

# On subtractive back-formation in Scandinavian nouns<sup>1</sup>

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## 1: Introduction

The topic of this paper is a type of back-formation in Scandinavian nouns; we shall call it subtractive back-formation. (It has also been called 'subtraction', cf Jespersen 1894). Two examples are *ert* < *ertr* and *om* < *omn*:

*ertr* > *erter* (epenthesis)

deletion of supposed suffix--- > *ert*

*ofn* > *omn* (f- > m/\_n) > *ommen* (epenthesis)

deletion of supposed suffix-- > *om*

The noun meaning 'oven' in Old Norse is *ofn*. The cognate in Modern East Norwegian, for example in Oslo, is *om*. The final consonant -- *n* -- has been 'subtracted', then. This development is probably not due to 'sound change': Larsen (1907) reports that the Oslo cognate of Old Norse *nafn* is (or rather used to be) *namn*, where the *n* is retained. (Compare also the expression *Jøssenammen*, literally "name of Jesus".) Apparently, a part of the stem has been interpreted as an affix, and then deleted. The reason why the *n* in *omen* was removed, then, was that it looked like a definiteness exponent.<sup>2</sup> At least, that is how Larsen (1907:69f) analysed this example. In these cases of subtractive back-formation, an element that belongs to the stem, etymologically speaking, is subtracted, deleted, taken away. The element that is deleted is similar to an inflectional affix (i.e. a suffix). The second example is the noun meaning 'peas' in Old Norse -- *ertr*, a pluralia tantum. In Modern Norwegian, it is no longer a pluralia tantum, a singular form also exists, *ert*. This example is probably also due to subtractive back-formation. The *r* looked like the plural ending.

A somewhat different account is given by Jespersen (1894:27), who connects subtractive back-formations to so-called "morphological haplology". In the *ofn* example, this means that a definite form such as *\*omenen* would have been perceived as unnecessarily repetitive. This seems quite plausible. Some sort of "haplology" or "repeated morph constraint" is quite common (see e.g. Plank 1981:149ff, Dressler 1985:251), so there is probably some truth in both Larsen's and Jespersen's account. However, even if the haplology hypothesis is quite plausible for the definite sg (*omenen* > *omen*), it does not really explain why *-en* should be deleted in the indefinite sg, where there is no possibility of haplology. Although Larsen's and Jespersen's explanations are not necessarily mutually exclusive, this is the reason why we shall focus on Larsen's explanation, i.e. similarity to a suffix.

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<sup>2</sup> Some may wonder why the *n* in *namn* has not been deleted in the same way. The answer is that *namn* is a neuter, whereas *ofn* is masculine.

However, also Larsen's explanation entails some problems, for it presupposes that speakers do not always distinguish between stem and inflectional suffix. Yet the distinction between stem and ending (or something similar to the same effect, such as between lexical and grammatical morpheme) is fairly central within the most common models for describing inflection today (e.g., Matthews (1972, 1991), Anderson (1992), Lyons (1977), Spencer (1991)). In these models, the idea is a stem is taken from the lexicon, and then something is added, or perhaps some sort of operations are carried out. But the stems -- qua lexical representations -- are not changed for good. The lexical representations are inaccessible to morphological operations. Thus, what happens in subtractive back-formations is theoretically problematic.

Examples of subtractive back-formation have often been included in traditional reference works on the historical development of the Scandinavian languages, such as Skautrup (1944), Wessén (1969) and Hansen (1971), but they have not attracted much interest in studies of morphological theory. By and large, it is probably fair to say that in the literature, back-formations are treated quite briefly, and the topic is not regarded as a terribly interesting one. If back-formations are given attention at all, they are often mentioned under such headings as 'non-systematic processes' (Hock 1991: ch 9), or in other ways swept under the proverbial rug. Another category that often comes into the group of 'oddities' is folk etymologies (e.g. *sparrow-grass* for *asparagus*). Gundersen (1995) has argued that folk etymologies are not quite as peripheral, after all, and I shall try to make a similar point for back-formations. Admittedly, subtractive back-formations are not terribly frequent, but it does not necessarily follow that they are unimportant. In fact, back-formations have loomed large in discussions of morphological theory in what might be called 'American mainstream linguistics': Aronoff (1976) used back-formation as argument for a word-based rather than a morpheme-based approach to morphology.

This article will proceed as follows: After this introduction (1) and consideration of a few examples (2), we consider some terminology (3). We shall see that subtractive back-formations differ from the more common sort of back-formations on some important points. We then turn to the descriptive problem -- how to describe what is going on (4), and then discuss whether these back-formations are as peripheral as they have been considered (5). Finally, the argument is summarised (6).

## 2 Examples

Before we confront the large theoretical questions, we had better consider some more examples (sources are given in parentheses):

**The *ert* < *ertr* type** (what is deleted, looks like the plural ending)

1) *ert* < *ertr*. 2) *blomst* < *blomstr*. 3) *fing* < *fingr* (Aasen). 4) *klamme* < *klammer* (cf German *Klammer*) (Jespersen 1894:4). 5) *sy lind* < *sy linder* (Swedish dialect, Hesselman 1931). 6) *diamet* < *diameter* (Hesselman). 7) *kilomet* < *kilometer* (Hesselman). 8) *magist* < *magister* (Hesselman). 9) *vet* < *vetr* (Aasen)

**The (*ofn*) > *omn* > *om* type** (what is deleted, looks like the definiteness ending)

1) *om* < *omn* (Larsen 1907:69f). 2) *beik* < *beiken* (child language, Eric Papazian, p.c.) 3) *ørk* < *ørken* (Jespersen, Hansen). 4) *en kombinesj* < *kombinasjon* (Knudsen 1967:15) 5) *nys* < *nysen* (Wessén 1969:23). 6) Swedish *ekorre* < *ekorn* (Wessén 1969:23) 7)

*tallerk* < *tallerken* (Wessén 1969:23). 8) *Axel* < *Axelen* 'man's name' (Wessén 1969 is somewhat uncertain, but this appears to be the standard explanation of the name *Axel*). 9) non-standard Swedish *brax* < *braxen* (name of a fish) 10) *bisk* < *bisken* (German *bisschen*) (Norsk Ordbok). 11) Swedish *jätte* < *iätun* (compare Norwegian *jotun*). 12) (non-standard) Swedish *exam* < *examen*.

The examples may seem as if they are taken straight out of a Dickensian "curiosity shop", but they have some intriguing theoretical consequences. A note of caution should be added, however: It is not always easy to decide in which Scandinavian language the change has taken place. For example, the change from *fingr* to *fing* is Norwegian, the change from *blomster* to *blomst* is Danish. This is one reason why the subject matter of this paper is Scandinavian -- rather than Norwegian -- nouns. A second problem is that some of the examples are slightly uncertain. Nevertheless, the examples are sufficiently many to warrant our attention.

### 3 Some terminology

A note on terminology is now required. The problem is that subtractive back-formations do not fit every definition of back-formation; for example, they do not fit Pennanen's (1975:216) definition: "The formation of what looks like a root-word from an already existing word which might be (but is not) the derivative of the former", e.g. *beg* < *beggar*. Yet there is nothing new in referring to an example as *ert* as 'back-formation'. In fact, one of the standard examples of back-formation is the analogous English change from *peas* > *pea* (cf Bloomfield 1933:412, Bauer 1983:231, Hock 1991:204). The point I want to make, is that many other standard examples of back-formation are fairly different. For example, the creation of *edit* from *editor* or *beg* from *beggar* is also called back-formation (cf Bauer 1983:231).

But the differences are clear: In the case of *ertr* > *ert*, there is a change of the lexical representation and no change of word-class. In the case of *edit* < *editor*, by contrast, there is no change of the lexical representation, but there is a change of word-class, a new lexical representation is created and one might describe the process as derivation - unlike *ertr* > *ert*. In other words: In the case of *ertr* > *ert*, the shape of one word is changed, whereas in the case of *edit*, a new word is created. This can be summarised as follows:

	change of word-class	change of lexical representation	new word created
<i>ert</i>	no	yes	no
<i>edit</i>	yes	no	yes

Thus, the term 'back-formation' covers different, if related phenomena.<sup>3</sup>

<sup>3</sup> Bauer (1983:232) has suggested, if somewhat tentatively, that back-formation can be seen as a subgroup of 'clipping'. Clipping is found in e.g. *binoculars* > *binocs*, *pornography* > *porn*. It is defined by Bauer (1983:233) as a "process whereby a lexeme (simplex or complex) is shortened, while still retaining the same meaning and still being a member of the same form class". Clearly, this definition fits with examples as *ert*: They are shortened, and they remain members of the same form class (or word-class). So far, the parallel is interesting. But clipping often has a stylistic effect (cf Bauer 1983:233, Plank 1981:201). In present-day English, one finds both *pornography* and *porn*. They are near-synonyms, but they differ in stylistic level. The example of Norwegian *ert* is different. The new form has no particular stylistic 'flavour', and it is not the case that two near-synonyms are found in the lexicon: Rather, the (lexical representation of the) word is changed, simply. This is one reason for distinguishing subtractive back-formations as *ert* and *om* from 'clipping'. Besides, there

### **Folk etymology**

In such cases as *omn* > *om* and *ertr* > *ert*, an etymologically speaking unanalysable form is treated by the speakers as if it were analysable. This resembles what happens in the case of folk etymologies. Compare Bauer (1983:44): "In some cases, an unanalysable form is treated as analysable, and this is when cases of **folk etymology** occur, for example when *asparagus* is re-analysed as *sparrows' grass*". So on this point, examples as *om* and *ert* resemble so-called folk etymologies. (Even if, of course, they differ on other points.)

So it sometimes happens that etymologically speaking unanalysable forms are treated as analysable. Conversely, it also happens that analysable forms are treated as unanalysable. According to Bauer (1983:44), very few speakers of English think of a *hedgehog* as a pig that lives in a hedge - even if this compound "ought to be" perfectly transparent. (See further Bakken 1995.)

### **Reanalysis**

Back-formations as *ert* can also be seen in relation to the notion of 'reanalysis', which has apparently become more popular in linguistics in the 1990s (see e.g. Wurzel 1992, Hopper & Traugott 1993 for some recent proponents). Reanalysis is often defined as a "change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation" (Langacker 1977:58).

Reanalysis modifies underlying representations [...] and brings about rule change. Analogy [...] modifies surface manifestations and in itself does not effect rule change, although it does effect rule spread [...] Unquestionably, reanalysis is the most important mechanism for grammaticalization, as for all change. (Hopper & Traugott 1993:32).

Speaking in general terms, reanalysis can be that a structure like 1 is turned into a new structure 2:

1) (A, B) C

2) A (B, C)

(from Heine et al 1991:216)

The idea is that reanalysis happens where both interpretations make sense, and then spreads by analogy to circumstances in which it becomes visible. What re-analysis means, then, is that speakers perceive the structure of some expression differently from the earlier generation. Or from how they used to perceive it themselves.

Back-formations are often treated as some isolated, bizarre phenomenon; just one of the many curiosities to be found within diachronic morphology. If, however, morphological back-formations can be connected to the notion of reanalysis, then they are no longer so peripheral. And indeed they can. Reanalysis is usually said to involve some sort of "resegmentation", such as "boundary loss, boundary creation and boundary shift" (cf Heine et al 1991:216, Hopper & Traugott 1991:50, Langacker 1977:64), and it seems quite appropriate to talk of "boundary shift" -- or "constituent-internal reanalysis" -- in such back-formations as *om*. The change is from

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are other sorts of back-formation that change word-class, for example *edit*, so not all kinds of back-formation can be subsumed under clipping, anyway.

- a) *omn*
- to
- b) *om+n*

By reanalysis, the *n* is seen as the exponent of definiteness rather than as part of the stem (the lexical representation). Incidentally, this is a parallel to garden variety examples of back-formation, such as *edit*:

- a) *omn* > *om+n*
- b) *editor* > *edit+or*

Forms such as *omn*, *ertr* are ambiguous in isolation: They can be interpreted as either plural forms or singular forms. Once a form as *om*, *ert* originates, it is clear that *omn* and *ertr* must have been reanalysed as definite form sg, indefinite form pl respectively, and the suffix must then have been deleted.

Reanalysis is evident also in the case of folk etymology, where, as is well known, morphological boundaries are often inserted, although one would not expect them, etymologically. Thus, both folk etymology and back-formations may count as some sort of reanalysis.<sup>4</sup> (See Gundersen 1995 for much discussion of folk etymology as reanalysis.)

#### 4 The descriptive problem

The very term 'back-formation' is metaphorical. It implies that there is another kind of formations, a kind that is not 'backwards', as it were -- a proper sort of formation. Hock (1991:204) puts it this way:

There is [...] one important difference between backformation and [...] analogy: Whereas in the latter process, the newly created form is a synchronically 'derived' formation [...], in backformation, it is the 'base form' of a synchronic derivation. [...] The historical development [in backformation, HOE] goes 'backward', contrary to the normal direction of derivation. This difference apparently is sufficient to bring about very different reactions: [...] analogical forms involving productive derivational [sic!] processes, such as *foots*, might elicit an indulging or condescending smile, but new backformations [such as *orientate* from *orientation*, HOE] are more likely to be met with a groan, or with a remark like *You can't say that*

As for the difference in social reactions between analogies and back-formations, i.e. the difference between smiles and groans, Hock's argumentation seems to be based on anecdotal evidence. That is not sufficient reason to dismiss it, but it is interesting that Hermann Paul (1909:110) says almost the opposite of Hock: "Eine Proportionsbildung findet gar keine Hemmung in der Seele, wenn für die Funktion, für welche sie geschaffen wird, bisher überhaupt noch kein Ausdruck vorhanden gewesen ist." If Paul is right, there should actually be **more** opposition to *feets* than to *orientate*, not less. My guess is that Paul is right. I think that the reactions would be at least as strong against *foots* as against *orientate*. So much for the sociolinguistic issue.

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<sup>4</sup> The idea that back-formation is a sort of reanalysis is not original. For example, Hock (1991:204) explicitly links back-formation to "reinterpretation", which apparently is his term for reanalysis. In fact, some of Hock's (1991:177) examples of reinterpretation are exactly the same as Hopper & Traugott (1993:41) use as examples of reanalysis.

But there is also an important problem in morphological theory here. Hock presupposes that our morphological model has only directional, source-oriented rules; rules of the sort where you take A, add B, and the result is C. This is apparently the dominant view in current morphology. (See for example Matthews 1972, Anderson 1992, most of the models surveyed by Spencer 1991, Dressler 1985:ch 1.) Yet the issue may be more complicated: If this were the whole story, then how could cases of subtractive back-formation come about? For in this case it looks like an element has been removed.

A priori, one could of course assume that there is a rule of truncation here. So that we have one rule which says 'add-en', and then we have one rule which says the exact opposite 'delete -en'. This is possible in principle, but the idea is seldom espoused in the literature. The obvious problem is why the truncation rule should work so seldom. There is simply little independent evidence.

Another possible description, which according to Bauer (1983:231) used to be the most common one, is "that a rule of word-formation (or [...] morphology) is reversed". This is the position taken by Aronoff (1976:27), who talks of "backwards application of a word formation rule". This idea seems problematic, however. In the standard picture of morphology, rules are directional. You take A, then you add B, and the output is C. It may seem somewhat unexpected that the rule should suddenly be able to work the other way around. Does it really seem plausible to say that normally we have directional rules - which sometimes happen to work the other way around? This looks suspicious, and Plank (1981:202) explicitly rejects the idea of describing back-formation as due to rule inversion.

Admittedly, the issue of directionality in word-formation is complicated. But the idea that **all** our rules have to have the A+B=C format will entail difficulties. For one thing, if you assume directionality in general, then the problem is bound to arise in some cases which direction to choose, and this problem can become quite vexing in some cases (see Sanders 1988).<sup>5</sup>

At this stage, it may be interesting to turn to the Swedish scholar Elias Wessén. He is not a theoretical morphologist; theoretically minded linguists might even consider him the old curiosity shop-keeper *in person*. Now, Wessén (1969:24) says that it is not always obvious to the speaker what word is the primary one:

Till substantiv har man sedan gammalt kunnat bilda verb på ett enkelt sätt genom att lägga verbändelser [...] till substantivets stamform: *eld-elda, jord-jorda* [...] Ofta är substantivet tydligen det primära, men vanligt är också att både verb och substantiv finns i det allmänna språkbruket utan att det åtminstone för nysvensk språkkänsla alltid är klart, vilketdera som är 'grundordet': *råd-råda, gråt-gråta*

To nouns it has long been possible to form verbs in a simple way by adding verbal endings to the stem of the noun: *eld* ('fire', noun) - *elda* ('make fire', verb) [...] Often, the noun is clearly primary, but it is also common that both verb and noun are found in ordinary speech, and it is not clear, at least not to the intuition of a modern Swede, which is the primary word":[...] (Translation HOE)

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<sup>5</sup> The problem of directionality may depend on our interpretation of the formalisms we use. Are they merely convenient notational devices, or do they somehow represent processes that are "real"? There is no denying that this is a debatable point. If the rules, the formalisms, are seen as mere hocus-pocus, then my objection may, perhaps, lose some of its force.

But there is also an important problem in morphological theory here. Hock presupposes that our morphological model has only directional, source-oriented rules; rules of the sort where you take A, add B, and the result is C. This is apparently the dominant view in current morphology. (See for example Matthews 1972, Anderson 1992, most of the models surveyed by Spencer 1991, Dressler 1985:ch 1.) Yet the issue may be more complicated: If this were the whole story, then how could cases of subtractive back-formation come about? For in this case it looks like an element has been removed.

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In line with this, my suggestion is that the rules need not have one direction only, and that they need not have one and the same direction for all words. Support for this idea can be found in the description of inflectional morphology. In describing Norwegian and English inflection, we do not only need the standard kind of rules, the so-called source-oriented ones. We also need product-oriented ones. Source-oriented rules are the kind of rules where you have a source (A), you have a process (add B), and you have an outcome, a result (C). A simple illustration from Norwegian noun inflection would be this: "The definite form sg of masculines is (usually) formed by adding *-en* to the indefinite form." You take the indefinite form, you add *-en*, and then you have the definite form. By contrast, in a product-oriented rule, you have only a product (C). Neither the input, the 'source', nor the process, is particularly well-defined. A simple illustration from Norwegian noun inflection would be this: "The definite form of masculines usually ends in *-en*". In this case, we do not say anything about the corresponding indefinite. These two formulations may sound as almost equivalent. But they are not entirely equivalent. For example, to interpret *omen* as a definite form is only possible, given the product-oriented formulation.

So a form such as *omen* is interpreted as definite because of the product-oriented generalisation. But this does not in itself explain why *-en* had to be deleted, unless we also accept that *-en* usually is an ending - which is a source-oriented generalisation.

Now, the directionality problem is only pressing in the case of source-oriented rules. The reason is that product-oriented rules by definition **cannot** be directional. It is also worth noticing that the difference between source-oriented and product-oriented rules in morphology resembles the difference between procedural and declarative descriptions in phonology and syntax. Apparently, declarative descriptions are gaining ground in those fields at the moment. In phonology, Optimality Theory is constraint-based rather than rule-based. In generative syntax, the role of transformations has been downplayed.

Some sort of product-oriented approach to morphology is also suggested by Jackendoff (1975), Bybee & Slobin (1982), Langacker (1987), Endresen (1996) and others. This is not to say, however, that source-orientation is wrong, or that it should be excluded from our morphological model. Rather, both source-orientation and product-orientation should be allowed for. (See Enger 1996:108, 110ff, 142ff, 161.)

The upshot of this theoretical problem may become clearer when we return to the case at hand, the example of *ommen* > *om*. Larsen's explanation presupposes that *-en* has been perceived as a marker (loosely speaking) of definiteness. In other words, the idea is that definite sg (of masculines) end in *-en*. Now, to say that the definite sg ends in *-en* is in itself a product-oriented generalisation, and not a source-oriented one. A source-oriented generalisation would be that definite sg has the ending *-en*, which you simply cannot say about *ommen*. What one would say in a strictly source-oriented model, is that an ending *-en* is added to get the definite sg of masculines. Clearly, in *ommen* no ending-*-en* has been added. Thus, Larsen's explanation rests on the possibility of using product-oriented generalisations. Conversely, the occurrence of subtractive back-formations of this kind is an argument in favour of product-oriented generalisations.



By contrast, the generalisation becomes difficult to capture within a strictly source-oriented model: Etymologically, the *n* belongs to the stem. If the speakers had been aware of that, there would have been no reason for the change. This is why, within a source-oriented model, a case as *omn* > *om* is bound to remain problematic, and this may be one reason why such back-formations are often set aside and seen as anomalies by morphological theorists: The example indicates that speakers do not always have a clear intuition about the distinction between ‘stem’ and ‘ending’ (or ‘formative, exponent’, whatever...).<sup>6</sup>

Speakers are not always aware of the distinction between stem and ending, then, and this goes counter to many morphological models. It certainly does not follow, however, that the distinction between stem and ending should be scrapped entirely. Let us only conclude that there is a theoretical problem here.

Another important conclusion is that the lexicon is changeable due to grammar. In our examples of back-formation, the lexical representation of a word is changed, for example from *omn* to *om*, due to similarity with a grammatical element. It is not obvious (to me, at least) how this observation is to be reconciled with the widespread post-Bloomfieldian view of the lexicon as static, unchangeable, a module that only hands out elements that the grammar is free to use. What our examples indicate, is that the lexicon should not, in the words of von Humboldt, be seen as “eine fertig daliegende Masse”. Subtractive back-formations may be seen as an example of interaction between lexicon and grammar.

## 5 How peripheral are back-formations?

### 5.1 Productivity and creativity

Subtractive back-formation is theoretically interesting, then, in that it becomes an anomaly within source-oriented approaches. However, it is often argued that back-formations are of peripheral interest. For example, Anderson (1992:191) dismisses back-formation in the following way:

If there were a Verb related to *submersible*, its form and content are easy to project: *submerge* [...] Such an inference is clearly distinguishable, at least in principle, from the direct application of a linguistic rule; and in so far as back formations can be seen as sporadic inferences of this sort, it is not necessary to treat derivational rules *per se* as being bidirectional in their basic character.

Anderson’s discussion is admirably explicit, and so it is a useful starting-point for further discussion. The claim that back-formation “at least in principle” can be distinguished from the direct application of a linguistic rule, seems somewhat problematic, since it is a classic problem where to draw the line for linguistic rules (cf Plank 1981). Furthermore, the

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<sup>6</sup> There are additional arguments for the assumption that speakers do not always distinguish between stems and endings. Firstly, there are cases where a morphologist may be in doubt. Bauer (1983:114ff) discusses a couple of examples. If the linguist is in doubt about this point, then it may not be too surprising if speakers also are: After all, the linguist can - often - rely on an explicit theory, and perhaps invoke etymology. Speakers cannot. Secondly, loss of intuition about ‘borders’ between different morphological elements is well known from the well attested diachronic process of lexicalisation. See Bakken (1995) for much discussion of this process. Standard Norwegian examples would be the development from *staf-karl* to *stakkar*, or *fê-hus* to *fføs*. In fact, what Bakken (1995) (like Bauer 1983 and many others) refers to as ‘leksikalisering’ or ‘lexicalisation’, is by Hopper & Traugott (1993:40f) referred to as ‘rebracketing’, that is reanalysis. If they are right, there is a more general mechanism at work here, and at least in examples as *stafkar* > *stakkar*, it seems appropriate to talk of boundary loss.

Danish linguist Skautrup (1944:202) says that subtractive back-formation "forekommer i adskillige ord", i.e. it occurs in a number of words.

One might still try to keep subtractive back-formations out, for instance by arguing that it is of diachronic relevance only. That is what Aronoff (1976:27) says, but the argument has been refuted by Bauer (1983:64f), who argues that in so far as back-formations can be coined, at the present day, they are part of the synchronic abilities of the speaker.

Moreover, the relative infrequency of subtractive back-formations has often been exaggerated. Actually, deletion of *-en* in Norwegian is quite common within the **possible domain** - namely masculines ending in *-en*.<sup>7</sup> (Likewise, English *-s* has been deleted in lots of words -- *peas*, *cherise*.) This argument is familiar from the discussion of productivity in morphology. If the number of possible bases for a process is low, then that is not in itself enough to conclude that the process is not productive:

If a process can apply to a limited, finite set of *n* bases, and is actually attested as having applied to all of those bases, then that process is fully generalised, and has, correspondingly, been fully productive, whether *n* is equal to 200,000 or to 10. That is, judgements about how productive some process is, or has been, should not be made before it is discovered which bases could provide input to the process. If this is not done, then the term 'productive' is being used in a [...] ultimately misleading way. (Bauer 1988:69)

Lyons (1977:549) draws a distinction between "productivity (a design-feature of the language-system[...]) and creativity (the language-user's ability to extend the system by means of motivated, but unpredictable, principles of abstraction and comparison)". In other words, a distinction is drawn between rule-governed and non-rule-governed behaviour - much in the same way as Anderson does in the quotation. (See also Bauer (1983:63). But generally, the distinction between productivity and creativity may seem to rest on a distinction between predictability and everything else (which is arbitrariness), and this perspective seems debatable. In fact, Bauer (1983:294) explicitly suggests that the distinction between productivity and creativity may become especially cumbersome in the case of back-formations (and some other cases).

An argument that should be mentioned in favour of the importance of subtractive back-formations, is that one finds parallels in other languages. English examples as *pea* < Old English *pise* (pl *pisan*). *cherry* < French *cerise*. *riddle* < OE *rædels* (cf German *Rätsel*). (Hock 1991:204) are well known. Reanalysis in the form of boundary shifts are found also in Uto-Aztecans (Langacker 1977:65). One also finds German parallels: For example, the noun *Messer* is developed from an older *mezzeres*, where the last element has been identified ("wrongly", etymologically speaking) as a genitive exponent, and then deleted.

The fact that parallel, but independent innovations happen, is an argument that this is interesting. Cross-linguistic parallels of this sort should not be dismissed too easily; this is an example of independent, parallel innovations. If we set this aside as sporadic phenomena due to creativity, we may miss interesting generalisations.

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<sup>7</sup> The possibility of *-a*, *-et* being deleted is probably somewhat lower, because they do not, at least not according to my intuition, occur as often. At least, there are not many indefinite feminines ending in *-a* in my eastern Norwegian dialect. (A more prosaic, but quite possible reason why we have so few feminine examples is that they are difficult to find in Danish and Swedish works, as those (written) languages do not have this category.)

## 5.2 In defense of the notion of reanalysis

Recently, it has been argued that the notion of reanalysis does not have any significant function in a mentalist theory. The argument stems from Nordgård & Áfarli (forthcoming). As they see it, reanalysis occurs between generations. In other words, reanalysis does not take place within I-language. In Principles and Parameters theory, which is the framework within which Nordgård & Áfarli work, what is theoretically interesting, is what happens within I-language. Therefore, Nordgård & Áfarli dismiss the notion of reanalysis within their framework:

the conclusion is unavoidable: Given the plausible idea that historical change takes place within generations, the concept of historical reanalysis (or historical change generally) has no place in a Principles and Parameters-style description. [...] If historical change is considered a property of language, then that language cannot be a language as conceived in Principles and Parameters Theory.

Nordgård & Áfarli's claim is theoretically interesting.<sup>8</sup> It deserves to be discussed, even if the following comments may look more like a discussion between paradigms (in Kuhn's sense) than like a discussion of empirical issues.

From the historiographic point of view, the argument presented by Nordgård & Áfarli looks extremely structuralist. Given the theoretical premises, historical change becomes theoretically irrelevant. By this interpretation of the Principles and Parameters theory, basic structuralist tenets are apparently preserved; synchrony has priority, and language change is not interesting. The argument has a "post-Saussurean" tone. Matthews (1997:193ff) makes the same point in a discussion of the structuralist legacy in linguistics in the 1990s:

one point on which all structuralists were agreed was that a particular state of a language could and should be studied in abstraction from its history [...] In this respect at least, most linguists in the 1990s are as structuralist as ever [...] Change and theories of change are clearly secondary [...] The distinction of synchrony and diachrony is so fundamental to linguistics in the twentieth century that it is tempting to see it as uncontroversial. But [...] neither Saussure's view nor that of Chomsky's followers is dictated by the phenomena

The fundamental issue is how to define a language; the problematic dichotomy between synchrony and diachrony is a consequence. There are different theoretical preferences here; I am inclined to set my money on a linguistic theory that does not downgrade the importance of language change.

Such theoretical preferences aside, it is ultimately an empirical issue whether **all** cases of reanalysis take place between generations. It seems plausible enough that the majority of language changes take place between generations, as argued already by the Neogrammarians (cf Romaine 1989:213). However, Nordgård and Áfarli's argument is based on the premise that absolutely all cases of reanalysis take place between generations. This premise is probably too strong, in my view. Several linguists have argued that language change does not take place only within generations; that children cannot account for all sorts of language changes. (See e.g. Romaine 1989:215.) It is well known that speakers may have sudden "morphological revelations". This is particularly clear with children, who, for example one day suddenly can have realised that the Norwegian compound *barnehage* "kindergarten" is not an unanalysable simplex, but consists of the two elements *barn* "child" and *hage* "garden". Most of us can think of similar moments in our own experience -- also as adults. Personally, I was well into

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<sup>8</sup> It is not clear that all linguists working within the Principles and Parameters theory would agree with Nordgård & Áfarli, but this issue need not concern us here.

my twenties before realising that the Norwegian verb *fortelle* could be related to *telle*. Thus, the ability to reanalyse is apparently not restricted to a "critical period" of language acquisition.<sup>9</sup>

In fact, Bauer's (1983) argument concerning back-formations (cf 5.1 above) can be repeated almost word by word: To the extent that speakers can coin neologisms in this way in their lifetime, back-formations are part of the synchronic competence. In fact, it seems to be the case that English neologisms like *lase* and *orientate* are understandable, even to a speaker who never had heard them before. The speaker might even coin them himself, on the spur of the moment -- long after the stage at which language acquisition seems to be complete. Admittedly, this may more often be the case with back-formations of the *edit* type than with back-formations of the *om* type. But the conclusion is still clear enough: reanalysis does not only take place between generations.

## 6 Conclusions

The contents of this article will now be summarised. On the basis of some examples of subtractive back-formation, I have argued

- a) that even if both *edit* and *om* may be called back-formation, there are important differences between them;
- b) that back-formations as *om* can be related to other terms, notably reanalysis, so that back-formation may become less of an isolated oddity;
- c) that there are intriguing problems within morphological theory, notably the distinctions between elements, which we tend to take for,
- d) that unless we accept product-oriented generalisations in morphology, the back-formations considered here are difficult to reconcile with a morphological model, and so we ought to incorporate in our model of a non-directional, product-oriented model in order to prevent our model from becoming unduly restrictive;
- d) that the possibility for reanalyses is "eine diakronische Adäquatheitsbedingung einer Grammatiktheorie", a diachronic condition of adequacy on grammatical theory.

Clearly, we would not wish to base a morphological model exclusively on examples of subtractive back-formation. facts about *ertr* and *omn*. But that is not what I suggest, either. What we need, is a theory that can accommodate these facts -- and other, more usual morphological phenomena.

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<sup>9</sup>There may perhaps be differences on this point between syntax, which is what Nordgård & Áfarli discuss, and morphology, which is the subject of the present paper, but this question is left open here.

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