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Contents

Letter from the Editors:

What do you say? This is only the third issue of VIEWS, and the journal is already turning into what it was designed to be: "a journal in which work in progress could be presented and reacted to and which would invite and provoke direct and informal replies to the contributions"[VIEWS 1(1)]. Thus, you will find that Christiane Dalton-Puffer's article on Middle English derived verbs has indeed started something that looks like a real dialogue. It's almost too good to be true. So far, the discussion involves Roger Lass, Christiane Dalton-Puffer and Nikolaus Ritt. Members of the editorial team have, of course, the advantage of being able to react to things which appear

in the same issue, but the next issue of VIEWS may easily contain your contribution to questions of Middle English word-formation. Or do you find other topics more tempting? Do you agree, for example, with Professor Penzl's view concerning the way in which Karl Luick's theoretical vein was laid bare in VIEWS 1(2)? If you are into syntax, you might have something to say about Gunther Kaltenböck's paper on IT-clefts and if you are one of the many who have tried to make sense of the phonetic features tense/lax, Ádám Nádasdy's article might take you further. Whatever your VIEWS, share them with us and we'll see to it that they are reacted to - and this includes both non-specialist and non-Viennese VIEWS.

This brings us to a second point. Although the V in VIEWS stands for Vienna, we do of course welcome non-Viennese contributions as well. Thus, witness the articles by Roger Lass (Capetown) and Ádám Nádasdy (Budapest) in this volume. Vienna, we feel, is not a geographical location but, as the saying goes, rather a state of mind. And you might find you are more of a Viennese than you know.

Finally some technical matters. Thanks to all who have returned their subscription reply cards and even more thanks to those who have included some payment. Unfortunately, we have reason to assume that not all cards arrived on our desks - so do not be surprised if you find another card enclosed with your present issue of VIEWS.

The Editors

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Letter to the Editors:

re: N. Ritt: "Luick, the theoretician". VIEWS 1(2)

*Als **L u i c k** schüler kenne ich seine Einstellung sehr gut: Gott sei Dank war er aber kein 'theoretician'. Der Artikel bestätigt nur, was man von ihm als strukturalistischem 'Junggrammatiker' weiß. Nach Ritts Kritik zeigte Luick in dem besprochenen Fall zu viel (zweifelhaftes) **L a u t g e s e t z** und zu wenig **A n a l o g i e**. Die meisten modernen Kritiker, auch die Generativisten, wollen eigentlich nur Lautgesetz in Formeln, aber bringen selbst gerne auch die Analogie in die Lautregel, weil für sie kein Unterschied zwischen analogischem und lautgesetzlichem Wandel in ihrer **T h e o r i e** besteht.*

Wenn man nach Schwächen bei Luick zu seiner 'Entgötterung' sucht, kann man sie in seiner im allgemeinen wirklich großartigen phonologischen Historiographie schon finden: er nahm das graphische historische Beweismaterial zu 'wörtlich', also z.B. <eo> war [Eo] und dergleichen. Ist das vielleicht auch Sprachtheorie?

Herbert Penzl, *University of California, Berkeley*

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Note to contibutors:

We would like your contributions to reach us on disks (or via e-mail) in any standard IBM compatible word processing format (MS Word, Word for Windows, Wordperfect [for Windows], Word Star, R.T.F., ASCII ...) together with a printout showing character format, special symbols, formulae, tables etc. If you find it helpful to refer to a style sheet, we suggest that of the MLA.

A brief discussion of it-*clefts in spoken English*

Gunther Kaltenböck

0. Introduction

The term 'cleft' (originally due to Otto Jespersen[1]), or by derivation the more recent term 'pseudo-cleft', comes from the idea that a 'more basic' sentence 'splits' into two parts in order that one of them may be highlighted. Much of the work on clefting conducted within the transformational framework is concerned with the relation between these 'ordinary' cleft sentences (sometimes called *it*-clefts) and pseudo-cleft sentences (sometimes called WH-clefts).

In this paper, however, I will leave aside the question of transformational derivation since it seems that the phenomenon of clefting (or cleaving) can only be fully understood if a cleft sentence is analysed in the context of the surrounding discourse. More precisely, I will look at *it*-cleft constructions from the viewpoint of constructing a message. I am particularly interested here in the use of *it*-clefts as focus-constructions and how their information structure affects - or interrelates with - syntax and prosody.

In the following section I will briefly look at the general notion of focus and try to establish an operational framework for our investigation. Sections two and three give a short delineation of the *it*-cleft sentence and discuss the various types of *it*-clefts. In the remainder of this paper I am then concerned with a detailed analysis of the corpus of *it*-clefts, with special emphasis on syntax and prosody.

1. The Theoretical Framework

1.1. Old and New Information

The general notion of given versus new information (sometimes also referred to as old-new, known-new) has been invoked particularly in the explication of cleft sentences and it seems that the given-new distinction is indeed a vital factor for a good understanding of how clefts function. Unfortunately, this area is characterized by great terminological confusion.

For our present purpose, I will adopt the notion of recoverability and follow Geluykens (1988: 825), who defines recoverable information as "information which is derivable from the discourse record, that is, from the context (either directly or via inferences)". Irrecoverable information - not

surprisingly - is not thus derivable. The notion of 'context', of course, has to be understood as referring to linguistic as well as extralinguistic context.

In this theoretical framework then, irrecoverable information can be regarded as more focal than recoverable information, as it is communicatively more salient. The advantage of such a model is clearly the absence of the somewhat vague notion of 'consciousness'(cf. Prince 1978; Chafe 1976). It depends exclusively on the presence or absence of an element in the context and not on speaker assumptions, which makes it more 'operational'. It has to be pointed out, however, that the distinction between 'recoverable' and 'irrecoverable' is by no means a matter of either-or but rather a question of degree and gradience. Some items are clearly more recoverable than others depending on whether they can be derived directly from the immediate context or indirectly, via inferences or general characteristics of the speech situation.

1.2. Contrastiveness

The notion of recoverability is clearly not the only one required for an adequate definition of focus. Another factor which appears to be relevant to focusing is 'contrastiveness'. According to Taglicht (1984: 46) contrastive means "presented as one of a pair of opposites". The question that inevitably arises is whether notions such as 'new' and 'contrastive' are on the same level, i.e. directly related, or whether they are mutually independent.

Bolinger (1961: 87) seems to suggest that they are very similar. For him, every piece of new information is to some extent contrastive. Far-fetched as this proposal might seem, it reminds us of the necessity to recognize various degrees of contrast, with intermediate stages between contrastive and non-contrastive. However, Bolinger's statement seems to be mainly motivated by the fact that there is no way of telling the difference between 'contrastive accent' and 'normal accent' signalling new information. In other words, contrastive accent is not phonetically definable: "It is the same as other highlighting by means of pitch accent, though it leans to the extreme end of the scale" (Bolinger 1961: 96).

It seems that new and contrastive information do not differ with regard to suprasegmental realization. From a practical point of view, however, they appear to be fairly distinct concepts, as is indicated by Chafe (1976: 35): "The distinction between given and new, which applies in noncontrastive sentences, has little relevance to contrastive sentences [...] the focus of contrast may be given or new". Put differently, both new and given items may be contrastive or non-contrastive. The idea of contrastiveness is therefore more or less independent from the notion of givenness. In terms of our adopted concept of recoverability we may say that items can be both irrecoverable and contrastive or recoverable and contrastive.

Therefore, it seems necessary for an adequate definition of focus to incorporate the notion of contrastiveness as well as the notion of recoverability, since both impose a degree of saliency or highlighting on an element. This is precisely what Geluykens (1988: 826) has in mind when he defines focal information as "information which is highly irrecoverable, or which is contrastive" and nonfocal information as "information which is noncontrastive and highly recoverable". This is, admittedly, a rather simplistic definition of a highly complex concept which involves certainly more than just two factors. Nevertheless, for all its simplicity or rather because of it, it seems to be a very practical and 'operational' one.

1.3. Focusing Devices

1.3.1. Intonation Focus

It is commonly accepted that one of the functions of intonation in English is to divide a discourse into 'information units' (or 'tone units') and to structure these units by singling out a focal part within each one. The principal means of indicating the focus within an intonation-group is nucleus placement (tonicity).

According to Halliday (1967: 204), pitch prominence is always associated with new (irrecoverable) information. This, however, does not seem to be entirely true. Although it is most commonly irrecoverable information that constitutes the focal part of an intonation-group, it would be a misleading oversimplification to equate the nucleus - or more generally pitch prominence - with irrecoverable material. As Cruttenden (1986: 91) points out "there are some occasions when we may wish to focus on a particular piece of information even though it is old [recoverable]". This applies particularly to cases of nucleus placement which are described as 'contrastive'.

1.3.2. Structural Focus

There are two general principles affecting word order in English. One of them, the so-called 'End-Focus Principle' (cf. Quirk et al 1985: 18.9; Vande Kopple 1986), is related to the tendency of recoverable information to precede irrecoverable information (old-before-new principle). The focus, in other words, tends to come towards the end of the sentence or information unit. This has indeed some psychological plausibility because the preceding recoverable information facilitates the processing of the irrecoverable information which follows. It also combines very well with the tendency in English to put the nucleus toward the right of the clause.

Closely related to the End-Focus Principle is the Principle of 'End Weight' (cf. Quirk et al 1985: 18.9), which stipulates that longer, 'heavier' structures tend to come in sentence final position. This is hardly surprising since

irrecoverable information (which usually comes at the end) often needs to be stated more fully.

Syntactic focusing devices such as clefting are not only closely linked to the above mentioned general principles but also to prosodic focus markers, notably nucleus placement. It will therefore be interesting to take a closer look at how prosody and syntax interact in the case of the *it*-cleft construction.

2. The Structure of an *it*-Cleft Sentence

Corresponding to the 'simple' or 'non-clefted' sentence (1a), there are in English sentences of the type (1b) and (1c):

(1)

(a) Annie gave him a record.
(b) What Annie gave him was a record.
(c) It was a record that Annie gave him.

(1b) and (1c) represent constructions which are commonly referred to as 'pseudo-clefts'[2] and 'clefts' respectively. However, following Prince (1978) I will adopt the more transparent terms 'WH-clefts' and '*it*-clefts' and use the term 'cleft sentence' more generally to refer to both constructions together.

The *it*-cleft construction then consists of two parts, a superordinate clause and a subordinate clause, or, more precisely, a relative clause[3]; the general effect is to give added prominence to the former. In fact, it has long been recognized that the *it*-cleft construction serves to focus the element(s) in postcopular position. To avoid confusion with the general term 'focus' as mentioned in section one I will resort here to a more neutral terminology and speak of a 'highlighted element' and a 'clause', which can be introduced by a 'relative element'[4]. This leaves us with the following structure:

(4)

<*it*> <*to be*> <highlighted el.> (<rel. el>) <clause>

3. Types of *it*-Clefts

In her discussion of cleft sentences Prince (1978) concludes that *it*-clefts should be divided into two subclasses: the 'stressed-focus *it*-clefts' and the 'informative-presupposition *it*-clefts'. This splitting up of the class of *it*-clefts into subgroups with characteristics of their own no doubt represents a major achievement. According to Declerck (1984), however, this is still not the end of the story. He goes one step further and distinguishes between two different types of informative-presupposition clefts. We are thus left with three types of *it*-clefts, whose characteristics will be briefly summarized below:

A. Contrastive Clefts:

As already pointed out by Prince (1978) this type has a focus (or highlighted element) which is new and heavily stressed. The WH/*that*-clause, on the other hand, is only weakly stressed and contains information that is 'given' in the sense that "the WH/*that*-clause pursues the thematic line of the stretch of discourse in which it is couched" (Declerck 1984: 264). In other words, the clause represents a 'continuous topic', one which - in our terms - is 'recoverable' from the preceding context. This is precisely why a contrastive cleft cannot function as a discourse opener. The highlighted NP, because it is heavily stressed, is not only strongly contrastive but also likely to be an 'important topic'.

B. Unstressed-Anaphoric-Focus Clefts (=UAF-clefts):

Unlike the previous type, the UAF-cleft has a WH/*that*-clause conveying information which is new. The focus NP (or highlighted NP), on the other hand, is anaphoric and therefore a continuous topic (in terms of the preceding context). Since the highlighted element is anaphoric and continuous, this type of cleft cannot occur at the beginning of a stretch of discourse. It needs a preceding context containing the antecedent of the anaphor. As the name already suggests, the highlighted NP is unstressed, which is perfectly in line with the fact that it is anaphoric and not strongly contrastive. The WH/*that*-clause is normally (vs. weakly) stressed.

C. Discontinuous Clefts:

In discontinuous clefts both highlighted element and relative clause are new. Consequently, both constituents receive at least normal stress and this type of *it*-cleft can easily be used as a discourse opener.

Thus, the main difference between the three types is that contrastive *it*-clefts consist of an 'old' relative clause and a (possibly continuous) highlighted element representing new information, whereas UAF-*it*-clefts have a 'new' relative clause and a weakly stressed continuous highlighted element; discontinuous *it*-clefts involve a relative clause and a highlighted element that are both new and discontinuous.

4. The Corpus

For my empirical analysis of *it*-clefts in English spoken discourse I have made use of the computerized 'Survey of English Usage' at University College London[5]. More precisely, I consulted the spoken texts S.1. to S.6., which makes a total of 64 texts, each being a continuous stretch of approximately 5.000 words, recorded sometime between 1953 and 1987. The corpus thus

consists of a wide range of both surreptitiously and non-surreptitiously recorded conversation between equals / intimates as well as disparates.

Since an analysis of all *it*-cleft sentences in the corpus would have gone beyond the scope of my investigation, I had to limit myself to the discussion of one particular kind, namely the *it*-cleft construction with the contraction *it's* as its initial element rather than, for example, clefts beginning with *it is* or *it was*. This seemed reasonable since I am interested in naturally occurring discourse and this type of *it*-cleft is, no doubt, the one that is most frequent in spontaneous speech. I thus arrived at a 'mini corpus' of 50 *it*-cleft constructions, 7 of which are incomplete, ie. have no overt clause.

5. *It*-Clefts in Discourse

5.1. The Highlighted Element

5.1.1. Category

It has been pointed out (cf. Prince 1978) that there are severe restrictions on the types of constituents that can occur as highlighted element in an *it*-cleft. According to Prince (1978: 884), the categories that can be highlighted in an *it*-cleft are NPs, ADVs and PPs. Quirk et al (1985: 18.28), on the other hand, mention the fact that, unlike an ordinary postmodifying relative clause, the relative clause of an *it*-cleft sentence can have as its antecedent (i.e. the highlighted element) "not only an element realized by a noun phrase, but an adjunct realized by a clause or prepositional phrase".

From our corpus we get the following results:

(1)

	contrastive	**UAF**	**discontinuous**
NP	35	7	1
PP	-	4	-
Clause	2	-	-
ADVP	1	-	-
(total)	38	11	1

It seems that the noun phrase is the favourite category in highlighted position in all types of *it*-clefts.

As pointed out by Prince (1978: 885), one of the differences between WH- and *it*-clefts is the fact that the former construction can focus only an inanimate NP whereas the latter can focus both an animate and an inanimate NP. In our corpus, however, we find that the *it*-cleft construction does not

really take advantage of its alleged 'flexibility' in this respect since the great majority of our NPs (namely 31 instances, 72%) are inanimate.

The small number of PPs in highlighted position (4 instances) is obviously due to the fact that the preposition is often deferred ('stranded') to the end of the relative clause, leaving only an NP as the highlighted element (5 instances out of 43), eg.:

(2)

It's the academic structure of the university that we're concerned about. (S.1.2.1336)

(3)

It's Marks and Sparks you're going to work for. (S.2.12.1004)

Thus, instead of highlighting the whole PP (eg. *for Marks and Sparks*), the speaker apparently prefers to focus only the NP (*Marks and Sparks*). Stranded prepositions are characteristic of informal speech. Moreover, keeping the number of elements in focal position restricted seems to make the highlighting more effective.

5.1.2. Syntactic Function[6]

Quirk et al (1985: 18.27) emphasize the 'flexible character' of cleft sentences which "can be seen in the ease with which different parts can be highlighted". They point out that the highlighted element can have the function of subject, direct object, adverbial of time and position and, marginally, the function of indirect object and object complement. In our corpus we only find instances of the first three:

(4)

	contrastive	**UAF**	**discontinuous**
Subject	21	5	-
(dir.) Obj.	7	2	-
Adverbial	3	4	1
(total)	38[7]	11	1

Thus, there is an overall high frequency of subjects in highlighted position. Contrastive clefts, however, tend to have a much higher frequency of subjects than UAF-clefts.

For a possible explanation of this discrepancy between contrastive *it*-clefts and UAF-*it*-clefts we have to compare the subject position in the *it*-cleft construction with its non-cleft counterpart[8]: eg.

(5)
It is **Annie** who did it.

(6)
Annie did it.

Whereas both examples adhere to the basic SVO pattern, the subject in (5) is put in noninitial, i.e. marked position. This may be due to the fact that only old (recoverable) elements normally occur towards the left of an information unit (cf. 'old'- before-'new' principle). Thus, if the subject is new, a speaker might be tempted to shift it to the right by 'cleaving' in order to conform to the pattern of new information coming late in the sentence. It is therefore not really surprising that contrastive *it*-clefts, which, of course, contain a 'new' highlighted element, show such a high percentage of subjects in highlighted position. Moreover, a sentence like (6) would have a nucleus on the initial element which is, however, highly unusual. English clearly prefers to put the nucleus as far right as possible. In the case of an unclefted sentence where the subject is old (recoverable), on the other hand, the temptation to use clefting as a means of moving the subject to the right might be less strong. This would then explain the relatively small number of subjects in the highlighted position of UAF-*it*-clefts, whose highlighted element - as we know - conveys old information. As for discontinuous *it*-clefts (we only have one in our data), we can only speculate that the percentage of subjects in highlighted position is higher than in UAF-clefts, although perhaps not as high as in contrastive clefts, since both highlighted element and relative clause are new.

5.2. The Relative Element

According to Quirk et al (1985: 18.28) the second clause in a cleft sentence (here referred to as 'relative clause' or simply 'clause') is similar to a restricted relative clause with both types being introduced by the same pronouns (*who*, *that*, 'zero' pronoun). It is pointed out, however, that there are differences from relative clauses in that the *wh*-forms are rare in cleft sentences in comparison with *that* and 'zero'. This is confirmed by the data from our corpus (see (7) below), which yields 14 *wh*-forms (32%), but 30 instances of *that* and 'zero' (68%). Thus, the non-*wh* class constitutes a clear majority. With a percentage of 32, however, the number of *wh*-forms is still quite substantial - especially compared to the relatively low frequency of 'zero' pronouns (only 6 instances).

(7)

	contrastive	UAF	discontinuous
that	16	7	1
which	7	-	-
ø	3	3	-
who	4	1	-
where	1	-	-

Almost all instances of *wh*-relative elements occur in contrastive clefts and only one (*who*) in an UAF-cleft. The reason for this might be related to the difference in the stress-pattern between the two types. It has been pointed out (cf. eg. Quirk et al 1985: 18.28) that a cleft sentence is distinguished intonationally from an ordinary postmodifying relative clause construction in that the former takes stress on the highlighted element whereas the latter does not. In the case of the UAF-cleft this cue for distinction is usually absent or rather weak. Therefore, in order to prevent confusion with a postmodifying relative, a speaker might be tempted to choose *that* rather than a *wh*-pronoun since the latter seems to be more closely associated with postmodifying relatives than *that*.

The main reason for the high frequency of *that*, no doubt, is its semantic 'flexibility'. Whereas *who*, for example, requires a human antecedent, the antecedent of *that* can be both human (3 instances) and non-human (20 instances). An example of 'human' *that* in the corpus would be:

(8)

It's us that lifted it from them (S.2.5.625)

Interestingly, all three instances of 'human' *that* come from UAF-clefts. This preference for *that* rather than *who* (a possible alternative) might be seen as evidence for the admittedly rather tentative explanation given above.

5.3. Length of Highlighted Element and Clause

Prince (1978: 886ff) found that there is a considerable difference between WH-clefts and *it*-clefts with regard to the length of, what we term, the highlighted element and the clause: in WH-clefts the clause has about one third of the average length of the highlighted string. By contrast, the relative clause in *it*-clefts is nearly twice as long as the highlighted string. What Prince did not, however, investigate are possible differences in the length of the highlighted element (or rather 'highlighted string') and the clause between the different types of *it*-clefts. This is what I am trying to do here. The results are given in (9) below:

(9)

	highlighted element (words)	clause (words)	
contrastive cleft	4,8	4,3	-
UAF-cleft	-	3,5	5,2
discontinuous cleft	3	5	-

The figures under 'highlighted element' give the average number of words in the constituent following the copula (in our case: contracted *is*) and the figures under 'clause' refer to the number of words following the relative element (i.e. *that*, ø, *wh*-word).

From these figures we can see that there seems to be a clear distinction between what Prince (1978) calls stressed-focus *it*-cleft (contrastive cleft) and informative-presupposition *it*-clefts (=UAF-clefts and discontinuous clefts). Whereas the former type has a highlighted element which is slightly longer than the clause, the reverse pattern is true for the latter: informative-presupposition clefts tend to have a longer clause and a shorter highlighted element (or string).

This result, however, is not really unexpected if we recall the difference in information status between these two types of *it*-clefts: stressed-focus clefts (=contrastive clefts) have a heavily stressed, 'new' highlighted element and a clause which is 'old'; UAF-clefts, on the other hand, have a highlighted element which is 'old' and a clause which is 'new'. Thus, it seems only natural to use as few words as possible to refer to old information, information that is already known, and to present new material in greater detail. In other words, it is to be expected that new or irrecoverable information, i.e. material which is communicatively more important (has a higher degree of communicative dynamism), is stated more fully and is therefore longer than old information.

Incidentally, the results for the UAF-cleft seem to confirm Prince's (1978: 899) assumption that the informative-presupposition type generally has "a short and anophoric focus". It is therefore not surprising that all highlighted elements realized by clauses in our corpus belong to the stressed-focus (contrastive) type and not to the informative-presupposition type.

If it is true that new information is usually stated more fully, why is it - one might ask - that in the case of contrastive *it*-clefts the highlighted element is still relatively short in absolute terms and hardly any longer than the clause? Geluykens (1988) has the following explanation. He points out that contrastive clefts run counter to the principle of old before new information. As a consequence, "they are more difficult to process. The speaker therefore restricts the amount of irrecoverable information to facilitate comprehension" (Geluykens 1988: 830). Secondly, as suggested by the name, contrastive clefts

normally have a contrastive highlighted element, which means that only one single piece of information, which is usually quite short, is put in highlighted position. Thus, unlike UAF-*it*-clefts which preserve the old-before-new order, contrastive *it*-clefts run counter to this general principle. This aberrant order together with the contrastiveness of the highlighted element is responsible for a 'relatively' short highlighted string. Nevertheless, there are instances of contrastive *it*-clefts in our corpus which seem to be completely unaffected by these interfering factors and contain highlighted elements that are up to 17 words long, such as:

(10)

It's the graduation of Ablauts of the ending and the nature of the consonant immediately before the ending which cause the most trouble. (S.2.11.1591)

Considering that (10) is an example of spontaneous spoken language, the length of the highlighted element is even more surprising since one might expect difficulties in processing such an amount of completely new information at the beginning. However, it seems necessary to point out that the new information is by no means the very first element of the sentence but is introduced by the sequence *it is* (or rather: *it's*). In fact, the semantically empty[9] element *it* together with the copula seems to be a means for preventing new information to occur in initial position by shifting it slightly to the right. In other words, *it+is* provides a kind of 'empty filler' which gives the listener and, indeed, the speaker some 'breathing space' and makes the sentence easier to process.

Moreover, there are cases where the clause of a contrastive (stressed-focus) type carries such a low degree of Communicative Dynamism that it is not really necessary for the understanding or correct processing of the new information and is therefore omitted. This then resolves the 'problem' of new information preceding old information altogether since there is simply no old material left in the construction. There are 7 of these incomplete *it*-clefts in our corpus, all of which are contrastive (stressed-focus) *it*-clefts. This is, of course, not surprising since the clause of an informative-presupposition (=UAF) *it*-cleft presents new information and is therefore communicatively highly relevant (i.e. carries a high degree of Communicative Dynamism). In all 7 instances in our corpus the deleted clause is completely recoverable from the immediately preceding context. In most cases, the relevant clause of the *it*-cleft construction has obviously been omitted because it would have involved a verbatim repetition of the preceding sentence or parts of it, as can be seen in (11), (12) and (13):

(11)

A: It's not the staff who are making a very poor business.
B: No, no. **It's the students by and large** (S.3.3.1154)

(12)

A: Yes it's not the ideologists you want to convince
B: (?m)
A: **It's the people with money** (S.2.1.870/1)

(13)

When does she retire? **It's not this year**, is it? (S.6.2.91)

Whereas in (11) and (12) the clause is made superfluous by the preceding *it*-cleft, the clause in (13) is anticipated in the question which makes the full construction *It's not this year that she retires?* unnecessary. Interestingly enough, the missing clause can also be recoverable from the immediately following context, as in:

(14)

It's probably not just him but a lot of people have been messed up. (S.2.7.296)

5.4. Prosody[10]

5.4.1. Tonality

The question of tonality, i.e. the division of *it*-cleft constructions into intonation-groups[11], seems to have been largely ignored in the literature. This is rather surprising since the division into intonation-groups has an immediate bearing on the stress-pattern of an utterance. More particularly, tonality is associated with the distribution of the nuclear accent(s) as "[e]ach intonation-group has by definition one nucleus" (Cruttenden 1986: 80). I am, of course, particularly interested in whether there are any significant tonality differences between the individual types of *it*-clefts. The table in (15) breaks down the *it*-clefts into the number of intonation-groups:

(15)

nr of intonation groups	**contrastive**	**UAF**	**discontinuous**	**(total)**
1	8	9	-	17
2	14	-	-	14
3	5	2	1	8
4	2	-	-	2
5	1	-	-	1
6	1	-	-	1
(total)	31	11	1	

Although *it*-clefts typically seem to consist of 1 or 2 intonation-groups (together they make 72% of the corpus), we have found *it*-clefts with up to 6 intonation-groups, as in:

(16)

/It's very MUCH the# /APPLICATION# or the CRITICISM# /OF# the/very techniques THEMSELVES# /which is the IMPORTANT 'thing# (S.3.3.1256)

The figures in (15) include boundaries between highlighted element and clause as well as within the clause and highlighted element. What I am especially interested in is whether there is an intonation-group boundary separating the highlighted element from the relative clause. In the following table, I only take this type of boundary into account:

(17) Boundary between <HE> and <CL>

	contrastive	**UAF**	**discontinuous**
Boundary:<HE>#<CL>	22	-	1
No Boundary:<HE-CL>	9	11	-
(total)	31	11	1

Thus, we can see that in the case of contrastive clefts there is a clear tendency towards dividing the cleft construction into a separate highlighted element and a separate relative clause. In 22 cases (71%) there is an intonation-group boundary between the two constituents. In 9 instances there is no such boundary and it will be interesting to find out where the nucleus falls in these cases (cf. 5.4.2). UAF-clefts, in contrast, have no boundary between the highlighted string and the clause. In other words, the highlighted element does not have a separate intonation-group and consequently contains no nucleus. This is not really surprising since the highlighted element in UAF-clefts represents given information and is - according to Declerck (1984) - only weakly stressed.

5.4.2. Tonicity

The importance of intonation-groups as discussed above becomes even more obvious if we go one step further and look at the distribution of accent in *it*-cleft constructions, in particular at the location of the nucleus. As was mentioned before, the number of nuclear accents within an *it*-cleft depends on the number of intonation-groups as each intonation-group has *per definitionem* one and only one nucleus. The nuclear accent is, of course, characterized by stress and pitch prominence and has a major focusing function. In fact, Cruttenden (1986: 81) points out that nucleus placement is "the principal means of focusing in English". It will therefore be interesting to see how intonation focus and the structural focus device of clefting interrelate. More precisely, I will try to establish whether there is a correlation between nucleus placement and the structural highlighting in *it*-cleft constructions.

Bolinger (1972) would, of course, disagree with such an assumption since he is convinced that accent cannot be accounted for in terms of syntax. For him, accent is an independent concept which reflects the speaker's intent and is therefore not predictable. Bolinger (1972: 644) emphasizes that "[t]he distribution of sentence accents is not determined by syntactic structure but by semantic and emotional highlighting". However, he does admit at least some kind of relationship between accent placement and syntactic structure, stating that "[s]yntax is relevant indirectly in that some structures are more likely to be highlighted than others. (But a description along these terms can only be in statistical terms)" (Bolinger 1972: 644).

The stressed focus (=contrastive) *it*-cleft - as the name already suggests - is characterized by the fact that "only the focus has strong stress" (Prince 1978: 896). Similarly, Declerck (1984: 265) points out that this type of *it*-cleft (in his terminology 'contrastive *it*-cleft') has a highlighted element that is heavily stressed and a relative clause that is only weakly stressed. If we interpret 'heavy or strong stress' as 'nucleus', we can easily check this in our corpus. To do this it is useful to distinguish between the following two types: clefts consisting of only one intonation-group (<HE-CL>) and clefts whose highlighted element is separated from the clause by an intonation-group boundary (<HE>#<CL>):

(18) Contrastive *it*-clefts: nucleus placement

Boundary: <HE>#<CL>	22	**Nucleus on <HE> and <CL>:**	22
No Boundary: <HE-CL>	9	**Nucleus on <HE>:**	6
		Split Nucleus (on <HE> and <CL>):	3
	(total)		31

Not surprisingly, the 22 cases where the relative clause has a separate intonation-group all have a nucleus situated somewhere within the clause; the highlighted element also has one or more nuclei. There seems to be a clear tendency for the nucleus to come at the end of the intonation-group both in the highlighted element and in the clause. In fact, in all 14 cases of contrastive *it*-clefts with 2 intonation-groups (one for the highlighted element, one for the clause) there is a nucleus on the last content word of the group, as in:

(19)

It's the /three two∆ ∆THREE# that / goes 'under the ∆∆M
THREE# (S.1.11.1070)

In the remaining 9 instances of contrastive clefts, with more than 2 intonation-groups, there is a similar tendency and in 8 out of 9 cases the item (word or compound) immediately preceding the relative element (*wh-*, *that* or 'zero') carries a nucleus. Cf.:

(20)

It's the faculty of ARTS# /or the faculty of ECONOMICS# or BOTH# with/in the NFO# that'll be/ putting him FORWARD# (S.1.2.1022)

Thus, it seems safe to say that in contrastive *it*-clefts with a highlighted element/string that is intonationally separated from its clause, the last item of the highlighted string attracts the nucleus, irrespective of the number of intonation-groups in the highlighted element. The only exception to this 'rule' I found in the corpus was (21), where we get deaccentuation of a repeated lexical item. Nevertheless, the item (*ending*) still receives stress:

(21)

It's the gra/duation of 'Ablauts 'of 'the ENDING# /and the nature 'of the CONSONANT#im/mediately BEFORE the 'ending# which /cause the 'most "TROUBLE# (S.2.11.1591)

If we now turn to the remaining 9 instances of contrastive *it*-clefts with no boundary between the highlighted element and the clause (=1 intonation-group), we notice an interesting phenomenon: There are 3 examples of, what might be called, a 'split nucleus', more precisely a fall-plus-rise:

(22)

It's Marks and ΔSPARKS you're going to WORK for# (S.2.12.1004)

(23)

It's the ΔLITTLE things that ANNOY us# (S.2.11.274)

(24)

It's /just 'one ΔQUESTION that they have to do ISN'T it# (S.1.1.57)

One might be tempted to treat these examples as just another variant of the above mentioned type with 2 intonation-groups. In fact, in the framework of O'Connor and Arnold (1973), which does not include the possibility of combined nuclei, these examples would have been transcribed as 2 intonation-groups with 2 separate nuclei. It is important to point out, however, that these two nuclei are by no means equal in prominence. As is indicated by the 'booster'-symbol (Δ), the first accent in each of the three instances is marked by particularly high pitch. Thus, in these three instances of 'split' nucleus the first element of the nucleus (the one on the highlighted element) is intonationally more marked than the second.

This brings us to the next type of contrastive *it*-clefts with one intonation-group. In 6 instances it is only the highlighted element which takes the nucleus. The clause takes only normal (vs. strong) stress, as in:

(25)

It's the /GRÂMMAR'which is 'interesting# (S.1.10.356)

This stress-pattern is what Declerck (1984: 265) considers to be prototypical for the contrastive *it*-cleft: "the focus NP is heavily stressed, whereas the WH/*that*-clause is weakly stressed". In our corpus of contrastive *it*-clefts, however, this type with only 6 out of 31 instances (19%) constitutes a clear minority.

We can conclude that at least in the case of the contrastive *it*-clefts structural focus and intonation focus seem to coincide: the highlighted element is always prosodically marked by the occurrence of a nucleus. The relative clause, on the other hand, is not really weakly stressed as Declerck (1984) would like to have it. On the contrary, in 87% of the cases the clause takes a nucleus. In the remaining instances the clause is normally (vs. weakly) stressed. This seems to suggest that, essentially, contrastive *it*-clefts are used to focus not only on the highlighted element but also, at the same time, on the clause or at least parts of the clause. Thus, the contrastive *it*-cleft might represent what Quirk et al (1985: 18.17, 18.26) call a 'divided focus'. Which of the two focused items is dominant seems to depend largely on the context, i.e. the information structure of the sentence: new information is generally more focal than old information.

Let us now turn to the UAF-cleft. According to Declerck (1984) this type of *it*-cleft should have a highlighted element that is only weakly stressed and a clause that is normally stressed. Prince (1978: 899) only points out that "unlike stressed focus it-clefts, they [informative-presupposition *it*-clefts] have normally (vs. weakly) stressed *that*-clauses". These assumptions seem to be confirmed by the 11 UAF-*it*-clefts in our corpus, all of which consist of one intonation-group with the nucleus in the clause, eg.:

(26)

It's/not until ∆next year that the job will be ∆ÂDVERTISED# (S.1.1.245)

This pattern is quite in line with Declerck's (1984) assumption as well as with the general tendency of given information to be unstressed (although not every given item is necessarily unstressed). In these cases, therefore, we get a clear discrepancy between structural focus (the highlighted element) and intonational focus (the clause). However, since the clause in UAF-*it*-clefts

also contains new information it seems safe to say that the relative clause constitutes the overall focus of this type of cleft construction.

Our only example of the discontinuous *it*-cleft type is quite in line with the stress-pattern given by Declerck (1984): highlighted element and clause are at least normally stressed:

(27)

It's ▵just this WEEK# that the /POUND's# /started ΔPLUMMETING# (S.2.13.88)

To conclude, we may say that there seems to be a strong correlation between the location of the nucleus and new information. Old information, however, sometimes receives fairly strong prosodic marking, too (cf. 18). The location of the overall focus in the individual types of *it*-clefts seem to coincide with the location of the new information: in contrastive *it*-clefts the focus is on the highlighted element, in UAF-*it*-clefts the focus is on the clause (hence the use of the more neutral term 'highlighted element').

5.4.3 Tone

The term 'nuclear tone' is generally used to refer to the pitch contour which begins on the nuclear syllable and ends on the tail if there is one. Tones fulfill a variety of functions: not only do they show the status of an intonation-group (eg. question, statement) and link intonation-groups together, but they also convey speaker attitude, which makes a systematic analysis extremely difficult. I will therefore only briefly discuss general tendencies.

For the contrastive *it*-cleft we get the following results from our corpus:

(28) Contrastive *it*-clefts: tones[12]

highlighted element:			**clause:**	
	20			13
	2			1
	2			3
	3			2
+	4		+	2
	-			1
(total)	31			22

In the highlighted element the predominant pitch-movement is with 65% (or 20 instances) the fall. If we consider the rise-fall as a variant of the fall, we would get an overall number of 22 falling tones (71%). This is indeed interesting as one might have expected a substantial number of fall-rises, which have a strong linking function joining an intonation-group to the next (here: to the clause).

A similar tendency can be observed in the relative clause: the clause takes a nucleus in 22 out of 31 contrastive *it*-clefts (71%), with 13 of these being falls (59%). By adding the one rise-fall we get an overall number of 14 falling-tones (63%). Both highlighted element and clause in contrastive *it*-clefts are thus cleary dominated by falling tones.

The UAF-*it*-clefts in our corpus yield a slightly different result:

(29) UAF-*it*-clefts: tones

highlighted element:	0	**clause:**	˩	8
			˥˩	1
			˧˩	2
(total)				11

The clause of an UAF-*it*-cleft clearly favours a falling tone (73%) (there is no nucleus in the highlighted element).

In the previous section I concluded that the overall focus of *it*-clefts is associated with the highlighted element in a contrastive *it*-cleft and with the clause in UAF-*it*-clefts. Returning to the idea of focus then, we might say - in accordance with Geluykens (1988: 831) - that falling tones are most common on foci no matter whether they are sentence final (UAF-*it*-cleft) or not (contrastive *it*-cleft). In the case of the contrastive *it*-cleft we get 71% falling tones on the focus (=highlighted element), in the case of the UAF-*it*-cleft we get a percentage of 73% for falls on the focus (=clause). The slightly higher frequency of falls on UAF-foci might be attributed to the fact that they occur in sentence final position.

The fall as predominant tone on the focus is also perfectly in line with Brazil's (1975) concept of 'proclaiming' and 'referring' tones which postulates that the "choice of falling tone [...] marks the matter as new" (Brazil 1975: 6). In our data all foci are associated with new information and - as we have seen - most of them take falling tones.

6. Conclusion

On the whole my corpus provides empirical evidence for Declerck's typology of *it*-clefts but it seems that his terminology is slightly misleading.

In the corpus the contrastive *it*-cleft is (with 38 instances, 70%) by far the most common. A typical example of this type would be:

(30)

But it's /NOT˧˩ just imagination# it's the /CHARACTER˩/of# /MEN˩ and# the /ACTIONS˩ of men# that I'm /INTERESTED˥˩ /in# (S.3.1.1133)

Here, the highlighted element is clearly new and contrastive while the clause conveys given - in Prince's (1978) terminology known - information; in other words a prototypical contrastive *it*-cleft. But what about a cleft like (31)?

(31)

It's the /GRAMMAR/ 'which is 'interesting# (S.1.10.356)

Here, too, the highlighted element is new and the clause is old, but the highlighted element (*grammar*) does not appear to be contrastive in any way.

Chafe (1976: 37) is certainly right when he states that *it*-clefts are a good way to express contrastiveness but this obviously does not mean that every *it*-cleft is contrastive; moreover, not even every 'contrastive' *it*-cleft seems to be contrastive. Sentence (31), for instance, is not, unless of course one accepts Bolinger's (1961) assertion that every semantic peak is to some extent contrastive. But then the criterion of contrastiveness would not be a very useful one for the distinction between the different types of *it*-clefts. Even with a fairly broad definition of contrastiveness it is sometimes hard to decide whether something is contrastive or not, as in (32) where there is no overt contrast with the context.

(32)

It's a very small MINORITY# who/want to discard our DEFENCES# (S.5.5.32)

Of course, it could be argued that there is an implicit contrastiveness of the highlighted element, contrasting *minority* with *majority*, but it is difficult to decide where to draw the line.

It seems necessary to allow for various 'degrees of contrastiveness', a scale of 'gradience' which includes implied contrastiveness as in (32) and explicit contrast as in the following example where the alternative is found in the immediate context.

(33)

It's/not the STAFF# /who are making a very poor BUSINESS#... it's the students by and LARGE . (S.3.3.1151)

In section 1.2. it was suggested that in a definition of the concept of focus contrastiveness should be treated independently from the concept of newness. Indeed, it seems that 'contrastive' clefts provide evidence in favour of such a separation since the highlighted element in 'contrastive' clefts (which constitutes the overall focus) is always new but not necessarily contrastive. (Provided that our definition of contrastiveness is more restricted than Bolinger's).

The UAF-*it*-cleft is less frequent in our corpus than the contrastive *it*-cleft. The small number of UAF-*it*-clefts (11 out of 50; 22%) might be an indication that this type is a kind of 'marked' cleft. This, however, is surprising since it is only the UAF-*it*-cleft that adheres to the general principle of old information coming before new information. But perhaps it is precisely this unusual order of 'new' before 'old' that makes the contrastive *it*-cleft more 'popular' since it sets it apart from other 'normal' constructions. Prince (1978: 897) points out that "though the [contrastive] *it*-cleft presents information (old vs. new) in aberrant order, it clearly marks which is which".

As for the term 'unstressed-anaphoric-focus *it*-cleft', I think that it is rather ill-chosen since the overall focus of this type of cleft is clearly the clause, which conveys new information and is always heavily stressed, and not the highlighted element. An *a priori* association of the highlighted element with 'focus' seems to me very misleading.

No doubt my discussion of *it*-clefts is far from exhaustive. I have only touched on a few aspects of this complex structure but it seems that a discourse approach can provide valuable information for the understanding of cleft constructions and their functions. A further investigation into this area would certainly have to be based on a bigger corpus, which would allow us to draw much more accurate conclusions. Also it would have to be carried out on a larger scale, including the two other cleft types, which have been completely neglected here. Moreover, it seems worthwhile to compare the occurrence of clefts in written and spoken texts or to look at their stylistic function (eg. as cohesive devices).

Notes

[1]cf. eg. Jespersen, Otto. 1937. *Analytic Syntax*. London: Allen & Unwin.

[2]It is further possible to distinguish between 'basic pseudo-cleft' (cf. 1b) and 'reversed pseudo-cleft' (eg. *A record was what Annie gave him*); cf. Huddleston 1984: 462.

[3]According to Quirk et al (1985: 89) it only "resembles a relative clause".

[4]cf. Huddleston (1984: 14.6), who uses this terminology; cf. also Geluykens' (1988: 827) use of 'filler', 'gap' and 'clause', and Declerck's (1984: 254) use of 'value' and 'variable'.

[5]The sentence references used here, however, refer to the Survey Files, not the Computer Corpus.

[6]i.e. the function the highlighted el. would have in the non-cleft version of the sentence.

[7]7 of which are incomplete.

[8]cf. Geluykens (1988: 829f) for a slightly different explanation.

[9]Bolinger (1977: 77f) would disagree; he believes *it* in cleft sentences to be meaningful.

[10]The notation used for the corpus material is essentially the one used by Svartvik and Quirk (1980):

#	end of intonation-group (tone unit)
/	onset of intonation-group (tone unit)
'	normal stress
"	heavy stress

BOOSTERS:

ΔΔ	higher than preceding syllable
ΔΔ	higher than preceding pitch-prominent syllable
ΔΔ	very high

C A P I T A L S indicate nucleus

3	Fall	4	Rise	5	Level
2	Fall-rise	1	Rise-fall		
3 + 4	Fall-plus-rise	4 + 3	Rise-plus-fall		

<HE> Highlighted element
<CL> Clause

[11]We adopt here the terminology used by Cruttenden (1986: 35ff); elsewhere intonation-groups are referred to as tone-groups (Crystal 1969), tone-units, sense-groups etc.

[12]Incomplete *it*-clefts are excluded and only the last pitch movement of <HE> and <CL> is taken into account.

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Old English -ian*: Inflectional or Derivational?*

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1. The Germanic Weak Class II

This paper was prompted by a remark in Christiane Dalton-Puffer's contribution to the inaugural issue of *VIEWS* (1992). She notes that the Middle English verb-forming suffix *-nen* developed through reanalysis of the composite *-n-en* < OE *-n-ian* (as in *fæstnian* 'fasten': cf. *fæst* 'fast'); and says that *-ian* (marking weak class II infinitives in OE) "originally is not even derivational" (9). I presume she means that this suffix is traditionally taken as (synchronically) little more than a conjugation-class marker. E.g. infinitive *-ian* (except for a small group of /r/-final class I verbs like *herian* 'praise', *nerian* 'save') predicts pres ind 1 sg in *-ie* rather than *-e* (*lufie* 'I love' vs. cl I *fremm-e* 'I do'), 3 sg in *-að* rather than *-eð* (*lufað* vs. *fremeð*), and a thematic preterite in *-o-* rather than *-e-* (*luf-o-don* vs. *frem-e-don*).

This conjugation-marker status however may be only apparent; on the contrary, by virtue of marking weak class II, *-ian* is (a) patently derivational from a historical point of view, and (b) can probably be taken as primarily a derivational marker within OE itself. And all this makes for a rather interesting little story, with recurrent elements as far apart as Latin and Old English, illustrating the complex desemanticization of a derivational affix to (largely and eventually) a conjugation-class marker. It also raises the (unanswered and maybe unanswerable, but discussable) question of how you define morphological 'productivity' in a dead language.

The Germanic class II weak verbs occur in three basic forms: Gothic and Old High German have an infinitive in *-on*, OE has *-ian*, and Old Saxon has *-on* varying with a longer *-oian*: Go, OHG *salbon* 'annoint', OE *sealfian*; OS *samnoian* - *samnon* 'gather' (= OE *samnian*). The element appearing as /-o:-/ in non-OE dialects, while absent from the OE paradigm in an explicit form, is nevertheless active in its history, and leaves distinct traces. This -ian < */-o:j-a-n/ (unlike the one in cl I *nerian* < */-j-a-n/, cf. Go *nasjan*) does not cause *i*-umlaut; class II verbs, unlike class I verbs may have back root vowels: *lufian* 'love' < */luß-o:j-an/ vs. *cyssan* 'kiss' < */kus-jan/. The /-o:-/ element blocks the umlaut that would otherwise have been caused by the */-j-/; in addition it surfaces as the thematic *-o-* in the preterite (*luf-o-don*, etc.), and

accounts for the back vowel in pres 3 sg *-að* as opposed to the front vowel in other conjugations' *-eð*.

This */-o:-/ (whether followed by */-j-/ as in pre-OE or not as in Gothic and OHG is immaterial) is the link with the essentially derivational origin of class II. Like the other weak verb classes, II continues in general not 'primary' (underived) Indo-European verbs, but old derivational types. Class II corresponds broadly to the 'denominative *yo*-class' (Buck 1933: §356), more particularly to the subclass originally formed from feminine *a*-stems (= Gmc *o*-stems): most typically Greek denominals in *-a-o* < */-a:j-o:/, Latin in *-a-re* (Gr *tim-a-o* 'fear', noun *tim-e*, L *plant-o* 'plant' < */plant-a:-jo:/, infinitive *plant-a-re*, base noun *plant-a* < */plant-a:/). This type is productive elsewhere in IE as well, e.g. Lithuanian *kartas* 'time', *at-kart-óju* 'I repeat', *pa-saka* 'story', *pa-sak-oju* 'I relate' (cf. Prokosch 1938: §54.VII).

The original derivations involving this suffix type seem to be based mainly mainly on *a*-stem (= Gmc *o*-stem) feminines, as in the Greek and Latin examples above; but the classical languages (and Germanic) also show derivations from other stem-classes: e.g. L *don-a-re* 'give' (*don-um* 'gift', *o*-stem neuter), *gener-a-re* 'generate' (*gen-us, -eris* 'genus, family', *s*-stem neuter), etc. In Germanic too we find not only *o*-stem derivatives like *lufian* 'love' (*lufu* < */luß-o:/), etc., but also *a*-stems (Go *fiskon*, OE *fiscian* 'fish', base *fisks, fisc* < */fisk-az/, cf. L *piscis, piscari*). There are also apparent *n*-stem derivatives, like Go *fraujinon* 'rule', cf. *frauja* 'master'; but these may be the other way round, since *n*-stem masculine agentives of this kind are typically deverbal. That is, it seems likely that say OE *hunta* 'hunter' is from *huntian*, rather than vice versa. This issue may arise with non-agentive nouns in *-a* like *hopa* 'hope': how is this related to the verb *hopian*? I return to this in §2 below.

Even though the majority of these verbs are clearly denominal, there are even in the ancient languages a scattering of apparent primary verbs: L *sta-re* 'stand', *fa-ri* 'say' (perhaps originally athematic *mi*-verbs, if one judges by Gr *phe-mi:* Buck §370, cf. also Watkins 1969: §145); also the types shown in L *duc-ere* 'lead' vs. *e-duc-a-re, capere* 'seize' vs. *oc-cup-a-re*, etc., which are either deverbal, or at least represent stem-formation off a verbal root (cf. Prokosch, §54, n.1). These are of particular interest here, as they may indicate the start of a slow shift from a reasonably productive derivational formative toward an inflectional class-marker. But it seems clear that in general these verbs were in the older IE languages basically denominals (which in an IE perspective could include de-adjectivals as well, since the two parts of speech are not distinct in pre-Germanic western IE); certainly this is true of the majority in Greek and Latin.

In Germanic, as we might expect from a much later stage in the development of IE, things are not quite so clear. Prokosch (§54) considers class II still to be basically denominal, though he does mention some verbs that appear to be 'primary': e.g. Go *miton* 'consider' (beside *mitan* = OE strong *metan*, OHG *mezzan* 'measure'). Here the existence of a virtually synonymous strong (*ex hypothesi* primary) verb suggests that this is not a derived formation. This however may be an artifact of the Gothic corpus: OE class II *metian* 'measure', though it also coexists with strong *metan*, does correspond to a simplex noun *met* 'measure'. So Gothic too may have had a noun **mits*. We will see below that there are more of this type in OE as well, suggesting that class II may include not only simple denominals, but denominals off deverbal nouns which on the face of it do not look derived (e.g. unlike nouns in *-ung*, etc.).

2. Class II in Old English

What is the situation in Old English? In order to size this up in a reasonable preliminary way, I took a fairly random selection of 205 OE class II verbs. This corpus, if not 'scientifically' chosen, is extensive enough to be unlikely to be significantly biased in any dangerous way; I take it to be indicative of the contents of the class (if not exhaustive). My sample is culled from various sources: the list of class II weak verbs in Wright & Wright 1925, others cited Prokosch, the group of *-sian* and related verbs covered in Hallander 1966, and a selection from Clark Hall & Meritt 1960 (most of the entries under A, and all of those under C and D). For the corresponding nouns, adjectives, etc., I depended largely on the last two sources. Since my topic is only the status of *-ian* itself, I conflate the extended types as well, i.e. I make no distinction between simple *-ian* verbs and those in *-s-ian, -c-ian, -n-ian*. Because my concern is the status of this class within OE, i.e. as a synchronic object, I will not invoke cognates in other Germanic dialects as possible bases for derivational formations. If a simplex is lacking in OE I (artificially) assume that it is missing (though of course the gap could be a contingency of text survival). Even with this perhaps over-careful strategy, the results are interesting.

I have divided the OE verbs into several groups, beginning with the most obvious cases, where derivational relations are generally unambiguous (problems are discussed in the notes). In cases where a noun and verb (because of the ease of zero-derivation in English) can be expressed by the same gloss, I give no separate gloss for the noun.

Group A. Existing Simplex (Or Almost Simplex) Noun Base

adlian 'become ill' (*adl* 'illness'); *aladian* 'excuse' (*lad* 'clearing from blame'); *aliðian* 'separate' (*lið* 'limb'); *andsacian* 'deny' (*andsæc* 'denial'); *andswarian* 'answer' (*andswaru*); *arian* 'honour' (*ar*); *behofian* 'have need of' (*behof* 'profit'); *æfnian* 'grow towards evening' (*æfen* 'evening'); *rendian* 'go on an errand' (*rende*); *bensian* 'pray, supplicate' (*ben* 'prayer, request'); *bodian* 'announce' (*bod* 'command'); *cafstrian* 'bridle, curb' (*cæfester* 'halter'); *cealfian* 'calve' (*cealf*); *ceapian* 'buy' (*ceap* 'purchase, sale'); *cearian* 'complain' (*c(e)aru* 'care, anxiety'); *clawian* 'scratch, claw' (*clawu*); *cneow(l)ian* 'kneel' (*cneow*); *cnossian* 'strike' (*cnos* 'collision'); *cnylsian* 'knock at a door' (*cnyll* 'knell, clang'); *cocsian* 'cook, roast' (*coc* 'cook'); *costian* 'try, test' (*cost* 'choice, possibility'); *crymian* 'crumble' (*cruma* 'crumb'); *cursian* 'curse' (*curs*); *cwiddian* 'talk' (*cwide* 'saying'); *cwylmian* 'suffer' (*cwealm* 'torment'); *cystian* 'put in a coffin' (*cist* 'chest, coffin'); *deaðian* 'kill' (*deaþ* 'death'); *dician* 'make a dike/ditch' (*dic* 'dike/ditch'); *diht(n)ian* 'arrange' (*diht* 'arrangement'); *droht(n)ian* 'behave' (*droht* 'condition, life'); *dropian* 'drip' (*dropa* 'drop'); *drysmian* 'become gloomy' (?*þrosm* 'smoke, vapour'); *dwolian* 'err' (*dwola* 'error, heresy'); *dynian* 'sound' (*dyne* 'noise'); *eahtian* 'esteem' (*eaht* 'estimated value'); *eardian* 'dwell' (*eard* 'country'); *ef(e)sian* 'trim' (*efes* 'eaves')[1]; *egesian* 'terrify' (*egesa* 'fear'); *endian* 'end' (*ende*); *fiscian* 'fish' (*fisc*); *gedafenian* 'beseem' (*dafen* 'what is fitting'); *gemidlan* 'bridle, restrain' (*midl* '(horse's) bit'); *gemyndian* 'remember' (*mynd* 'memory'); *ginian* 'yawn, gape' (*gin* 'yawning deep'); *grapian* 'grope, feel' (*grap* 'grip')[2] *hafenian* 'hold' (*hæfen* 'property';[3] *hleoðrian* 'make a sound' (*hleoðor* 'sound'); *hlynsian* 'make unharmonious sound' (*hlynn* 'noise'); *hopian* 'hope' (*hopa*); *hwearfian* 'wander' (*hwearf* 'exchange'); *ieldcian* 'delay' (*ielden*); *iersian* 'make angry' (*ierre* 'anger'); *lacnian* 'heal' (*læce* 'physician');[4] *latian* 'be sluggish' (*latu* 'delay'); *leanian* 'reward' (*lean*); *lofian* 'praise' (*lof*); *mærsian* 'set a limit' (*mære* 'limit'); *meldian* 'announce' (*meld* 'proclamation'); *metian* 'measure' (*met*); *metsian* 'feed' (*mete* 'food'); *reafian* 'plunder' (*reaf*); *sargian* 'cause pain', *sarian* 'grieve' (*sar* 'pain'); *scamian* 'be ashamed' (*sc(e)amu*); *screadian* 'prune' (*scread(e)* 'shred, cutting'); *scyld(g)ian* 'sin' (*scyld* 'offense'); *sealfian* 'annoint' (*sealf* 'ointment'); *siþian* 'travel' (*siþ* 'journey'; *sorgian* 'sorrow' (*sorg*); *stician* 'stick' (*sticca*); *swinsian* 'make a harmonious sound' (*swinn* 'song, melody'); *syngian* 'sin' (*synn*); *þancian* 'thank' (*þanc* 'thought, will, thanks'); *wealwian* 'roll' (*wielm* 'boiling'); *weorþian* 'honour' (*weorþ* 'worth'); *wilnian* 'desire' (*willa* 'mind, desire'); *wisian* 'guide' (*wise* 'way, direction'); *witnian* 'punish' (*wite* 'punishment'); *wlipsian* 'lisp' (*wlisp* 'lisping'); *wuldrian* 'glorify' (*wuldor* 'glory');

wundian 'wound' (*wund*); *wundrian* 'wonder' (*wundor*); *wunian* 'dwell' (*wuna* 'habit').

B. Existing Adjectival Base

ablindan 'become blind' (*blind*); *(a)cealdian* 'become cold' (*ceald* 'cold'); *adeadian* 'decay' (*dead*); *aidlian* 'make useless' (*idel*); *andweardian* 'present' (*andweard* 'present' actual'); *asearian* 'dry up' (*sear* 'sere'); *brycsian* 'be of use' (*bryce* 'useful)'; *clænsian* 'cleanse' (*clæne* 'clean'); *cwician* 'quicken' (*cwic*); *deopian* 'make deep' (*deop*); *deorcian* 'darken' (*deorc*); *diersian* 'make glorious' (*diere* 'splendid'); *dimmian* 'darken' (*dimm*); *doxian* 'turn dusky' (*dox* 'dark, dusky'); *dreorigian* 'be sad' (*dreorig*); *dysigan* 'be foolish' (*dysig* 'foolish'); *fæstnian* 'fasten' (*fæst* 'fast'); *fiersian* 'remove' (*fierra* 'farther'); *frecelsian* 'expose to danger' (?*frecne* 'daring, perilous'); *gad(e)rian* 'gather' (*geador* 'together'); *gearwian* 'prepare' (*gearu* 'ready'); *geomrian* 'lament, be sad' (*geomor* 'sad'); *gestrangian* 'strengthen' (*strang* 'strong'); *gladian* 'gleam' (*glæd* 'shining'); *grimsian* 'rage' (*grimm* 'fierce'); *hefigian* 'make heavy' (*hefig* 'heavy');[5] *halgian* 'hallow' (*halig* 'holy'); *hatian* 'make hot' (*hat* 'hot'); *hlænsian* 'make soft' (*hlæne* 'lean, meagre'); *hliewsian* 'protect' (*gehliewe* 'sheltered'); *hreowsian* 'be sad' (*hriew* 'sad, depressed); *ieðsian* 'make pleasant' (i*eðe* 'mild, pleasant'); *ieðsian* 'become empty, weak' (*ieðe* 'deserted'); *leasian* 'tell lies' (*leas* 'false'); *lician* 'please' ((*ge-*)*lic* 'suitable');[6] *mærsian* 'make famous' (*mære* 'famous'); *mildsian* 'be mild' (*milde* 'mild, gentle'); *openian* 'open' (*open*); *samnian* 'collect' (*samen* 'together'); *triewsian* 'declare oneself loyal' (*triewe* 'loyal'); *unrotsian* 'be sad' (*unrot* 'sad'); *untreowsian* 'defraud' (*untreowe* 'unfaithful'); *wacian* 'be awake' (*wacen* 'awake'); *welegian* 'enrich' (*welig* 'rich'); *werigan* 'be weary' (*werig* 'weary'); *wlacian* 'be tepid' (*wlaco* 'tepidity'); *wlancian* 'become boastful' (*wlanc* 'boastful, arrogant'); *wrænsian* 'be wanton' (*wræne* 'lascivious').[7]

This takes care of the relatively clear denominal and deadjectival cases, where both origin and synchronic derivedness seem pretty uncontroversial. There is also a small group that may be deverbal, in more or less the same way as *grapian* (see note 3), and perhaps *hefigan* (note 5). In these however there is no existing noun (like *grap* for *grapian*, whatever its origin), so deverbal derivation is at least plausible (there are deverbals of this type elsewhere in IE as well: Watkins §145).

C. ?Deverbal Formations

corflian 'mince' (?*corf-* pp stem of *ceorfan* 'carve'); *cunnian* 'try, test' (*cann* 'know, be able', pres stem of preterite present verb); *drusian, drysnian* 'droop' (related in some way to *dreosan* 'decay, fall', at least the second; the vocalism of the first is problematical); *fandian* 'try, experience, visit' (*fand*, pret sg stem

of *findan* 'find'); *fundian* 'strive after' (*fund-*, pret pl or past participle stem of *findan*); *wandrian* 'wander' (?*wand,* pret sg stem of *windan* 'wind, turn').

These are slightly problematical, and in any case a very small subgroup. At least one of them, *fundian*, may perhaps belong in the class below, sharing a root with *fundung* 'departure'.

The next class poses an analytical difficulty hinted at earlier: these are instances where both verb and noun or adjective are transparently derived; at least the verbs are if the evidence above for the status of *-ian* is so far convincing, and the nouns and adjectives are derived by virtue of having fully transparent suffixes like *-ung, -oð , -ol* , or agentive *-a*.[8] The point is that for none of these pairs is there an (attested) simplex or opaquely derivational form that could be the source of one of both; hence the ploy above of using the symbol '√' for a 'root'. Each of these pairs could be said to represent respectively verbal and nominal derivation from a (synchronically) uncategorized root. I will call these pairs 'co-derivations'.

D. Co-Derivations

bifian 'tremble': *bifung* 'trembling'; *bladesian* 'flame, blaze': *bladesung* 'flash, lightning'; *bletsian* 'bless': *bletsung* 'consecration'; *blysian* 'blaze': *blysa* 'torch'; *borian* 'bore': *bora* 'gimlet'; *citelian* 'tickle': *citelung* 'tickling'; *clifian* 'cling: *clibbor* 'clinging', *clife* 'burdock'; *clifrian* 'scarify': *clifrung* 'clawing, talon'; *clipian* 'call': *clipol* 'sounding'; *cneatian* 'dispute': *cneatung* 'inquisition'; *cristnian* 'christen, annoint': *cristnung* 'christening';[9] *cwanian* 'lament': *cwanig* 'sorrowful'; *dagian* 'dawn': *dagung* 'dawn(ing);[10] *earnian* 'earn': *earnung* 'merit, reward'; *eofolsian* 'blaspheme':*eofolsung* 'blasphemy'; *declinian* 'decline': *declinung* 'declension'; *folgian* 'follow': *folgoð* 'following'; *gearcian* 'prepare': *gearcnung* 'preparation'; *gitsian* 'desire, covet': *gitsung* 'covetousness'; *halsian* 'augur, adjure': *halsung* 'augury'; *hangian* 'hang': *hangung* 'hanging';[11] *hatian* 'hate': *hata* 'enemy'; *heorcnian* 'hearken': *heorcnung* 'listening, power of hearing'; *hnappian* 'doze': *hnappung* 'doze'; *hopian* 'hope': *hopa* 'hope'; *hwinsian* 'whine'; *hwinsung* 'whine'; *langian* 'long': *langoð* 'longing'; *liccian* 'lick': *liccung* 'licking'; *locian* 'look': *locung* 'look'; *mangian* 'get by trading': *mangung* 'trade'; *minsian* 'diminish': *minsung* 'making less'; *offrian* 'offer': *offrung* 'oblation';[12] *sceawian* 'look': *sceawung* 'seeing'; *teohhian* 'determine': *teohhung* 'arrangement'; *þolian* 'suffer': *þolung* 'passion'; *þrowian* 'suffer': *þrowung* 'suffering'; *wacian* 'be awake': *wacol* 'awake' (but see group C); *wansian* 'diminish': *wanung* 'diminution'; *war(e)nian* 'warn, take heed': *warnung* 'warning, foresight'; *warian* 'beware' (?*weard* 'guardian);[13] *witgian* 'prophesy': *witega* 'prophet'; *woffian* 'shout, rave': *woffung* 'madness, raving'; *wogian* 'woo': *wogung* 'wooing'.

A final class consists of verbs with no obvious relations; this is so much smaller (even in this preliminary sample) than the others that it seems unlikely that the rarity is purely a sample artefact; the numbers suggest that there simply never were very many, which given the history sketched in §1 would be expected.

E. Isolates

acsian 'ask'; *bedecian* 'beg'; *cearcian* 'creak, gnash'; *circian* 'roar';[14] *cloccian* 'cluck'; *clynian* 'enfold'; *cnucian/cnocian* 'knock'; *cnu(w)ian* 'pound'; *copian* 'steal'; *crammian* 'cram, stuff'; *dennian* 'flow?'[15] ; *dil(e)gian* 'destroy'; *dogian* 'endure?'; *dreahnian* 'drain'; *dreflian* 'drivel'; *dubbian* 'dub'; *hlinian* 'lean'; *macian* 'make'; *racian* 'rule'; *sparian* 'spare'; *sumsian* 'stretch'; *temesian* 'sift'; *þaccian* 'stroke, beat'; *þucsian* 'make dark'; *wincian* 'close one's eyes, wink' (~ *wincan*).

3. Status Report

Given the total sample of 205 verbs (which I stress again is non-exhaustive but exemplary, not statistically 'fair' but unlikely to be wildly off the mark), the results are:

(1)

	N	%
A. Denominal	82	40.0
B. Deadjectival	48	23.4
C. Deverbal	6	2.9
D. Co-Derived	43	21.0
E. Isolated	26	12.7

Summing up totals of derived/derivational vs. isolated:

(2)

	N	%
A. Derived	179	87.3
B. Isolated	26	12.7

It's clear then that class II is an overwhelmingly derivational category (ratio derived : nonderived = 7:1); and that denominal (including deadjectival) derivations are favoured over others in a ratio of roughly 8:3. Assuming that at least a good number of the isolates are really pseudo-isolates, whose missing bases or cognates are contingent lexical gaps, I conclude that class II (even though it does on one level count as a 'conjugation', i.e. as inflectional) is in fact something pretty close to a piece of derivational morphology. It should probably be tagged in the handbooks now to indicate this special status.

Notes

[1]This may be doubtful; Hallander (1966: §3.11.1) suggests that the connection has to do with clipping the thatch on the eves of a building. One could visualize a similar modern English type: a verb **to eave a house* is 'to do whatever it is that makes the eaves complete' or 'to perform the appropriate task for completing/finishing off the eaves' (cf. *top and tail* = 'remove the top(s) and tail(s) of (beans)', *shell (peas), roof (a house), wall (a garden)*, etc.)

[2]Perhaps better taken as deverbal, or at least as a formation from the pret sg stem of class I *gripan* 'grip'. Some cases like this, where the noun seems to be a (zero) derivation are difficult to classify synchronically; historically they are probably deverbal, if such a derivation counts as having a specific grammatical-category base, and not one that is category-neutral. More on this below under groups C and D, and notes 3, 5.

[3]This raises a question like that of *grapian* (see previous note); is *hæfen* to be taken as synchronically related to the *hæf-* stem of *habban* 'have', and is *-en* a derivational suffix here? It certainly is in e.g. *stæ-en* 'made of stone', etc., but this (and a few other *-en* cases here) is unclear. A similar problem might be said to exist for pairs like *hopian/hopa*, *dwolian/dwola*, *egesian/egesa*; if *n*-stem masculines (other than agentives like *hunta*, etc.) are perceived as synchronically derivational, then perhaps *hopian* and *hopa* derive from an abstract root √*hop-*, *egesian* and *egesa* from √*eges-*, etc. (using a 'level'-neutral representation of a root as a semantically content-bearing formative). I return to this issue below, in reference to verbs with an existing 'related' form, but one that is also obviously suffixally derived, and where there is no simplex. A lot depends on the extent to which one takes OE morphology to be stem-/root- or word-based, which is an interesting typological and historical question (cf. Kastovsky 1990).

[4]I take it that a relation like /ä/ - /æ:/ could count as synchronically morphophonemic, so that this pair is legally derivational. I allow in the same way for umlauted *wielm* 'boiling' as a base for *wealwian* 'roll', and other similar cases, where the umlauted stem appears in either the verb or the noun/adjective involved.

[5]*Hefig* may not be a simplex, but could be taken (cf. the discussion of *hæfen*, etc. in note 3 above) as belonging (even synchronically) with *hebban* 'raise', i.e. built on a root √*hef-*, oddly perhaps combining preterite or past participle consonantism and present vocalism (class VI weak present *hebban*, pret sg *hof*, pp *hafen*, etc.), but not semantically or phonologically inept (especially given the morphophonemic alternation of /f/ ~ /bb/ (*habban, libban*, etc.).

[6]This is the one sense of the old */li:k-/ 'image, likeness' root that seems to cohere with that of the verb; the connection is a standard one: cf. Holthausen 1963: s.v. *lician*.

[7]This might be denominal, with *wræsa* 'lasciviousness' as base; though the *-s-* suggests that the noun itself is a deverbal formation from *wræsian*.

[8]Strictly speaking of course a good number of 'simplex' forms in both groups A and B above could be taken as (ultimately) derived, if say a feminine abstract like *cearu* is taken as √*cear-* nominalized by */-o:/. But given the frequency of such formations in OE as 'headwords', we can probably take them as simple. I specify agentive *-a* here, as other masculine *n*-stems like *hopa* 'hope' are not so transparent (if they are at all).

[9]This is a complex case; there is also the noun *crisma* 'chrism', presumably however with a short vowel. And in an etymological (or maybe also folk-etymological) sense there may be a contamination with *Crist*, which would then be a simplex nominal base. (I don't suppose your average OE speaker knew that Christ = 'the annointed one', though educated clergy surely must have.)

[10]Unless this is a denominal from *dæg*. Historically this is ambiguous, since the thematic */-o:-/ would block Anglo-Frisian Brightening in the root */ða0-/, whatever its category assignment.

[11]Unless both of these are deverbal, from the participial stem of class VII *hon* 'hang' (*hang-*).

[12]The fact that these are Latin loans seems to me neither here nor there; the root √*offr-* is, as the existence of at least two native word-formations show, well enough *eingebürgert*.

[13]This is a dubious one, perhaps. But one could just argue for a synchronic relation between say *bear-m* 'bosom' and the pret sg stem *bær* of *beran* 'carry', on the basis of the productivity of breaking, and the relatively large number of formations from different ablaut grades of this root: e.g. *berend* 'bearer', *bæ*

'bier', etc. This would probably not be arguable in the case of other (historically) derived nouns in *-m*, like *stream* 'stream', *seam* 'seam', etc., where comparable alternants do not seem to exist.

[14]Unless connected with a root that appears in *cirman* 'call', *cirm* 'noise'.

[15]This is the famous hapax at *Brunnanburh* 12-13: *feld dennode secga swate,* where the sense suggests something like 'flow, run', etc., but there is no sure etymology. Holthausen 1963 s.v. says 'Vgl. ai. *dhánvati* "fließt"', which of course we may do.

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What exactly is it that makes OE **-ian** *derivational? Reply to Lass*

Nikolaus Ritt

0.

In the first issue of *VIEWS* Christiane Dalton remarked that the OE suffix *-ian* was not derivational. As it may sometimes happen with casual remarks, this particular one turned out to be less harmless than the intention behind it. Thus, it managed to catch the attention of Roger Lass and provoked him - much to the joy of the *VIEWS* editors - to draft a short treatise about what he regards as the essentially derivational character of OE *-ian* and to let *VIEWS* publish it. What is even better, however, is that Roger Lass's contribution does not merely comment on a problem, let alone settle it, but is so beautifully controversial in itself that it has the potential of triggering a full fledged discussion of problems which strike me as so fundamental that they might even interest a wider group than just students of historical English inflection and related matters.

The question on which the argument between Dalton and Lass hinges is this: was the OE suffix *-ian* itself "primarily a derivational marker" just because for most OE *-ian* verbs there existed nouns, adjectives or other verbs which could - and are in many cases even likely to - have served as their derivational bases? Or wasn't it?

1.

For an item to count as derived from another one, the following conditions have to hold: on the one hand, the derived item must be semantically different from, i.e. typically more complex than its base. On the other hand, the derived item must also be formally different from, i.e. typically larger than the base. In other words, derivation will typically involve a formal difference which corresponds to a semantic one and which, by virtue of that correspondence can be said to signal the latter or to be a 'derivational marker'. Of course, there are special cases such as zero derivation or such back formations as *typewrite* from *typewriter*, where the relationship between the formal and the semantic levels is not quite as straightforward, but they should not confuse us at the moment (actually it is not too difficult to show that they are special cases of the same principle).

To take a pair such as *kill* - *killer* as a typical case, the formal difference between the two items would be the *-er* in killer, which *kill* lacks, and the semantic one that *killer* contains a semantic component which might be paraphrased as SOMEBODY WHO and that *kill* doesn't express. The *-er* can thus be regarded as signalling, or meaning, or expressing SOMEBODY WHO, or, in other words, as 'marking agentivity'. Of course, agentivity is a vague concept. Of course, there are *-er*s that do not express agentivity at all, and, of course, the story of derivation is much more complex than all that. All I want to do is to clarify what I take it to mean if something is called a 'marker of something else'.

2.

Thinking of derivation in this unrefined, yet rather uncontroversial way, however, I must admit that I find it practically impossible to go along with Roger Lass in calling OE *-ian* a derivational marker.

Look, first of all, at the formal side of the coin. Yes, *-ian* verbs did have *-ian*. Sometimes. More often than not, however, they will have occurred with other, apparently inflectional suffixes instead, because the prominence which *-ian* enjoys is primarily due to the habit of quoting verbs in the infinitive. Therefore, the way in which *-ian* verbs differ formally from their supposed bases is less easy to determine than one might be tempted to think. In a pair such as *ar* 'honour'- *arian* 'honour', for example, all conjugational suffixes, i.e. (*ar*) *-iu, -ast, -að, -iað, -a. -ian, -ie, -ien, ...* represent formal differences between forms of the verb and forms of the noun from which the verb seems to be derived. And the list is not complete yet, because the noun *ar* did not exclusively occur in the nominative singular either but would take such endings as (*ar*) *-e, -a, -um, ...* . Since the verbal forms did not take these suffixes, their absence must also be included in the list of formal differences between the alleged nominal base *ar* and the allegedly derived verb *arian*. In short, then, whatever distinguishes verbal from nominal forms qualifies as a marker of the derivational component of the meaning of *arian* and words of its type. And this means that there are no principal grounds on which even the actual contexts of actual *ar-* forms could be excluded either, because the context of a wordform does, after all, contribute to its identification as verbal or nominal, and in cases such as *ara*, or other *-a* forms, for example, it is even necessary as a disambiguating factor.

So much for that. What about the semantics of *-ian* derivation, then? Well, looking again just at the first list in Roger Lass's contribution, i.e. denominal *-ian* derivation, I must admit that I find it practically impossible to identify what the meaning of the derivation that *-ian* etc. are supposed to mark should be. Of course, there are pairs such as

(1)

ar 'honour' - *arian* 'honour'
sealf 'ointment' - *sealfian* 'annoint'
ierre 'anger' - *irersian* 'make angry'
mete 'food' - *metsian* 'feed',

in which the verbal meaning could be paraphrased as 'cause sbdy/sth. to have NOUN' or 'endow sbdy/sth. with NOUN' and where the derivation could be called ORNATIVE. But they are not the only type. Thus, EFFECTIVITY and INCHOATIVITY could be assumed in (2a) and (2b) respectively

(2) a.

synn 'sin'- *syngian* 'sin'
cealf 'calf'- *cealfian* 'calve'
dic 'ditch'- *dician* 'make a ditch',

b.

fæn 'evening'- *fænian* 'grow towards evening'.

Of course, these meanings could be subsumed under a general type which, it could be argued, expresses some vague sort of CAUSATIVITY that could be paraphrased as 'cause something that has to do with NOUN'. But this paraphrase is so general that it is hard to find any verb that does not fit it. It is too general, in any case, for basing a derivational category on it.

Even more disturbing, however, is that in quite a number of pairs the verbal member is semantically less complex than the corresponding noun, so that the latter contains the meaning of the former. In pairs such as

(4)

'denial' - *andsacian* 'deny'
ben 'prayer, request' - *bensian* 'pray, supplicate'
curs 'curse' - *cursian* 'curse'
gin 'yawning deep' - *ginian* 'yawn, gape'
wlisp 'lisping' - *wlipsian* 'lisp'
wite 'punishment' - *witnian* 'punish',

for example, the nouns strike me as relatively straightforward action nouns, whose meaning can be paraphrased as 'act/process/result of VERBing'. By the same token, the noun in the pair,

(5)

coc 'cook'- *cocsian* 'cook, roast'

seem to represent an agent noun, paraphrasable as 'person who VERBs'. Then, there is also a group of such pairs as

(6)

cnos 'collision' - *cnossian* 'strike'
cnyll 'knell, clang' - *cnylsian* 'knock at a door'
diht 'arrangement' - *diht(n)ian* 'arrange'
hopa 'hope' - *hopian* 'hope'.

While they may be less straightforward cases, it strikes as clearly more plausible to see them as deverbal derivations instead of as denominal ones. The only cases that I find really difficult to classify are such pairs as

(7)

swinn 'melody, song' - *swinsian* 'make a harmonious sound'
droht 'condition, life' - *droht(n)ian* 'behave'.

3.

What all this amounts to, however, is that OE *-ian* derivation appears as a strange phenomenon at least within the paradigm of conventional morphology: it involves a large variety of formal devices (including different suffixes, the lack of suffixes, and syntactic context) that is supposed to signal an all but open list of potential meanings. As far as I know, there are few traditionally bred morphologists who would posit a derivational morpheme in this case. Much rather, I guess, would they go along with Christiane Dalton who, when she said that OE *-ian* was not derivational, probably just meant that the function of the suffix was to express the morphosyntactic category INFINITIVITY.

In this view *-ian* is the prototypical case of a grammatical morpheme and is compatible with the established way of considering morphemes as semiotic units in which a clearly identifiable form signals a relatively determinable meaning. In such an approach, the question of the semantic relatedness between the members in the pairs adduced by Roger Lass would probably be relegated to the domain of primary word formation and accounted for by the assumption that both nouns and verbs were derived from syntactically neutral roots. - This would be true of all pairs in his corpus, not just of those pairs that Lass calls 'co-derivations' and the cases of *hopa*/*hopian*, *egesa* - *egesian*, etc... (cf. Lass's footnotes 3 - 5).

4.

In terms of traditional morphology, then, Christiane Dalton is certainly correct in calling OE *-ian* non-derivational. At the same time, however, I feel that it is not necessarily the only plausible one. Rather, the case of OE *-ian* verbs, i.e. the fact that many, albeit not all, of them can be viewed as semantically denominal (i.e. 'ornative', for example) might suggest a scenario in which this frequently emerging meaning was looking for a form to which it could attach

itself, so to speak. Among other suffixes, it probably did attach itself also to the *-ian* ending, so that in some sense this suffix did come to signal such a notion as 'ornativity' in various cases, only that this sign relation was not very strong at first. When *-ian* came to be rivalled by 'zero' as an infinitve marker, however, i.e. in the Middle English period, it was free to attach itself more strongly to the derivational meaning(s) which in OE it had signalled only secondarily. This, then, might be the background of the 'reinterpretations' behind such ME innovations as *lightnen*, *liknen*, *tabournen*, etc.. Since there were more speaker-friendly or semiotically more efficient ways of expressing the ornative meaning these words carried (zero derivation, *-ify*) it is no surprise that *-ian*/*-n-* went down the drain of linguistic evolution.

Incidentally, this view is not compatible with the established integrity-of-the-linguistic-sign theorem, but what the heck. Viewing OE *-ian* as embrionically derivational along the lines just sketched makes it easy to motivate its eventual reinterpretation. Thanks to Roger Lass, therefore, for showing that OE *-ian* was in fact much more derivational than one would have been ready to recognise.

How distinct are inflection and derivation? Reply to Lass and Ritt

Christiane Dalton-Puffer

0.

In formulating this reply, I realize how difficult it is not to make it sound like a justification. I will therefore explicitly justify myself at the beginning and then move on to the more interesting issues which are being raised by Lass and also by Ritt in his comments on Lass's paper included in the present issue of *VIEWS*.

When I said that Old English *-ian* "wasn't even derivational", I was of course looking at it from a purely Middle English point of view as the source of the Middle English verbal suffix *-nen*. As one is inclined to do on such occasions, I took the handbook view of this piece of Old English morphology, namely that *-ian* marks the class II weak verbs and is thus inflectional, at its face value. In addition to that the superficiality of my remark was both necessary and inevitable because the handbook view of Old English morphology is practically the only one available. With the exception of Kastovsky's "Semantics and vocabulary" chapter in *The Cambridge History of the English Language* (1992) nobody has showed much interest in Old English derivational morphology over the past sixty years or so. In this sense, then, I am glad my little it-turns-out-not-so-innocent phrase is there and prompted Roger Lass to dig a bit deeper and to finally suggest that Old English morphology be rewritten in this particular respect.

1.

Having done my bit of self-justification I am wondering whether there might not be an argument between Lass and me after all. Here is what he says in his concluding statement:

> I conclude that class II (even though it does on one level count as a 'conjugation', i.e. as inflectional) is in fact something pretty close to a piece of derivational morphology. It should probably be tagged in the handbooks now to indicate this special status. (p. 32, this volume)

For the sake of the argument I am going to take this statement literally (you may have noticed that I am good at doing that). In particular I am going to take issue with the implication that *-ian* is something special because it combines inflectional and derivational characteristics. I readily admit that

from my contribution to *VIEWS* 1(1) it is by no means clear that I might disagree with such a view but this is exactly what I would like to do.

Speakers of languages (and linguists as speakers of languages) tend to have an intuition that, for instance, the /s/ in *walks* is somehow different from the /er/ in *walker*. In other words, they tend to feel that there is a difference between inflection and derivation. Linguists of vastly different persuasions have modelled their grammars following these intuitions. and traditional grammar has always made a distinction between the two - and that is the line which is reflected in my previous *VIEWS* contribution, as Nikolaus Ritt rightly observes. It is in fact a kind of default position which popped up automatically since the differentiation between inflection and derivation was not a topic of that contribution. (Here's another self justification, then.)

2.

Differentiating between inflection and derivation is thus staple food for any modestly competent linguist. However, "the objective criteria behind this intuition have been difficult to find" says Bybee (1985: 81) as she reviews a long series of arguments which have been brought forward in favour of the "strict separation view" and, indeed, all those who have tried have inevitably run into problems (which is exactly why we are having the present discussion). Thus, *-ian*, this new celebrity among Old English suffixes, points our noses straight at one of the fundamental questions of linguistic morphology.[1]

3.

Unobjective though it may be, one often develops a hunch about an affix being derivational or inflectional by simply looking at its shape. There is a statistical reason for this, though: on the whole, derivational affixes tend to have more phonological substance, they consist of more vowels and consonants than inflectional ones; in short, they tend to be longer. How about *-ian* in this respect? The story of *-ian* in Middle English involves the appropriation of phonological material, so much is clear. The material which was appropriated was the segment /n/, and in my previous paper I speculated that it might have been through a reanalysis of the stem-final /n/ of existing formations. However, even a quick skim through Lass's Old English data shows that certainly in terms of frequency there were other more obvious consonantal candidates so that a different hypothesis for the emergence of *-n-* is in order. Be that as it may, the /n/ came to be regarded as part of the suffix in Middle English. Hence, *will-nen*, *christ-nen*, *dark-nen* etc. so that it would seem that Old English *-ian* looked somewhat less derivational than Middle English *-n-en*. Derivational meanings are more complex, more substantial,

than inflectional ones and this ought to be reflected in the substance of the sign. So while the infinitive was still being marked through *-en* it would have been semiotically problematic to have exactly the same form starting to mean something else besides in some cases but not in others (remember we are always talking about verbs). Moreover, the /n/ could remain in place whenever a finite form of the verbs in question was called for (cf. Ritt's section 2). It is interesting to observe that once *-en* the infinitive marker went out of use, items like *darknen*, *christnen* (ModE *to darken, to christen*) reverted to the n-less form, while others like *namnen* or *willnen* became zero derivatives (ModE *to name, to will*). So N. Ritt is probably right in assuming that all this reanalysing backwards and forwards was semiotically less than ideal which is why "*ian/-n-* went down the drain of linguistic evolution" (p. 39, this volume).

4.

The criterion which is often considered as a hard and fast distinguisher between inflection and derivation is the following: the borderline between inflection and derivation is clear-cut because derived forms belong to a different wordclass than the base form while inflected forms belong to the same. In other words, derivational morphemes change the word-class-membership of the resulting word. In the sense then, that only 3% of Lass's *ian*-verbs have corresponding verbs in OE, *-ian* definitely looks like derivational suffix. What makes it look a bit less like a derivational suffix is that **at the same time (?)** *-ian* expresses the infinitivity of these verbs. It is one of N. Ritt's main points in his reply that once the verbs are not in the infinitive, *-ian* is gone, too, and other grammatical morphemes indicating person, number and/or tense step into its place. In this sense, then, *-ian* looks very much like an inflectional suffix, that is a grammatical morpheme, not a lexical one.

On the other hand it is tempting to speculate whether word-classes as such don't perhaps have a meaning beyond the sheer mechanics of syntax (after all they do differ in conceptual content). This would mean that a marker which is a signal of that particular wordclass might come to "represent" the characteristic meaning (= conceptual content?) of that wordclass in one way or another. To speculate even more wildly: perhaps it is no coincidence that the infinitive is a favourite quotation form for verbs? In our case, then, the infinitive marker *-ian* would be able to embody "verbiness" as such. From there it is only a step towards the capacity of conferring "verbiness" onto members of other wordclasses (or vice versa - which seems to be the historically correct view for the history of *-ian* up to Old English).

5.

Now this is precisely where Nikolaus Ritt would probably say that a bit of verbiness does not qualify one to pass as the representative of a derivational category. There is nothing to disagree with in his analysis of the semantics of a number of *-ian* formations: there have to be several different paraphrases and there are several discernible semantic groups. What I do not want to go along with is his conclusion that this (relative) heterogeneousness per se excludes *-ian* from being derivational. He does not say so explicitly, but his arguments tell us that he believes a derivational category is something where a neat and closely circumscribed meaning is expressed by a small and closely circumscribed number of forms (preferably one?). I presume that he would regard Material Adjectives of the type Mod E *gold-en, wood-en* etc. as a good example. While this is no doubt a kind of ideal (prototypical??) derivational category it is obvious that the majority of derivational categories look a lot less tidy. The messiest class of all is probably represented by what has been called Transpositional or Relational Adjectives (e.g. ModE *musical, industrial, scientific, allergic*)[2] This kind of denominal adjective seems to be able to express **a n y** relation holding between its base-noun and its head-noun so that the number of semantic subclasses is potentially infinite.

(1)

e.g. ***musical***: *musical instrument* vs *musical clock* vs *musical evening* vs *musical chairs*

The only paraphrase general enough to cover them is "related in some way to NOUN". This is clearly a good deal more general than Ritt's paraphrase for *-ian*-verbs "cause something that has to do with NOUN" (p. 37, this volume) and yet nobody has managed to describe English adjectives without introducing this derivational category. Maybe, *-ian/-nen* does for verbs what *-al* does for adjectives? This is what I tentatively proposed last time (*VIEWS* 1(1): 12-13) so that Ritt's paraphrase of *-ian* would **n o t** be "too general ... for basing a derivational category on it".

Here I am, of course, lifting the lid of the semantics section of Pandora's box. Before quickly replacing it let me just mention a couple of questions whose existence we need to at least acknowledge: what kind of meaning does a morphological process need to have in order to qualify for being inflectional / derivational? Can we really distinguish between grammatical (inflectional) and lexical (derivational) kinds of meanings? If we can, is this distinction universal or language specific?

6.

What we have here is one of those complex issues which defy a simple answer and which consequently do not allow us to be definitely on one side or the other. In effect this also seems to be the experience of Nikolaus Ritt in his comments in the present issue of *VIEWS*: he casts a critical look on Roger Lass's argumentation for the derivational character of *-ian* but finishes up sort of agreeing with him in the end by acknowledging that OE *-ian* must have been "embryonically derivational".

The embryo image does not quite resolve the question of how we might best view the relationship between inflection and derivation, not even for *-ian*. If we observe it over a long enough period of time we can watch it move in both directions: first from derivational to inflectional (Lass's main point as I understand it) and then with a bit of phonological incorporation from inflectional to derivational (my point in *VIEWS* 1(1)). Unless we do not mind full fledged characteristics reverting back to embryonic state I think it would be most profitable to regard the relationship between inflection and derivation in terms of a scale where either end serves as a kind of prototypical center. Concrete affixes would then occupy different places on that scale and they would be able to move about on it over time. Consequently, they would change their degree of "derivationality-inflectionalness" rather than hop from one disjunct set to another. After all, inflection and derivation have more in common with each other than either has with any other component of grammar.

Notes

[1]I am not going to give an even rudimentary survey of the criteria which have been proposed in order to allow an absolute differentiation between inflection and derivation. Anyone interested in pursuing this can read up in Plank (1981), Bybee (1985) and Dressler et.al. (1987), for instance.

[2]On these adjectives see among others Post (1986), Beard (1981), Szymanek (1988).

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Tenseness in the phonological system of British RP

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0.

This article examines some problems of arranging the vowels of British English RP ("Received Pronunciation") into a phonologically plausible system. It will be argued that the features "tense" and "lax", controversial as they are, form a good basis for classification. The treatment will be surface-oriented and not-too-abstract, trying to strike a compromise between theoretical constructs and a model that has face validity even for non-specialists.

The RP surface vowels assumed for this paper are as in (1). The list is taken from Roach (1991: vi), with items marked & added by the present author.

(1) RP Vowels

/I/ pit, /e/ pet, /</ pat, /V/ patt, /^/ pot, /u/ put.
/i:/ key, /u:/ coo, /ju:/ cue.
/A:/ car, /O:/ core, /8:/ cur.
/eI/ bay, /aI/ buy, /OI/ boy, /2U/ go, /aU/ cow.
/I2/ peer, /e2/ pear, /U2/ poor, /ju2/ cure.
/aI2/ fire, /aU2/, tower.

Unless otherwise indicated, the data will be from British RP, but frequent reference will be made to American English (AmE) too.

1. Tenseness

The terms "tense" and "lax" are originally phonetic or physiological features: they specify "whether the muscles of the articulatory organs are tense or relaxed" (András 1969: 34). This meaning is recognized by Chomsky and Halle, who say that

> phonetically the difference between tense and lax sounds [is] a difference in the manner in which the articulatory gesture is executed. A tense sound is executed deliberately so that the articulating organs actually attain their target configurations; in producing a lax sound, ... the gesture is executed rapidly and with reduced amplitude.
>
> (*SPE* 1968: 68)

On the other hand, Jones warns that it is not certain "that this mode of describing the sounds really corresponds to the facts" (1964: 39). By "facts" Jones means "phonetic facts", of course. He says,

> It is generally advisable to apply the terms *tense* and *lax* only to the case of the close vowels. It is extremely difficult to determine in the case of the opener vowels whether the sensation of 'tenseness' is there or not, and there is in regard to some vowels considerable difference of opinion on the subject.
>
> (Jones 1964: 40)

Jones (1964) and Gimson (1989) do not use these terms, probably in order to avoid controversy, and the word "tense" only appears once in Wells (1982: 214), almost as if by a slip of the pen. Roach (1983, 1991) does not use these terms in the body of his practical coursebook, but says in the "Notes" section, "Some writers (particularly Americans) give the labels tense to long vowels and diphthongs and lax to the short vowels" (1991: 24). Anderson (1974) avoids this feature altogether.

András (1969) specifies each "relatively pure" vowel for tenseness, labelling /I U ^ / as lax, and all other monophthongs as "tense". Diphthongs are not explicitly labelled: their tenseness seems to depend on that of their first, nuclear element. Kreidler (1989: 56-58), in a widely-used American-based textbook which covers British accents as well, includes tenseness among "the articulatory features which make vowels differ from one another", but then adds: "Tenseness alone, however, does not create an audible difference". He labels the vowels /I U e V/ as lax, ie. those that he can whole-heartedly label as "short". The other traditionally short vowels, /< ^ /, have a strong tendency for length (this is true for both RP and AmE, and is probably due to their very open nature, whatever the other features of their realization), and thus Kreidler refrains from labelling them as lax. For him "lax" really is a concomitant feature of true phonetic shorteness - and as such, a redundant one. Sommerstein (1977: 104) is sceptical about the tenseness feaure, which "has sometimes seemed to be something of a *deus ex machina*". To him the term - if meaningful at all - is a proper articulatory feature, meaning "greater deviation from the neutral or rest position of the vocal tract" (104: 5): of the vowels of English, he classes /I U ^ V / as lax *vis-à-vis* "their tense counterparts" /i: u: O: A:/.

The vowels of English - that is, the fully-specified or "full" or nonreduced vowels - are usually classified into two large groups, but the basis for classification is different according to aim or period or school. Let us list the labels usually given to the two groups:

(2)

Group I	**Group II**
free	checked (never final)
long	short
tense	lax
diphthongal	monophthongal ("pure")

The phonetically-oriented "physical" view of English phonology considers the main distinction to be *diphthong* vs. *monophthong* or *long* vs. *short*. This classification is relatively trouble-free since it is based on observable "hard" features - but it says little about the relationships into which the sounds enter, that is, the rules that govern their behaviour. It cannot be overlooked that, say /i:/ and /ɪ/ hardly ever alternate (*green ~ Greenwich?*), whereas /i:/ and /e/ regularly do (*metre ~ metric*), and this alternation between a long and a short monophthong is analoguous to that between, say /aɪ/ and /ɪ/ (*crime ~ criminal*), where a diphthong alternates with a monophthong. It is certainly important to insist that *autumn, orthodox, glory* are pronounced with the same stresed vowel /ɔ:/ in RP, but it is equally important to point out that there are strong reasons - and not just historical-orthographic - to regard these as the surface neutralization of two (or even three?) different vowels.

The system-oriented "abstract view" of English phonology, especially the generative tradition, sonsiders the main distinction to be that of *tense* vs. *lax* (or, in another terminology, *free* vs. *checked*). In a generative framework the underlying and surface representations can differ in significant ways, do not have to be bi-unique, and grammatical or morphological relationships are regarded as relevant for phonology.

I shall adopt this more abstract approach, and say that the basic distinction of English nonreduced vowels is not to be found in any direct phonetic feature, but rather in their behaviour. The two large behavioural classes may be called "tense" and "lax". Since the meaning of the terms "tense/lax" is controversial and cannot be pinned down to any single phonetic fact, one feels free to use them more or less metaphorically to label phonological classes defined by behaviour rather than by phonetic makeup. This would be permissible even if we could not cite any phonetic correlate in English to such a "tense/lax" division; as a matter of fact our division overlaps quite strongly with the diphthong/monophthong division. Chomsky and Halle claim that, as a phonological term applied to English, "tense" basically equals "diphthongal". They say, "English tense vowels are diphthongized or have off-glides" (*SPE* 1968: 183). I subscribe to their standpoint, but will have to deviate from it or make compromises, partly due to the non-rhotic character and other

idiosyncrasies of RP. The following are, in rough outline, the characteristics of tense and lax vowels in RP (to be defined under (22)):

(3) Main differences between tense and lax vowels in RP

	Tense	**Lax**
diphthongal	yes	no
long	yes	no/yes
Infl. by -/r/	yes	yes/no
Antepenult. str. syll.	no	yes
Before V	yes	no
Bef. noncor. cluster	no	yes
Bef. -Clic	no	yes

I assume, then, that all traditional diphthongs, - ie. all vowels transcribed by Gimson with a combination of two vowel-characters - are tense. I also assume (with *SPE*, *pace* András and Kreidler) that all traditionally short vowels - ie. all monophthongs transcribed by Gimson without a colon - are lax. It is the long monophthongs, really, which will require special attention. I hold the following to be true of the RP vowel system:

(4a) Surface vowels

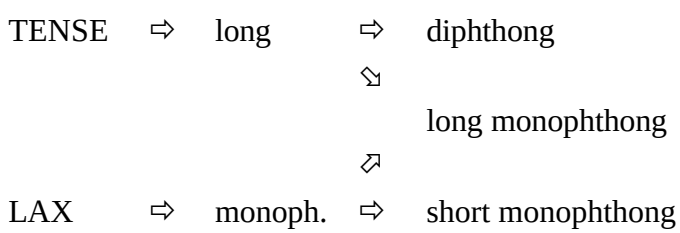
- all surface short Vs come from underlying lax Vs.
- all surface diphthongs come from underlying tense Vs.
- all surface long monophthongs may come from underlying tense or lax Vs.

(4b) Underlying vowels

- all underlying lax Vs are realized as monophthongs, but may be long or short.
- all underlying tense Vs are realized as long, but may be monophthongs or diphthongs.

The implications in (4) are schematized in (5). the status of long monophthongs is ambiguous, since these can be realiziations both of underlying tense or underlying lax vowels. Note that the information remains mostly retrievable, because /i: u: ju:/ come from tense vowels, /ä: 3:/ from lax, and it is only /0:/ which is ambiguous in this respect, being the surface neutralization of certain occurences of a lax and of a tense vowel.

(5)



Chomsky and Halle, in describing the sound system of English (*SPE* 1968: 176) use "tense" as a phonological distinctive feature whose "+" value

characterizes the vowels listed under (6). I give the vowels first in the underlying form they have in *SPE*, then in the Gimsonian convention of transcribing RP vowels, with pre-*r* variants ("broken-tense" vowels) where applicable.

(6)

i	/ju:/ ~ /jU2/	i	/aI/ ~ /aI2/	u	/aU/ ~ /aU2/
e	/i:/ ~ /I2/	o	/u:/ ~ /U2/		
02	/0I/	0	/2U/ ~ /0:/ ~ (/02/)		
æ	/eI/ ~ /e2/	a	/A:/		

These sounds exhaustively cover the diphthongs of RP: there are no RP diphthongs deriving from nonsense vowels. On the RP nondiphthongs in (6) we shall have more to say.

3. Basic classification of vowels

The tense/lax classification of the vowels under (1), with regard to their surface characteristics of diphthonghood and length, appears in (7). Schwa and similar stressless elements are not included. The sound /0:/ appears twice because some of its instances behave like a tense vowel (/0:[1]/ and some, like a lax one (/0:[2]/), as discussed below.

(7) English vowels - tentative classification

Surface Characteristic		**T E N S E**	**L A X**
Diphthongs	**LONG**	eI aI 0I 2U aU I2 e2 U2 jU2	_
Monophthongs	**LONG**	i: u: ju: 0:[1]	A: 0:[2] 8:
	SHORT	-	< e ^ V U

The ideal case would be if "tense" coincided with "diphthongal" and "lax" with "monophthongal", that is, if only the upper left and lower right boxes are filled in (7). The two middle boxes, with long monophthongs, must now be accounted for.

Note that /ju:/ (with its variant /ju2/) is best considered a vowel in its own right (*SPE* 1968: 193), though many analysts, especially in the British tradition, describe surface /ju:/ as a combination of /j/ plus /u:/. Gimson, incidentally, distinguishes "PresE /u:/" from "PresE /ju:/" when listing the sources of /u:/ (1988: 122). Underlying /ju:/ may lose its /j/ through Yod Dropping (Wells 1982: 206) and thus neutralize with /u:/ on the surface. We shall list /ju:/ as a unitary element, but otherwise not discuss this problem in the present paper.

4. Long monophthongs and diphthongs

In standard descriptions of RP the two types of "phonemically" long vowel are the diphthongs and the "pure" [= monophthongal] long vowels. The latter are symbolized by Gimson with a symbol plus a colon, thus /i: u: A: O: 8:/.

"Long" here means underlying length, ie. a tendency to be long, controlled by environmental factors, chiefly the degree of stress of the syllable, and the underlying voiced/voiceless nature ("fortis/lenis") character) of the following segment. In this respect the "colon" vowels behave just like the diphthongs (Gimson 1989: 96-7). Length also means the ability to stand in word final position. The vowel /</ and partly also /^/ have a strong tendency for lengthening in RP, thus *bad, dog* [<: ^:], but since they cannot be word-final, their length is traditionally not regarded as "phonemic", and their transcription symbol is not provided with a colon.

It is pointed out in all handbooks that /i:/ and /u:/ (and thus /ju:/) are pronounced more or less diphtongally, /Ii Ij/ and /UU Uw/ (eg. Jones 1964: 65, 85; Gimson 1989: 121). This is why the five long nondiphthongs are called "relatively pure" by László András (1969: 51). His term is somewhat misleading, though, since it is only /i: u:/ that tend to be diphthongal, whereas /A: O: 8:/ are always monophthongal in present-day RP.

The vowels /i: u:/ (and /ju:/) can easily be regarded as diphthongs, either because they are realized as such, or because they may be analysed as being composed of two identical halves of which the second functions as the glide, thus /ij uw/ (Trager and Smith 1951). These sounds, then, do not contradict the "diphthong comes from tense vowel" postulate.

It must be remembered, on the other hand, that "the so-called 'centring diphthongs' /I2 e2 U2 /are often scarcely diphthongal at all and not seldom quite monophthongal" (Sommerstein 1977: 32). The non-centring (ie. closing) diphthongs, when followed by another vowel, may undergo "Smoothing" and lose their off-glide, thus becoming monophthongs, eg. *day out* [de: aUt] (Wells 1982: 238-8). Consequently by "diphthongs" we must mean vowels that may be pronounced diphthongally.

5. Breaking

In RP the close diphthongs, ie. those whose second member is a high glide (including /i: u: ju:/), do not appear on the surface before /r/. On the other hand, the centring diphthongs, ie. those whose second member is /2/, almost exclusively appear in positions where they are followed by *r,* at least in spelling. This is regressive *R*-influence, a phenomenon known in Germanic philology under the traditional name "Breaking": the name is revived for it by Wells (1982). (To him, Pre-*R* Breaking means the historical process of schwa-

insertion between /i: e: o: u:/ and a following /r/, thus /i:r/ > /i2r/, which is then followed by "Pre-Schwa Laxing" /i:r/ > /I2r/ (213). I shall subsume both changes under the single name Breaking).

If we compare the words in (8), we are tempted to say that the closing diphthongs are in complementary distribution with the centring diphthongs. /eU/ does not have a centring diphthong pair, but matches with /O:/ instead: these occurrences will be labelled /O:[1]/.

(8)

Closing Diphthongs	**Centring Diphthongs**
seem /i:/	beer /I2/
pool /u:/	poor /U2/
tube /ju:/	cure /ju2/
main /eI/	hair /e2/
tone /eU/	more /O:[1]/

The taxonomic argument against this parallelism is that in the words on the right there is no /r/ consonant, and thus no motivating factor for the breaking. What is more, there are surface minimal pairs like those in (9), which are said to prove the "phonemic status" of the centring diphthongs.

(9)

bee /i:/	-	beer /I2/
hay /eI/	-	hair /e2/

One would not attach so much importance to surface minimal pairs today, especially since *beer, hair* etc. have pronunciations with Linking-*R* even in RP, an otherwise strictly nonrhotic dialect. These Linking-*R* forms satisfy the Alternation Condition and entitle us to include the final /r/ in the underlying representation of the words, thus //bi:r//, //heIr// (though Wells expressly warns against doing this, 1982: 217).

If the closing diphthongs and the centring diphthongs are in complementary distribution, the latter always appearing before /r/, then they are obviously not distinct underlying phonemes but each other's variants or allophones. This is further shown by cases where medial /r/ is opposed to some other consonant; the word pairs in (10) must indeed be regarded as minimal pairs hinged on the opposing consonants, with the vowels automatically modified.

(10)

weeny /i:n/	-	weary /I2r/
patent /eIt/	-	parent /e2r/
Judy /u:d/	-	jury /U2r/
stony /2Un/	-	story /O:r/

The problem is that there are hardly any instances or real alternation of unbroken ~ broken, ie. where the same stem would appear now with, say /i:/

and now with /I2/. This is understandable since no suffixes begin with /r/, and Breaking is a strictly word-level rule, that is, it does not operate across word boundaries (*keyring* has unbroken /i:/). Therefore we are walking on thin ice when we want to establish which broken vowel is the counterpart of which unbroken one. We have, of course, the commonsense argument of similarity, and the support of the spelling (cf. (8) and (10)). A further, more exclusive demonstration may be driven from tense ~ lax alternations (vowel shift), where the same lax vowel is seen to alternate with an unbroken or a broken tense vowel according to whether they are followed by /r/ or not:

(11)

Lax		**Tense**	
competitive	/e/	compete	/i:/
severity	/e/	severe	/I2/
manic	/</	mania	/eI/
barbaric	/</	barbarian	/e2/

We may conclude from (11) that /eI/ and /e2/, /i:/ and /I2/, etc. are predictably and pairwise distributed, thus each other's counterparts. I will therefore call the vowels in (12b) "Broken-Tense" Vowels, being the automatic pre-*R* variants of the "Plain-Tense" Vowels.

(12)

(a)	i:	u:	ju:	eI	OI	aI	aU	2U
(b)	I2	U2	ju2	e2	(OI2)	aI2	aU2	O:[1]

We should add that Breaking is unknown in many varieties of English, including General AmE, where the same tense vowel appears before /r/ as elsewhere. Thus cross-dialectal evidence also speaks for considering the Broken-Tense vowels as surface variants.

There are a few instances of centring di- or triphthongs in words like *beard, scarce, iron*, where it is impossible to prove the presence of an /r/ in RP since it will never surface. Obviously neither the spelling nor the evidence from rhotic dialects is sufficient proof for the operation of Pre-R Breaking in such forms; I still suggest that we should assume the broken-tense vowel in these, as shown in (13).

(13)

fiend //fi:nd//	-	beard //bi:rd//	⇨	/I2/
haste //heIst//	-	scarce //skeIrs//	⇨	/e2/

This may be criticized for unnecessary rule-application (ie. getting "the maximum mileage" out of Pre-*R* Breaking), but it has great face validity because it agrees with both the spelling and the rhotic dialects like AmE, and certainly cannot be disproved.

There are, furthermore, instances of centring di- or triphthongs even where no /r/ appears, eg. *idea* /I2/, *dual* /ju2/, *dialect* /aI2/. These need not be derived via Pre-*R* Breaking because they are derivable from a disyllabic sequence of tense vowel plus schwa through Smoothing (cf. Gimson 1989: 141, Wells 1982: 240).

We have seen that surface tense vowels fall into two corresponding groups: Plain-Tense (or Unbroken) and Broken-Tense. The former are all closing diphthongs, which never surface as such before /r/. The latter are a more varied and problematic group: most of them are centring diphthongs, some are "triphthongs", and one, /0:/ - whose appearance in this environment we label as /0:1/ - is a long monophthong.

We can now arrange our classification table (first given as (7)), with /i: u: ju:/ re-classed as diphthongs, and the distinction between "Plain-Tense" and "Broken-Tense" vowels now displayed clearly:

(14) English vowels - improved classification

Surface Characterstic		TENSE		LAX
		Plain	**Broken**	
Diphthongs	**LONG**	eI aI 0I 2U aU i: u: ju:	e2 a I2 aU2 I2 U2 ju2	-
Monophthongs	**LONG**		0:1	A: 0:2 8:
	SHORT	-		< e ^ V U

6. Broad Vowels

I use the term "broad vowels" to cover the vowels that are underlying lax, yet appear long on the surface, as in (15):

(15)

/A:/ part, ask
/0:/ (= 0:2) short, lawn
/8:/ hurt, colonel

The use of the word "broad" is derived from traditional school use where "broad A" often refers to the letter a being pronounced /A:/ (eg. *bath* /bA:T/), as opposed to "flat A", which refers to the sound value /</ (eg./b<T/). This terminology is taken up by Wells (1982: 134-6), who extends the use of "broad" to certain occurrences of /0:/, eg. when *cloth* is pronounced /kl0:T/. He is right in trying to capture (if not quite explicitly) the analogous nature of /A:/ and /0:/:

(16)

Word	Nonbroad	Broad
bath	/b<T/	/bA:T/
dance	/d<ns/	/dA:ns/
cloth	/kl^T/	/kl0:T/
soft	/s^ft/	/s0:ft/

To Wells, then, the name "broad" describes a particular variant pronunciation of certain sets of words having a or o in the spelling. I shall generalize this term and use it for all occurrences of /A:/, /8:/, and all those occurrences of /0:/ where it does not obviously pattern like a tense vowel. Some label to cover them is necessary anyway, since they show behaviour not shared by others, yet they have no traditional name (cf. Wells 1982: 158).

"Broad" here is quite metaphoric and does not refer to one particular phonetic feature but rather to a cooccurrence of certain phonetic features coupled with a certain behaviour. Broad vowels share the following phonetic features: they are nonhigh, nondiphthongal, and long. This is a fairly welldefined natural class, as anybody would agree; the question is whether we class these sounds with the tense vowels (ie. is it their length that we consider dominant?), or with the lax vowels (ie. do we give priority to some other feature?). I shall definitely take the second standpoint: the broad vowels are to be classed as lax vowels.

The characteristic features of the broad-lax vowels /A: 0: 8:/ are:

(1) They are monophthongal and have no alternative diphthongal surface realizations: this is typical of lax vowels. Tense vowels are diphthongal, with the exception of the broken reflex of /eU/, ie. /0:ɪ/.

(2) They freely occur in antepenultimate stressed syllables, a position typically occupied by lax vowels, eg. *particle, orthodox, auditive, permanent*. Tense vowels only exceptionally occur here, eg. *nightingale, obesity*.

(3) They do not occur prevocalically within the narrowly-defined word. (Forms like *drawing* are no counterexamples, since *-ing* is preceded by a # word boundary.) Tense vowels freely occur in this position, eg. *neon, bias, boa*.

(4) They freely occur before noncoronal consonant clusters (ie. clusters not entirely consisting of coronals), eg. *ask, example, auction, corpse, excerpt*. (If we posited an underlying /r/ after them - suggested by the spelling and supported by cross-dialectal evidence - even *dark, storm, usurp* would have noncoronal clusters after the vowel.) Tense vowels only exceptionally occur before noncoronal clusters, eg. *traipse, hoax*.

The above criteria sufficiently show that /A: 0: 8:/ are lax vowels despite their length and alleged "tense" muscular articulation (Kreidler 1989: 58).

6. Broadness or Broadening?

We showed above that the Broken-Tense vowels are not underlying elements but conditioned surface alternants of the plain tense vowels, derived from them through the rule of Pre-*R* Breaking (or simply "Breaking"). We must now examine whether the Broad-Lax vowels are derivable from the plain lax vowels in some analogous way. The first thing to be noted is that while broken-tense vowels only occur before an underlying /r/, in the case of broad-lax vowels it is often quite controversial whether there is any underlying /r/ after them. Two of the broad-lax vowels, /A: O:/, occur in many words where even rhotic dialects have no /r/ whatsoever.

It is doubtful whether we are entitled to recognize Broadening as a rule in present-day RP, that is, to consider the "broad" vowels as derived rather than underlying. To put it simply, is there such a thing as Broad*ening*, a rule turning "plain" (nonbroad) lax vowels into broad-lax ones, or is there just Broad*ness*, a bundle of properties that charaterize certain vowels (notably, /A: O: 8:/)? This question is more vexing in RP than in other dialects, partly because RP is nonrhotic (and most of the historically lost /r/'s can hardly be retrieved synchronically), and partly because it has cases of Broadness without /r/ (like *ash, example*) not shared by other dialects.

6 (a) Broad-lax vowels before /r/

It is difficult to prove the existence of an underlying /r/ in words like *park, short, term*. One must be careful not to overestimate the spelling, and evidence from rhotic dialects is also a double-edged weapon, for how do we draw the line between using and ignoring such evidence?

Let us suppose (as *SPE* 1968: 217 does for *park*) that the broad-lax vowels in *park, short, term* derive from some lax vowel followed (and influenced) by an underlying /r/. Such a rule could be called Pre-*R* Broadening: it operates when an underlying lax vowel is followed by an /r/ in the syllable coda. Wells describes the historical background of this as "a Pre-*R* Lengthening of mid and open short vowels in the environment of /r/ plus a consonant or a word boundary (including the internal # of *stirring, furry*)" (1982: 201).

There are two problems with this approach. First, how do we demonstrate the existence of underlying /r/ in *park* except by its result: Broadening? This word could be underlyingly //p<rk//; but then, *pass, drama* will also have to contain /r/ - thus //p<rs//, //dr<rmV//. This is to be rejected because alternations like *pass - passage* or *drama - dramatize* obviously do not depend on the presence vs. absence of an /r/ after the vowel. Furthermore this "global-pre-*R*-broadening" solution is heavily counter-intuitive, and of course cross-dialectal evidence points to the contrary. Only an /r/ in final position can,

through the alternation of Linking-*R*, be shown to be underlyingly there in RP; internally the broad-lax vowels never occur before pronounced [r] (since broadening is blocked in this case, see (17)).

Second, it would be hard to decide which underlying lax vowel is "broadened". With surface /A:/ we might think of underlying /</ (*SPE* 1968: 217), and with surface /O:/, most probably /^/. But surface /8:/ could be derived from no less than four plain-lax vowels, /I e V U /. For some words one could posit one of these as underlying, eg. *occur* can be assumed to be underlyingly //V'kV r//, because it alternates with *occurrence* /2'kVrns/ (similar to the *car* ~ *carriage* example in *SPE*), but for hundreds of non-alternating words like *term, church, first, colonel, courtesy* it would be arbitrary to point to one particular lax vowel as the one from which the surface /8:/ is "broadened".

There is, furthermore, an important grammar-dependent limitation to the rule of Pre-*R* Broadening: if the /r/ is resyllabified as the onset of the following syllable (always within the word, of course), then the lax vowel remains unaffected by it and undergoes no Broadening, (cf. Jespersen 1909: 362 - "when a vowel follows the /r/, the short vowel preceeding the /r/ retains its usual pronunciation"), eg.:

(17) Lax vowels before /r/ not followed by another C

Intramorph. (Plain-lax)	**Before + (Plain-lax)**	**Finally (Broad-lax)**	**Before # (Broad-lax)**
carrot	barbar+ic	star	starr#y
hurry	occurr+ence	occur	occurr#ing
pyramid	satyr+ical	stir	stirr#er
sorrow	horr+ible	--(?)	--(?)

Forms like *star - starry, occur - occurring* are not counterexamples but have a # boundary before the suffix, and their [r] is pronounced as Linking-*R*. the existence of pairs like *starry* /A:/ - *carry* /</ shows that Pre-*R* Broadening (if it exists) depends on the morphological makeup of the word, and is thus a less straightforwardly phonological rule than Breaking, which depends on the phonological context only (within the word).

6 (b) Broad-lax vowels not before /r/

Two of the broad-lax vowels, /A: O:/ occur in a number of words where even traditional orthography (or evidence from rhotic dialects) does not point to the presence of an underlying /r/. The vowel /8:/ never occurs in such a position (the only apparent exception, *colonel*, is best taken to have underlying /r/ after the vowel despite the spelling, ie. to be homophonous with *kernel* at all levels; cf. also AmE /k8rn2l/.

(18)

/A:/	ask, chance, aunt, advantage, palm spa, sonata, tomato
/0:/	bald, fault, altar, falsify, Balkans water, talk, Arkansas, broad autumn, law, yawn, taught, fought

The occurrence of /A: 0:/ seen in (18) are problematic for the phonological system of any dialect of English; in RP I consider them to have /A: 0:/ underlyingly, ie. to be examples of "Broadness without *R*". *SPE* tries to cover them by introducing a tense vowel (see (6), namely underlying /a/, whose diphthongal nature is far from obvious: the solutions offered by Chomsky and Halle (1968: 206-19), though exciting and insightful, are not convincing. This vowel, they say, appears on the surface in words like *father, Chicago,* or *laud, brawl* in environments where it is not followed by /r/. It escapes the vowel shift rule (since it does not underlyingly agree in backness and roundness), but it undergoes diphthongization (since it is a tense vowel), and appears phonetically in polysyllables as [aV] (≈ RP /A:/) (*father*), in monosyllables as [0V] (=RP /0:/) (*laud*).Obviously, surface [0V] also occurs in polysyllables, eg. *maudlin*: there *SPE* derives it from another underlying vowel, /u/, which generally gives [aU] (or [<U]) (*town*) but, according to Chomsky and Halle, only has this value in polysyllables when followed by nasal plus consonant (*mountain*). Thus in polysyllables [aU] (≈ RP /aU/) and [0V] (≈ RP /0:/) are in complementary distribution and therefore can be derived from the same underlying segment /u/.

(19) Broadness without /r/ in *SPE*

Underlying	**Surface Realizations**		
	In Monosyll.	**In Polysyll. before N+C**	**In Polysyll. elsewhere**
/a/	[0V] *laud*	-	[aV] *father*
/u/	[<w] *town*	[<w] *mountain*	[0V] *maudlin*
/</+/lm/	[aV] *balm*	-	[aV] *almond*

In the present paper I shall assume the broad-lax vowels to be underlying, ie.not derived by a rule of "Broadening" from an underlying vowel, even in the case of alternations like *pass - passage, car - carriage, occur - occurrence*.

7. The dual nature of /0:1/

We have seen that /0:/, in some of its occurrences, behaves like a tense vowel (*more, glory, historian*), while in others, like a lax one (*short, auction, corpse, bald, talk*). This is why it appears in table (14) twice, once as /0:1/ and once as /0:2/. I claim that two different underlying segments are realized in the same way on the surface: /0:1/ is the Pre-*R* (broken-tense) surface representation of underlying tense /eU/, while /0:2/ is an underlying broad-lax vowel. The

superscript numbers are merely abbreviations referring to the different derivational histories.

Compare the analogous pairs showing Vowel Shift under (11) and (20).

(20)

Lax	Tense
melodic /^/	melodious /eʊ /
historic /^/	historian /ɔ:¹/

This patterning of /ɔ:/ entitles us to call it /ɔ:¹/, and regard its surface identity with /ɔ:²/ a coincidence. As a matter of fact, older RP had /ɔ2/ in those places where we posit /ɔ:¹/ (Jones 1964: 80; Wells 1982: 160-2). Many AmE speakers still have /o(+r)/ in words like *glory, historian, more*, ie. the same vowel as in *pony, close, mow*, as opposed to /ɔ(+r)/ in *horse, north, fork*. Since AmE has no Pre-*R* Breaking, this identity supports the analysis of the vowel in BrE *historian*, etc. as tense, and thus underlyingly a diphthong /eʊ/, which is idiosyncratically "broken", not into a centring diphthong but into a monophthong /ɔ:/.

The distribution of /ɔ:¹/ and /ɔ:²/ is the following:

(a) /ɔ:/ is taken to be /ɔ:¹/ (ie. broken from tense /eʊ/) before r, in environments where otherwise we find a tense vowel in its pre-*r* (broken-tense) variant: (i) in word internal position before pronounced [r], eg. *glory, oral, historian; aural, Laura*; (ii) in final position before potential Linking-*R*, eg. *more, four, soar, door; nor, abhor*.

(b) /ɔ:/ is taken to be /ɔ:²/, ie. underlyingly broad, in all other cases, including those in (21).

In a number of words where /ɔ:/ occurs in internal position before (silent *r* plus) a coronal consonant, older RP had /ɔ2/ and many AmE speakers have /or/. Such words are exemplified in (21) (data largely from Wells (1982) and Jones (1964)):

(21)

hoarse, court, mourn

worn, sworn, borne

force, port, portrait, porch, forth, forge

Wells (1982: 160) sets up the category of "FORCE-words" to include all those words which have /ɔ:/ in RP, /o:/ in AmE and which, at least for older speakers, may have /ɔ2/ in RP, and whose vowel is distinct from the vowel of *north* in many dialects. In the present paper, where we wish to provide a synchronic model of the vowel system of RP, the peculiar history of the FORCE-words under (21) is irretrievable, and since they do not occur in positions typical for tense vowels, we shall not count them to the /ɔ:¹/-words.

We thus suggest a different treatment for *beard, scarce, iron* on the one hand (see (13)) and *hoarse, force* on the other.

8. Summary

English nonreduced vowels fall into two classes: tense and lax. Each has two subtypes: plain-tense and broken tense, plain-lax and broad lax.

Plain-tense never appears before surface [r]. Broken-tense only appears before /r/ (which may or may not appear on the surface), and is therefore not underlying but a conditioned variant. The few cases where the presence of /r/ cannot be proved (*beard*) are classed here by analogy and an /r/ is assumed.

Both plain-lax and Broad-lax may appear before surface [r], depending on syllable structure and grammatical boundaries. Broad-lax appears also where proving the presence of /r/ is hopeless, or where alternation shows none to be there (*pass - passage*), and is therefore best regarded as underlying in all its occurrences.

The behaviour of the four classes is tabulated in (22b). The criteria are the following:

(22a)

(a) Is the surface sound a diphthong (ie. does it have an offglide)?

(b) Does it occur in an antepenultimate stressed syllable (not counting "neutral" suffixes, ie. those preceded by a # boundary)?

(c) Does it occur before a vowel, ie. as first member of a hiatus?

(d) Does it occur before noncoronal clusters (ie. clusters not entirely composed of coronal consonants)? Since /r/ is coronal, its presence or absence underlyingly or on the surface is not relevant here.

(e) Is it "long" (ie. transcribed by Gimson with a digraph or with symbol plus colon)?

(f) Does it occur in word-final position on the surface?

(g) Does it occur before pronounced [r] within the word (excluding compounds)?

(h) Does it occur when there is no underlying /r/ after it, pronounced or unpronounced?

(22b)

	TENSE		LAX	
	Plain-Tense	**Broken-Tense**	**Plain-Lax**	**Broad-Lax**
(a) Diphthongal	yes [1]	yes [2]	no [3]	no
(b) Antepenult. syllable	no [4]	no	yes	yes
(c) Prevocalic position	yes	-- [5]	no	no [6]
(d) Before noncor.	no [7]	no	yes	yes
(e) Long	yes	yes	no [8]	yes
(f) Surface final pos.	yes	yes	no [9]	yes
(g) Before surf. [r]	-- [10]	yes	yes [11]	yes [12]
(h) Without underlg. /r/	yes	no [13]	yes	yes [14]

Notes to (22):

[1] If we consider /i: u: ju:/ to have off-glides.
[2] If we ignore /0:[1]/, which belongs here on the basis of its behaviour.
[3] If we ignore the recent slight diphthongization of /I e </ (Gimson 1989: 104, 107, 108).
[4] If we tolerate a few irregular counterexamples like *nightingale*, and accept the regular exception of underlying /ju:/, eg. *cubicle, juniper*.
[5] Broken-tense vowels occur before /r/ only, if we ignore smoothing.
[6] Forms like *drawing* are not counterexamples because of the # boundary.
[7] If we tolerate a few irregular counterexamples like *hoax*.
[8] If we ignore the lengthening of /</ and /^/.
[9] Weak /I U/ may occur finally, but show different behaviour altogether.
[10] Plain-tense vowels may not occur before /r/.
[11] In words of the *carrot-barbaric*-type; see (17).
[12] Only before Linking-*R*, eg. *star is, starry*.
[13] If we ignore Smoothing as in *idea, dual*.
[14] Only /A: 0:/ can occur without /r/, eg. ask, law.

As can be seen, the first four criteria (a-d) divide the four groups into tense and lax. The last four criteria (e-h) cut across my classification, suggesting different groupings. I hope to have been able to show that the first four criteria are more relevant and a classification based on them yields a more interesting analysis of the vowel system of RP.

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Personal Notes

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