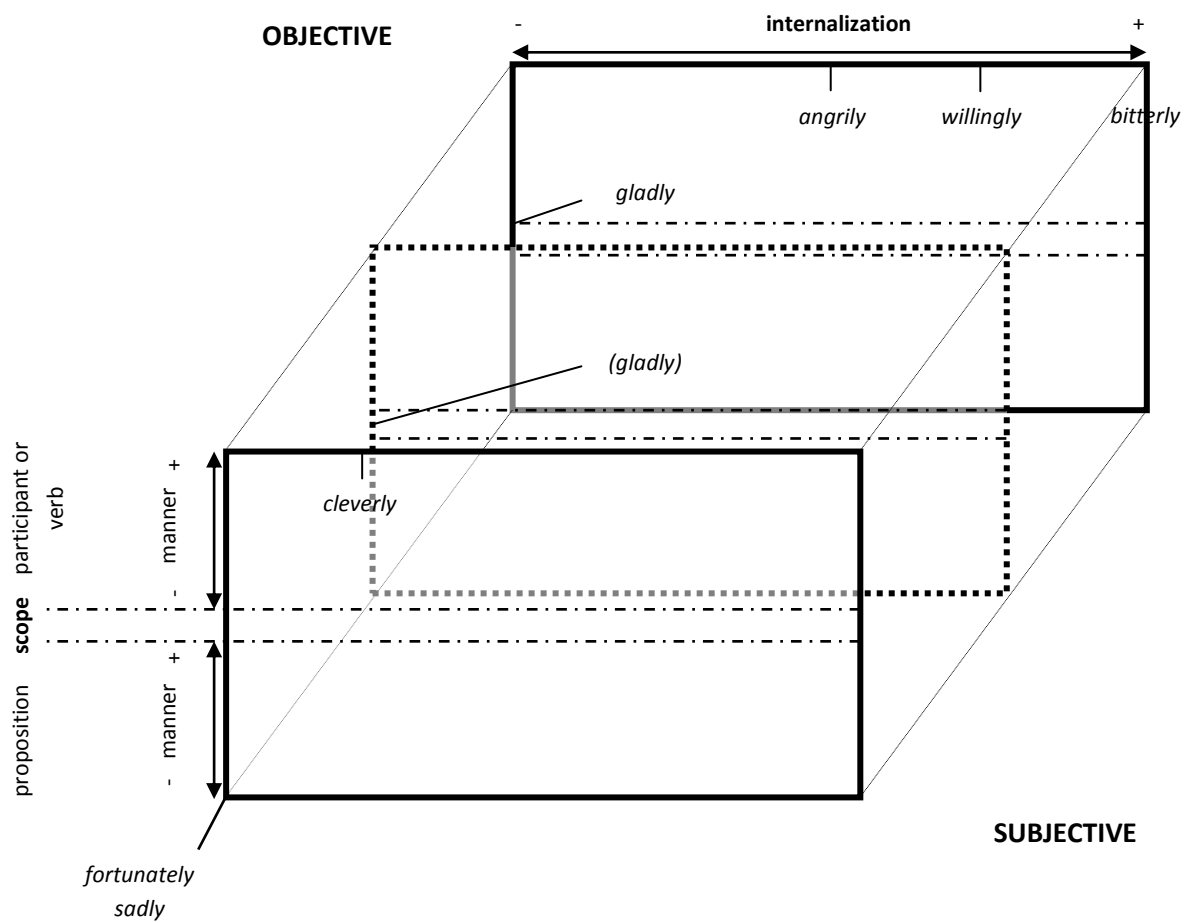


Figure 8. New model of subject-oriented adverbs (3)

Chapter 7

Although in recent decades many scholars have tried to describe and categorize subject-oriented adverbs, the details of their behaviour are still subject to debate. One of the main reasons is that most contemporary scholars have tried to delineate these adverbs by dividing them into a number of heterogeneous subtypes which essentially fail to paint the complete picture. In this research, I have discussed the work of Ernst (2002, 2003), Huddleston & Pullum (2002) and Geuder (2002) and I have showed that each of these frameworks contains crucial flaws in the way it has tried to approach the classification and description of subject-oriented adverbs.

In the current study I have therefore tried to put forth a new model for analyzing and categorizing subject-oriented adverbs. From a theoretical point of view, I have argued that the most successful theory is one that does not need to assume different lexical entries for the two possible readings – participant-oriented and manner – of subject-oriented adverbs by discussing the difference between monosemous and polysemous adverbial theories. As an alternative to these two approaches, I have proposed adopting the point of view of Construction Grammar: the different readings of these adverbs may be brought forth by the specific constructions in which they appear. This means that the insertion of only one lexical entry may result in different readings, depending on the clause in which it appears.

The classification itself needs to start with an intensive study of the reading pattern of subject-oriented adverbs. To affirm this claim I have taken a limited set of adverbs and showed how lexical features play an essential role in their reading pattern. Additionally, I demonstrated how much of their syntactic-semantic behaviour can be explained by ranking subject-oriented adverbs on a scale with respect to the level at which the manner reading implies the subject-oriented reading. I have called this scale the internalization continuum.

Furthermore, the close study of the reading pattern led me to hypothesize the possibility of a grammaticalization path from subject-oriented adverbs towards evaluative adverbs like *fortunately*. This shift involves two stages, of which only the latter is compulsory: firstly the loss of the manner reading, secondly a scopal transition in which the adverb shifts from having scope over a part of the clause to having scope over the complete proposition. This grammaticalization path explains why adverbs like *sadly* and *angrily* differ in their syntactic-semantic behaviour: *sadly* has taken the syntactic-semantic properties of *fortunately* whereas *angrily* is still a prototypical subject-oriented adverb. The behaviour of adverbs such as *wisely* and *stupidly* may be explained by assuming that they are currently going through the transition towards FORTUNATELY-type adverbs or have stranded somewhere in this conversion.

In sum, the classification I propose respects the individuality of every adverb, assigning each them its own position within a three-dimensional model. Four factors govern the positioning of an adverb. Firstly, its place on the internalization continuum. Secondly, the

objective or subjective nature of the adverb – which is one of the main differences between on the one hand CLEVERLY-type adverbs and, on the other hand, ANGRILY-type and WILLINGLY-type adverbs. Thirdly, I argued that the diachronic transition towards evaluative adverbs is crucial for understanding the synchronic behaviour of adverbs and that it therefore must be represented in the new model. This surrenders the last two governing factors: the scope of the adverb and the possibility of a manner reading.

The strong suit of this study does not only lie in the close study of each separate adverb but also in the fact that, in assessing the reading pattern of subject-oriented adverbs, I have primarily trusted the judgement of native speakers of English. Nonetheless, I am fully aware that this study shows some essential shortcomings. First of all, I have only interrogated two native speakers, both of the same region in England, while further research will probably be able to attest a lot of regional variation in the interpretation of subject-oriented adverbs. On the whole, further research is needed to study all of these adverbs in more detail and to answer some essential questions that still remain, such as the specific orientation of these adverbs (towards the subject or the agent). It would also be very interesting to scrutinize the relation between adverb and verb. Often this relation will turn out to be of a causal nature, but certainly there are a number of cases which require special attention.

Probably the most controversial hypothesis in the current study is the grammaticalization path towards evaluative adverbs. Although I have tried to corroborate my claims with a diachronic corpus research and by describing P_{ADJ} in terms of the distinction between individual level and stage level predicates, I am aware that my proposal is still very hypothetical and is certainly in want of further research.

All in all, I believe this study has effectively demonstrated the need for a dynamic approach to subject-oriented adverbs and grammar in general. By confirming that the syntactic-semantic behaviour of subject-oriented adverbs can only be fully accounted for by taking into consideration the lexical features of each adverb, it has shown how grammar and lexicon shape each other and cannot be understood separately.

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