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The Meaning of the English Adverbial Suffix -ly





Mise en garde/Advice

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LA SIGNIFICATION DU SUFFIXE ADVERBIAL ANGLAIS - LY

En anglais moderne, les adverbes sont généralement dérivés d'une racine adjectivale à laquelle on ajoute le suffixe -ly. On retrouve toutefois le suffise -ly dans d'autres types de mots, soit des adjectifs et des substantifs. Or, -ly est généralement considéré comme un suffixe adverbial même s'il est utilisé pour former d'autres types de mots. De plus, certains adverbes (et adjectifs) en -ly ont des équivalents nus, ou sans suffixe, et ils forment ainsi des paires adverbiales (ou adjectivales). Un exemple de paire adverbiale serait: He tought deeply about religious matters, et he plunged deep into the ocean. Un exemple de paire adjectivale serait: a king man et an kingly heart.

Il est intéressant de constater que pour nombres de paires adverbiales, l'adverbe en -ly et l'adverbe nu ne peuvent être interchangés, comme c'est le cas pour deep et deeply ci-haut. On peut donc penser qu'il existe une différence sémantique entre les deux types d'adverbes, différence que l'on peut probablement attribuer au suffixe.

Puisque les suffixes -ly, qu'ils soient adverbial, adjectival ou substantival, sont morphologiquement identiques et qu'ils ont la même racine étymologique, il est possible qu'un lien sémantique pouvant être généralisé à tous les usages du suffixe puisse exister. Si un tel lien existait, cela signifierait donc que -ly ne contribue pas seulement à former des adverbes, comme nombre de grammairiens le prétendent.

Suivant les principes de la psychoméchaniques du langage de Gustave Guillaume, nous tenterons, dans le cadre de ce mémoire de maîtrise, de démontrer que le suffixe -ly est porteur d'une seule et même signification qui est rattaché à la genèse du contenu lexical du mot, quelque soit sa catégorie grammaticale. En d'autres termes, nous prétendons que le suffixe possède une valeur sémantique en langue, valeur qui expliquerait tous ses usages en discours.

SUMMARY

In Modern English, adverbs are generally derived from an adjectival root to which the suffix -ly is added. However, -ly is also found in other kinds of words such as adjectives and even a few substantives. Therefore, the problem of the English suffix -ly lies in the fact that it is generally considered an adverbial suffix even though it is used to form other types of words. The suffix apparently has many uses which would endow it with many functions and meanings.

To complicate matters further, some -ly adjectives and adverbs have bare counterparts, and they form adjectival and adverbial pairs. The adverbial pairs are made up of two adverbs derived from the same adjectival root, and one adverb is characterized by the -ly suffix, whereas the other adverb is bare, meaning that it is identical in form to the root. Here is an example: He thought deeply about religious matters, and He plunged deep into the ocean. An example of an adjectival pair would be a kind man and a kindly heart.

Interestingly, in a good number of adverbial pairs, the -ly adverb and the bare adverb are not interchangeable, as is the case for deep and deeply, mentioned above. This suggests that there is a semantic difference between the two types of adverbs, and that this difference would probably be explained by the presence of the suffix.

Since the -ly suffixes, be they adverbial, adjectival, or substantival, are morphologically identical and since they have a common etymological root, the question of whether a definition exists that could be generalized to all uses of the suffix can be raised. If such a semantic link existed, this would mean that -ly does far more than, as many grammars claim, simply generate adverbs.

The goal of this thesis is to show that -ly is a consistently meaningful suffix that tells us something about the nature of the genesis of the lexical content of whatever part of speech the word may belong to. In other words, it will be proposed that there exists a unique semantic value of the suffix in tongue which would explain all of its uses in discourse.

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CHAPTER I

THE PROBLEM

It might seem inappropriate to consider the English adverbial suffix -ly as a linguistic problem since its behaviour in the language is apparently exemplary. It is generally recognized as the adverbial suffix "par excellence," since its addition to adjectival or, less frequently, to nominal bases to form adverbs constitutes an extremely productive system in Modern English. As Schibsbye (1969) states: "adverbs are most commonly formed from adjectives simply by adding -ly" (149).

It might seem even more inappropriate to try to find the "meaning" of a suffix whose function in language appears to be purely grammatical and derivational, having no obvious bearing on the lexical content of its root. For example, Quirk et al. (1985) explain the function of -ly using the following example: "(1) a rapid car - drive rapidly/*rapid. Example (1) here represents the normal case, where there is regular variation between form and function of the adverb and the adjective, and where the adverb is formed by the derivational suffix -ly" (405). Indeed, derivational affixes, just like inflectional affixes, would seem to play a simple functional role and would hardly appear to be worthy of study.

1.1 The First Part of the Problem

It is common practice among linguists and grammarians to define suffixes exclusively in terms of their functional characteristics. For example, as Newman (1948) claims, "suffixation is the most extensive morphological process in English for converting words from one grammatical class to another" (33). For a great many linguists, the addition of -ly to a dominant element or head to form a "syntagma" is a simple derivation where the bound morpheme "is a categorizing suffix" (Marchand 1967b: 16). In other words, -ly is frequently considered to be an ending that belongs to a specific class and that is added to words of one grammatical category to form words that belong to another grammatical category without affecting their meanings.

Furthermore, it is generally believed that, unlike a free morpheme, a suffix has no "meaning" in itself, "meaning" being perceived exclusively in lexical terms. It acquires meaning only when it is attached to the base. Adams (1973) goes so far as to state that there is sometimes disagreement as to whether "the suffix -ly, forming adverbs from adjectives, is inflectional or derivational: [...] adverbs have been seen as merely 'positional variants' of adjectives" (27). Szymanek (1988) adds to the confusion by arguing that an inflectional suffix would "never change the word-class membership of an item" (17). For a suffix with no meaning, -ly would seem to have generated a good deal of controversy and contradiction.

In contrast, some linguists claim that the -ly suffix is more than a mere empty functional tag; it is also endowed with meaning. They argue that its addition to a base or

stem means not only a change in grammatical category but also a change in meaning in the word base. For example, Donner (1991) argues that -ly "functions primarily as a signal of semantic content rather than systematic function" (5). Hewson (1975) goes even farther and adds that derivation markers "usually bring a change of meaning to a word that may cause a shift in the allocation of the syntactic category" (81). Hewson's view is actually the contrary of what most linguists and grammarians believe. As we have already mentioned, it is generally believed that suffixes simply change the grammatical category of their bases and that any change in the meaning of the base is subsequent to this. Hewson claims that any change in category is preceded by a change in meaning.

Despite the fact that some linguists, such as Donner and Hewson, agree on the possibility that the suffix -ly carries meaning, consensus has not yet been reached as to what meaning the suffix could actually add to the base. For example, Urdang (1982) believes that: "-ly is the most active suffix in English. It adds the meaning 'in the manner specified' to the combining root, which is usually an adjective" (261). Zandvoort (1972) agrees with Urdang and says that "-ly forms adverbs (chiefly of manner) from many adjectives" (320). Rice (1927) states that "most adverbs end in -ly, meaning 'like'" (489). Donner has a very different explanation: "Modern English has a substantial body of modal adverbs distinguished by a duality of form in which the suffix usually serves to impart a figurative sense to whatever literal meaning the word expresses without one" (1). And Guimier (1985) states that "the meaning of the suffix [-ly] depends on the meaning of the base, but fundamentally it always evokes a virtual attribute of the notion expressed

by the base" (164). While all these linguists basically feel that -ly affects the lexical value of the word it is found in, they do not agree on the meaning that the suffix carries or how it brings this meaning to the word.

It is important to point out that lexical suffixes can act in at least two different ways: they can add lexical meaning to their roots, or they can indicate that the lexical content of the root has not been conceived the way it is in the word without the suffix. In other words, lexical suffixes would not necessarily add an extra lexical content to the bases they are attached to, but instead they could tell us something about the nature of the genesis of the lexical content of these bases. This means that the use of some lexical suffixes represent a change that has occurred in the base itself and not an addition to the base. In Guillaumian terms, one would see that some suffixes represent an interruption in the ideogenesis of the word (those affecting the word base) while others (those perceived to add meaning) represent a subsequent treatment of the fully defined meaning of the base. One of our major goals here is to determine just what type of operation -ly represents.

1.2 The Second Part of the Problem

Another aspect of the problem of the adverbial suffix -ly is that, even if most Modern English adverbs are derived from an adjectival base to which this suffix is added, it also is clearly mentioned in a great number of studies that this "adverbial" suffix "not only transforms adjectives into adverbs (its most common function) but also nouns into adjectives: manly, kingly, motherly" (Hewson 81). Even though the fact is rarely

mentioned in grammar books, the suffix -ly is actually one of the most common suffixes used to form derived adjectives in present-day English. Examples like a daily paper, a lonely woman and a comely girl are found in spoken and written corpora. Despite the fact that there are significantly fewer adjectives in -ly than adverbs in -ly, since "the adverb-forming suffix -ly can be added to any derived adjective except a few in -ly, so that there are just about as many adverbs in this group as there are in the large class of derived adjectives," this suffix should not be known only as an adverbial suffix (Francis 1958: 283).

In addition to forming adverbs and adjectives, -ly is also used to form substantives, as in the following example The "Star" is a daily. A few linguistic studies, including Siegel's Topics in English Morphology (1979), recognize this fact and list -ly with the noun-forming suffixes such as -ness, -less, and -al (107). At this stage, it is difficult to say if such substantives were created through conversions of adjectives or by way of derivations with -ly. However, we do know that such uses are exceptional, and that most linguists and grammarians do not mention them. To our knowledge, the English language only has five of these substantives in -ly, and they are hourly, daily, weekly, monthly, quarterly, and yearly. Yet one fact remains: most of the linguists and grammarians that we have consulted neglect to mention the ability of the -ly suffix to form adverbs, adjectives, and substantives. Moreover, no one has attempted to find the differences or the similarities between the three -ly's, be they adverbial, adjectival, or nominal.

Interestingly, this phenomenon of finding a multipurpose suffix derived from Old

English -lic is not limited to the English language. In German, the suffix -lich, which is a cognate of the English suffix -ly, is used to form adverbs and adjectives, for instance: Die Aussprache ist deutlich ("The pronunciation is clear": adjective), Das Wort wurde deutlich ausgesprochen ("The word was pronounced clearly": adverb). However, in German, most adjectives can be converted into adverbs and vice versa. Marchand (1969) states that the range of the English suffix -ly is much smaller than that of the German suffix -lich.

This is chiefly due to the invasion of French and Latin which established nonnative suffixes (and prefixes), and introduced a flood of Latin and Romance words, superseding the old words and preventing the further extensive coining of words after traditional patterns. (Marchand 1969: 331)

For example, beside kingly, the English language also has royal and regal.

1.3 The Third Part of the Problem

The problem of the English suffix -ly has not yet been entirely laid out. Not only can we find adverbs, adjectives, and substantives in -ly, but we can also encounter what we call "adverbial pairs" (see list in annex I) By adverbial pairs we mean two adverbs derived from the same root, one with the suffix -ly and the other bare $(-\emptyset)$.

This situation gives rise to two kinds of oppositions. Zandvoort (1972) explains the first one in the following words: "some words may function as adverbs as well as adjectives: clean, dead, wide" (321). This is a confusing situation as Schibsbye explains:

It is sometimes difficult to draw the distinction between adjectives and adverbs; the suffix -ly, which may be the formal distinction [...] is missing in many cases: a fast train/he ran fast, while in others the suffix -ly is found in both the adjective

and the adverb: leisurely movements/he works leisurely. The distinction must be based upon function. (Schibsbye 121)

The second opposition to emerge is that of bare adverbs and -ly adverbs. This opposition poses a particularly thorny problem. If some adjectives such as wide, high, and deep are used as adverbs, and the adverbs widely, highly, and deeply exist in the language and are commonly used in written and spoken English, how does the speaker know which one to use in a specific context? There must be a semantic difference between the -ly form of the adverb and the bare form (without the suffix) since the two types of adverbs are not always interchangeable. Here are some examples:

- (1a) He thought deeply about religious matters.
- (1b) He plunged deep into the ocean. (Pyles 1982: 119)
- (2a) The plane flew high above.
- (2b) They were praised highly. (Quirk et al. 1985: 407)
- (3a) The door was wide open.
- (3b) He seems to be widely known here. (Quirk et al. 1985: 407)

In addition, we can also encounter what we could call adjectival pairs, made up of a bare (-\varphi) adjective and an -ly adjective. Therefore, it is possible that "[...] the addition of -ly to an adjective forms both an adverb, and a new adjective: kind words/to speak kindly/a kindly heart..." (Schibsbye 148).

To add to all this confusion of adverbs and adjectives, Sweet (1920) underlines a very interesting historical fact: "such adverbs as daily, yearly, quarterly in he is paid quarterly are old adjectives used as adverbs" (430). This also means that not all adverbs in -ly are necessarily derived from adjectives or nouns; the fact is that some of them can

be, and are -ly adjectives that were converted into adverbs over time. This also means that the five substantives in -ly that we mentioned earlier (hourly, daily, weekly, quarterly, monthly, yearly) could find their origin in the conversion of adjectives into adverbs and then of adverbs into substantives, or of adjectives into substantives.

1.4 Summary of the Problem

Any study of the English suffix -ly must take three problems into account. First of all, it has to be determined whether -ly is a grammatical suffix or a lexical suffix. Furthermore, if it is determined to be a lexical suffix, it must then be established whether it represents a modification of the meaning of the word base itself or a treatment of the word base meaning as a whole.

In addition, the question as to whether there is a single -ly suffix or several different homophones must be answered. Since there seem to be several uses of -ly in discourse, one could be led to believe that -ly also has different functions and meanings.

Finally, the opposition of bare adverbs and adjectives to their -ly counterparts must also be investigated. Both elements of these adjectival or adverbial pairs have meanings that are closely related, but still remain different, since these adverbs or adjectives are not always interchangeable. In short, the suffix -ly cannot be confined to the representation of the grammatical category of adverbs in English: it must be the sign of a mental representation common to several parts of speech without being characteristic of any of them.

CHAPTER II

STATE OF THE QUESTION

As we have already mentioned in the previous section, our study of the English suffix -ly is divided into three sections. First, we need to define the status of -ly as a grammatical or lexical suffix. We will also study the uses of -ly in discourse in order to determine if it has different functions and meanings. In other words, we must find out if there is in fact one or more than one -ly. We also need to study the adverbial pairs, especially those where the adverbs are not always interchangeable because of their different meanings. This third step will hopefully take us to the point where we can begin to define the linguistic information that -ly conveys, and, this way, put us in a position to define the "meaning" of the adverbial suffix -ly. However, we must first look at what grammarians and linguists have discovered about the suffix.

2.1 Is -ly an Inflection, a Derivational Suffix, or a Lexical Suffix?

As far as the first part of the problem is concerned—that is, the lexical or grammatical status of -ly—linguists and grammarians definitely do not agree on the matter. They do not even agree on the definitions of inflections, derivational suffixes and lexical suffixes. A great number of grammarians, including Schibsbye and Zandvoort (1972), get around the problem by not specifying the status of -ly in their studies; they

simply refer to it as an adverbial or adjectival suffix or both, but never as an inflection or as a lexical or derivational suffix. Others, such as Francis (1958), refer to -ly as a derivational suffix without defining the notion or explaining its function. Therefore, we must first determine what inflections, derivational suffixes and lexical suffixes are, before we can define the specific status of the English suffix -ly.

2.1.1 Inflectional Suffixes

Bauer (1983) defines the operation of inflection very broadly as "a process in which words differ in their endings" (10). Szymanek (1988) is not much more specific when he writes that tense, person, gender, mood, voice, case, aspect, valence and number are all inflectional categories (18). He does, however, go on to argue that, in contrast to derivations, inflections are fully productive and never change the grammatical category of an item. Adams (1973) agrees with the characteristic of productivity and attributes this productivity to the fact that inflectional affixes have highly generalized meanings (13).

Szymanek adds that the role of inflections is syntactic as well as morphological (17-18). Indeed, if we consider the category of number, it is easy to see its role in the syntax as well as in morphology, as number might affect the morphology of substantives and sometimes of verbs, and it might also affect the choice of determinants, and even their actual presence in the sentence. In much the same vein, Adams suggests that the function of inflections is to indicate relationships between words: "the addition of an inflection to a word in a sentence is not a matter relevant to that word alone" (13).

For Hewson (1975), inflections are for "marking systemic elements within a single part of speech" (79). He uses, as an example, the inflections of the verb which mark the various elements within the verb system. An inflection indicates that the word has been grammaticalized as a particular part of speech, since the word follows the systemic rules of that particular part of speech. Hewson adds that inflections can be agglutinated with other derivational markers and are regular in their application.

Hewson argues that "an inflectional suffix is a sign that the word has been processed through a grammatical system, and the inflection therefore does not indicate any modification of the lexical content, quite the contrary. In fact, it indicates the allocation of a grammatical meaning, an addition, not a restriction" (Hewson 95). Inflections only modify the lexical content of the word within the limit of the word, as Hewson points out.

Although none of the aforementioned writers deals specifically with the case of -ly, it would not seem that -ly displays inflectional characteristics.

2.1.2 Derivational Suffixes

Derivational suffixes are generally defined as "endings of different classes added to words." For example, *nation* becomes *national* by the addition of -al, a denominal adjectival suffix, and *national* becomes *nationalist* by the addition of -ist, a de-adjectival noun suffix (Bauer 11). Bauer adds that derivational suffixes can easily be agglutinated.

However, Quirk et al. (1985) claim that since "suffixes are by no means uniquely associated with a particular word class, it is convenient to group them according to the

word class that results when they are added to the base" (1547). Therefore, if a great number of grammarians and linguists call -ly an adverbial suffix, it might simply be a matter of convenience. Quirk et al. also mention that "suffixes have by contrast a small semantic role, their primary function being to change the grammatical function (for example the word class) of the base" (1546).

It is also generally accepted that derivational affixes are more numerous than inflectional affixes. Adams (1973) claims that "derivational affixes tend to be much less generalized in meaning than inflectional affixes" (13). Adams also argues that both inflectional and derivational affixes are "grammatical" rather than "lexical" elements. Adams explains that "the grammatical elements of the language, which may be words or affixes, form groups which are relatively small and stable in membership, compared to the lexical classes of nouns, adjectives, verbs and adverbs, which are large and much more subject to the addition of new members and the loss through obsolescence of old ones" (12). For Quirk et al. (1985), the treatment of suffixes is generally done on a grammatical basis, since suffixes only have a small semantic role, "their primary function being to change the grammatical function [...] of the base" (1546).

Lipka (1990), just like Adams and Quirk et al., has also grouped inflections with derivations under grammatical morphemes. He argues that they "denote general grammatical functions" such as number, tense, etc. (69). However, according to a great number of linguists and grammarians, such as Szymanek as we saw in section 2.1.1, this latter definition seems to apply more to inflections than to derivational affixes. Lipka adds

that grammatical morphemes form a closed class; they follow lexical morphemes, and their combination with lexical morphemes is relatively unrestricted since the results of the combinations are different word-forms (69).

According to the definitions seen thus far, the -ly suffix could be considered a derivational suffix. Yet some linguists seem to believe that -ly could also constitute a lexical suffix. The problem is that the distinction between lexical and derivational suffixes is not always clear. Hewson (1975) seems, however, to have studied the question of derivational suffixes thoroughly. In fact, to our knowledge, he is the only linguist who has tackled the problem head on and clearly defined inflections and derivation markers in terms of their grammatical and lexical functions.

Hewson defines derivational markers precisely and, interestingly, he uses the adverbial suffix -ly as an example. He indicates that derivational markers may derive one part of speech from another, and that they have a very irregular distribution. This is the case for -ly adverbs, which are mainly derived from the lexical bases of adjectives and substantives; the distribution of -ly is also quite irregular, for example, the adjective *nice* can become the adverb *nicely*, but *big* cannot become *bigly. Hewson adds that derivational suffixes can be agglutinative, as is the case for -ly, whereas inflections never are.

Hewson next argues that derivation markers "usually bring a change of meaning to a word that may cause a shift in the allocation of the syntactic category" (81). Again the suffix -ly is a good example in terms of the shift of grammatical category, since it not

only transforms the lexical bases of adjectives and substantives into adverbs, its most common function, but also the lexical bases of substantives into adjectives: *manly*, *kingly*, *motherly*, etc. According to Hewson, "the addition of a derivation marker may make a notion more appropriate for use as a particular part of speech; it does not, in and by itself however, categorically label a notion as a particular part of speech" (96). Indeed, the suffix -ly is not used to form only adverbs and should not be labelled exclusively as an adverbial suffix, nor should all the words that it derives be labelled "adverbs."

In terms of the change of meaning, Hewson goes against the current, since a great number of linguists, such as Beard (1981), believe that "the adverb marker -ly merely marks an adjective base" (Beard 93). Indeed, Beard argues that there is an indirect relation between form and meaning. In other words, he explains that every change in form does not necessarily imply a change in meaning.

However, Hewson claims that a derivational suffix indicates a modification of the lexical content of the form. The adverb *nicely*, for example, may indicate that "things were done in a nice way": this is a restriction or particularization of the original meaning of the adjective *nice*. Therefore, the lexical content of the adjective *nice* has been modified. As Hewson claims, "being essentially lexical by nature such affixes are added only where the community of speakers has accepted to make such additions: hence *manly*, womanly but not *boyly, girly" (96). Thus for Hewson, the meaning of derivational suffixes is essentially lexical since it modifies in a qualitative way, by way of restriction, the lexical notions of the base.

Consequently, it would seem that -ly would be more appropriately classified as a derivational suffix than an inflectional suffix given its behaviour and the broad definitions offered by linguists, and even more precisely, as a lexical suffix since, as we shall see, its effect on the lexical meaning of the base is to orient the word toward the adverb, in most cases.

Szymanek's work (1988) is interesting, especially the rough definition of lexical suffixes that he provides. He writes that "traditionally, affixes capable of altering the meaning of the base form have been called lexical formatives" (39). He adds that "the attachment of a lexical formative may be accompanied by a shift from one word-class to another, but not necessarily" (39). This means that Szymanek's lexical formatives resemble derivational suffixes without being completely identical to them.

Lipka (1990) provides a more complex definition, stating that lexical or semantic morphemes "denote particular extralinguistic objects or states" (69). He adds that they constitute an open class, and that their combination with other lexical morphemes is limited since they result in new lexemes (69).

In the preceding lines, we have gathered definitions of inflections, derivational suffixes and lexical suffixes from various linguists and grammarians. These definitions are not always complete, frequently contradictory, and far from satisfying. Nonetheless it is possible to draw a few preliminary conclusions.

The adverbial suffix -ly certainly does not conform to the definition of an inflection, since it does not represent any of the inflectional categories which are tense,

person, gender, mood, voice, case, aspect, valence and number. Nor is the suffix -ly fully productive, as inflections are. For example *bigly and *redly have not yet been accepted as adverbs even if they could easily be formed. Moreover, the addition of -ly can cause a change in the grammatical category of the base, which is not a feature of inflections.

In fact, our research has confirmed that -ly appears to be a derivational marker—particularly when Hewson's definition is used—since its addition generally causes a shift in the grammatical categorizing of the word. Indeed, adverbs in -ly are, for the most part, derived from adjective or substantive bases. Moreover, its distribution is irregular and it can be agglutinated with other derivational markers. The problem is that the suffix is not restricted to forming words in one part of speech, but is found in the genesis of at least two: adverbs and adjectives. It is thus falsely characterized as a sign of the grammatical category of adverbs. According to Hewson, it would seem that those linguists attempting to study -ly as a meaningful lexical suffix are moving in the right direction. This is confirmed by our observations of the behaviour of the -ly suffix. The problem is to determine the type of meaning conveyed by -ly, the manner in which it interacts with the meaning of the word base, and why it should show such a remarkable affinity with the adverb.

2.2 The Etymology of -ly

The first step in arriving at a better understanding of the workings of -ly consists

in investigating the history of the suffix. It appears that -ly is a native English suffix. It is generally believed that -ly comes from the suffix -lic of Germanic origin. In Old English, -lic was an adjectival suffix. As Marchand (1969) points out, often a suffix was once an independent word but is no longer one (210), and that is indeed the case for -ly. The historical origin of the English suffix -lic can be traced back to the Old English substantive lic which meant "a body, dead or living" (Guimier 1986: 155). Guimier (1985) goes even further back in time to conclude that the "Old English substantive lic comes from a Proto-Indo-European root *lig- whose meaning is 'form' [...] or 'Gestalt'" (158). He then attempts to explain why this particular root should come to be used to form first adjectives and then adverbs.

Guimier argues that all words are part of a broad process of "external subduction" or bleaching, which means that because of the nature of their meanings, some words are notionally situated before other words. For example, a "body," which only constitutes one type of form or "Gestalt," would stand notionally after the more general word *Gestalt*. "The condition for external subduction makes it highly probable that the origin of the suffix *-ly* is a substantive whose meaning was 'Gestalt' rather than 'body' (Guimier 1985: 162).

Guimier next proposes that the word *lic* meaning 'form' went through a second type of subduction, this time internal in nature, "whose effect [was] to destroy the word as a semantic and formal entity" (Guimier 1985: 160). As Guimier explains, when the formal meaning of a word is destroyed, the word becomes an affix. This confirms

Marchand's (1969) claim to the fact that a "suffix was once an independent word but is no longer one" (210). Thus the internal subduction caused the meaning of the substantive *lic* to be generalized. Originally, the substantive *lic* meant 'Gestalt,' and it referred to the form of an object or notion; "as a suffix it evokes any virtual attribute that may be found in the notion designated by the base to which it is attached" (Guimier 1985: 164).

"In OE [Old English], -lic serves very commonly to form adjectival derivatives from two main sources (i) from substantives e.g. wiflic, and (ii) from other adj. god: godlic..." (McIntosh 1991: 297). Because lic was first a substantive, Sweet claims that words such as wiflic were not derivations, but a mixture of conversions and compounds: "these derivatives were originally conversion-compounds with lic 'body', the weak vowel being afterward shortened, so that wiflic, for instance, meant originally 'having the body or form of a woman'" (Sweet 466).

As far as adverbs are concerned, research reveals that the Old English adverbial suffix was -e, and "since adjs. in -lic normally formed advs. in -lice, the latter early became regarded as an adverbial suffix which could be used beside or instead of -e. e.g. heardlice [...] (beside hearde)" (Campbell 1977: 275). As a result, there were two adverbial suffixes in Old English times: the double adjectival-adverbial suffix -lice, and the adverbial suffix -e.

Of course, this opposition did not last long. The double suffix -lice took over the adverbial function, simply because people added -lice to all sorts of words to form adverbs without ever producing the adjective in -lic first (Sweet 429).

In Middle English, "this -e was lost along with all other final e's by the end of the fourteenth century" (Pyles 1982: 119), and "when final -e was dropped in North-Thames English the distinction between the adjective hard and the adverb harde, etc. was lost" (Sweet 429). The distinction between adjectives in -lic and adverbs in -lice was also lost, with the result that many Modern English adjectives and adverbs are identical in form.

By the early 16th century, the English suffix -ly was used to form adjectives as well as adverbs. However, it is interesting to know that "many adverbs that now must end in -ly did not require the suffix in early Modern English times" (Pyles 189). A great number of examples can be found in the works of Shakespeare: indifferent cold, grevious sick, wondrous stage, etc.

In addition, there are many present-day English adverbs which do not have the -ly ending and are identical in form with the corresponding adjective: fast, sound, high, low, etc. A great number of grammar books state that such adverbs are adjectives used as adverbs. As we can see, this is probably not the case. Rice explains: "These words are merely survivors of a large class of Old English adverbs in -e, and it is the disappearance of this adverbial termination (in common with all weak final e's of our language) that makes them coincide in form with the adj. from which they are derived" (489). However, not all of today's bare adverbs date from the time adverbs lost their -e adverbial ending. According to the Oxford English Dictionary, right and full, for example, were used as adverbs in their actual bare forms around the year 1000.

To conclude the etymological discussion of -ly, it seems that "the process of shortening forms was a characteristic of Old and Middle English, but the reduction of -lic to -li was particularly accelerated by frequency of use of the suffix..." (Barnhart 1988: 617). According to Marchand (1969), the form -li, -ly occurred in northern Midland texts as early as the 13th century and became universal in the 15th century" (329). Marchand (1969) adds: "The use of part of these words as primaries [substantives], chiefly to denote newspapers or periodicals, is a 19th century development (quarterly, 1818)" (330).

As we can see, the English -ly suffixes, be they adverbial, adjectival, or nominal, have at least one thing in common: their origin. According to Guimier (1985), they all come from the Old English substantive *lic* which comes from a Proto-Indo-European root *lig*- that meant 'Gestalt'.

2.3 -ly and its Different Classifications

Different labels, different classifications, and different resulting parts of speech could definitely lead one to believe that the -ly suffix has different functions and therefore different meanings. Indeed, in most of the studies that we consulted, the meaning of -ly is rarely mentioned in terms of a generalized definition. On the other hand, a few dictionaries, grammar books and linguistic studies such as those of Marchand (1969), Quirk et al (1985), Onions (1966), and Huang (1975) provide a certain number of semantic explanations specific to some uses of the suffix. The five most frequent uses of -ly adverbial are:

- a. "[...] manner adverbs: He smiled broadly [...]" (Huang 13);
- b. adverbs of frequency: "[...] the sense implied is 'recurring every—', as in daily, nightly, yearly [...]" (Marchand 1969: 330);
- c. intensifiers: "[...] the adverb form is used to express intensity of feeling [...] badly, strongly, deeply [...]" (Quirk et al. 1985: 407);
- d. adverbs of addition: "[...] the suffix has been added to ordinal numerals to form advs. denoting serial position, as firstly, secondly, thirdly, etc. [...]"
 (OED 521);
- e. time adverbs: "[...] adverbs referring to moments or periods of time, such as formerly, instantly, lately [...]" (Onions 541).

In fact, a great number of studies of adverbs consist of functional classifications of the different kinds of adverbs. Generally speaking, adverbs in -ly are classified as "manner" adverbs, such as quietly, slowly etc., "time" adverbs such as annually, finally, etc., "intensifiers" such as greatly, remarkably, etc., "evaluative" adverbs such as incredibly, surprisingly, etc., "modal" adverbs such as probably, certainly, etc., "domain" adverbs such as logically, linguistically, etc., and "speech act" adverbs such briefly, frankly, etc.

In Bowers's study of adjectives and adverbs in English (1971), one statement in the analysis of the -ly adverbs summarizes, for the linguist, the meaning of such adverbs. "Let us turn now to an examination of manner adverbs [...]. In this class are most of the adverbs which have the suffix -ly, with the exception of a few sentence adverbs such as

probably, certainly, etc." (Bowers 12). In terms of a generalized definition of the meaning of -ly adverbs, Bowers's perception that -ly adverbs are mostly adverbs of manner could very well be true. Indeed, a good number of -ly adverbs do constitute adverbs of manner whether they are classified as "time" adverbs, "intensifiers", "evaluative" adverbs, "domain" adverbs, or "speech act" adverbs, as we saw in the previous paragraph. A discussion of this general notion of manner and -ly adverbs can be found in section 4.2, where it will be seen that there always seems to be an underlying meaning of "manner" in -ly adverbs. The question then becomes why -ly and manner should have come to be so closely associated.

2.4 Studies on -ly

To our knowledge only three linguists have actually concentrated their studies on the meaning of the adverbial suffix -ly: Donner (1991), Chuquet (1990), and Guimier (1986). One other, Greenbaum (1969), studied adverbial usage.

Donner (1991), studying Middle English adverbial forms, discovered that there was "a substantial body of modal adverbs distinguished by a duality of form in which the suffix [-ly] usually serves to impart a figurative sense to whatever literal meaning the word expresses without one" (1). Since this duality of forms still exists in Modern English, and so does a duality of meaning in some cases, Donner's study deserves careful consideration.

Donner explains that besides being the sign of a grammatical category in Middle

English, a function we have questioned above, -ly was also a semantic signal of modal reference, while its absence indicated diminished modality in the case of adverbial pairs. Therefore, bare adverbs, in adverbial pairs, represented semantic and formal alternatives to the suffixed forms. For example, in the twelfth century, the adverb high was used to show how a sword is raised, and highly to show how ladies are attired (Donner 4). According to Donner, such semantic distinctions with regard to modality preponderated by a ratio of three to one during the Middle English period.

Donner also noticed that the pairs were quite numerous among adverbs of Germanic origin, long settled in the language, such as rich(ly) and rough(ly). Moreover, the suffixed form often served as a complement to the bare form rather than as an alternative (6).

In contrast, among adverbs of Romance origin, relatively new in the language, only a few came in pairs, functioning mainly in a complementary fashion, for example large(ly) and certain(ly) (8). Donner adds that the presence of the suffix "among newly-introduced Romance adverbs, adopted when the suffix had already become standard, must be ascribed solely to the influence of its contemporary currency as an indication of objective reference" (10). In fact, during the fourteenth and fifteenth centuries, Romance adjectival adoptions almost tripled the entire Middle English stock of modal adverbs since their lexical bases formed adverbs with the use of the -ly suffix (10).

Using an entirely different framework, Chuquet's (1990) study focuses on evaluative adverbs in -ly, a subclass of sentence adverbs. She argues that such adverbs

synthetically express modality. Chuquet claims that the addition of -ly to some adjectives forms what Quirk et al. (1985) call "viewpoint subjuncts" such as optimistically, realistically, etc. It seems that viewpoint subjuncts "évaluent les conditions dans lesquelles la relation prédicative à laquelle ils sont juxtaposés peut être validée," and value judgement subjuncts such as regrettably, surprisingly, etc., "évaluent de façon qualitative (portent un jugement sur) une relation assertée" (Chuquet 3).

Chuquet claims that sentence adverbs are fundamentally multifunctional, and quotes Perkins (1983) in explanation: "modal adverbs are far less explicit in the way they qualify the meaning of the clause or sentence than other modal expressions" (qtd. in Chuquet 6). In fact, their lack of explicit meaning is compensated by their mobility in the sentence, but it seems that their non-explicit meaning allows them to "say more" than the addition of their semantic elements. This ability to "say more", caused by the addition of the suffix -ly, is described as modality.

In the quest for the meaning of the adverbial suffix -ly, an important source of reflexion is Guimier's Syntaxe de l'adverbe anglais (1986), which emphasizes particular semantic aspects of adverbs in -ly. Guimier claims that adverbs of intensity, where the adjectival base means 'quantity' (size, measurement, weight, etc.) such as enormously, entirely, etc., or an idea of 'fear' for example awfully, frightfully, etc., or ideas of 'fabulous' or 'marvellous' such as fantastically, fabulously, etc., or 'astonishment' for example, amazingly, astonishingly, etc., constitute for the most part expressive variations of very or much (Guimier 1986: 61).

Guimier quotes Roggero's study and explains that it is through a process of dematerialization that "le trait d'outrance évolue en s'affaiblissant vers la seule intensité" (qtd. in Guimier 1986: 61). It is apparently the addition of the suffix -ly that brings about this dematerialization of the original meaning of the adjectives from which such adverbs are derived. With this explanation, Guimier underlines the function of the suffix as well as its influence on the meaning of the word base in the case of adverbs of intensity, since, as he explains, the addition of the suffix to certain adjectives causes a loss of the original meaning of the adjective, resulting in the adverb functioning as an intensifier.

In his exhaustive study of adverbial usage, Greenbaum (1969) follows the same train of thought as Roggero and Guimier (1986) insofar as he considers some -ly adverbs as intensifiers. Greenbaum explains that "attitudinal disjuncts," which are adverbs that express the speaker's attitude towards what he is saying, for example definitely, certainly, indeed, undoubtedly, really, etc., can become intensifiers. He argues that when attitudinal disjuncts "are positioned next to an item [...], certain of them appear to focus on that particular item to such an extent that they are felt to be similar to intensifiers like thoroughly, very, or completely" (Greenbaum 128).

The studies that we have just considered do not provide us with a specific definition of the meaning of the adverbial suffix -ly. However, the findings will be helpful in our analysis of our corpus since they indicate paths that should be further explored. Indeed, the Germanic or Romance origin of adverbs, brought up by Donner, might be revealing with regard to adverbial pairs. Moreover, Guimier's study of

intensifiers, as well as that of Greenbaum, and the process of dematerialization will also deserve careful attention.

2.5 Adverbial Pairs

The third part of the problem of the meaning of the -ly suffix concerns what we called adverbial pairs. Such pairs consist of one adjective from which two adverbs are derived, one is characterized by the -ly suffix and the other one is a bare adverb, identical in form to the adjective. We refer to adverbial pairs as one part of the problem in our quest for the meaning of the suffix -ly, but in fact, the study of such pairs probably constitutes the key element of the solution to our problem. Indeed, since the two adverbs of these pairs are often not interchangeable, it means that there is a semantic difference between the two types of adverbs and that this semantic difference is represented by the suffix. A study of such adverbial pairs should provide us with at least some elements in the -ly puzzle.

Some linguists and grammarians, such as Zandvoort (1972) and Quirk et al. (1985), mention the existence of adverbial pairs. However, very few of them study them in any detail. Most of the time grammarians note that there can be a subtle difference in meaning between the suffixed and the unsuffixed forms of the same adverb depending on the context. According to Jacobson (1939), "'zero' morphemes are possible only relative to an abstract, intervening paradigm and only in contrast to 'real' morphemes in the same system" (qtd. in Beard 1981: 109). This is the case for the adverbial suffix -ly which, in

some cases, is opposed to a bare "equivalent."

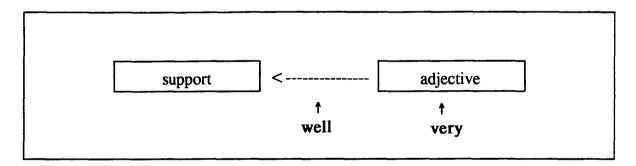
Jacobson also claims that "'zero' morpheme marking is possible only where meaning is carried by the categories of the paradigm, not directly by the morpheme itself as it is the case of the lexemes" (qtd. in Beard 1981: 109). In the case of -ly, this argument would seem to be tenuous indeed, largely because it is almost impossible to determine which paradigm -ly belongs to.

Schibsbye (1969) also mentions the problem of adverbial pairs and studies the semantic subtleties between the two members of a great number of adverbial pairs. However, Schibsbye only explains how the two members of a pair differ in terms of expressive effects; his study does not lead to a generalized explanation of the phenomenon. There is no attempt to group the uses under one common meaning, nor does Schibsbye try to come up with a theory based on his observations although his observations do provide data to be explained by any such theory.

Guimier (1986) also tackles the problem of adverbial pairs. He uses the following examples: a dark blue sky/He had not before observed (...) how darkly blue the sky was (Guimier 232). Guimier uses Bolinger's opposition between "essence" and "accident" to explain the phenomenon of adverbial pairs. Bolinger claims that very expresses "essence," and well expresses "accident," which Guimier explains as follows: "well assigne une qualité vue comme un 'accident,' very assigne une qualité appréhendée dans son 'essence' même" (Guimier 1986: 227). This leads Guimier to conclude that very would affect the meaning of the adjective, and it would have an early syntactic incidence. That is, he

proposes that the meaning of *very* is applied to the meaning of the adjective before the adjective is made incident to, establishes a link with, its nominal support. In contrast, *well*, which adds an "accidental" meaning attributable to specific circumstances, would have a late incidence; the application of its meaning to that of the adjective would occur when the adjective is in the process of establishing a link with its support (the noun). These two possibilities of operational syntax are illustrated in Figure 1 (Guimier 1986: 227):

Fig. 1 Incidences of the Adjectives Well and Very



Guimier then makes a parallel between *very/well* and *dark/darkly*. He explains that bare adverbs have an "incidence précoce à la matière adjectivale" just like *very*, and that adverbs in *-ly* would have an "incidence tardive à l'incidence adjectivale" just like the adverb *well* (233). Bare adverbs would then affect the essence of the adjective the same way the adverb *very* does, whereas adverbs in *-ly* would be linked to more specific circumstances as is the adverb *well*.

Guimier's work is an attempt to find the meaning of the suffix -ly used in a great number of adverbs. According to his findings, the addition of the suffix to certain types

of adjectives which have either an idea of 'quantity', 'fear', 'astonishment' or 'marvel' results in a dematerialization of the meaning of such adjectives in discourse. The derived adverbs are then provided with a meaning of 'intensity' not unlike that of the adverb very, but with this difference: very is instituted in tongue with its highly abstract, diachronically dematerialized meaning.

Despite the fact that Guimier studies only adverbs of intensity, his theory, which claims that the addition of the suffix -ly occurs when there is a dematerialization of the meaning of certain types of adjectives to bring out a meaning of 'intensity', could be applied to other kinds of adverbs. Indeed, some adverbs of manner actually intensify the meaning of the verbs they modify.

Let us consider the following examples:

- (4) He is flatly opposed to it. (Quirk et al. 1985: 407)
- (5) He would dearly love to see his mother again. (Schibsbye 153)
- (6) He is deeply offended (Schibsbye 153).

As we can see, the three -ly adverbs, flatly, dearly and deeply, intensify what follows. However, as soon as we try to apply this rule to a larger sample, we come across adverbs which have lost their original meanings through dematerialization without becoming intensifiers, for example:

(7) He was loudly dressed. (Schibsbye 155)

Here the meaning of *loud* has been dematerialized as the adverb means "in a flashy way," but it has nothing to do with the meaning of intensification.

(8) The book was suppressed directly when it appeared. (Schibsbye 153)

In example (8), the original meaning of *direct* as 'in a straight line' has been dematerialized, and the adverb means 'as soon as' or 'from one instant to the next', but again no meaning of intensification can be found here.

As we can see, Guimier's work does not bring a solution to the whole problem of adverbial pairs. However, he definitely underlines aspects that will require further analysis on our part.

In short, despite the fact that a large number of grammarians and linguists mention the adverbial suffix -ly, the suffix has never been the object of studies aiming at finding the meaning it contributes to the adverb and motivates its use in all cases. In general, people refer to its ability to form adverbs or adjectives mainly from adjectives or substantives. Semantic descriptions are so rare, explanations so brief, and contexts so specific that general conclusions can hardly be drawn on the basis of the information they afford the researcher.

2.6 Other Elements to Consider in Our Study

So far, we have described the problem and the three different aspects that are of interest to our study. We have also gathered a few linguistic findings more or less closely related to the problem. However, before we begin our analysis, we shall mention the studies of other linguists which bring out other aspects of the -ly problem to be taken into consideration in our analysis.

Kjellmer's (1984) study of the formation of adverbs in -ly focusses on the

semantic type of adjective that requires the suffix -ly to become adverbs. His findings may help us determine the meaning that -ly adds to such adjectives. Kjellmer claims that "only a fraction of English adjectives have lexicalised adverbs in -ly," since adjectives outnumber -ly adverbs by far (7). Kjellmer raises the distinction between "stative" and "dynamic" types of words. He explains that a state will continue unless something happens to change it, whereas a dynamic situation will only continue if "it is continually subject to a new input of energy" (8). Therefore, most verbs and adverbs are dynamic, most nouns and adjectives are stative. According to Kjellmer, dynamic adjectives produce adverbs more readily than stative adjectives.

Kjellmer uses Dixon's (1977) study, among others, to support his theory. Dixon concentrated his work on the relation between semantic types of adjectives and their derived adverbs. According to Dixon, adjectives of "value" such as *proper* and *good*, adjectives that indicate "speed," for example *quick* and *slow*, and adjectives that carry an idea of "human propensity," such as *happy* and *kind*, form derived adverbs with the same meaning as the adjectives. In contrast, adjectives of "colour" for example *black* and *red*, adjectives of "dimension," such as *big* and *long*, and most "physical property" adjectives, for example *hard* and *rough*, form derived adverbs with metaphorical meanings. "Age" adjectives such as *young* generally do not form adverbs at all (qtd. in Kjellmer 12).

Kjellmer explains that "value," "speed" and "human propensity" adjectives mostly refer to controllable, dynamic properties, and the others do not. Therefore, Kjellmer argues that "the adverb productivity of each morphological type depends on the extent to

which the type as such is dynamic" (12). It is then hypothesized that dynamic adjectives normally form their adverbs in -ly.

Kjellmer adds that adjectives are usually syntactically dependent on nouns which are generally stative. However, when a stative adjective regularly co-occurs with dynamic nouns, it might acquire a certain dynamism, and thus become fit to form adverbs in -ly (Kjellmer 14). Kjellmer uses the following example: British is a stative adjective with the meaning of "Great Britain or its inhabitants." However, in the expression a very British reaction, British means "something which is characteristic of or similar to Britain or its people." In this context, British is no longer stative, which explains why a journalist wrote: "Yet, Wales in that year voted in referendum, general and European elections more 'Britishly' than any other part of the United Kingdom" (Kjellmer 16).

In short, Kjellmer claims that normally dynamic adjectives and adjectives that generally co-occur with dynamic nouns form adverbs in -ly. "Other adjectives, the vast majority, only exceptionally do so, when they temporarily assume a dynamic character" (Kjellmer 18). Although the stative/dynamic distinction is not very clear when applied to adjectives, this study will be kept in mind in our search for the meaning of the suffix -ly, since the meaning of the suffix may strongly depend on the nature of its roots.

In another study, Chuquet (1990) looks at the problem of translating English evaluative adverbs. There are a lot more English evaluative adverbs than French ones, and this is due to the fact that -ly can be agglutinated to a great number of suffixes such as the verb-forming suffixes -ed and -ing as well as the adjective forming suffixes -ful,

-able and -less, also noticed by Rush (1996). Therefore, according to this study, we should consider not only the types of adjectives that can be transformed into -ly adverbs as we saw previously, but also the suffixes to which -ly can be agglutinated.

Bertrand (1986) also claims that certain suffixes easily accept the adverbial suffix -ly to form adverbs. However, the focus of her study is the function of -ly adverbs. Bertrand defines two types of adverbs: sentence adverbs and verb phrase adverbs, a distinction also made by Keyser (1968), who uses the terms sentence-modifying adverbs and word or word-group modifying adverbs. Bertrand explains that sentence adverbs can be put in front of a negated sentence, for example Surprisingly, John did not come, whereas verb phrase adverbs cannot be put in front of a negated sentence, for example *Rapidly, John did not come (183). Bertrand adds that some adverbs can be found in both positions and can therefore be ambiguous since they can be interpreted both as sentence adverbs as well as verb phrase adverbs, for example, Naturally he played.

Keyser suggests the following examples to show how position can influence the function of the adverb.

- (9a) He gave her the money immediately. (Keyser 361)
- (9b) He gave her the money back. (Keyser 361)
- (10a) Immediately, he gave her the money. (Keyser 361)
- (10b) *Back, he gave her the money. (Keyser 361)
- (11a) He immediately gave her the money. (Keyser 361)
- (11b) *He back gave her the money. (Keyser 361)

As we can see, *immediately* and *back* are both adverbs, and they occupy the same position in the first construction, but they behave differently in the other two

constructions.

Other linguists such as O'Neal (1973), McCawley (1983), and Travis (1988) have also showed the importance of syntactic positions of adverbs in terms of meaning and function. In her adverb typology, Travis (1988) mentions that the initial position is especially important in terms of meaning change. Thus, we will also have to take the position of the adverbs into consideration in our study, since it might be revealing of function and meaning.

In terms of adverbial positioning, Cotte (1980) tries to determine if the positions of certain classes of adverbs could be meaningful. He hypothesizes that "les adverbes occupent de préférence cette position [mid] s'ils sont incidents à l'opération prédicative au moment où elle se réalise [...] Les adverbes choisiront la position avant S [sujet] s'ils décrivent une opération antérieure à l'opération prédicative et la position après V [verbe] s'ils présupposent cette opération" (Cotte 50). For example, Cotte explains that most modal adverbs such as probably and certainly are found in mid position since they establish a link between the subject and the verb. However, modal adverbs such as maybe, perhaps, surely, etc. are found in front position, since they do not serve to establish the link between the subject and the verb.

Cotte states that "la position F [Front] et M [Mid] marquent donc l'engagement faible et fort du locuteur quant à la valeur de vérité de SV" (Cotte 52). Therefore, the Mid position is the position of adverbs that are incident to the entire phrase, which express a dialectical confrontation between SV. Conversely, time adverbs such as

yesterday, tonight, etc. and adverbs of place such as nowhere are often found at the end of the sentence since they are not incident to SV.

In short, adverbs in Mid position refer to operations that are close to SV or are part of it. Adverbs in End position indicate operations that presuppose the SV construction, and adverbs are found in the Front position if they describe an operation that precedes SV. Here are some examples:

- (12) Surely I've talked to you about him before? (Front) (Cotte 52)
- (13) Fortunately fines were heavy. (Mid) (Cotte 52)
- (14) He came weekly. (End) (Cotte 53)

Clearly adverb position and adverb mobility have to be taken into account, particularly given that bare and -ly adverbs do not share a single syntactic distribution.

In an entirely different perspective, Kudora (1970) studies English manner adverbials in terms of their deep structures. He claims that "for the most part, adverbs do not, properly speaking, constitute a category of deep structure" (378). He argues that manner adverbials are equivalent to "adjective + -ly," a combination with the following deep structure: "in + a + adjective + manner" (378). Here is an example:

- (15a) John disappeared elegantly. (Kudora 378)
- (15b) John disappeared in an elegant manner. (Kudora 378)

Perhaps Kudora's deep structure of adverbs of manner can be applied to other adverbs, or perhaps another deep structure that would be common to all adverbs can be found. The fact is that the deep structure of adverbs may be revealing of their functions or meanings. Equally interesting is Kudora's apparent equation of -ly with the expression of manner.

In conclusion, the problem of the meaning of the suffix -ly is not a simple one.

Many linguistic aspects must be taken into account in our analysis. Morphologically speaking, the status of the suffix and the consequences of that status need to be further explored. So far it has been suggested that -ly should be considered a derivational suffix, but we feel that the presence of the suffix in the adverb does not simply derive one part of speech from another. The phenomenon of adverbial pairs, especially the pairs where the two adverbs are not interchangeable, strongly suggests that the use of the suffix somehow affects the meaning of the base.

As far as we know, no one has ever studied the -ly suffix in an attempt to find a definition that could account for all its uses in discourse. However, the different studies that we have looked at have laid down paths that we shall definitely explore.

CHAPTER III

THEORETICAL FRAMEWORK

3.1 Psychomechanics and -ly

As we have already mentioned, our study of the English adverbial suffix -ly will be done following the principles of Gustave Guillaume's psychomechanics of language. This school of linguistics proposes to study the various contextual senses of a morpheme in discourse in order to determine the nature of its potential underlying meaning in tongue. We thus hypothesize that the -ly adverbial suffix possesses in fact one single potential meaning in tongue which would explain all of its different uses in discourse.

The main principle in psychomechanics is the operative aspect of language. For Guillaume, language constitutes a dynamic process rather than a static entity. Therefore, in psychomechanics, the goal is to attempt to gain understanding of the dynamic stage when tongue is transformed into discourse. It is at this precise stage, which Guillaume calls the "act of language," that the speaker exploits the numerous possibilities that language has to offer as he constructs the linguistic representation that best expresses what he has in mind.

In the course of the transitory act of language, in which the starting point is tongue and the result is discourse, language is transformed from a group of general operating conditions, thus a potential, into discourse, an actualized form of language. As

Guillaume stated, discourse is the "résultat statique d'une activité constructrice révolue" (Lowe 1993: 32).

Thus for Guillaume, the tongue/discourse dichotomy, made popular by Saussure, inevitably leads to the recognition of three distinct stages in the language act, the first of which is tongue, and the third is discourse. Between the two falls a moment of transition. "It takes time to think as it takes time to walk," as Guillaume used to say (Hirtle qtd in. Guillaume 1984a: XII). The transition from tongue to discourse thus cannot occur without a certain lapse of time which, as short as it may be in the case of language, deserves attention. It is precisely in this transitory stage, the "act of language," that the psychomechanics of language is interested. The tongue/discourse opposition is fundamental to Guillaume's theory since it represents the two extremes, the universal and the particular which, at the same time, constitute the two limits of the phenomenon of language.

A Guillaumian approach in the study of the suffix -ly is particularly effective given that the -ly problem would seem to arise during the transition from tongue to discourse. Indeed, it seems that it is during the moment when words are formed and then made incident to each other that the meaning of the suffix can be isolated and studied.

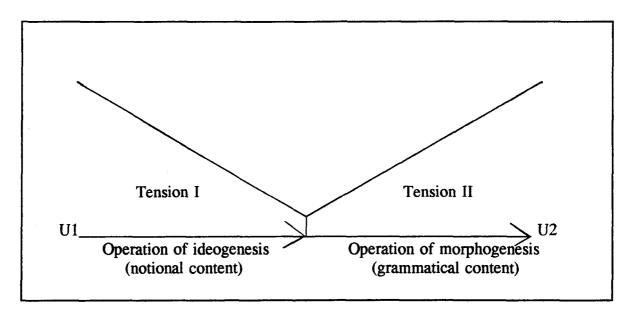
In addition, the principles of psychomechanics will allow us, through the proposed method of analysis, to find coherent explanations based on careful observations. For the study of the suffix -ly, we will first have to look at the expressive effects in discourse in order to formulate a hypothesis concerning the nature of the potential meaning of -ly in

tongue. On the basis of the expressive effects observed, we will try to determine the elements that cause -ly to have a certain meaning in a given context, and hope to find a link between all the uses of the suffix. This will not be an easy task since the contextual senses of -ly adverbial are numerous in discourse. The parameters of psychomechanics will ensure a rigorous and precise analysis.

3.2 Guillaumian Postulates

What is particularly interesting for us are Guillaume's postulates concerning the system of the word, postulates that are generally represented by a binary tensor as illustrated in Figure 2:

Fig. 2 The Binary Tensor



As we can see, when realizing a word in discourse, a speaker performs two

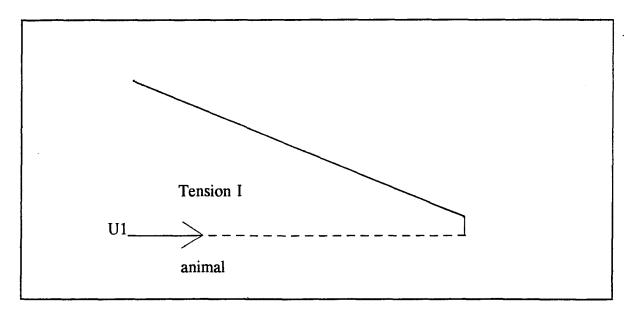
operations: the operation of ideogenesis, during which the speaker particularizes to establish the notional content of the word, that meaning which distinguishes a word from all others, and the subsequent operation of morphogenesis, during which the speaker generalizes by categorizing the lexical content grammatically to determine the part of speech of the word. It is the part of speech which determines its syntactic behaviour. These two unconscious mental operations are extremely rapid and occur successively, the operation of ideogenesis being the first of the two.

The operation of ideogenesis starts in the notional universe, at the point represented by U1 in the figures. This point corresponds to all the notions instituted in tongue, all that is thinkable in words, the concepts drawn from the impressions of which common human experience is made up (Lowe 1993: 119). The speaker then moves mentally towards the point that corresponds to the degree of particular notional representation that best corresponds to the experimental impressions he wishes to represent. Thus, the operation of ideogenesis allows the speaker to extract from the notional universe the particular notion (=lexical meaning) that he requires to express what he has in mind. The notion used could be very general, such as *animal*, more precise, for instance *mammal*, or even more precise, for example, *cat*, and very precise if the speaker uses a proper noun (Lowe 121-123).

Ideogenesis basically consists in a selection of a concept, of an organized set of semantic characteristics. Let us look at the four figures below, which successively illustrate the operations of ideogenesis of the substantives *animal*, *mammal*, *cat*, and of

a proper noun:

Fig. 3 Ideogenesis of the Substantive Animal

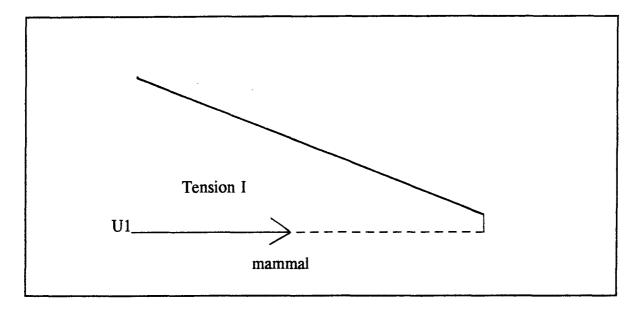


The substantive *animal* is quite general and can be said of a large number of beings. Thus the operation of ideogenesis, which consists in a particularization or a selection of the characteristics that can be used to form the notional content of the word, is quite short since the notional content of the word *animal* does not include much in the way of comprehension, or specific traits.

On the other hand, the substantive mammal is more restrictive or more particular.

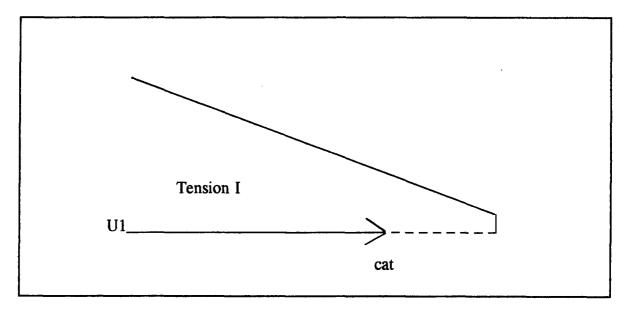
Mammal is said of a smaller number of beings than animal. Its notional content is more precise than that of the substantive animal because it encompasses more characteristics; it has a greater comprehension. Therefore, the ideogenesis is more complex and requires a greater selection of traits, as shown below:

Fig. 4 Ideogenesis of the Substantive Mammal



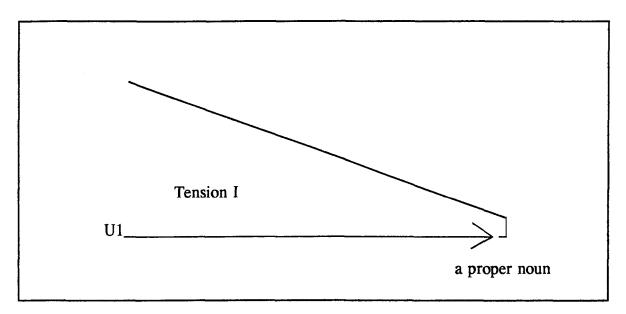
The substantive *cat* is even more precise than the substantive *mammal*, because *cat* can be said of fewer beings than *mammal*. Thus its ideogenesis is even more complex because its requires the selection of an even greater number of semantic traits for the definition of its notional content. Here is the illustration:

Fig. 5 Ideogenesis of the Substantive Cat



Finally, the process of particularization reaches its limit in the case of the ideogenesis of a proper noun because an enormous number of characteristics might be selected to define only one particular being. There is no generalization possible in the case of proper nouns as illustrated in Figure 6:

Fig. 6 Ideogenesis of a Proper Noun



It should be noted, however, that when a proper noun is conceptualized as in the following utterance, He's a regular Wayne Gretzky on skates!, its extension includes more than one possible referent, that is, its comprehension is not pushed to the point of a proper noun.

Tension II of the binary tensor, illustrated in Figure 2 above, represents the operation of morphogenesis which serves to situate the word in the universe of the parts of speech (U2), where every word must be situated, and thereby determine the syntactic behaviour of the word in discourse. Morphogenesis, in contrast to ideogenesis, consists

in a process of generalization in the course of which grammatical traits, which ultimately determine the way the word functions in discourse, are accumulated. Basically, the operation of morphogenesis allows the ideogenic or notional content of the word to be integrated into a general word form (Lowe 129). It is a process for providing a word with certain general properties in view of the syntactic role the speaker intends it to play in the sentence.

Now, how do these two mental operations of ideogenesis and morphogenesis, fundamental to all words in English, apply to our problem of the meaning of the adverbial suffix -ly? Before we look at the suffix, let us first establish the particular mental operations that lie behind the production of an adverb, as outlined in Guimier (1986).

Adverbs, like substantives, verbs and adjectives are predicative parts of speech, also called the lexical words. The predicative parts of speech all say something about a referent, whether it is the referent itself, its action, or one of its properties. The non-predicative parts of speech are the grammatical words, such as the determiners, which do not refer to any experimental entity per se (Gueron qtd. in Guimier 1986: 23).

Adverbs are considered the most dematerialized predicative part of speech, which means that their lexical contents are limited in comparison to those of substantives, verbs and adjectives. The fact is that substantives, adjectives and verbs all say something about beings, directly in the cases of substantives, and indirectly in the case of adjectives and verbs. In this regard, adverbs are different since they do not say anything about beings

(Guimier 1986: 45).

In the sentence, John talked slowly during his long presentation, for instance, one can easily see that long and presentation are syntactically bound in that the adjective long needs the support of the substantive presentation for its specific meaning (sentenced in time) to be understood. The adjective long brings extra information with regard to the notion of the substantive presentation. In a similar way, the proper noun John, the verb talked and the adverb slowly are also syntactically and semantically linked: through its meaning the verb talked says something about the proper noun John, and the adverb slowly says something about the verb talked. In other words, there is both a grammatical and a lexical link between talked and John, as there is also a link between slowly and talked. These links consist in translatory movements that Guillaume calls incidences (Guimier 1986: 27), the applying of one word's meaning, the import to the meaning of the other word, the support. For example, one can say that the adjective long is incident to the substantive presentation; this means that the import notion of 'long' finds its realization in its support, the notion of 'presentation'.

Guillaume also determines two types of incidences: internal and external. The type of incidence seen thus far is of the external variety. In external incidence, the content of one word is attributed or said of the content of another word. For example, the incidence of the adjective *long* is external with regard to the substantive *presentation*; the incidence of the verb *talked* to the proper noun *John* is also external, and that of the adverb *slowly* to the verb *talked*. Adjectives, adverbs, and verbs need the support of a substantive for

their specific meanings to be integrated to the resulting phrase, clause or sentence.

When one gets to the substantive *presentation* or to the proper noun *John*, however, one might well wonder what they are said of or incident to. Guillaume postulates that the incidences of the substantive *presentation* and of the proper noun *John* are internal because the words only say something about themselves, about that portion of their extension which is pertinent to the sentence: they do not need the support of any other words for their meaning to be fully realized.

The part of speech that we are particularly interested in for the purpose of this study, the adverb, shows external incidence, just like adjectives and verbs. Upon closer inspection, however, the type of external incidence shown by adverbs is seen to differ from that shown by adjectives and verbs. Adjectives and verbs have incidences of the first degree, since they are said directly of substantives. In contrast, the incidence of adverbs is of the second degree, since adverbs are never directly incident to substantives (Guimier 1986: 27). This explains how adverbs differ from the other predicative parts of speech: adverbs are incident to other incidences, that is, the support of an adverb is an incidence, usually the incidence of an adjective to a substantive or that of a verb to a substantive (Guimier 1986: 46).

For example, in the sentence John talked slowly during his long presentation, the adverb slowly is incident to the incidence of the verb talked to the proper noun John. This means that the notional support of an adverb is a movement, a movement of incidence. Adverbs do not say anything about beings per se, the way substantives, adjectives and

verbs do. Adverbs generally say something about the incidences of adjectives to substantives, or of verbs to their subject.

So far, we have outlined Guillaume's postulates of the system of the word, and we have also looked at his approach to adverbs. Can these general views help us solve the problem of the meaning of the suffix -ly?

As seen above, the -ly suffix seems to be a derivational suffix as defined by Hewson since it results in another part of speech, and its distribution is quite irregular. In addition— and this is where Hewson's definition of derivational suffixes differs from those of other linguists and makes it quite pertinent to our argument—the use of derivational suffixes usually brings a change of meaning, usually by way of restriction, since they are "essentially lexical in nature" as Hewson explains (96). The evidence so far suggests that this is what -ly does. Assuming, then, that -ly is lexical by nature, it follows that the suffix arises during the operation of ideogenesis, not during the operation of morphogenesis. In the following pages, we will examine further evidence that leads us to support Hewson's position while offering some new ideas about the meaning and workings of -ly.

3.3 Objectives

In the course of this study, we shall concentrate our efforts on the suffix -ly in its adverbial uses. In conformity with Gustave Guillaume's psychomecanics of language, we will attempt to find the basic meaning in tongue of the adverbial suffix -ly, the meaning

that would account for its various uses in discourse. With this in mind, our starting point will be the various expressive effects we have observed as well as those enumerated by others. Then we will attempt to determine if an underlying potential meaning of -ly can be found. Should we prove to be successful in our endeavors, this would confirm Adams's statement which says that "an important autonomistic principle is that all elements, roots, and affixes should have only one meaning each; and the meaning of an element must remain the same in all its combinations. This means that word-formation can be seen as always strictly an additive process, semantically as well as formally" (202).

CHAPTER IV

EXAMPLES AND ANALYSIS

4.1 Corpus and Methodology

For our corpus, we have gathered data from various sources in order to work with a broad sampling that represents the many different uses of -ly adverbial in discourse. We have used a good number of examples found in grammar books and linguistic studies and have gone through a corpus already constituted with examples of the written language, The Brown University Corpus (referred to as "B.U.C." in the following chapters), as well as through a corpus of examples of the spoken language, The London Lund Corpus (shortened to "LoLund"). We have also used examples that we have gathered through our reading of literary works, newspapers, magazines, as well as a good number of examples of the spoken language heard on the radio or the television or during conversations.

Our sampling thus includes examples of the written and spoken language. We have chosen this approach since we have noticed that native speakers tend to "drop" the suffix -ly of a good number of adverbs in spoken language. For example, a hockey player might well say, I played a real good first period, instead of saying, I played a really good first period. This is a significant phenomenon because of its frequency and because it does not affect all -ly adverbs. This phenomenon is also important not only because it creates a good number of adverbial pairs that are hard to find attested in the written language, but

also because it suggests that the speaker really feels a difference of expressive effect in using the bare form. It will be interesting to see if this trend of the spoken language will eventually spread to the written form.

Consequently, our corpus provides a wide range of uses from which we have selected the examples most revealing of the value of the suffix. We first divided the examples into three groups: the adverbs that only take the -ly ending, the ones that only have a bare form or a zero suffix, and the ones that have both forms, -ly and zero (or -\varphi) suffix. We then looked for elements that link or differentiate the adverbs of those three groups. We studied their syntactic behaviours, namely the positions that they can occupy in the sentence, the types of sentences they can be used in, as well as the parts of speech and phrases to which they are incident. We then considered the final expressive effect achieved. This helped us define the syntactic and semantic impact of those three types of adverbs. As will be seen, the syntactic and semantic analysis of the adverbial pairs, adverbs that can have both forms, was particularly revealing of the meaning of -ly adverbial.

Finally, a broad corpus of written and spoken examples was used to make sure that our findings with regard to the meaning of the -ly suffix could in fact explain the various uses of the suffix in discourse.

4.2 The Meaning of Manner

Through our study of English adverbs, we have discovered several semantic and

syntactic characteristics that are specific to either -ly adverbs or to bare adverbs. Such characteristics have helped shed light on the particular differences between the two types of adverbs and ultimately on the meaning of the suffix -ly. Since the meaning of manner is particularly striking with regard to -ly adverbs, we will analyze it first.

It is a fact that the vast majority of -ly adverbs are adverbs of manner. This can probably be attributed to the fact that the suffix is derived from a word which was dematerialized very early on and came to evoke "likeness," "similarity" and "comparability" in appearance and in action, hence "manner." A detailed description of the etymology of -ly is provided in section 2.2.

Today, numerous examples can be found in which -ly is clearly associated with manner. The following sentences are good cases in point:

- (1a) He thought deeply about religious matters. (Pyles 119)
- (2b) They were praised highly. (Quirk et al. 1985: 407)

Here, the notion of manner comes through clearly: he thought about religious matters "in a deep manner," and they were praised "in a high manner."

Given the strong association observed between -ly adverbs and the notion of manner, it is worth reflecting briefly on what a manner of doing something is and what conditions must be met for us to perceive the existence of manner. Webster's defines manner as "a mode of procedure or mode of acting." Thus, the notion of manner implies a selection of one way or mode among others. In other words, not all of the possible ways of doing something are being used. This means that the speaker who uses an adverb of manner exploits one possibility from a range of two or more.

The selection process involved in the notion of *manner* could be compared to a filter. Indeed, before the speaker can perceive a manner of doing something, he must be able to imagine at least one other alternative. He must therefore go through a mental act of opposition or comparison before perceiving a manner. Thus, the notion of *manner* can only be arrived at through a mental process of particularizing in which the speaker represents one of the possible ways of carrying out the activity. Consequently, one could argue that an adverb of manner represents the subjective perception of the speaker and thereby an act of representation that involves a process of speaker reflection.

There also seems to be another type of selection implied by adverbs of manner. Indeed, the notional contents of adverbs of manner in -ly would not seem to include all the same semantic traits present in the bare form, thus suggesting an act of filtration. Let us compare examples (1a) and (2b), which contain -ly adverbs of manner, to sentences which contain the bare counterparts of those two adverbs:

- (1a) He thought deeply about religious matters. (Pyles 119)
- (1b) He plunged deep into the ocean. (Pyles 119)
- (2a) The plane flew high above. (Quirk et al. 1985: 407)
- (2b) They were praised highly. (Quirk et al. 1985: 407)

Clearly, the notion of "depth" is represented in the adverbs deeply and deep, but

Hirtle would argue that the mental process does not involve a conscious lining up of alternatives, but more an actualization of the process which implies that it could have been otherwise but the other ways are not part of the speaker's intended message. The trait is added, by means of the adverb, to a general verbal idea which thus particularizes it since this trait corresponds to an impression in the speaker's experience.

the two adverbs are not interchangeable. This means that there must be a difference in meaning between them. The fact is that the bare adverb *deep* seems to include a greater number of the characteristics that make up the notional content of the notion "depth" than the adverb *deeply*. For one, the depth implied in the adverb *deeply* cannot be measured definitively, whereas that of the bare adverb *deep* can. Moreover, *deep* is applied to a result or the end of the event *plunge*, whereas *deeply* is said more of the process of *think*, the manner in which it was done, and thereby excludes all result-related traits. This perhaps explains why it is that the "depth" of the *-ly* adverb cannot be measured.

The same logic can be applied to the adverbs highly and high. The two adverbs are not interchangeable because the notion of "height" has evolved differently in the two adverbs. The notion of "height" contained in the bare adverb high, in The plane flew high above, is resultative and could again be physically measured, but that of the adverb highly, in They were praised highly, definitely cannot. Highly is said of the process rather than the result.

Many, such as Donner, hastily conclude that "Modern English has a substantial body of modal adverbs distinguished by a duality of form in which the suffix usually serves to impart a figurative sense to whatever literal meaning the word expresses without one" (1). This would mean that the difference between -ly adverbs and bare adverbs, in the case of adverbial pairs, is that the bare adverbs generally convey a literal or concrete sense and that the -ly adverbs are used in the figurative sense. However, this conclusion is wrong. In fact, one can easily find counterexamples in which the literal-figurative

opposition is blurred, if not reversed:

- (16a) The bullet went clean through his shoulder. (Schibsbye 152)
- (16b) She works cleanly. (Schibsbye 152)
- (17a) The prisoner got clear away. (Schibsbye 152)
- (17b) It is clearly visible. (Robert & Collins Senior)
- (18a) The vase was right in the middle. (Schibsbye 156)
- (18b) He described her rightly. (Schibsbye 157)

As we can see, the meanings of the bare adverbs *clean*, *clear*, and *right*, are figurative since they have lost almost all of their literal meanings or they are almost completely dematerialized, whereas the -ly adverbs that have kept most of their literal meanings.

What is more interesting with regard to the adverbial pairs in examples (1), (2), and (16) to (18) is that the notional contents of the bare adverbs would appear to differ from those of the -ly adverbs. Indeed, not all of the characteristics that make up the underlying notions of the -ly adverbs seem to be included in the -ly adverbs, but a greater number of those characteristics are apparently included in the bare adverbs. Since some readers might find this conclusion rather surprising given the high degree of dematerialization of some bare adverbs, a few words of explanation are in order.

In examples (16), (17), and (18), the bare adverbs *clean*, *clear*, and *right*, are used metaphorically, having lost almost all of their literal meaning, whereas the *-ly* adverbs *cleanly*, *clearly* and *rightly* are used in a more concrete sense. It thus seems strange to argue that the lexical content of the word base is more intact in the case of bare adverbs than it is in the case of *-ly* adverbs. To understand what is happening in these and similar cases, it is necessary to make a clear distinction between lexical

dematerialization (or bleaching) that occurs over time and ideogenesis as it occurs in the passage from tongue to discourse.

Ideogenesis describes the mental process of representing the semantic traits, through particularization: it aims at finding the specific notion and through it the word that the speaker requires to express his idea. Sometimes the operation of ideogenesis does not reach its end—as we suggest for -ly adverbs. This means that the lexical content of the word is not particularized to the full extent that it could be particularized.

Historical dematerialization is the outcome of basically the same process, the result of which is instituted in tongue. Dematerialization occurs over time—it could take centuries—as some of the semantic traits of a word are attenuated, or eliminated altogether, so that the word is left with a minimum lexical content, which allows it to be used metaphorically.

In example (16a) The bullet went clean through his shoulder, for instance, the bare adverb clean has been previously dematerialized. Over time, most of the lexical traits of the notional root of "cleanliness" were bleached and only a few are left in the adverb clean which give it the meaning of "completely," the only interpretation possible in this particular example. In other words, when the speaker put sentence (16a) together, he already had at his disposal a highly dematerialized adverb with a minimum of lexical traits. The adverb clean describes the precise way that the bullet went through the shoulder. Its meaning is thus positional.

A good parallel can be made with metaphorical uses of substantives and verbs.

The metaphor is at the disposal of the speaker before he puts his sentence together². What we are proposing is that, in the case of bare adverbs, lexical particularization of the individual adverb is allowed to run its full course. Sometimes the course is short, because of the high degree of dematerialization of the adverb, but the course, whatever its length, is run fully.

On the other hand, in example (16b) She works cleanly, the meaning of the adverb cleanly is apparently closer to the notion of cleanliness than the adverb clean in (16a), yet it would seem that the adverb is not allowed to run its full course to maximum particularization. Cleanly is an adverb of manner and thus allows for other ways or degrees of "clean". For this to be possible, the lexical content can never be fully particularized for to do so would preclude the possibility of finding an alternative manner or degree.

Similarly in (17a) The prisoner got clear away and (18a) The vase was right in the middle, the adverbs clear and right have been dematerialized and are left with very little lexical content. Indeed, the lexical content does little more than evoke a precise position in space. Only one interpretation is possible for each of these two adverbs; the focus is clearly on a resultative position rather than a manner or degree.

In example (17b) It is clearly visible and (18b) He described her rightly, the

² Hirtle would disagree. He explains that the metaphor is always the result of a spur-of-the-moment process. "En somme, le mécanisme de la métaphore soumet le concept à une dématérialisation momentannée, *ad hoc* pourrait-on dire" (Hirtle 1992: 148).

adverbs *clearly* and *rightly*, even if their meanings are closer to the literal meanings of their notional roots, do not represent a complete particularization of the available lexical material in the adjectives *clear* and *right* since they refer to the manner in which the events occurred, one manner from various possible manners.

In short, the study of adverbs of manner seem to indicate that -ly adverbs have a lexical content which is not fully particularized, while their bare counterparts, often dematerialized and left with very little semantic content, have an uninterrupted lexical particularization. In other words, -ly adverbs of manner would seem to have a lexical content which is somehow "treated" by the speaker, while bare adverbial forms would seem to incorporate the full content of the available lexical material. Further evidence in support of this position will be provided in the coming pages.

One final point can also be made at this time. It could be argued that bare adverbs cannot be true adverbs of manner. They tell us about the result of an activity rather than the process of realization. They provide information concerning static, resultative positions which exist independently of the speaker. Discerning a manner is a subjective judgement call, but describing a result or position is essentially an objective act. There would seem to be an association between a subjective adverbial assessment and -ly adverbs and an objective adverbial assessment and bare adverbs.

4.3 Sentence Adverbs

Since the majority of sentence adverbs take the -ly ending and their syntactic behaviours are different from those of adverbs in general, they might prove to be helpful to our study. Generally speaking, grammarians and linguists do not agree on a precise definition of sentence adverbs, nor do they agree on a means of identifying sentence adverbs, or on a single type of classification. Most linguists will in fact agree that it is quite difficult to determine if an adverb is a sentence adverb or not.

Because a lot of adverbs in initial position could falsely be considered sentence adverbs, Bertrand (1986) suggests an efficient means of identification. She proposes that sentence adverbs can be put in front of a negated sentence, whereas verb phrase adverbs cannot occupy such a position, for example:

- (19) Surprisingly, John did not come. (Bertrand 183)
- (20) *Rapidly, John did not come. (Bertrand 183)

Although Bertrand's finding is quite efficient for the identification of sentence adverbs, her method of identifying sentence adverbs will not be the only one used in the this study. Moreover, her finding does not reveal much as to why most sentence adverbs have the -ly suffix and how they function. This requires further investigation.

Among linguists, one concept seems to be unanimously accepted as far as sentence adverbs are concerned: "tout adverbe exprimant un jugement porté par l'énonciateur sur son énoncé" is usually considered a sentence adverb (Guimier 1986: 236). Another fact that cannot be denied is that in Modern English a good number of sentence adverbs take the -ly ending, as exemplified:

- (21) Certainly, she'll win the contest. (Swan 1988: 3)
- (22) Unfortunately, we never saw them again. (Swan 4)

Interestingly, not only do sentence adverbs generally have an -ly form, but most of them could also be classified as adverbs of manner.

As for the adverbial pairs, it appears that very few -ly adverbs which have a bare counterpart can be used as sentence adverbs. Moreover, their bare counterparts cannot function as sentence adverbs, as we can see in the following examples:

- (23a) Clearly, this was a family in crisis. (B.U.C.)
- (23b) *Clear, this was a family in crisis.
- (24a) Roughly, four kinds of adverbs can be distinguished. (Swan 5)
- (24b) *Rough, four kinds of adverbs can be distinguished.

Despite the fact that a great number of sentence adverbs take the -ly suffix, some bare adverbs can also be used as sentence adverbs. This would seem to weaken our hypothesis linking -ly with subjective adverbial assessments and the bare form with objective assessments, but a closer look at bare sentence adverbs reveals that it is not the case. We have found that most, if not all bare sentence adverbs function as connectors. Here are some examples:

- (25) Therefore, I can't help you. (Householder 1965: 11)
- (26) Hence this statement is a theorem. (Guimier 1986: 267)

Looking at these examples and others, it is possible to see that the bare sentence adverbs provide essentially objective assessments. Connectors will be further discussed below.

Among all the adverbial pairs that we have studied, the only adverbial pairs in which the two adverbs could be used as sentence adverbs were in the series of *first/firstly*,

second/secondly and so on, up to last/lastly. Here are some examples:

- (27) First he barely touched the blade on the hand which shaded the eyes. (B.U.C.)
- (28) Firstly, the amount [of vitamin C] you get from the sun doesn't count. (LoLund)
- (29) Lastly, the speaker decried our organized program of emergency help calling it "Civilian Defense." (B.U.C.)

Interestingly, all these adverbs constitute connectors. However, the types of connection that the bare forms and the -ly forms establish are slightly different. Indeed, the bare adverb *first* would seem to be exclusively positional as most connectors are. It simply serves as an indication of the order of the argument within a time frame.

In contrast, the -ly adverb firstly would seem to be both positional and argumentative in that the speaker intervention is felt in the adverb. With firstly, the speaker does not simply put the events in a certain order as he does with the bare form, but there are also consequences to the order established by -ly adverbs. The adverb firstly not only introduces the first element of the enumeration, it also conveys a meaning of "predominance" of the argument with regard to the others: firstly underlines the fact that the element it introduces is also the most important one and is being developed and as an opening to an argument.

The adverb *lastly* is also argumentative since it serves to conclude and sometimes even to summarize. In fact, very rarely do we use *last* to simply indicate the final element of an argumentation. Unfortunately it is impossible to demonstrate the *first/firstly* and *last/lastly* opposition with single sentences. One would require the script of an entire conversation or the text of an entire paragraph or even a chapter to show this point better

and space does not allow for this. In the texts we examined, however, there seemed to be a strong tendency to resort to -ly in arguments and to use the bare forms such as thus, first, last, next, although, hence, yet, so, etc., to "connect" two sentences or phrases and to give them an unequivocal position in the argumentation. In other words, the bare forms tend to evoke a position while the -ly forms apparently evoke more of a function. At least, this would appear to be the case for firstly, lastly, etc.

Let us consider a number of cases that lend support to what we are proposing. We have already suggested that behind the use of sentence adverbs, lies a mental operation of comparison or opposition on the part of the speaker. In other words, a sentence adverb seems to represent a certain degree of speaker commentary or mediation with regard to the following proposition. We have determined three types of commentaries or comparisons in relation to sentence adverbs.

In the first type, the speaker relates what the sentence talks about to the rest of the situation being talked about and uses the sentence adverb to show that the following sentence either corresponds to the situation or fails to correspond to situation. For example, in (30) and (31), the speaker needs to have a certain expectation with regard to the *daring* or *arriving* before using *certainly* or *fortunately*.

- (30) Certainly, she wouldn't dare ask her father afterward. (B.U.C.)
- (31) Fortunately, they arrived on time. (Householder 12)

Similarly, the speaker has to have an idea of what is not surprising or what constitutes fortunate before being able to declare an event surprising or unfortunate.

(32) Surprisingly, the two factions now agree. (O'Neal 64)

(33) Unfortunately, we never saw them again. (Swan 4)

It is noteworthy that only -ly adverbs are found in this category of sentence adverbs where a subjective evaluation is called for.

The second type of sentence adverbs represents a speaker judgement of a particular way of presenting the information to the listener who is part of the situation.

- (34) Bluntly, there never was a Ptolemaic system of astronomy. (B.U.C.)
- (35) Briefly we rolled over a paved road up to Pak Song, on the cool Bolovens Plateau. (B.U.C.)

In other cases, the speaker wants to emphasize the particular emotional colouring of what he is about to say. He then uses sentence adverbs such as the following:

- (36) Frankly, it is being very cleverly done [...]. (B.U.C.)
- (37) Admittedly, the evidence is conclusive. (O'Neal 64)

What is important with these three categories of sentence adverbs is that the adverbs represent a type of subjective mental activity that has been undertaken by the speaker. Comparisons, restrictions, classifications and judgements all constitute subjective operations because they require a filtering of the information on the part of the speaker and the selection of one possibility from a range of two or more. Once again, it is interesting to note the absence of bare adverbials in this category.

In the third category of sentence adverbs, the act of opposition or comparison leads the speaker to classify the information in a certain order before presenting it to the listener. Two sub-categories of sentence adverbs have been observed: temporal or restrictive. A temporal classification implies that the speaker represents the information in terms of chronology before expressing it to the listener. The speaker's experience of

the elements of information suggests a certain order in time. Here are some examples:

- (27) First he barely touched the blade on the hand which shaded the eyes. (B.U.C)
- (38) Eventually the bubbles became lost in the sparkle of the ocean surface, and he rolled over on his back. (B.U.C.)

In cases of restrictive classifications, the speaker reduces the scope of the information to a specific field or to a particular person. In order to achieve such a restriction, the speaker compares the content of the sentence to the rest of the situation, as shown in the examples below:

- (39) Anatomically, the horse lung appears to be remarkably like that of man [...] (B.U.C.).
- (40) There are reportedly some 5,000 non-professional theatre-groups in the U.S. (Guimier 1986: 255)

In example (39), the speaker reduces the scope of the affirmation to a specific field. Example (40) is a little different since the content of the sentence is restricted as well, but to a particular person that reported the facts given in that sentence. In both cases, the speaker uses the sentence adverb to situate the sentence within the experimental setting.

However, as it was the case for adverbs of manner, it seems that there exists a difference between -ly sentence adverbs and bare sentence adverbs. Indeed, a careful inspection of sentence adverbs reveals that bare and -ly forms do not reflect the same type of situating process. This difference is introduced by the connectors, which are all bare adverbs.

Generally speaking, connectors have a bare form and behave differently from the other sentence adverbs. By definition, connectors or conjunctive adverbs, such as

therefore, yet, hence, so, thus, although, next, etc., seem to represent a very precise relationship between the two elements that they link. Frank (1972) defines connectors as adverbs that "establish a relationship between one sentence or clause and the preceding sentence or clause" (145). Basically, connectors order the information by giving it an unequivocal position in the argumentation. In fact, most connectors belong to our second category of sentence adverbs which are used to arrange the information with regard to time before presenting it to the listener. A position in time is quite precise and can be evaluated in a reasonably objective manner by a speaker.

Consequently, there are in all essentially two types of sentence adverbs. First there are the "positional" sentence adverbs, or connectors, which establish precise links between syntactic elements. These are invariably bare adverbs. Second, there are the "situational" sentence adverbs, a group that includes most sentence adverbs (the three categories that we mentioned earlier), which essentially represent the speaker's judgement call on a sentence. These adverbs all have the -ly form.

This suggests, as the study of adverbs of manner did, that the meaning of -ly adverbs differs substantially from that of bare adverbs, since the former occur when the speaker engages in a subjective mental operation. Such operations generally involve an opposition or a comparison that ultimately leads to a less than complete particularization of the word base. In contrast, bare adverbs, which refer to precise positions in space or time that can be measured or to precise positions in an argumentation, do not result from a particular treatment of the word base, which is simply particularized as far as it can be.

4.4 One-Word Answers

The English language provides speakers with two broad types of questions: yes/no questions and information questions. These two types of questions differ in the kinds of answers that each requires, but both types of questions accept one-word answers, and even one-word adverbial answers. Still, the types of adverbs that can function in such usages differ according to the type of question. Here are the details.

4.4.1 Yes/No Questions

In general, when one asks a yes/no question, one expects a definite answer which is either one of the two bare adverbs: yes or no. Yet, other adverbs can also be used to answer such questions. Most of those other adverbs have an attenuating effect in comparison to the definite yes and no. In fact, a great number of those other adverbs used as one-word answers to yes/no questions reflect the speaker's uncertainty. Here are some examples:

- (41) A: Is he coming tonight? B: Possibly.
- (42) A: Was she sick yesterday? B: Unfortunately.

Other possible adverbial answers include *certainly*, *clearly*, *definitely*, *undoubtedly*, *perhaps*, *maybe* and so forth. What is of note here is that many of these one-word adverbial answers are -ly adverbs. Moreover, these adverbs also happen to function as sentence adverbs and they could also be classified as adverbs of manner.

As stated in the previous section, sentence adverbs are generally looked upon as

modifying the entire sentence rather than just the verb. Moreover, as Guimier (1986) explains, and as we have argued, sentence adverbs represent the speaker's subjective evaluation. As one-word answers, sentence adverbs, most of them having the suffix -ly, express the speaker's uncertainty in contrast to the definite yes or no.

Another type of -ly adverbs, intensifiers, can also serve to answer yes/no questions. Intensifiers can be defined as adverbs that indicate the highest degree on a scale, such as the adverbs in the following example:

(43) A: Was she sick yesterday? B: Terribly. or Very

Of course, other intensifiers in -ly could have also been used here, for instance, awfully, frightfully, really, and so on. Interestingly, the meanings of a good number of intensifiers are highly dematerialized; in other words, there is hardly any trace left of the original meanings of the notional roots of adverbs used as intensifiers. Moreover, when intensifiers function as one-word answers, they could generally be replaced by a simple yes.

The adverb *really* is particularly interesting because it functions frequently not only as a one-word answer, but also as a one-word question. Here is an example:

(44) A: She couldn't come because she was sick.

B: Really?

A: Really.

In example (44), the question *Really?* can be paraphrased by "Is this true?" or "Is that a fact?". The question *Really?* is actually a yes/no question in itself that causes speaker A to reinforce his statement by a yes or a no, or their equivalents, and by an explanation.

Although a great number of adverbs can work as one-word questions as well as one-word answers, they tend to do so but only in very specific contexts, hence less frequently than *really*. For example, when speaker A wants to question the adverb that speaker B has used in answering the first question that speaker A asked, speaker A, in his second question, the one-word adverbial question, simply repeats what speaker B has said and puts it in the form of a question, probably because he is surprised by the choice of adverb. Here is an example:

(45) A: Is he coming tonight?

B: Unfortunately.

A: Unfortunately?

By using the adverb *unfortunately* as a question, speaker A is not asking a yes/no question as he was with the adverb *really* in example (44), he is simply expressing his surprise through a repetition of the adverb. Speaker A wants speaker B to explain his choice of adverb. The question *Unfortunately?* equals "Why *unfortunately?*" It constitutes an information question that requires further explanation.

It is interesting to note that the bare counterparts of the -ly adverbs that serve as one-word answers or questions cannot be used in the same roles. Moreover, connectors or conjunctive adverbs in -ly such as similarly, consequently, etc., which are generally considered sentence adverbs as we already mentioned, cannot function as one-word answers to yes/no questions, the way other sentence adverbs in -ly can, nor can bare connectors.

Now, what is the source of these restrictions? To answer this question, it is useful

to look at the distribution of one-word answers and one-word questions and of -ly and bare adverbs in these roles.

First of all, very few bare adverbs can function as one-word answers to yes/no questions apart from the obvious yes and no, as well as maybe and perhaps. An interesting exception is the bare adverb sure, which is another way of saying yes. What is interesting is that sure seems to be the only bare adverb that has an -ly counterpart, surely, and that can function as a one-word answer to a yes/no question, as shown below:

(46) A: Is he coming tonight? B: Sure.

The adverb *surely* could have also been used as a one-word answer to this particular yes/no question. However, the meaning conveyed would not have been the same. Indeed, the answer *surely* expresses less certitude than the answer *sure*. This is further corroborated by other oppositions of *sure* and *surely* such as in the following example:

- (47a) He is sure nice.
- (47b) He is surely nice.

Indeed, in example (47a), the speaker is certain that the person is nice, whereas, in example (47b), the speaker is not quite certain of it. In (47b), the speaker postulates or assumes that the person is nice, but he has not verified it for himself. There would therefore seem to be an attenuation of the lexical value of the notional root when the -by suffix is present, much as was observed in the case of adverbs of manner.

As for bare adverbs used to answer yes/no questions, none of the bare

counterparts of the other -ly adverbs can function as one-word answers the way sure does. Here is an example:

(48) A: Was she sick yesterday? B: Clearly, but not *Clear.

So, why is it that, apart from yes, no, sure, maybe and perhaps, intensifiers and sentence adverbs in -ly are apparently the only one-word answers to yes/no questions? The fact is that when answering a yes/no question a speaker can express two positions: certainty or uncertainty.

Now, the very nature of yes/no questions generally calls for definite, unequivocal answers. When an unequivocal answer is given, for example yes, no, and sure, a bare adverb is used. Indeed, by definition, yes expresses an affirmative reply to a question, no is used to express a negative reply to a question, and sure, which finds its origins in the Latin securu-s, means "secure" and by extension "certain." Once again, when speaker objectivity is dominant, bare adverbs are used.

Intensifiers can also constitute definite one-word answers to yes/no questions. Intensifiers refer to the ultimate position on a scale, as we mentioned earlier. The ultimate position on a scale also constitutes a definite answer which could, in fact, generally be replaced by a yes, as shown in example (43) above. Interestingly, the meanings of intensifiers are highly dematerialized. This means that there are very few traces left of the original meanings of their notional roots, and the meaning of intensification dominates. Thus, intensifiers indicate a clear or definite ultimate position. Further details on intensifiers can be found in section 4.6.

When the speaker cannot provide a definite answer, he could use the bare adverbs maybe or perhaps. This would seem to undermine the argument we have presented thus far. However, this is not really the case. Maybe and perhaps are in a sense exceptional adverbs given the sources from which they were derived. They can never take -ly, but not for semantic reasons, and must therefore be excluded from the bare versus -ly discussion.

Maybe and perhaps aside, uncertainty in one-word adverbial answers to yes/no questions is always expressed by sentence adverbs in -ly. Sentence adverbs, as one-word answers, have an attenuating effect in comparison to the definite yes and no, as mentioned earlier. The use of sentence adverbs in -ly, as we have already argued in the previous section, requires a subjective mental operation. Such an operation is in fact a filtering of the information on the part of the speaker in order to compare and ultimately to select one option. Uncertainty, by nature leaves room for an alternative position. Thus one-word answers, like adverbs of manner and sentence adverbs show an affinity between bare adverbs and objective adverbial evaluation, and between -ly adverbs and subjective evaluations.

The only remaining question to be addressed here is why connecting adverbs, be they bare or in -ly, cannot be used as one-word answers. The answer is very simple and straightforward. By definition, a connector establishes a very precise relationship between the two elements that it connects. As one-word answers, connectors would have nothing to connect and therefore no reason for being there at all.

As for one-word questions, the almost exclusive use of -ly adverbs should not be surprising. One-word questions are asked in order to cast doubt on what has just been said. In other words, their function is essentially to call for other options by calling into question a proposed option. Thus far, we have seen that when room is left for other manners or other positions -ly is always present. We can therefore conclude this section with the observation that the tendencies previously outlined for adverbs of manner and sentence adverbs are confirmed by one-word answers and questions.

4.4.2 Information Questions

A second type of questions, information questions, also accepts adverbs as one-word answers. As a matter of fact, numerous -ly adverbs can be used to answer such questions, since most adverbs of manner can answer the question how. Here are some examples:

- (49) A: How did he manage the project?
 B: Wisely. or Confidentially. or Slowly. etc.
- (50) A: How was she supposed to react?
 B: Calmly. or Casually. or Quickly. etc.

We have also found that a few bare adverbs can be used to answer information questions with how, particularly in spoken English, as shown in the example below:

(51) A: How did he manage the project? B: Well. or Bad. or Slow.

Many of these bare adverbs have an -ly counterpart which can also be used to answer an information question. For example, the -ly counterpart of the bare adverb slow, could have also functioned as a one-word answer to this particular information question, as we

saw in example (49), but the expressive effect is not quite the same. With the bare adverbs *slow*, one can sense a negative colouring in the speaker's evaluation of the result of the event *manage*, whereas with the adverb *slowly*, the colouring could be negative but it could also be positive, as in the expression *slowly but surely*. Furthermore, *slow* seems to represent a global assessment of the management of the project, while *slowly* is more clearly an adverb of manner. Admittedly, however, the difference between the expressive effect obtained with *slow* and that obtained with *slowly* is very subtle.

Other information questions can also accept adverbs as one-word answers, including questions with the adverb when. Here, only a very limited number of -ly adverbs such as eventually can function as one-word answers. In fact, chances are that the answer will be a bare adverb such as soon, late, never, seldom, today, tomorrow, etc. Furthermore, most, if not all, of the questions with the adverb where require bare adverbs such as here, there, far, near, deep, north, upstairs, etc., for an answer. No -ly adverb can be used here, as far as we know.

Thus, even if yes/no questions and information questions differ in the kinds of answers that they usually require, they show common adverbial patterns. As far as yes/no questions are concerned, we have seen that when the speaker cannot provide a positional, definite style of answer, he uses an adverb in -ly. The case of information questions with how is similar in that if they call for the description of the "manner" in which something is done, an -ly adverb is used in response. If the final result is being evaluated, a bare adverb is used.

In contrast, when the speaker expresses a clear, unequivocal position in response to any question type, he uses a bare adverb. It should be pointed out that the speaker can also use an intensifier. A detailed explanation of what happens in this case can be found in section 4.6.

So far, all our findings seem to converge. We have found that -ly adverbs are used to convey a subjective judgement of the speaker in qualifying a process. This is the case for adverbs of manner, -ly sentence adverbs, one-word adverbial answers to yes/no questions that convey the speaker's uncertainty, and one-word adverbial answers to information questions with how. In fact, each of these cases is an expression of manner, one way of envisaging the support of the adverb's import, and it could be this which results in an impression of subjectivity, of 'it might have been otherwise'.

Bare adverbs appear to express a more categoric and objective qualification than their -ly counterparts. They are generally said of static results. Indeed, bare adverbs function as connectors, definite one-word answers to yes/no questions, and one-word adverbial answers to information questions with where and when.

The suffix -ly seems to be strongly associated with subjective mental operations of selection, and with the description of process-like events. In the absence of the -ly suffix the adverb seems to represent an objective and categoric qualification, a qualification which is not open to change. We will try to see if these findings can be generalized to other syntactic phenomena.

4.5 Negative Sentences and Questions

We have grouped our analyses of negative sentences and questions in the same section, since both types of sentences affect the events or verbs in similar ways and cause similar responses in terms of adverbial use. The cases of negative sentences and questions are especially interesting with regards to adverbial pairs.

In some contexts, the -ly adverb and its bare counterpart are interchangeable, apparently with very little difference in the expressive effect, as shown in the following examples:

- (52a) It's awfully busy around here.
- (52b) It's awful busy around here. (conversation)
- (53a) It was really thoughtful of him.
- (53b) It was real thoughtful of him. (television advertising)
- (54a) He paid dearly for the error. (Schibsbye 153)
- (54b) He paid dear for the error.

Interestingly, when using a negative sentence or a yes/no question only the -ly adverb sounds natural. In other words, sentences containing -ly adverbs can easily be negated or made into questions, whereas sentences containing bare adverbs generally call for the use of the -ly ending when such sentences are used. Without the use of the suffix, the sentences that include bare adverbs become awkward when negated or made into questions. Here are some examples:

- (52b) It's awful busy around here.
- (52c) ?It's not awful busy around here.
- (52d) ?Is it awful busy around here?
- (53b) It was real thoughtful of him.

- (53c) ?It was not real thoughtful of him.
- (53d) ?Was it real thoughtful of him?
- (54b) He paid dear for the error.
- (54c) ?He didn't pay dear for the error.
- (54d) ?Did he pay dear for the error?

The fact is that the three (c) sentences could only be possible in the cases where speaker A had said the (b) sentence, and speaker B wanted to contradict him. Speaker B would then use the same wording as speaker A and would add the negation plus a phonetic stress on the word *not*. Otherwise, such negative sentences are somewhat unnatural.

The three (d) sentences or questions are not entirely impossible either. They could be heard if speaker A had said any of the b) sentences, and that speaker B wanted to question the statement by using exactly the same wording and by putting it in the form of a question. Otherwise, such questions are also unusual.

On the other hand, the use of the -ly adverbs makes the negated sentences and the questions quite acceptable, as shown below:

- (52e) It's not awfully busy around here.
- (52f) Is it awfully busy around here?
- (53e) It was not really thoughtful of him.
- (53f) Was it really thoughtful of him?
- (54e) He didn't pay dearly for the error.
- (54f) Did he pay dearly for the error?

The affirmative form acts to assert the actualization of an event. In contrast, the negation and the question form transform the event evoked by a verb into a potential or

a hypothesis. The subject is not perceived to actualize or engage in the event. When the speaker negates or questions that event, it is no longer actual, as it would be in an affirmative sentence, because the speaker denies or questions the existence of the event. The event is thereby virtualized.

It is interesting to see that in affirmative sentences, both -ly adverbs and bare adverbs can easily be used. However, negative sentences and questions generally call for -ly adverbs.

It should be of note that this finding applies only in the cases where the -ly adverbs and the bare adverbs are interchangeable, apparently without much difference in meaning. When the bare adverb does not have an -ly counterpart, sentences containing bare adverbs can easily be negated or transformed into yes/no questions without the use of the suffix -ly, as shown in the following examples:

- (55a) I am flat broke. (conversation)
- (55b) I am not flat broke.
- (55c) Are you flat broke?
- (56a) I bought this cheap. (conversation)
- (56b) I didn't buy this cheap.
- (56c) Did you buy this cheap?
- (57a) We could hear it loud and clear. (R-C)
- (57b) We couldn't hear it loud and clear.
- (57c) Could you hear it loud and clear?
- (58a) The wind was dead against us. (Schibsbye 156)
- (58b) The wind wasn't dead against us.
- (58c) Was the wind dead against you?

It is of note that the bare adverbs that allow for easy negation, for instance flat

and dead, are highly dematerialized or bleached. This means that the original meanings of the notional roots have almost completely disappeared. Indeed, the adverb flat in I am flat broke does not have much to do with a surface that is levelled, and the adverb dead in The wind was dead against us has very little to do with something that is deprived of life.

Moreover, the bare adverbs in examples (55) to (58) are part of the fixed or semifixed expressions as buy cheap, flat broke, loud and clear, and dead against. Fixed expressions do not allow for degrees of interpretation. As the name suggests, fixed expressions are "fixed" and offer little or no range of meaning, and they do not allow for speaker intervention. In other words, fixed expressions convey very precise meanings that do not permit degrees of interpretation or semantic attenuation. In fact, the bare adverbs have almost fused with the adjectives they are incident to in hyphenated set expressions such as full-ripe, bitter-sweet, new-born, deep-set, tight-fitting. With time, the two elements have grown to form a semantic unit that represents a clear concept.

What is of particular note here is that -ly adverbs are not found in such fixed expressions. The line of reasoning we have been pursuing thus far could account for this. If -ly is a sign of less than total particularization of the lexical content of an adverb, then -ly adverbs would be unsuitable for being locked into an invariable relationship of incidence to a particular verb or adjective. The objective, fully particularized bare form would be a much more appropriate choice. Thus the bare adverbs in fixed expressions seem to behave similarly to bare adverbs in general, since they are associated with

resultative and positional types of situations and an invariable closed type of incidence.

With regard to the problem of negative sentences and questions, the notion of incidence is of key importance. We mentioned earlier in section 3.2, that adverbs have an incidence of the second degree, because they are incident to another incidence, generally that of the event to the subject or that of an adjective to a noun. On the basis of what we have observed thus far, it would appear that -ly adverbs and bare adverbs differ slightly in the type of incidence they are incident to.

Indeed, -ly adverbs are apparently mainly incident to "open" incidences, meaning that they are incident to incidences which the speaker perceives subjectively and which therefore could be otherwise. In contrast, bare adverbs seems to be incident to "fixed" incidences, meaning that they are incident to incidences that do not allow for speaker intervention or a judgement call.

Negations and questions constitute forms of speaker intervention, and they affect incidences. The use of the negative form or the question form potentializes the incidence. Here is how this could be illustrated with an example of an adverbial pair and the use of the negative form:

- (53a) It was really thoughtful of him.
- (53e) It was not really thoughtful of him.
- (53b) It was real thoughtful of him.
- (53c) ?It was not real thoughtful of him.

It should once again be pointed out that (53c), ?It was not real thoughtful of him, is not ungrammatical. It can still be used in specific contexts, as mentioned earlier, and it means

that whatever the person did was "sort of thoughtful, but not very thoughtful." This meaning comes from the fact that, in examples (53b) and (53c), the adverb *real* and the adjective *thoughtful* are locked into a tight relationship, a type of immutable incidence. When *real thoughtful* is negated, the incidence of *real* to *thoughtful* does not change, but instead the entire phrase is negated. The intensifier *real* could be replaced by *very*.

Sentence (53e), It was not really thoughtful of him, is quite different. Unless the stress very exceptionally falls on really, it means that whatever was done was "not thoughtful at all." This is because the adverb really, in (53a) and in (53e), on the condition that it does not carry primary sentence stress, is not an intensifier but an adverb of manner, and it can be paraphrased by "in a true manner." The adverb and the adjective do not form the same tight semantic unit found in real thoughtful, thus they allow for speaker intervention which can isolate the elements of the unit. Here, the negation not first affects the adverb really which in turn affects the adjective thoughtful, and this is how we get the meaning of "not thoughtful at all." The difference in meaning is due to the difference in the import of meaning of the two adverbs, and in turn to what is affected by the negation.

The difference in the incidences of -ly adverbs and of bare adverbs helps us understand why the (c) sentences, such as (53c) ?It was not real thoughtful of him, sound unnatural. Negative sentences or questions, containing an adverb, often aims at denying or questioning the adverb, and thus attenuates the meaning of the adverb only. However, this type of attenuation is not possible with a good number of bare adverbs, since bare

adverbs generally have a tight link with the word to which they are incident. Consequently, the use of the negation or of the question form, which produces the (c) and the (e) sentences, affects the adverb and adjective taken together and not the adverbs only, and thus does not produce the semantic effect one normally expects. This is why a negative sentence or a question sound unnatural.

Here is another interesting example with affirmative sentences:

- (59a) This is real real bad.
- (59b) This is really real bad.
- (59c) *This is real really bad.
- (59d) This is really really bad.

The fact that (59c) is unacceptable proves our point about the varying tightness of semantic relationships in the case of -ly and bare adverbs. In (59a) and (59b), real and bad form a tight semantic unit that can easily be modified, as a whole, by either the adverb of manner really or by the intensifier real. In (59c) however, really and bad have a "looser" type of relationship. The two words work separately, and they cannot be affected by the intensifier real. In example (59d), the two adverbs really are simply repetitive.

Essentially, with bare adverbs there exist different degrees of acceptability of the negation or the question form depending on the tightness of the relationship of the bare adverb and the word to which it is incident. When the relationship is tight as in example (55a) I am flat broke, negation is relatively easy and affects the entire incidence of flat to broke. When the relationship is not as tight, as in (53b) It was real thoughtful of him, the negative sentence or the question seem unnatural. This is probably because the

negation bears on the entire incidence of *real* to *thoughtful* while the notion of "real thoughtful" has not been conceptualized to the same extent as *flat broke*. The relation of tightness resulting from the incidence of an adverb to an adjective may well be a consequence of the earliness or lateness of the incidence. However, this concept remains to be analyzed. On the contrary, with adverbs in -ly, speaker interventions are generally more readily acceptable since the relationship between the -ly adverb and the word to which it is incident is clearly "loose" and the words can be separated in negative or interrogative sentences and elsewhere.

4.6 Intensifiers and Degree Adverbs

4.6.1 Intensifiers

A good number of adverbs can function as intensifiers or as degree adverbs. Degree adverbs indicate various degrees on a scale, low, middle, and high degrees, but not the highest. Intensifiers, as we mentioned in section 4.4.1 in our discussion of yes/no questions, constitute one type of degree adverbs and refer to the highest degree on a scale. The highest degree on a scale represents a very precise and unique position, the ultimate position on that scale.

It is generally believed that bare adverbs as well as -ly adverbs can function as intensifiers, as Schibsbye (1969) points out:

Words such as awfully, exceedingly, far, frightfully, greatly, highly, much, terribly, very, and many more are used as intensive adverbs. Of these, much and very occupy a special position in expressing only a high degree, while each of the rest has associations which confines its usage to the intensification of certain

concepts: deeply interested / highly amusing / dreadfully sorry, so that its use is a semantic question. (Schibsbye 165)

Generally speaking, adverbs function as intensifiers when they are incident to adjectives or to other adverbs. Here are some examples:

- (60) The evening went off very well. (R-C)
- (61) You look much better. (Schibsbye 165)
- (62) [...] and they just were so absolutely disgusted. (LoLund)

Among the two types of adverbs, bare adverbs and -ly adverbs, some bare adverbs form one group of intensifiers. In that group of intensifiers, there are first the bare adverbs that constitute intensifiers by definition, for instance very, much and so used in examples (60) to (62). These adverbs are confined to the role of intensifiers because their high degree of dematerialization does not leave them enough notional content for them to evoke a manner or a subjective judgement. We should mention that the intensifier "par excellence" is the bare adverb very. The etymology of this adverb is quite revealing as to why it is so.

Very finds its origins in the Old French verai, the modern form being vrai, which mean "true." In those days, very was used adjectivally as in the very night, and still is occasionally today. In Middle English, very developed into an adverb when the transition from "real" to "really" and the meaning of high degree emerged (Guimier 1986: 60).

A number of other bare intensifiers also play this role because of their high degree of dematerialization, such as dead in he was dead against it or clean in the knife cut clean through. In fact, one could argue that there is only minimal semantic content left

in such adverbs. This content generally conveys an idea of extreme limit which allows these adverbs to function as intensifiers. Here is an example:

(55a) I am flat broke. (conversation)

In this utterance, the adverb *flat* is highly dematerialized in that only the vaguest notion of *flatness* seems to be apparent in the intensifier. It is this notion that carries the meaning of extreme limit. Indeed, when something is flat, it has reached the extreme limit in the absence of protuberances, anything above the level of the surface; it cannot be any thinner than it already is or else there would not be anything left. That is the limit that the person in example (55a) has reached financially.

These bare intensifiers could be called *grammatical intensifiers*, since it is their reduced lexical content that allows them to be used as intensifiers. The only lexical content that they seem to have is that of extreme limit or intensification which reduces these adverbs to an almost purely grammatical function.

In short, bare intensifiers convey the idea of an extreme limit or the ultimate point on a scale. Bare intensifiers are therefore clearly positional and unequivocal just like the other bare adverbs.

The second group of intensifiers is made up of -ly adverbs. We noticed that the intensifiers in -ly are never as dematerialized as the bare intensifiers. There always seems to be stronger traces of the notional root left in the -ly intensifiers, which, in fact, seem to counter the notion of true grammatical intensification. Here are some examples:

- (63) He is highly pleased. (Schibsbye 155)
- (64) I am fully satisfied. (Schibsbye 154)

The underlying notions of *height* and *fullness*, behind the -ly adverbs *highly* and *fully*, can be a bit more strongly sensed in these adverbs than it is the case for *flat* and *very*. The -ly adverbs *highly* and *fully* are strongly lexically oriented towards an upper limit and their lexical content is still felt to play an active role in their use. In other words, these "intensifiers" play their role by virtue of their current lexical content and not by virtue of their dematerialized state. Because of their lexical content, these -ly adverbs would be more accurately referred to as *lexical intensifiers*, as opposed to *grammatical intensifiers*.

It will also be proposed here that these "intensifiers" (lexical intensifiers) are not true intensifiers according to the definition proposed at the beginning of this section. A true intensifier evokes an ultimate limit, expressing but a minimum quantity of its lexical content. Intensifiers in which the lexical content still plays an active role in the intensification process have not reached this ultimate limit yet. Their lexical content may be almost exploited to the full, but it has not yet been reduced to a pure limit. In short, lexical intensifiers represent a high degree on a scale but not yet the ultimate limit in itself and for itself.

These observations have led us to postulate that the only true intensifiers are bare. Indeed, since -ly high degree adverbs are not as dematerialized as the bare intensifiers, their lexical content includes a greater number of lexical traits, and these traits counter the meaning of intensification and thus restrict these adverbs to the indication of a high position on a scale but not the highest. On the other hand, bare intensifiers, because they are so highly dematerialized, no longer offer a degree among other degrees. They only

offer a single, unequivocal position.

Let us compare the following pair of adverbs:

- (65a) I am deadly serious. (R-C)
- (65b) I am dead serious.

In example (65b), the bare intensifier *dead* is highly dematerialized. Only the notion of an extreme limit remains in the lexical content of the root *death*, *death* being the extreme limit of life. The bare intensifier *dead* is extremely close to "very." On the other hand, in the *-ly* adverb *deadly* of example (65a), we can sense a stronger colouring of the notion of *death* in the intensifier. In addition to the idea of extreme limit, one can also feel an idea of urgency and perhaps even morbidity. It is a life or death matter: that is how serious the person is. The *-ly* adverb would therefore seem to carry more semantic traits than the bare intensifier and cannot be considered a true grammatical intensifier.

In the case of degree adverbs, the presence of the suffix -ly in adverbs with an "intensifying" function is not compatible with a maximum dematerialization of the notional root of the adverb. In the case of lexical intensifiers in -ly, there would seem to exist the possibility of an alternative degree of intensification. It is as if the -ly form provides a comparative type of intensification whereas the bare form provides a superlative. In other words, -ly adverbs of degree can refer to the higher end of a scale, but not to the definite highest position on that scale. Thus, high degree adverbs in -ly are not unequivocally positional as are bare intensifiers. The latter clearly refer to the highest position on a scale, and the -ly adverbs refer to a point on the higher end of the scale which is not quite as specific.

Let us compare another pair of adverbs:

(66a) Is he real sick? (conversation)

(66b) Is he really sick?

The adverb *really* is generally considered an intensifier. The bare adverb *real* is also an intensifier and does not constitute bad use of grammar, nor should it be reduced to a difference in the level of language, as a good number linguists and grammarians argue. In this regard, Quirk et al. (1985) mention, "Whereas *speak clear* is nonstandard, *speak loud and clear* is fully acceptable in standard English" (406). Still, there is a subtle semantic difference between the two adverbs, probably due to the presence of the suffix.

The bare adverb *real*, in (66a), is highly dematerialized; only the extreme limit implied by the idea of "true" or "actual" of the notional root *real* is retained. The bare adverb *real* could be replaced by stressed *very* and example (66a) could be paraphrased by "Is he very sick?" On the other hand, the adverb *really* in (66b), in addition to the idea of "true" or "actual," also carries the notion of "genuine" in its notional root *real*. Thus, when the speaker asks *He is really sick?*, the speaker could in fact be asking, "Is he genuinely sick?" In this case, the speaker would not want to know how sick the person is, as he did in (66a); he would be questioning the very fact that the person is sick.

The bare adverb *real*, a true intensifier, provides a measure of the extent of the sickness. In contrast, the adverb *really* can be used to call into doubt the sickness itself. It requires a subjective judgement in response, not an objective measure of the extent of the sickness.

In short, it seems that only bare adverbs function as true intensifiers, which we

have called *grammatical intensifiers*, in which a minimal quantity of the original lexical matter is retained after dematerialization. Bare intensifiers are used to establish a clear, unequivocal position or quantity, just like the other bare adverbs we have examined thus far. In contrast, -ly adverbs are never as completely dematerialized as their bare counterparts because of the import of -ly. This means that they always have more lexical matter, permitting them to express a 'more or less' way of being and not only the highest degree of an adjective. Because -ly adverbs contain more lexical matter, various degrees of interpretation of their semantic contents could be possible thus such adverbs could only provide an approximation of a position on a scale, not an ultimate one.

These findings actually contradict Guimier (1986) and Greenbaum (1969) insofar as they consider -ly adverbs as intensifiers, as we explained in section 2.4. Guimier claims that it is through a process of dematerialization that a good number of -ly adverbs lose the original meaning of the adjective from which adverbs are derived. The -ly adverbs then become intensifiers. We, on the other hand, claim that -ly adverbs are never dematerialized to the point of carrying only the meaning of an extreme limit because the lexical import of -ly to the little materialized word base implies 'a way of being X'. According to our analysis, there always seems to be an impression of 'manner', even in such quantitative uses which keeps the -ly adverbs from being intensifiers.

4.6.2 Degree Adverbs

Apart from intensifiers, which refer to the highest degree on a scale, there are also

the degree adverbs which indicate various degrees on a scale, low, middle, and high degrees, but not the highest, as mentioned previously. Here are some examples:

- (67) She is part French. (R-C)
- (68) He is partly crazy. (conversation)

There is a major difference between intensifiers and degree adverbs. Intensifiers indicate the ultimate position on a scale, as we mentioned in the previous section. Consequently, speakers use them to push the value of the ideogenic content of the words that intensifiers are incident to the limit. For instance, in example (55a) *I am flat broke*, the speaker wishes to convey the idea that his "brokenness" has reached its nadir and cannot be further extended. In contrast, degree adverbs constitute approximators. By definition, they apply to the various increments leading up to the nec plus ultra, but not to the nec plus ultra itself since it is not an approximation.

Given the arguments put forth thus far, one would expect that only -ly adverbs would be suitable in playing the role of degree adverbs, but an examination of the evidence initially suggests that this is not the case because cases like part/partly can be found.

Let us compare example (67) She is part French, and example (68) He is partly crazy to find out what is going on. Interestingly, these two adverbs are not interchangeable. This would suggest that the presence of the suffix is the sign of a semantic difference.

In (67), the adjective *French* refers to the genetic heritage of an individual, thus to a fixed state. This fixed state is characterized by the bare degree adverb *part*, which

specifies that the person is not totally French but that only a portion of her is. More importantly, the portion that the adverb *part* refers to is necessarily fixed and invariable. In other words, however big or small the part of her that is French is, it will never increase or decrease: a specific and fixed portion of her is and will always be French. Therefore, the adverb *part* qualifies an unequivocal position, as do most bare adverbs in general, since it does not allow for degrees of interpretation of the concept of *French*. Consequently, *part* does not constitute an approximator.

In example (68), the degree adverb *partly* is incident to the adjective *crazy*. *Partly*, like *part*, also indicates that the person is not totally crazy, but that only a portion of him is. However, the difference is that *crazy* is not a fixed feature as *French* is. In fact, the degree adverb *partly* means that the man is sometimes *very crazy*, some other times *a* little crazy, and some other times not crazy at all. This means that the portion of him that is crazy is not fixed and immutable. There are degrees to the craziness introduced by the adverb *partly*, whereas there is only one degree of Frenchness in example (67). Therefore, only *partly* is a true approximator.

When time approximators are involved, the situation is similar, albeit harder to see than in the case of *part* and *partly*. Consider the following examples:

- (69) It is almost midnight. (R-C)
- (70) It is nearly midnight.

A study of the distribution and the expressive effects of *almost* and *nearly* (Lessard et al. 1994) has shown that *almost* is used to evoke a particular point situated as near as possible to the final limit. In contrast, *nearly* is used when any one of two or more

positions leading up to the limit is potentially occupied. In short, the bare form is used to evoke a clear and unequivocal position while the -ly form represents an approximation.

Degree adverbs in -ly, similar to other -ly adverbs, are often associated to processlike events that generally allow for degrees of interpretation. This can be seen in the following examples:

- (71) You could see fairly well from here. (Schibsbye 154)
- (72) You must fight fair. (Schibsbye 153)

There is a clear semantic difference between the -ly form and the bare form of the adverbial pair fair and fairly: the two adverbs are obviously not interchangeable. Indeed, the "fairness" implied in the adverb fair is in the sense of "properly" and "equitably." In fact, the notion of fairness is, in this case, defined by a set of rules—the rules of fighting—which apply in the same manner at each and every instant of a fight. Therefore, the adverb fair describes a very precise way of fighting, the only way authorized. Although it seems to evoke a manner, it does not do so in the same way true manner adverbs do since it excludes all other manners and does not authorize any alternatives. The adverb fairly is more justifiably classified as an adverb of manner or as an approximator. In example (71), it means "reasonably" and plays an approximating role, admitting the possibility of "not very well" as it admits "fairly well".

In short, degree adverbs can refer to low, middle or high portions of a scale, but not to definite absolute positions, which is why they are called approximators. All true degree adverbs (i.e. those which allow for alternative positions or extends) end in -ly.

CHAPTER V

CONCLUSION

5.1 Summary of Findings

Let us summarize our findings. We first noticed that adverbs in -ly are frequently used as adverbs of manner, a meaning that bare adverbs do not seem to have. The use of an adverb of manner presupposes the speaker's ability to imagine more than one way of doing something and to select a single option. Furthermore, adverbs of manner are applied to the process of an event rather than the result. This suggested a connection between the use of -ly and the presence of a subjective evaluation of an event on the part of the speaker.

A study of sentence adverbs revealed that their use requires subjective mental operations of comparison or opposition on the part of the speaker. For -ly sentence adverbs, these operations seem to be of three types and constitute subjective judgement calls in each case. Such operations essentially require a filtering of the information by the speaker and the selection of one possibility from a range of two or more, much as was the case for adverbs of manner. These sentence adverbs could be classified as situational sentence adverbs. In contrast, bare sentence adverbs, or connectors, were found to behave differently. They establish definite, objective links between syntactic elements by indicating unequivocal positions in the argumentation. These connectors are thus

associated with resultative and positional types of event. They could be called *positional* sentence adverbs.

We then examined one-word answers to yes/no questions and information questions. The very nature of yes/no questions calls for definite answers such as the bare adverbs yes, no, and sure. Intensifiers are also used as definite answers to yes/no questions since they refer to the ultimate position on a scale. This very precise position constitutes a definite answer that could be replaced by a yes. When the speaker cannot provide a definite answer to a yes/no question, he can use the bare adverbs maybe and perhaps, which, because of the manner in which they were derived, can never take -ly. More commonly, however, uncertainty in one-word adverbial answers to yes/no questions is conveyed by -ly sentence adverbs. These adverbs have an attenuating effect in comparison to the definite yes and no, offering intermediate rather than polarized positions and conveying a subjective response.

As for one-word answers to information questions, only some types of information questions accept one-word adverbial answers. Information questions with *how*, which call for the description of the "manner" in which something is done, require non-unipositional types of answers generally provided by -ly adverbs of manner. In contrast, the speaker usually has to provide a definite answer when answering information questions with *when* and *where* because these two question words call for the identification of precise, unequivocal positions in time or space. As the subjectivity of the response declines, so do the chances of finding an -ly adverbial response. We noticed that bare adverbs are

mostly used to answer such straightforward information questions. The study of one-word adverbial answers again confirms that -ly adverbs are used to convey the speaker's subjective opinion or uncertainty. In contrast, bare adverbs appear to provide a more objective assessment of a situation.

We next argued that the difference in meaning between the -ly adverbs and bare adverbs could be one of degree of subjective speaker evaluation of an event. The -ly suffix is strongly associated with a subjective treatment of the adverbial base. The suffix would seem to have an attenuating effect on the particularization of the meaning of the notional root of the adverb. For example, surely nice is less certain than sure nice.

The study of the negative form and of the question form also brought out a difference between the bare and the -ly forms of adverbial pairs. Essentially, the negation and the question form transform an event or verb into a potential because the speaker denies or questions the existence of the event. The event becomes virtual. We noticed that in affirmative statements, both -ly adverbs and bare adverbs could easily be used. However, negative sentences and questions generally called for -ly adverbs. This phenomenon could be attributed to the difference in the types of incidences possible with -ly adverbs and bare adverbs. Bare forms would seem to occur when the adverb is incident in an unequivocal, closed manner, while -ly forms occur when the incidence is in any way hypothetical or open to interpretation.

Finally, the study of intensifiers and degree adverbs also added to our findings.

Intensifiers indicate the highest degree on a scale, a very precise position. We have even

gone so far as to conclude that only bare adverbs function as true intensifiers or what we have chosen to call *grammatical intensifiers*. The dematerialization of bare adverbs used as intensifiers has reduced them to a single dominant semantic trait containing the idea of an extreme limit. In this respect, bare intensifiers are highly objective and positional, just like most bare adverbs. They do not allow for or suggest the presence of alternative degrees or manners. In contrast, -ly adverbs never seem to be dematerialized to the point where they include only one dominant semantic trait. Because -ly adverbs contain more than one dominant semantic trait, degrees of interpretation of their semantic contents are possible thus such adverbs provide only an approximation of a position on a scale, not a precise one.

Degree adverbs, in contrast to intensifiers, indicate various degrees on a scale, low, middle, and high degrees, but not the highest. As could be predicted on the basis of previous findings, this field is dominated by -ly forms. In fact, it could be argued that even when bare adverbs appear to be functioning as approximators, as in the case of part and half, they indicate a fixed, albeit partial, quantity and therefore do not really approximate anything.

In short, the suffix -ly is consistently meaningful in the case of English adverbs. At times it is almost indistinguishable from its bare counterpart, but careful research has revealed that the two adverbial forms are not used in the same situations and do not convey the same information.

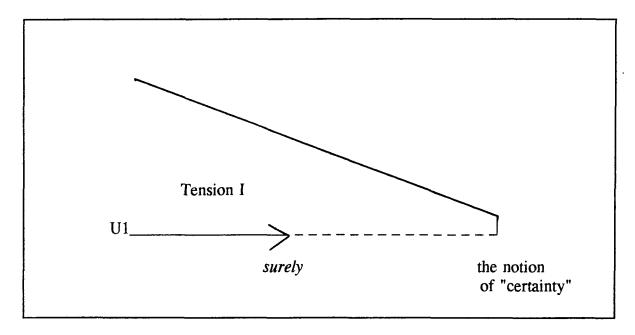
5.2 Our Hypothesis

The following section describes our hypothesis with regard to the phenomenon of the adverbial suffix -ly. Further study of the problem is certainly required. Thus, our hypothesis is tentative.

Our findings have led us to believe that semantic differences exist between -ly adverbs and bare adverbs and that the -ly is therefore consistently meaningful. It would seem that the -ly ending is present only when the value attributed to the adverb is perceived to be subjective and open to change or to an alternative interpretation. For this to occur, it would seem that at least one or more lexical traits of the root must go unused and that an -ly form can never include full lexical particularization. This argument is rather complex and requires further explanation.

Since the selection of the lexical traits occurs during the operation of ideogenesis, and since the only morphological difference between -ly adverbs and bare adverbs is the suffix, there seems to be a distinction in terms of the lexical particularization between the two types of adverbs. We have seen, for example, that *surely* is less "sure" than *sure*, and that *really* is less "real" than *real*. This would suggest that the suffix is the sign of the interruption of ideogenesis. Here is how this could be illustrated with the adverb *surely*:

Fig. 7 Ideogenesis of the -ly Adverb Surely



Here, tension I clearly illustrates how the use of the -ly ending could be the sign of the interruption of the ideogenesis of the -ly adverb surely. Indeed, the -ly adverb of manner surely does not seem to include all of the semantic traits of its notional root 'certainty'. As shown in example (47b) He is surely nice, the ideogenesis of the -ly adverb of manner surely may not have been completed at all.

If this were the case and the operations of ideogenesis of -ly adverbs were shorter than those of their notional roots, the concepts described by -ly adverbs would be more general than those described by their roots, the same way the operation of ideogenesis of the substantive animal is shorter than that of cat, because the substantive animal does not include as many semantic traits as the substantive cat. The process of particularization of -ly adverbs would be shorter and include fewer lexical traits than their notional roots.

Although this is speculative, there is a certain body of evidence to back our claim. For example, -ly occurs when, for one of a number of possible reasons, the exact relationship between the adverb and what it characterizes is left undetermined. Assuming that the adverb, like any word, is a product of an act of mental representation, this would mean that bare adverbs and -ly adverbs are not products of exactly the same process of representation. The question is what representational conditions must exist in each case to produce the differing expressive effects we have observed.

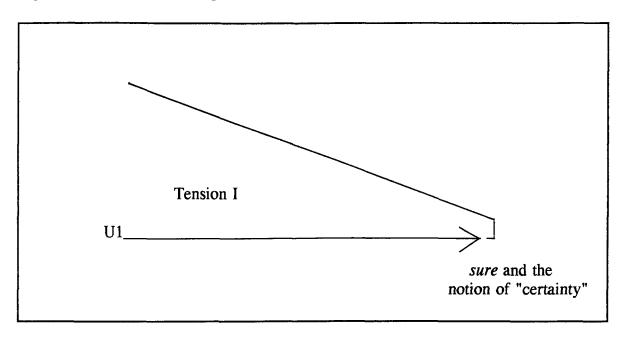
The evidence shows thus far that -ly adverbs seem to include fewer lexical traits of their notional roots than bare adverbs, that -ly adverbs are generally incident to process oriented events, that the use of -ly adverbs implies the selection of one way among others, that -ly adverbs allow for speaker interventions and for alternative interpretations. All of these phenomena could occur if the ideogenesis of -ly adverbs were suspended before the full particularization was achieved³.

On the other hand, and still according to our findings, the operations of ideogenesis of bare adverbs appear to be longer that those of -ly adverbs, since their semantic contents seem to be more particularized. In fact, we suggest that the operations of ideogenesis of bare adverbs are complete, or reach their ends, because bare adverbs

³ Pattee would argue differently and say that -ly does not affect the ideogenesis, but that the action of the suffix is one of virtualization. Such virtualization would allow for the meaning of manner (one way among others) and for speaker intervention. Pattee uses the following analogy to illustrate the action of the suffix: when a verb is in the indicative, the event itself is evoked, the actual, and when a verb in the subjonctive, a virtual event is then evoked, since the event is compared to something that does not exist. "Le suffixe serait alors une façon de saisir la matière notionnelle, en la virtualisant."

essentially include all of the notional characteristics of their roots. For example, the bare adverb *sure*, in example (47a) *He is sure nice*, seems to include all of the semantic traits of its notional root 'certainty'. Here is how this could be illustrated with the tensor:

Fig. 8 Ideogenesis of the Bare Adverb Sure



If the operations of ideogenesis of bare adverbs were to be completed, it would explain why their meaning appears to be so precise and why they refer to clear positions defined by all the characteristics that make up the notional content of their roots.

In short, a bare adverb has a precise meaning because its operation of ideogenesis is apparently completed. It would consequently be defined by the greatest number of characteristics possible which would allow it to represent an unequivocal position. On the contrary, the notional content of an -ly adverb would not be as precise since its operation

of ideogenesis would be interrupted because of the use of the suffix. As a result, only some of the characteristics that could be used to define the notional content of an -ly adverb would actually be used, and the lexical content of an -ly adverb would be more general than that of its bare counterpart. If -ly adverbs indeed included fewer lexical traits than their bare equivalents, this could explain why their notional contents seem to allow for degrees of interpretation; their meaning would simply not be as particular or as precise as those of bare adverbs.

In addition to the apparent semantic difference between -ly adverbs and bare adverbs, a difference that we argue is represented by the suffix, there also seems to be a syntactic difference between the two types of adverbs. In fact, our study of the negative form of sentences and of the question form, section 4.5, was quite revealing in this regard. We argued then that bare adverbs are very frequently tightly bound to the word they are incident to, and that this tight link can sometimes create a semantic unit where the elements could not be separated. In other words, the incidence of many bare adverbs to certain words has been almost institutionalized in tongue. The same is rarely the case for -ly adverbs, however. For example if new born, flat broke and high flying are quite current, ?newly born, *flatly broke and ?highly flying are questionable, if not impossible.

If what Guimier (1986) argues is true and adverbs are incident to another incidence, then it would seem that bare and -ly adverbs are either not incident to the same types of incidence or not incident in the same way. We have noticed that there seem to exist two types of event-subject incidences. Some of these incidences are apparently

"closed" or "fixed," meaning that the event was completed, and that the speaker has to deal with the result of that event. For instance, in example (2a) *The plane flew high above*, *high* can only be arrived at once the plane has reached a particular zenith.

Some other incidences are apparently "open" when the adverb is applied. Consequently, the adverb tells us about a process as opposed to the result of a process as in example (2b) *They were praised highly*. In that example, the event *praise* is over and the end or result of that event is known, but it is not important to the speaker's message. The speaker wants to focus on the process of *praise* as it was happening.

We have also noticed that the type of event-subject incidence seems to influence the type of adverbs that one is allowed to use in the sentence. When the event is still in progress in "open" event-subject incidences, these adverbs allow for subjective evaluations and judgement calls with regard to an event because the notional contents of those adverbs do not seem to include all of the possible semantic traits of their notional roots, as shown earlier in this same section.

In contrast, when the event is over and the result is known, the incidence seems to be "fixed" or "closed," and any adverb used is incident to a static result. Such events are similar to the cases when one answers an information question with *when* or *where*, or when one uses a connector. There is no room for the speaker's subjective interventions in such instances. These situations call for positional and resultative answers. Bare adverbs are generally used to describe such events, because their notional contents include a great number, if not all, of the semantic traits of their notional roots, which makes their

lexical contents more particular than those of adverbs in -ly, thus more suitable for describing positional types of events.

Our findings could help explain why, in some cases, the two adverbs of an adverbial pair are not interchangeable and that, in some others, the two adverbs are interchangeable. More importantly, they show that, contrary to what is written in grammar books, the two forms do introduce a difference in meaning. In short, our findings are quite different from the explanations generally provided by grammarians and linguists. Schibsbye explains that the difference between bare adverbs and -ly adverbs is a question of evolution stages:

A difficult question concerning adverbs is the extent to which the adverbs formed from adjectives have the suffix -ly. A development is taking place in the direction of -ly as the general adverbial ending; most adverbs have reached this final stage, but a number have not yet acquired the suffix, and a group is still at some point of the development, so that some adverbs occur both with and without the suffix. The use of the two forms in this group depends in some cases on semantic distinctions, in others the form without the suffix is now found only in stock expressions. (Schibsbye 151)

Schibsbye's theory is interesting since a good number of the present-day English adverbs which do not have the -ly ending, and are identical in form with the corresponding adjective, such as fast, "are merely survivors of a large class of Old English adverbs in -e, and it is the disappearance of this adverbial termination (in common with all weak final e's of our language) that makes them coincide in form with the adj. from which they are derived" (Rice 489).

However, not all bare adverbs, with a zero ending, actually go back to Middle English as adverbs that lost their -e adverbial ending. According to the Oxford English

Dictionary, right and full, for example, were used as adverbs in their actual bare forms around the year 1000, which is at least 200 years before adverbs started losing the -e ending. In addition, other adverbs appeared in the language in their bare form, during the Modern English period, and acquired the -ly suffix later. For instance, direct was first used as an adverb during the 14th century and acquired the -ly ending during the 15th century, and the earliest adverbial uses of part were recorded in 1513, and those of the suffixed form in 1523, according to Oxford English Dictionary.

Quirk et al. (1985) have a very different explanation for the use of -ly adverbs and bare adverbs. They argue, "in those cases where there is variation (eg. drive slow - slowly, buy cheap - cheaply), the adjective form and a corresponding -ly adverb form can be used interchangeably, with little or no semantic difference, except that some people prefer the adverb form, particularly in formal style" (405). In addition, Quirk et al. (1985) claim that some adverbial pairs, where the two adverbs are interchangeable, could simply be explained through a question of personal preference or level of language: "[...] in nonstandard or very familiar English, the use of the adjective for the adverb form in widespread. eg.: [...] They played real good [...]" (406).

Our findings have led us to believe otherwise. Indeed, the use of a good number of bare adverbs, instead of the -ly form, does introduce a semantic difference, and it is not at all a question of level of language or personal preference. If the bare form is quite frequently used in spoken language, could it be because speakers do not take the time to process two or more possibilities and simply let lexical particularization run its course?

In questions and negative sentences, which require a more complex thinking process, the -ly form is generally used, even in spoken language.

The fact is that the expression *real good* is not bad grammar at all, as a good number of linguists, grammarians, and teachers seem to believe. As we saw with example (66a) *Is he real sick?* and (66b) *Is he really sick?*, the adverb *really* is generally considered an intensifier, and it should not be. The use of the bare adverb *real* is generally called bad grammar, and it should not be either. The bare adverb *real* is the intensifier of the pair and could be replaced by *very*, whereas the *-ly* adverb *really* is simply an adverb of manner that means "genuinely."

5.3 The Meaning of the English Adverbial Suffix -ly

Hundreds of examples later, we have accumulated quite a bit of evidence and we shall attempt a definition of the English adverbial -ly suffix. Even if a good number of linguists, such as Marchand (1969), believe that, unlike a free morpheme, a suffix has no meaning in itself, and that it acquires meaning only when it is attached to the base, we believe that -ly conveys meaning. The phenomenon of adverbial pairs and adjectival pairs, and the fact that in a number of cases the two adverbs of adverbial pairs and the two adjectives of adjectival pairs are not interchangeable, have led us to believe that the -ly suffix has a certain lexical content attached to it.

As Hewson suggests, the -ly suffix probably constitutes a derivational suffix since it derives at least one part of speech from another, and it has an irregular distribution.

We noticed that the addition of the suffix to a base caused not only a change in the grammatical category but also a change in meaning, as Hewson's definition of derivational markers states. This means that the suffix -ly carries some sort of lexical content since its addition to a base apparently modifies the meaning of that base.

However, being "lexical by nature," as Hewson explains, does not mean that -ly adds an extra lexical content to the word base, but more that the suffix is endowed with grammatical meaning. In other words, -ly tells us something about the nature of the genesis of the lexical content of its base.

In fact, we claim that the use of the suffix reflects an interruption in the operation of ideogenesis. It seems that the operation of lexical particularization is halted before it runs its full course in the case of -ly adverbs.

Our study of bare adverbs revealed that those adverbs seem to include a greater number of the semantic traits of their notional roots than their -ly counterparts where no previous dematerialization in tongue had occurred. Since the only morphological difference between bare adverbs and -ly adverbs is the suffix, we linked that reduction of the number of semantic traits and the arrested particularization to the use of the suffix.

Thus, according to our study, the English adverbial suffix -ly would be a derivational suffix that carries grammatical meaning. This grammatical meaning could be defined as an interruption of the operation of particularization of the lexical content of the adverb.

5.4 Remaining Problems

We do not claim to have solved the question of the meaning of the English adverbial suffix -ly, only to have laid down some paths to be further explored. First, -ly adverbs require further investigation to develop a more complete discussion of the notion of 'manner' and of the notion of 'incidence' to see what supports are involved with sentence adverbs and other adverbs. Also a more thorough analysis of the different senses of the base to which the suffix is added or not would also be required. In addition, bare adverbs demand a much more detailed study than the one we have provided. In fact, we have only briefly looked at the latter and have observed only a few distinctive traits that helped us better understand the syntactic and semantic behaviour of -ly adverbs.

For instance, the bare adverbs that are highly dematerialized and are found in set expressions such as *full-ripe*, *flat broke*, *bitter-sweet*, *new-born*, *deep-set*, *tight-fitting*, and many others would be very interesting to look into further. The reasons as to why two words come to be perceived and used as one semantic unit that is so tight that no degrees of interpretation or semantic attenuation are allowed are quite intriguing.

Another point to be explored is raised by the observation that many bare adverbs are semiologically identical to adjectives. Could we then assume that bare adverbs are not only semiologically identical to adjectives but also lexically? In other words, since bare adverbs apparently include all of the possible traits of their notional roots, this could mean that their lexical contents are identical to those of the adjectives. Bolinger (1972) seems to think that this is a possibility. Indeed, he suggests that utterances such as a

terrible hot day include a combination of two adjectives and not a combination of a bare adverb and an adjective (24). This utterance actually means, according to Bolinger, "a hot day that is terrible."

The phenomenon of adjectival pairs could also be quite revealing of the meaning of the -ly suffix in general. We stated in section 1.2 that the suffix -ly could be used not only to derive adverbs but also to create adjectives such as manly, kingly, motherly. Therefore, in addition to adverbial pairs, the English language also presents adjectival pairs. Let us look at some examples:

- (73a) a dead man (R-C)
- (73b) a deadly blow (R-C)
- (74a) a good person (R-C)
- (74b) a goodly heritage (R-C)

In examples (73a) and (74a), it would seem that the lexical content of the bare forms is fully particularized, in that the man is indeed deprived of life, and that the person is virtuous or commendable. In examples (73b) and (74b), however, fewer lexical traits would seem to have been retained. Indeed, the blow is not deprived of life, and the heritage is not virtuous or commendable.

In fact, adjectives in -ly and bare adjectives apparently do not include the same number of notional characteristics or traits. Indeed, the bare adjectives seem to include more of the semantic characteristics of the notional roots than their -ly counterpart. The -ly suffix again seems to be present when there is an attenuation of the lexical content of the adjective.

The study of -ly's sister suffixes such as -like, -y and -ish would also be quite helpful in providing a better definition of -ly. For instance, the suffix -like, which is used to form adjectives and adverbs just like -ly and which apparently "means" the same thing as -ly, first appeared in the language as an adjectival suffix in the 15th century, that is to say later than -ly. It was then endowed with the sense of "similar to" such as in godlike. Its use as an adverbial suffix goes back to the 16th century when it meant "in or after the manner of" as in gentlemanlike. This use is now considered archaic and obsolete according to the Oxford English Dictionary. The two suffixes, -ly and -like, although apparently semantically close have an entirely distinct evolution and distinct distribution.

According to the Oxford English Dictionary, the general sense of the suffix -y is "having the qualities of" or "full of" that which is denoted by the substantive to which it is added. For example, icy means that the object or person has the qualities of ice, or that the thing or person is covered with ice. Since the suffix is mainly adjectival, the study of -y would probably be more revealing with regard -ly adjectival, than to -ly adverbial.

The suffix -ish has more meanings that -y, but it remains mainly adjectival as well. In Old English, the suffix was used to form adjectives from national names such as British, English, etc. Later on, the suffix was added to substantive meaning "of or belonging to a person or thing, of the nature or character of," for example boyish. The suffix was also added to adjectives with the sense of "of the nature of, approaching the

quality of, somewhat," such as in bluish.

Despite the fact that these four suffixes have different origins and have evolved differently, they still have some common semantic traits in the sense of "having the quality of" or "in the manner" that would need to be explored further.

It would also be quite interesting to take a look at the phenomenon of adverbial pairs in other languages where they exist, such as French for example, where utterances such as the following are possible:

- (75a) Frapper fort. (Le Nouveau Petit Robert)
- (75b) Il a été fortement intéressé par votre projet. (Le Nouveau Petit Robert)

What is of note here is that, as in a good number of adverbial pairs in English, the two adverbs are not interchangeable. This means that the presence of the suffix -ment also introduces a semantic difference. The underlying notion of "force" (strength) is present is both adverbs, but to different degrees, and it seems that it is in the -ment adverb that it is less apparent. Thus, would -ment adverbs contain fewer semantic characteristics than their bare counterparts? Does this mean that the French adverbial suffix -ment could be the sign of the interruption of the operation of ideogenesis of -ment adverbs, just as -ly seems to be in -ly adverbs? These constitute grounds for other very interesting studies... but our work is done for now.

BIBLIOGRAPHY

- (* Works cited)
- * Adams, Valerie. An Introduction to Modern English Word-Formation. London: Longman, 1973.
- Algeo, John. "Where do all the New Words Come from?". American Speech vol. 55 (1927): 264-277.
- Bacquet, Paul. L'étymologie anglaise. Paris: Presses Universitaires de France, 1976.
- * Barnhart, Robert K., ed. *The Barnhart Dictionary of Etymology*. London: H.W. Wilson Company, 1988.
- Bartsch, Renate. The Grammar of Adverbials. New York: Noth Holland, 1976.
- * Bauer, Laurie. English Word-Formation. New York: Cambridge University Press, 1983.
- Baugh, Albert C. and Thomas Cable. A History of the English Language. Englewood Cliffs: Prentice-Hall, 1978.
- * Beard, Robert. *The Indo-European Lexicon: A Full Synchronic Theory*. New York: North Holland, 1981.
- Beard, Robert. "Simultaneous Dual Derivation in Word Formation." *Language*. vol.69. n° 4 (1993): 716-741.
- Bellert, Irena. "On Semantic and Distributional Properties of Sentential Adverbs". Linguistic Inquiry vol. 8. 2 (1977): 337-351.
- * Bertrand, Chantal. "Quelques remarques sur les adverbes français en -ment et leur rapport avec les adverbes anglais en -ly". Meta 31 (1986): 179-203.
- Bolinger, Dwight. "The Atomization of Meaning". Language 41 (1965): 555-573.
- * Bolinger, Dwight. Degree Words. The Hague: Mouton, 1972.
- Bolinger, Dwight. "Adjectives in English: Attribution and Predication". *Lingua* 18 (1967): 1-34.

- * Bowers, John S. Adjectives and Adverbs in English. Bloomington: Indiana University Linguistics Club, 1971.
- Bowers, John S. "Adjectives and Adverbs in English". Foundations of Language 13 (1975): 529-562.
- * Campbell, A. Old English Grammar. Oxford: Clarendon Press, 1977.
- Chapin, Paul G. On the Syntax of Word-Derivation in English. Cambridge: Massachusetts Institute of Technology, 1967.
- Chapin, Paul G. "On Affixation in English". *Progress in Linguistics*. Bierwisch, M. and Karl Erich Heidolf, ed. The Hague: Mouton (1970): 51-63.
- * Chuquet, Hélène. "Problèmes soulevés par la traduction de certains 'évaluatifs' de l'anglais vers le français". Travaux linguistiques du CERLICO 3, Les États de l'adverbe. C. Guimier and P. Larcher, eds., Presses universitaires de Rennes 2 (1990): 161-188.
- Coates, Jennifer. "Denominal Adjectives: A Study in Syntactic Relationships Between Modifier and Head". Lingua 27 (1971): 160-169.
- Connors, Kathleen. English Adverb Function: Their Distributions and Relations. Berkeley: University of California, 1973.
- * Cotte, Pierre. "Quelques réflexions sur la place des adverbes en anglais contemporain". Sept études en linguistique anglaise. Saint-Étienne: C.I.E.R.E.C., 1980.
- Crépin, André. Grammaire historique de l'anglais: du XII^e siècle à nos jours. Paris: Presses universitaires de France, 1978.
- Daswani, C.J. "English Manner Adverbials in -ly". Indian Linguistics vol. 31 (1970): 28-40.
- Draps, Jean. Grammaire de l'anglais contemporain. Bruxelles: Didier, Hatier, 1982.
- * Dixon, R. M. W. "Where Have all the Adjectives Gone?". Studies in Language 1. 1 (1977): 19-80.
- * Donner, Morton. "Adverb Form in Middle English". English Studies 72 (1991): 1-11.

- Duffley, Patrick. "À propos de l'adverbe anglais". Langue et Linguistique 16 (1990): 245-251.
- Faubert, A. Analyse morphologique de l'anglais. Montréal: Université de Montréal, 1966.
- * Francis, W. Nelson. *The Structure of American English*. New York: Ronald Press Company, 1958.
- Funk and Wagnalls, ed. *Britannica World Language Dictionary*. Chicago: Encyclopedia Britannica, 1961.
- Garnier, G. Introduction à la lexicologie anglaise. Notes de cours. Université de Caen, 1988.
- Gleason, Henry Allan. Linguistic and English Grammar. New York: Holt, Reinehart and Winston, 1965.
- * Greenbaum, Sidney. Studies in Adverbial Usage. Coral Gables: University of Miami Press, 1969.
- Greenbaum, Sidney. Verb-Intensifier Collocations in English. The Hague: Mouton, 1970.
- Greenbaum, Sidney. "Some Verb-Intensifier Collocations in American and British English". American Speech vol. 49 (1974): 79-88.
- * Guillaume, Gustave. Langage et science du langage. Québec: Presses de l'Université Laval, 1984a).
- Guillaume, Gustave. Foundations for a Science of Language. Amsterdam: John Benjamins Publishing Company, 1984b).
- * Guimier, Claude. "On the Origin of the Suffix -ly". Historical Semantics Historical Word-Formation. Jacek Fisiak. ed. Berlin: Mouton, 1985: 155-170.
- * Guimier, Claude. Syntaxe de l'adverbe anglais. Lille: Presses Universitaires de Lille, 1986.
- Guimier, Claude and G. Garnier. "Syntaxe de l'adjectif en français et en anglais". *Projet contrastif français-anglais*. Cling, M. ed. Contrastes 14-15 (1987): 55-86.

- Guimier, Claude. "Very adjectif en anglais moderne". Organisation du sens. Domaine anglais. Recueil en l'honneur de Jean Lavedrine. Roux, L. ed. Travaux 68 du C.I.E.R.E.C. Université de Saint-Étienne (1990): 185-199.
- * Hewson, John. "Derivation and Inflection in English". Studies in English Grammar. Joly, André and Thomas Fraser. ed. Paris: Éditions Universitaires, 1975: 77-104.
- Hirtle, W.H. "-Ed Adjectives like 'verandahed' and 'Blue-eyed'". JL6 (1969): 19-36.
- * Hirtle, W.H. "La métaphore: une idée regardante?". ALFA 5 (1992): 137-150.
- * Householder, F.W. Jr. A Preliminary Classification of Adverbs in English.

 Bloomington: Indiana Linguistics Club, 1965.
- * Huang, Shuan-Fan. A Study of Adverbs. Paris: Mouton, 1975.
- Hudson, Richard. Word Grammar. Oxford: Basil Blackwell Publisher, 1984.
- Isit, David. Crazic, Menty and Idiotal: An Inquiry into the Use of Suffixes -AL, -IC, -LY and -Y in Modern English. Göteborg: Acta Universitatis Gothoburgensis, 1983.
- Jacobson, Sven. "Adverbial Positions in English". Language 44 (1968): 357-373.
- Jacobson, Sven. "Various Types of Adverbialization". Studies in English Transformational Grammar. Stockholm: Almgvist & Wiksell, 1971: 77-90.
- Joly, I. and W.H. Hirtle, éd. Langage et psychomécanique du langage. Québec: Presses de l'Université Laval, 1980.
- Kastovsky, Dieter. "Word-Formation, Case Grammar, and Denominal Adjectives". Anglia 92 (1974): 1-54.
- Kastovsky, Dieter. "Word-Formation: A Functional View". Folia Linguistica 16 (1982): 181-198.
- * Keyser, Samuel Jay. "Adverbial Positions in English". Language 44 (1968): 357-373.
- * Kjellmer, Göran. "Why *Great: Greatly* but not *Big: *Bigly? -* On the Formation of English Adverbs in -ly". *Studia Linguistica* 38 (1984): 1-19.
- Klein, Ernest. A Comprehensive Etymological Dictionary of the English Language. London: Elsevier Publisher Company, 1967.

- * Kudora, S.-Y. "Some Remarks on English Manner Adverbials". Studies in General and Oriental Linguistics Presented to Shirô Hattori on the Occasion of his Sixtieth Birthday. Jacobson, Roman and Shigeo Kawamoto. ed. Tokyo: TEC Company, 1970: 378-396.
- * Lessard, Nathalie et al. "Nearly and Almost: Almost the Same or Not Nearly the Same". *Dialangue*, 5, (1994): 103-105.
- Lakoff, George. "Instrumental Adverbs and the Concept of Deep Structure". Foundations of Language 4 (1968): 4-29.
- * Lipka, Leonhard. An Outline of English Lexicology: Lexical Structure, Word Semantics, and Word-Formation. Tübingen: Niemeyer, 1990.
- Ljung, Magnus. English Denominal Adjectives: A Generative Study of the Semantics of a Group of High-Frequency Denominal Adjectives in English. Lund: Acta Universitatis Gothoburgensis, 1970.
- * Lowe, Ronald. *Introduction à la psychomécanique du langage*. Québec: Fonds Gustave Guillaume, 1993.
- Marchand, Hans. "On Attributive and Predicative Derived Adjectives and Some Problems Related to the Distinction" *Anglia* 84 (1966): 131-149.
- Marchand, Hans. "Synchronic Analysis and Word-Formation" Cahiers Ferdinand de Saussure. Genève: Librairie Droz, 1967a): 7-18.
- * Marchand, Hans. "Expansion, Transposition and Derivation" La Linguistique vol. 3 (1967b): 13-26.
- * Marchand, Hans. The Categories and Types of Present-Day English Word-Formation. Munich: C.H. Beck, 1969.
- McConnell-Ginet, Sally. "Adverbs and Logical Form: A Linguistically Realistic Theory". Language vol. 58. 1 (1982): 144-184.
- * McCawley, James D. "The Syntax of Some English Adverbs". Papers from the Nineteenth Regional Meeting of the Chicago Linguistic Society vol. 19 (1983): 263-282.
- * McIntosh, Angus. "Old English Adjectives with Derivatives In -lic Partners: Some Semantic Problems". Neuphilologische Mitteilungen 92 (1991): 297-310.

- McKnight, George H. English Words and Their Background. New York: Guardian Press, 1969.
- Moignet, Gérard. L'adverbe dans la locution verbale: étude de psycho-systématique française. Québec: Presses de l'Université Laval, 1961.
- Moignet, Gérard. Systématique de la langue française. Paris: Éditions Klincksieck, 1981.
- Morris, William, ed. *The American Heritage Dictionary of the English Language*. New York: American Heritage Publishing, 1970.
- Newman, Stanley S. "English Suffixation: A Descriptive Approach." Word. vol. 4 (1948): 24-36.
- Nida, Eugene Albert. Morphology: The Descriptive Analysis of Words. Ann Arbor: University of Michigan Press, 1949.
- Nilsen, Don Lee Fred. English Adverbials. The Hague: Mouton, 1972.
- * O'Neal, Cothburg. "Generating the Sentence Adverb". Linguistics 108 (1973): 59-67.
- * Onions, C.T. et al. *The Oxford Dictionary of English Etymology*. Oxford: Clarendon Press, 1966.
- * Oxford English Dictionary. Oxford: Clarendon Press, 1933.
- Platt, John T. and Heidi K. Platt. "Orientation of Manner Adverbials". *Papers in Linguistics* 5 (1972): 227-249.
- * Pyles, Thomas and John Algeo. *The Origins and Development of the English Language*. New York: Harcourt Brace Jovanovich, 1982.
- * Quirk, Randolf et al. A Comprehensive Grammar of the English Language. New York: Longman, 1985.
- Quirk, Randolf and C.L. Wrenn. An Old English Grammar. New York: Holt, Rinehart & Winston, 1957.
- * Rice, Wallace. "Go Slow Proceed Slowly". American Speech vol. 2 (1927): 489-491.
- Roggero, Jacques. "L'expression qualitative de la quantité". Sigma 4 (1979): 109-152.

- * Rush, Susan. "The -ed of English Denominal Adjectives: Lexical or Grammatical Morphology?". Langues et Linguistique n° 22 (1996): 165-176.
- * Schibsbye, Knud. A Modern English Grammar. London: Oxford University Press, 1969.
- Schreiber, Peter A. "Some Constraints on the Formation of English Sentence Adverbs". Linguistic Inquiry 2 (1971): 83-101.
- Schreiber, Peter A. "Two Approaches to English Adverbials". *Lingua* 29 (1972): 347-359.
- Selkirk, Elizabeth O. *The Syntax of Words*. Cambridge: MIT Press, 1982.
- * Siegel, Dorothy. Topics in English Morphology. New York: Garland, 1979.
- Slater, Joseph. "A Renewed Meaning of the Suffix -ly". American Speech. vol. 38 (1963): 301.
- Smith, Michael. "Food Subtractives: Losing -ed and -ly". Word Ways 19 (1986): 74-78.
- Stein, Gabriele, English Word-Formation over Two Centuries: in Honour of Hans Marchand on the Occasion of his Sixty-Fifth Birthday. Tübingen: Druck Becht Co., 1972.
- * Swan, Toril. "The Development of Sentence Adverbs in English". Studia Linguistica 42 (1988): 1-17.
- * Sweet, Henry. English Grammar: Logical and Historical. Oxford: Clarendon Press, 1920.
- * Szymanek, Bogdan. Categories and Categorization in Morphology. Lublin: Catholic University Press, 1988.
- Tallman, C.F. "Slow Slowly". American Speech. vol. 3 (1928): 118.
- Tellier, A. R. "Compte Rendu: The Categories and Types of Present-Day English Word-Formation". Études anglaises. vol. 14 (1961): 357-359.
- Thomason, Richmond H. and Robert C. Stalnaker. "A Semantic Theory of Adverbs". Linguistic Inquiry. vol. IV. 2 (1973): 195-220.

- * Travis, Lisa. "The Syntax of Adverbs". McGill Working Papers in Linguistics. May 1988: 280-310.
- * Urdang, L. Suffixes and other Word-Final Elements of English. Detroit: Gale Research Company, 1982.
- Valin, Roch. Perspectives psychomécaniques sur la syntaxe. Québec: Presses de l'Université Laval, 1981.
- Vendler, Zeno. Adjectives and Nominalizations. The Hague: Mouton, 1968.
- Verschueren, Jef. "Problems of Lexical Semantics". Lingua 53 (1981): 317-351.
- * Webster's New Universal Unabridged Dictionary: Second Edition. Cleveland: William Collins Publishers, 1979.
- Weekley, Ernest. An Etymological Dictionary of Modern English. New York: Dover Publications, 1967.
- Williams, Edwin. "Arguments Structure and Morphology". The Linguistic Review 1 (1980): 81-114.
- Zandvoort, R. W. "Review: The Categories and Types of Present-Day English Word-Formation". *English Studies* 42 (1961): 120-124.
- * Zandvoort, R.W. and J.A. Van Ek. A Handbook of English Grammar. London: Longman, 6° éd., 1972.

ANNEX I

Adverbial Pairs (72 pairs)

Classified according to size (R-C) He acted accordingly (R-C)

He's got it **bad** (R-C) Badly dressed (R-C)

to fly **blind** (R-C) to obey blindly (R-C)

I bought this **cheap**. They have bought cheaply on this trip. (Schibsbye 152)

The sun shone **bright**(ly) (R-C)

to play the game **clean** (Quirk 407) The bullet went clean through his shoulder. (Schibsbye 152)

The prisoner got clear away. (Schibsbye 152) I clearly understood what he said. (Schibsbye 152)

He followed **close** behind. (Schibsbye 152) He resembled his father closely. (Schibsbye 152)

to know something **cold** (R-C) to say coldly (R-C)

The wind was **dead** against us. (Schibsbye 152) The play was deadly dull. (Schibsbye 152)

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This will cost you dear. (Schibsbye 153)
He would dearly love to see his mother again. (Schibsbye 153)
He plunged deep into the ocean. (Pyles 119)
He thought deeply about religious matters. (Pyles 119)
He flew direct to New York. (Schibsbye 153)
The book was suppressed directly when it appeared. (Schibsbye 153)
They sailed due north. (Schibsbye 153)
He was duly punished. (Schibsbye 153)
Go easy! (Schibsbye 153)
The engine was running easily (R-C)
to play fair (R-C)
You could see fairly well from there. (Schibsbye 154)
to play somebody false (Schibsbye 154)
to act falsely (Schibsbye 154)
It works fine. (Ouirk 407)
The parsley was chopped fine(ly). (Quirk 407)
When we first lived there (R-C)
Firstly, the amount [of vitamin C] you get from the sun doesn't count. (LoLund)
I am flat broke.
He is flatly opposed to it. (Quirk 407)
to travel free (R-C)
```

He spends his money freely (R-C)

to look somebody full in the face (Schibsbye 154) I am fully satisfied. (Schibsbye 154)

It rained hard last night. (Schibsbye 154)
I could hardly understand him. (Schibsbye 154)

He's heavy on health foods. (R-C) to rain heavily (R-C)

The plane flew **high** above. (Quirk 407) He is highly pleased. (Schibsbye 155)

inward-looking (R-C)
The house was outwardly clean but inwardly filthy (R-C)

This is jolly awful. (Schibsbye 155) He smiled jollily enough. (Schibsbye 155)

It took me just two hours. (R-C) He was justly pardoned. (Schibsbye 155)

Taking it by and large (Schibsbye 155) It is largely a question of energy. (Schibsbye 155)

She arrived last. (R-C)

Lastly, the speaker decried our organized program of emergency help calling it "Civilian Defense." (B.U.C.)

He arrived late. (Schibsbye 155)
I have not seen him lately. (Schibsbye 155)

to sleep light (R-C) They were lightly armed. (Quirk 407) like enough (R-C) most likely (R-C)

We could hear it **loud** and clear (R-C) He was loudly dressed. (Schibsbye 155)

a dress cut **low** in the back (R-C) He bowed lowly. (Schibsbye 156)

The **most** intelligent boy (R-C) It is mostly water. (R-C)

my dear mother, whom I had **near** forgotten. (Schibsbye 156) He walked nearly ten miles. (Schibsbye 156)

He's **new** out of college. (R-C) a newly married couple (Schibsbye 160)

to work **nights** (R-C) twice nightly (R-C)

outward bound for (R-C) He was outwardly pleased. (R-C)

This one goes **over** and that one under (R-C) He was overly pleased.

She is part French (R-C)
Partly blue, partly green (R-C)

I told him quite **plain** what I thought of him. (R-C) There has plainly been a mistake. (R-C)

It is **pretty** early. (Schibsbye 156) She is prettily dressed. (Schibsbye 156)

previous to leaving he... (R-C) he had previously tried to ...

I want it on May 6th **prompt**. (R-C) He arrived promptly at 3. (R-C)

to be tangled up good and **proper** (Quirk 406) He was not properly dressed. (Quirk 406)

Come as **quick** as you can. (Schibsbye 156) The police were quickly on the spot. (R-C)

Ready-cooked (R-C) readily available

We had a real good laugh (R-C) I don't really know what to think (R-C)

The **Right** honourable (Schibsbye 156) He rightly refused to answer. (Schibsbye 156)

to sleep **rough** (R-C) The table is very roughly made. (R-C)

He could **scarce** climb to the platform. (Schibsbye 157) It scarcely touched him (R-C)

to be bought up short and **sharp** (Quirk 406) She turned the car sharply. (Quirk 407)

The enemy fired **short**. (Schibsbye 157) He left shortly after. (R-C)

To be sound asleep (R-C) he was soundly defeated (R-C)

He can sure play the piano (R-C) That's surely not true (R-C)

to be **sickly** sweet (R-C)
Jeremy sat in misery of embarrassment, sicklily smiling. (Schibsbye 151)

When he saw that the case demanded it, he could go slow... (Schibsbye 158) The animals came slowly towards the gate. (Schibsbye 158)

He slept **sound** while I lay awake fretting. (Schibsbye 158) I beat him soundly. (Schibsbye 158)

to lose fair and **square** (Quirk 406) squarely in the middle (R-C)

to be **stark** raving mad (R-C) starkly clear (R-C)

to go **steady** with someone (R-C) to stand steadily (R-C)

The smoke rises straight upwards. (Schibsbye 158)
The rusted iron that led so straightly upwards. (Schibsbye 158)

to be going **strong** (R-C)
It smells strongly of onions (R-C)

to smell sweet (R-C)
The most sweetly mannered gentleman alive (Schibsbye 160)

The trunks of beeches were coated **thick** with snow. (Schibsbye 158) The furniture was thickly covered with dust. (Schibsbye 158)

screw the nut tight (R-C) tightly screwed

to breed **true** (R-C) He spoke truly. (Schibsbye 158)

going **upward** upwardly mobile (R-C)

The door was wide open. (Quirk 407) He seems to be widely known here. (Quirk 407)

All his plans went **wrong**. (Schibsbye 158) You have been wrongly informed. (Schibsbye 159)