VIEW[Z]

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LETTER FROM THE EDITORS

Dear readers,

*did you notice that the previous issue of **VIEWS** did not feature a single historical paper? Were you getting worried about this? Rest assured, historical linguistics is back on the scene! (Notice the sighs from the non-historical members of the editorial team). While the local historical linguists are holding back for the time being, Joachim Grzega, our guest-contributor from the University of Eichstätt, takes a new look at the rivalry of* -ing *and* -inde/-ende/-ande *during Middle English and proposes some new explanations. Christiane Dalton-Puffer shows she's still into word-formation but is keeping uncharacteristically synchronic this time. What starts out as a straightforward description of a present-*

day word-formation pattern, turns into an exploration of the fields of noun classification, language typology, the notion of word-classes. In a letter, Boris Hlebec from Belgrade has taken up Bryan Jenner on the terminological problems in phonetics and phonology (Views 7-2), and Bryan has written a rejoinder. We know we are repeating ourselves, but keep those comments coming! The third article-size contribution this time reports on an M.A. study concerned with content-based instruction (CBI). As more and more Austrian secondary schools are adopting the policy of teaching certain subjects (like geography or biology) through English, Marion Griessler undertook to evaluate the impact this decision has on the English language competence of the pupils concerned.

Griessler's paper with its real-world educational concerns furnishes us with a subtle way of leading over to other real-world concerns. Yes, we are talking about money. Thanks to your discreet little letters with bank-notes in them we've been able to keep VIEWS going for another year. We are including address stickers again this time, hoping that you will use them to send us your support. Our thanks go also to our advertisers: please note the ad of our Campus bookseller ***Kuppitsch****, who will order any German book for you and get it to you anywhere in the world. And while you are waiting for your favourite German book to arrive - read VIEWS!*

The Editors

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LETTERS TO *VIEWS*

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Belgrade, Feb. 29, 1999

The latest issue of VIEWS has struck a chord with me, and I would like to comment on two subjects covered in it.

The status of ModE /ɪə/ (Jenner in *VIEWS* 7/1)

Jenner's paper brings forth an original idea on the status of /ɪə/. It really can be sustained that the diphthong /ɪə/ is in fact a sequence of /ɪ/ + /r/ in most cases, i.e., in words which contain a letter ⟨r⟩ in spelling at the corresponding place, which is pronounced as linking 'r' and is distinctly heard in a number of English dialects. The status of /r/ as a semi-vowel, with its contoid and vocoid variants, of which the latter is articulatorily quite near /ə/ also supports the view (they are both central according to the part of the tongue). In other instances, where /ɪə/ is a sequence of two sounds belonging to different morphemes, it can also be maintained that we have a phonetic glide here rather than a phonological diphthong, as in *easier* or *carrier*, i.e. /ɪ/ + /ɪə/. This is the same as in cooing / ku:ɪ /, where /u:/ and /ɪ/ are considered to be two different phonemes belonging to separate syllables and separate morphemes. What makes me less happy is the fact that /ɪə/ also occurs in words without a morpheme boundary, as in *real*, *hideous*, *genius*, *idiom*, *morphia*, *theological*, *Ian* (A.C. Gimon, *An Introduction to the Pronunciation of English*, second edition, 1970, p. 142). This brings us back to /ɪə/ having a phonological status, which the author would gladly do away with.

Translating Hardy (Klingler and Ritt in *VIEWS* 7/1)

As regards translation being 'a task that involves a stunning variety of choices', as you say, I can refer you for a theoretical framework to my article 'Factors and steps in translating' (*Babel* Vol. 35, No. 3, 1989, 129-141). The article features eleven steps or factors which the translator must take (into consideration) if he or she wants to be successful. Since decisions within factors are liable to variation, there is a vast choice of translation varieties, as illus-

trated in the article. It is a happy coincidence that I have translated *I look into my glass* a dozen of years ago. Each line of the translation contains three syllables more than the original, while the rhythm remains the same.

Ogledalu moj pogled skreće,
Pa motrim ovo lice svelo,
I kažem: 'Kada bi mi, kamo sreće,
Usahnuti i srce htelo!'

Jer ja bih mogao, bez jada
Sto srca gledaju me studno,
Svoj pokoj beskrajni da čekam tada
Samotarski i neuzbudno.

Al' Vreme da mi bol nanese,
Dok deo krade, deo daje,
Pa lomno telo to u smiraj trese
Uz podnevne još otkucaje.

In back translation it goes like this:

My eyes are turning to the glass,
And I view my withered face,
And say, 'Would God it came to pass
My heart had shrunk also!'

For then I, undistrest
By hearts looking at me coldly,
Could wait my endless rest
Lonely and with equanimity.

But Time, to make me grieve,
While stealing part, part gives,
And shakes this fragile body at eve
With throbbings of noontide.

I congratulate you and your team on the inspired project and admire Helmut Klingler's brilliant reasoning about the original poem and his versions of it. I have translated some eighty poems by Hardy and I know how prolific he was, always changing meter, and his verse was often left uncouth.

Boris Hlebec

Bryan Jenner replies

I was delighted by Dr. Hlebec's response to my very compressed suggestion about English diphthongs (*VIEWS* 7/2: 52 - 53). This is, of course, a very large topic that merits more discussion and exemplification than I could fit into 3 paragraphs and a footnote, and I will try to remedy this deficiency in a future article. Providing an adequate and sufficiently abstract phonological account of diphthongs is, I believe, one way of bringing British and American English closer together: phoneticians have, in general, exaggerated the differences, and this has caused unnecessary problems for learners.

To deal specifically with the questions raised in Dr. Hlebec's letter, I am forced to go back to something like the Prague School approach. As he points out [ɪə] is a surface manifestation of (at least) two different phenomena. The first – which is what I was talking about – is a realisation, in non-rhotic varieties of English, of underlying /ɪ + r/ in contexts like *here*, *beer* and *near*. In all such contexts the [ə] element corresponds to orthographic -r and even in non-rhotic varieties this is sometimes realised as [r]. Another type of context is found in words like *hearing*, *query*, *nearest* where the schwa element is variable and may best be described as an off-glide in anticipation of /-r/ with no phonological status at all.

The third type of context constitutes a more serious but not insoluble problem. The words Hlebec lists are something of a mixture, but I will try to categorise them. Firstly we may consider *real, idiom* and *theological*. It may well be true that the ɪ.ə boundary (or perhaps *i*.ə, cf. Wells, J.C., 1995: *Pronunciation Dictionary*, London: Longman) is not a morpheme boundary but I would suggest that in all of these cases it **does** correspond to a (potential or latent) syllable boundary. This is apparent in a number of derivatives or related words, such as *reality, idiomatic* and *theology*, where the schwa may be traced back to an underlying /o/ or / /. In *genius*, *morphia* and *hideous*, on the other hand, it seems to me that the schwa element is stronger than the /ɪ/ element, which is not true of cases where schwa corresponds to orthographic -r. Indeed in some present-day realisations of these words the /ɪ/ is becoming almost a consonantal /j/. Alternatively we may speculate about the forms derivatives might take if they existed and propose *hideosity* (which I have seen or heard as a joke!) *morphiation* (= treating with morphia or morphine) and *geniosity* (= the quality of being a genius). These would then be handled in the same way *real*, *idiom* and so on.

The name *Ian* is quite different from the other words given since it seems to me to consist unambigously of 2 syllables, and the vowel in the first is not a checked /ɪ/ but an open /i/ with or without length. It is therefore comparable to *iron*, *rowan* or to the example Hlebec gives of /u:/ + /ɪ/:*cooing*, to which we might add *ruin*, *suing* and even *mewing*.

I feel it is dangerous to take phonological decisions on the basis of morphological boundaries, but fortunately we can avoid this here. And the same could be said of the /i + o/ sequence which Hlebec mentions. I would agree that this has no status as a phoneme since it always corresponds, if my explanation is accepted, to a (potential) syllable boundary.

The other way out of the problem, which is again a Prague School strategy, is to say that these are not 'real' English words at all and that their phonology does not need to be accounted for by the system. This was the strategy used by Vachek to handle Czech long /o:/ which is only found in (recent) loan words like *móda* and *póza*. The 'system' vowel is a diphthong /ou/ which pairs with a short /o/. This preserves the phonemic symmetry of Czech, giving it 5 long-short pairs. The long /o:/ is simply 'outside the system'. The same is true, in Czech, of the diphthong /au/ which is only found in loan words such as *auto* and *autor*.

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Screenfuls of classifier things: noun classes and derivation in English

Christiane Dalton-Puffer

1. Introduction

Those who know my views on the use of too many footnotes in academic papers and have at times suffered from my expressing them, are entitled to a good smirk as I tell them that this contribution springs from a footnote in Plag, Dalton & Baayen (1999). In that paper we examined the productivity of various English derivational suffixes across written and spoken language. In a footnote (!) we stated that the structural properties of some of the items studied would need more attention than we could give them in the given context. Two of these items are under investigation here: *-ful* and *-type*.

The paper starts out with a discussion of *-ful*, linking it up to the general issue of noun classification. The formative *-type* will be brought into the discussion at a later stage.

2. Quantitative and structural aspects of *-ful*

The data on which this paper is based were extracted from the British National Corpus (BNC), all examples, unless indicated otherwise, are lifted from the corpus. As is evident from Table 1, the majority of tokens with *-ful* in the BNC are derived adjectives of the type *characterful, grateful, eventful, resourceful, useful* and so forth. The adjective suffix is relatively uninteresting in structural/formal terms. It has been shown to be unproductive in present-day English (Plag, Dalton & Baayen 1999) and will not be dealt with here. This paper will take a closer look at *-ful*$_2$, which produces items like those in (1) below.

TABLE 1: Occurrences of *-ful* in the British National Corpus

	-ful **$_1$(adjectival)**			***-ful*** **$_2$ (nominal)**		
	N	V	n1	N	V	n1
demog[1]	1820	53	13	76	18	8
Context	3753	75	15	94	21	15
Written	77316	154	22	2913	136	51

N = number of tokens in the corpus;
V = number of types in the corpus;
n1 = *hapax legomena* = types occurring only once in the corpus

(1) *handful, mouthful, barrelful, potful, busful, officeful, canful, potful, eyeful*

The *OED* (s.v. *-ful*) and the *Comprehensive Grammar of the English Language* (*CGEL* = Quirk et al.1985: 1548) include this variant of *-ful* among those suffixes which are used to form English nouns. On closer inspection, however, the relevant formations do not behave like full-blooded nouns after all. It cannot be denied that they have a nouniness about them, but they do not fit all the nounhood criteria of the *CGEL* (p. 410) to the same extent as adjectival *-ful* formations fit the adjective criteria. Table 2 lists the six criteria established for English nouns by Quirk et al., typical English nouns should pass all the tests, as is reflected by the ticks in the third column of the table. As we run *ful*-formations through these six tests, it becomes clear that it is not possible to award ticks across the board.

TABLE 2: *ful*-nominals vs. "real" nouns.

	CGEL nounhood criteria (p.410)	**"real" nouns**	**ful-forms**
1.	Pluralisation	✔	✔
2.	co-occurrence with quantifiers	✔	✔ ✔
3.	Occurrence in direct object position	✔	?✔
4.	Attributive use	✔	✘
5.	fit "I saw a N"-frame	✔	?
6.	fit "The N is here"-frame	✔	✘

The nominal *ful*-formations can take the plural and they can occur with other quantifiers; in fact, that is what they typically do, witness the examples

[1] The three lines in Table 1 correspond to the three parts of the BNC: *demog* stands for "demogrpahic", i.e. the spoken sub-corpus consisting of spontaneous everyday conversation (4.2 million words), *context* stands for "context-governed", i.e. the spoken sub-corpus consisting of speeches, public discussion, lessons, lectures, radio-programmes etc. (6.1 million words), *written* is self explanatory (89 million words).

eight mouthfuls, a couple of mouthfuls, very few mouthfuls. *Ful*-words can also occur in direct object position (cf. (2)):

(2) a. *The* bird *pecked at the grass, tearing up beakfuls.*
b. *Practical work showed them that they could put six canfuls into the bottle*.

On the other hand, it is almost impossible to think of a context where *ful*-formations could be used attributively. I have been able to construe one example (cf. 3) which is somehow interpretable but hardly acceptable.

(3) ? *a cupful cake* "a cake where all the ingredients are measured in cups rather than weighed on a scale"

In other words, nominal *ful*-formations cannot act as modifiers and cannot, therefore, function as the determinant in a compound. Notice that they cannot function as the head or determinatum either. Starting out from a postmodified noun structure (*a N of N*) we can convert (4a) into a N+N compound but not (4b).

(4) a. *a wall of stone > a stone wall*
b. *a stickful of glue > * a glue stickful*.

With regard to the criteria five and six, it can be said that some *ful*-formations may fit the "I saw a N"-frame (? *I saw a keyholeful*) but that they certainly do not seem to work in the "The N is here" frame: **The potful is here*.

The behaviour of *ful*-formations in the nounhood tests strongly suggests the conclusion that these items are not fully-fledged nouns and should perhaps be designated as "nominals". What is striking about their behaviour is the extent to which it complies with what is reported in the literature about noun classifiers (cf. especially Dixon 1982).

3. Nominal classification and noun classifiers

Typologically speaking there seem to be two ways in which languages classify their nouns. One strategy is the use of noun classifiers, the other the existence of morphological noun classes. In both cases it is very likely that the classification of the numerous nouns existing in any language into a limited number of groups has an experiential and/or semantic basis but this is often obscured diachronically. On the level of linguistic form, noun classes are expressed by bound morphemes and tend to form a closed system of a smallish number of groups over which all nouns of the language are distributed. Such systems are typical of the inflecting Indo-European languages (Dixon 1982:166). Noun classes tend to involve categories such as gender, animacy,

human vs. animal but also food vs. non-food or dimensional shape in which case they can be highly elaborate such as in the Bantu languages. Noun classifiers, on the other hand, are more typical of isolating languages. They are always free forms and "often have the same broad grammatical status as the particular nouns they qualify" (Dixon 1982:216). In other words, they are a type of noun. However, languages may vary in the extent to which their classifiers are like nouns proper. Dixon remarks that

> It is impossible to draw a firm line between forms which are purely classifiers, those which function only as specific nouns; and those that can be both specific noun and classifier. (Dixon 1982:214)

In order to illustrate what a noun phrase containing a noun classifier looks like, I include some prototypical examples (Craig 1994: 565).

(5) JAPANESE

Empitsu *ni-hon*
pencil two-CL:long
"two (long) pencils"

no' *chiyo*
CL:animal chicken
"the (animal) chicken"

PONAPEAN

kene- *mwenge*
CL:edible food
"my (edible) food"

Noun classifiers systems may vary considerably in size, but they are always characterised by the fact that the co-occurrence with a noun-classifier is not obligatory for all the nouns of the language. Abstract nouns, for instance, are usually excluded (Craig 1994: 568). In short, noun classifier systems are much less grammaticalised than noun class systems. Table 3 gives a comparative summary of the characteristics of noun classes vs. noun classifiers.

Turning to the function of noun classifiers, there is widespread consensus that their function is to give information about the head noun in terms of some perceived characteristic of its referent (Allan 1977: 285, Zubin 1992: 91-93). There are two broad types of classifiers: quantitative and non-quantitative. (Dixon 1982: 226).[2] Quantitative noun classifiers involve some type of measure unit and are therefore always closely linked to numerals. They often consist of

[2] Craig follows a narrower definition of noun classifiers in saying that numeral / quantitative classifiers do not count as classifiers in the narrow sense. She still discusses them in her encyclopaedia entry reasoning that the systems are so complex that nobody has been able to come up with a satisfactory overall description. (Craig 1994: 565)

large inventories which are part of the lexicon (Craig 1994:569). The English expressions *three head of cattle, two loaves of bread, two pairs of trousers* correspond very well to what has been described as quantitative noun classifiers for other languages (Dixon 1982: 211 and see below).

TABLE 3: Characteristics of noun classes and noun classifiers (summarized from: Allan 1977, Dixon 1982, Zubin 1992, Craig 1994)

NOUN CLASSES	**NOUN CLASSIFIERS**
bound morphemes > inflection	free forms usually noun-like > isolating languages
closed system with small number of categories (2-20); typical 3-4	fluid system with up to over 100 categories typical: ca 20-30
obligatory membership of all Ns in the lg.	co-occurrence with a noun-classifier not obligatory for all Ns in the lg.
Grammaticalised; semantically often opaque	not grammaticalised, motivated in perceived characteristic of referent of the noun
e.g. gender, animacy	2 main types: quantitative and qualitative (with subclasses)

The non-quantitative noun classifiers represent a more complex field. The general semantic domains from which they draw all involve physical and functional properties of referents, but the descriptive labels given to those domains as well as their number, specificity and extension vary among scholars. It is likely that the descriptive labels depend on the concrete sample of languages a particular categorisation is based on. The most elaborate categorisation of noun classification to date was established by Allan (1977), who mentions six non-quantitative categories: MATERIAL, SHAPE, CONSISTENCY, SIZE, LOCATION, ARRANGEMENT. Craig (1994:567) postulates three general semantic domains MATERIAL (e.g. animacy, sex, rock, liquid, ...), SHAPE (physical characteristics of objects) and FUNCTION (edible, tools, clothing, ...) and subsumes social status under FUNCTION. Zubin (1992: 91-93) also postulates three such domains but they carry the labels PHYSICAL PROPERTIES, FUNCTIONAL PROPERTIES AND SOCIAL/RELIGIOUS STATUS: It seems obvious that classifier systems are heterogeneous, non-hierarchical and non-taxonomic (Craig 1994: 568) but it is equally obvious that similar noun categories do recur in widely dispersed languages so that it makes sense to assume that they are linguistic correlates of perceptual groupings. This position corresponds to what has been described in the cognitivist literature as the realist orientation within a conceptualist attitude towards categorisation (Taylor 1995). That is to say, human

categorisation is regarded as an emergent property and thus conceptual in nature. However, core concepts are seen as directly grounded in our experience of the world, both in physical and social terms. To the extent, then, that humans are endowed with identical bio-physical and cognitive properties their responses to the world will be comparable if not identical.

4. Classifiers in English?

4.1. Are nominal -*ful* derivatives noun classifiers?

Having briefly summarised the characteristics of noun classifiers in the previous section, we can now reconsider the formal properties the nominal *ful*-formations in this light. We will find that their behaviour appears a good deal less puzzling once we do that.

As mentioned in section 3, noun classifiers tend to be somewhat ambiguous about their own nouniness and this is exactly the case with *ful*-nominals, too. We saw in section 2 that *ful*-nominals pass some but not all the nounhood criteria established for English (Quirk et al. 1985: 410). Among the criteria which they do not fulfil are attributive use as the first element in a compound, or the "The N is here" test-frame. *Ful*-nominals are noun-classifier-like in other respects, too. While pluralisation and co-occurrence with quantifiers is a general nounhood-criterion according to Quirk et al., it is obvious that *ful*-nominals co-occur with quantifiers and especially numerals much more often than an average noun. This, too, is a characteristic of noun classifiers in general (Dixon 1982: 214) and is demonstrated by the typicality of the examples *eight mouthfuls, a couple of mouthfuls, very few mouthfuls*. Further, the examples used in section 2 in order to illustrate that *ful*-nominals can occupy direct object position can be more elegantly and more adequately explained by the fact that noun classifiers may be used relating back to the noun they occurred with before (Dixon 1982: 216). This seems to me to be a much more satisfactory interpretation of the examples in (2) above (examples reproduced here for convenience).

(2) a. *The bird pecked at the grass, tearing up beakfuls.*
b. *Practical work showed them that they could put six canfuls into the bottle.*

In (2a) the *beakfuls* clearly stand for *grass*, whereas in (2b) the context only allows us to infer that we are concerned with some kind of liquid but not exactly which. Note that the inference is largely based on knowledge about the world: we know on the one hand what kinds of things come in cans (beans, peas, soup, beer, soft drinks etc.), and we know what kind of things tend to come in bottles (namely only a subset of those which can come in cans) so that

the combined knowledge limits the kind of thing which *canfuls* might be referring to in the given context. It seems, then, as though these *ful*-nominals do not refer to the world in the same sense as "real" nouns such as *grass,* or *liquid* do. This is likely to be the reason why they do not work as heads of compounds themselves as has been shown in example (4) above.

TABLE 4 summarises the comparison of *ful*-nominals with noun classifiers in general.

TABLE 4: Characteristics of noun classifiers vs. *ful*-nominals.

Characteristics of noun classifiers (Dixon 1982)	**Noun classifiers**	***ful*-forms**
1. Typically co-occur with quantifiers/numerals	✔	✔
2. May be used anaphorically for the noun they co-occurred with before	✔	✔
3. Quantitative noun classifiers involve some kind of measure unit	✔	✔
4. Large inventories which are part of the lexicon	✔	✔

ad 1. *three cupfuls of rice, two fistfuls of hair, very few mouthfuls, a couple of mouthfuls*

ad 2. a. *The bird pecked at the grass, tearing up beakfuls.*
b. *Practical work showed them that they could put six canfuls into the bottle*.

With regard to row 3 in Table 4 it may be noted that Allan (1977) calls *armful, handful* and *mouthful* universal measure and volume terms, mentioning them as examples for his category of "volume classifiers". In English, these words seem to belong to the oldest layer of *ful*-formations. What is striking, is how English has extended the derivational base beyond bodyparts to artefacts which function as containers *(barrelful, spoonful, ladleful, cupful)*. These latter examples are all attested for Middle English in the OED. At a later stage this was extended metaphorically to virtually anything that can be construed as a container *(officeful, stickful, keyholeful* etc*)*. From what can be gleaned from the OED, it is likely that this metaphorical process got under way during the 19th century. The 136 different types of nominal *-ful* occurring in the written part of the BNC underline the way in which these formations exhibit also the fourth characteristic of noun classifiers mentioned in Table 4.

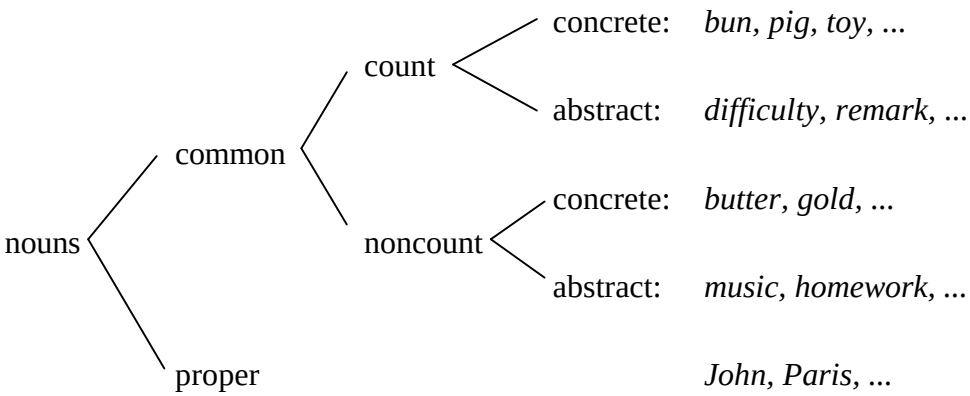
In short, there is a good deal of evidence that nominal *-ful* is indeed a suffix which produces (at least something close to) quantitative noun-classifiers in English.

4.2. General evidence for noun classification in English

If English possesses a suffix which derives noun classifiers, the question arises how this fits in with our general picture of English grammar and the role of noun classification therein. It is obvious that in typological terms English is not a "noun class language". It has not been a language with noun-classes for the best part of this millenium. Neither has anyone claimed that English belongs to the group of noun classifier languages. It is not easy to ascertain from the literature on noun classification in how far the two types are meant to be complementary, i.e. whether there are languages which do not belong to either type. Dixon (1986) suggests that there are indeed languages in Central Asia that do not classify their nouns, but it is somehow difficult to think of a language that does not sort its nouns into groups of some kind. It is noteworthy in this respect that Allan speculates that "perhaps all languages have classifiers" (1977: 285), yet it would amount to hijacking if we turned this into an argument for regarding English as a noun-classifier language. What is remarkable all the same is how easy it seems to be for writers on the subject of noun-classification to find English equivalents illustrating the phenomena of the American, East-Asian and Australian languages they are describing.

Among the descriptive grammars of English consulted by me,[3] the one with the most elaborate system of noun classes is the *CGEL* (Quirk et al 1985) whose classification is reproduced in Figure 1 below.

FIGURE 1: English noun classes (from *CGEL* 1985: 247)



The classes are based on a combination of syntactic and semantic criteria where the syntactic criteria mostly refer to the combinability (or indeed non-combinability) of a particular noun class with different kinds of determiners, the key factor being countability. The abstract - concrete distinction, which cuts across the count - non-count distinction, is largely determined semanti-

[3] Quirk et al. 1985 (*CGEL*); COBUILD English Grammar, Lock 1996.

cally. Other grammars do not consider the abstract - concrete classification at all, centring their discussion on the syntactic implications and hence the countability issue (COBUILD, pp. 6-19, Lock 1996:22-25).

All these grammars, however, feature linguistic objects which have served as glosses for the noun classifiers of other languages in the noun classifier literature, for instance, *three head of cattle, two loaves of bread, two pairs of trousers*, mentioned above. These items are clearly not ad hoc paraphrases but well established lexical phrases which have a firm place in the descriptive grammars of present-day English, usually as "partivitives" or "partitive constructions".

In the *CGEL* these expressions appear under the heading of "partitive constructions" (Quirk et al. 1985: 249-251) Although the concept of noun classifiers is not used, it is striking that these "partitive constructions" should be subdivided into the two categories qualitative and quantitative.

The qualitative partitive constructions mentioned in the *CGEL* are few: *kind of, sort of, type of* (see also section 4.3 below). The quantitative ones feature the general expressions *item of, piece of, bit of* as well as more specific ones like *head of cattle, loaf of bread, pair of trousers, lump of sugar, a bunch of flowers* and many more which are equally well established - and explicitly taught to second language learners as idioms of a kind. Quirk at al. establish a separate category called "measure partitive nouns" for words like *foot, metre, pint*, and *litre* but I would suggest to regard these as a subgroup of the quantitative partitive constructions rather than a category of their own. They do form a group in that they represent standardised units of measurement whereas the rest do not but this can hardly be considered a linguistic difference.

In the other grammars considered here these "a N of N"-constructions are also called "partitives" and they are characteristically discussed in the vicinity of other satellites of the noun, usually quantifiers. They may be on the same hierarchical level as the quantifiers (Lock 1996) or they may be a subcategory of quantifiers as in the COBUILD grammar. In the latter, derivatives in *-ful* are subsumed at this point: it is said that the suffix can be added to all containers and that it is a ‘productive feature’ of English (p.112).[4] On closer inspection, though, the COBUILD Grammar seems to have a wider conception of the function of these partitives than is warranted by their position in the hierarchy as a kind of quantifier: It is stated explicitly that there are many nouns which indicate the shape of an amount (*ball of, strip of, stick of)* or shape and move-

[4] For an explanation of what is meant by the label ‘productive feature’ see COBUILD Grammar, p.ix.

ment (*dribble of, jet of, spurt of, gust of)*, and that these, again, are a 'productive feature' of English (p.113). We may remember from section 3 that the physical property shape is a characteristic element of qualitative noun classification. In the grammars consulted here the main criterion for an expression to be subsumed under the 'partitives' category is definitely formal rather than semantic/functional. In the first instance, what counts is "2 nouns linked by of" (Lock 1996:47) the exact meaning is secondary. But given the fact that a striking amount of productivity is connected with this area, it seems that it might be worth looking at them from a functional point of view in terms of noun classification.

Examining noun classification in English we cannot ignore the fact that adjectives also seem to be involved. Functional grammars, above all, have been operating with the concept of "classifying adjectives" for a while.[5] Within the Hallidayan framework adjectives are seen as occupying qualitatively different slots in the noun group: the "describer" slot and the "classifier" slot (Halliday 1994). (Nouns and participles can also occupy these slots but we will concentrate on adjectives for the time being.) COBUILD also distinguishes between two such categories, labelling them "qualitative" vs. "classifying" adjectives (p.63) respectively.

Describers or qualitative adjectives, then, tell us something about the qualities that someone or something has, while Classifiers identify the head noun as a member of a certain class

(5) a. *rapid decay, wealthy banker, pretty dress* A = Describer
b. *ecological niche, musical instrument, atomic bomb* A = Classifier
c. *fast urban growth* *fast* = Describer, *urban* = Classifier

The examples in (5a), therefore, characterise an inherent quality of the head noun (and the "N is A"-frame is possible). The examples in (5b), on the other hand, identify a certain kind of *niche, instrument* and *bomb* implying that there are other kinds of these things too. (5c) illustrates the canonical order of these two slots in English: describers must always precede classifiers. A good number of adjectives specialise in one function or the other (cf. COBUILD, pp.66-67), but there are also those which can take on either role. The main test frame for those cases is gradability. Qualitative adjectives are gradable, whereas classifying adjectives are not. Thus *fairly rapid decay* and *a very pretty dress*

[5] The CGEL also makes several distinctions between different kinds of adjectives both in terms of their semantic quality and syntactic behaviour (inherent/non-inherent adjectives; central vs. peripheral adjectives). The features non-inherent and peripheral in combination capture more or less the same phenomenon as the "classifying" label used in functional grammar.

are grammatical, whereas **very musical instrument*, or **fairly financial gains* are not.

This short survey has shown that noun classification in English seems to be expressed through a variety of linguistic means: semantically, syntactically, through classifiers and classifying adjectives.

4.3 Another candidate: *-type* as a noun classifier suffix(oid)?

After this brief general examination of noun classification in English I would like to explore the possible role of another derivational element in relation to this general area. The element in question is *-type*. Plag, Dalton & Baayen (1999) identify *-type* as one of the four most highly productive formatives among the fourteen investigated by them. A staggering 83% of the different 689 types found in the BNC are hapax legomena, i.e. they occur only once, a fact which stands in direct correlation to the number of neologisms a suffix produces (Baayen 1993). The domain of *-type* seems largely unrestricted, it can be found combining with nouns of all kinds (common, proper, concrete, abstract) but also with adjectives. It appears to be a fairly recent phenomenon and is not mentioned in suveys of English word-formation such as Marchand (1969) or Bauer (1983). In the OED its first attestation is from 1887 and there are uncharacteristically many post WWII quotations.

Here are a few examples from the BNC:

(6) *cowboy-type boots, Magritte-type surrealism, growth-type investment, acne-type rash, industry-type bargaining, family-type hotels, baronial-type castle, Indian-type meal*

It ought to be noted that the examples of N-*type* do not stand alone but seem to need their head noun in order to make them interpretable. If they are presented in isolation, they tend to be read as N+N compounds with *type* as their second component (cf. (7))

(7) a. *acne-type rash* ‘a kind of rash comparable to acne’
b. *acne-type* ‘a type of acne’

Checking the BNC, we note that compounds like (7b) do exist but that there are only few since the examples given in (8) cover all types encountered in the BNC (written).

(8) *bloodtype, text-type, reward type, skintype, personality type, papertype, trial-type, band-type, description-type*

These compounds in themselves are not as straightforward as they might look at first sight: *bloodtype* is a type of blood, and not a kind of *type* which is characterised by *blood*. It cannot be interpreted in the same way as, for instance, *skincancer*, i.e. a kind of cancer characterised more closely by *skin*. The canonical headedness relationship of noun-noun compounds in English, where the right-hand element is both syntactic and semantic head, does not quite seem to hold with these *type*-structures.[6]

How, then are the constructions in (6) interpreted? In general terms, an "*X-type N"* is a type of N which is characterised in some way by the element X. In a sense, then, the group as a whole is comparable to a N-N compound. To take a concrete example, *Magritte-type surrealism* is a type of surrealism as it was practised by Magritte, the implication being that there are other types of surrealism too; *Dali-type surrealism*, for instance. Exactly how these implicatures arise would have to be investigated in much greater detail but it seems to me that it is going to be a strictly extra-linguistic, encyclopedic knowledge-of-the-world affair. At the present moment it is not clear to me either what role established terminologies and established typologies play. But all this pertains to the textual-pragmatic dimension of the *type*-formations which I will not deal with here.

The fact that *type*-formations in isolation will in the first instance be interpreted as compounds makes it a little problematic to regard *-type* as an ordinary derivational suffix. These *type*-things do not seem to be able to stand alone in the same way as other adjectives do (cf. *restful, adventurous, remarkable*. *Type*-words definitely act as noun modifiers, that is they act like adjectives but are somehow more closely bound to their head noun than other adjectives. If we put them through the four adjective tests of the CGEL (attributive use, predicative use, premodification with *very*, comparative formation; p.402-403), they pass only one, namely attributive use. Unfortunately that is a test which nouns pass too! Without wanting to claim that these *type*-formations are nouns, I cannot resist referring back to what was said in section 3 about the ambiguous or fluid word-class status of typical noun classifiers (cf. especially Dixon 1982: 214-216). Another piece of evidence which furnishes a parallel between the *type*-formations and areas of English grammar perhaps more uncontroversially connected to noun-classification is the fact that we find them in constructions with *of*:

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[6] A full account of *type*-combinations in Modern English would have to include also the neo-Latin *type* as in *genotype, phenotype, allelotype, ecotype, histotype, prototype*. But this is not the aim of the present paper.

(9) *questionnaire-type of worksheet, a matrix type of structure, the motet-type of ricercar, Stamford Raffles type of do-gooding*

These cases, however, are only a small minority compared to examples as in (6). It would be interesting to trace the genesis of the *type*-pattern since structurally speaking the *of*-construction would provide a plausible-looking source. Alternatively, and even more audaciously, one might speculate whether the *of*-construction is on the up, expressing a trend to make noun-classifying constructions more alike each other. But in the absence of diachronic evidence all this is mere speculation.

Having presented some evidence which places the *type*-formations in the vicinity of noun-like noun-classifiers, it is only legitimate to point out their affinity with classifying adjectives like *raw, urban, central, medical, western, theoretical*. The COBUILD Grammar (p.67) provides a list of 99 typical classifying adjectives. What is particularly striking is that 35 of the 99 end in *-al*. (The next strongest formally unified group is made up of adjectives in *-ic* with 8). Many of those are of course not analysable synchroncially, but with those that are it is evident that *-al* belongs to the non-native stratum, exhibiting stress shift with concurrent vowel changes.--*Type*, on the other hand, shows none of these phonological and lexical constraints on its domain. I'll speculate some more and suggest that *-type is* an emergent "rival" to *-al*.

5. Conclusion

In this paper I have presented two currently productive word-formation patterns of English which present some problems at the descriptive level. These problems have led me to explore an area of grammar to which derivation has, to my knowledge, not been linked so far, the area of noun classification. After weighing up the evidence I have suggested that regarding *-ful* as a noun classifier suffix explains its behaviour quite satisfactorily. Similar, if more strongly hedged, suggestions were put forward with regard to *-type*. As both patterns are highly productive in present-day English, accepting their status as something like noun-classifiers has far-reaching implications in the sense that there is something going on noun-classifier-wise in English. Any claims that English is becoming a noun-classifier language are certainly exaggerated. What is needed is a more detailed comparison of English with acknowledged noun-classifier languages regarding the size and structure of their classifier sets. In terms of the general typological development of English, its acquiring noun classifiers would certainly be in character.

The points raised in this paper also have implications on the level of morphological theory. It is widely considered to be the case that derivation produces items belonging to the major word-classes (nouns, verbs, adjectives) only. Items like *busful,* however, would indicate that minor classes such as noun-classifiers can also be involved.

For the time being this paper raises more questions about noun classification in English than it can possibly answer. It certainly is another demonstration of the fact that small empirical or descriptive puzzles may prompt us to abandon deeply ingrained ways of thinking about a particular language and to take a fresh look. In doing this we realise that just like any other categorising activity, linguistic description produces constructs not "facts".

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The Combined Effects of Formal Instruction and Immersion Education: The Case of LISA

Marion Griessler

Approaching the third millennium, we live in a world of international communication and the demand for multilingualism in individuals as well as in communities is ever growing. To meet this demand, research in foreign language teaching has gained in importance and bilingual schools have been increasingly implemented around the world. Especially in Europe, however, evaluation studies on the effectiveness of bilingual programs are still rare.

The *Linz International School Auhof* (LISA) can be regarded as an Austrian response to the trend toward internationalisation. It is one of several bilingual schools which have been established in Austria within the last decade, most of which use English as a medium of instruction. The empirical study reported on in this article investigates to what extent the goal of promoting functional bilingualism is attained at LISA. The study evaluates in great detail the English proficiency of LISA students, as compared to students enrolled in traditional foreign language learning programs, and thus assesses the effectiveness of this Austrian type of enrichment bilingual education.

1. The LISA model of bilingual education

The *Linz International School Auhof* (*LISA*) was founded in 1992 and is a bilingual branch integrated into a regular Austrian high school (‘Gymnasium’) in Linz, Upper Austria. It differs from what we usually mean by *International* Schools with regard to its low monthly fee (of only 200 to 400 Austrian shillings) and with regard to its student population. About 90% of the children attending LISA are from average Austrian middle-class families; only a minority

are native speakers of English or have spent some years of their lives in an English-speaking country.

Designed as an enrichment bilingual program in a monolingual European country, LISA aims at *additive bilingualism*[1]. To attain this goal, it is necessary to foster the students' weaker, second language, which is not likely to develop outside school. Since the great majority of LISA students are Austrians, with German as their mother tongue, their language of the home, the street, and the media, a maximum amount of instruction time is allotted to English. The most special characteristic of LISA is therefore the use of English as the language of instruction.

German plays an important role during the first semester of LISA schooling, which provides a transition from German to English. As a matter of fact, the German language is never completely ignored or neglected; it is taught as a subject throughout schooling and technical or scientific terminology is always introduced in both languages. For non-native speakers of German, special afternoon language classes are provided. LISA students even have the option of choosing their preferred language of examination. However, since, with a few exceptions, they all commence schooling with relatively homogeneous language skills and receive subject matter instruction in English, they soon feel more comfortable in their second language. At times they use it among themselves and, more frequently, in informal teacher-student conversation.

Most of the teachers at LISA are Austrian, having completed their teacher training in English and another subject. Approximately one quarter of the staff are native speakers of English, with origins in various English-speaking countries. The curriculum of LISA corresponds to that of other Austrian high schools, including formal English as well as German classes. What distinguishes future LISA graduates from other students is that they are also prepared for the International Baccalaureate.

With a primarily German-speaking student population and English as the major language of instruction, LISA belongs in the category of *enrichment bilingual education*, as opposed to *assimilationist* (also called *transitional*) or *maintenance bilingual programs*, which involve a minority language.[2] As a program type, LISA seems closest to Canadian immersion, which is the most

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[1] For a survey of different types of bilingualism in general, and the distinction between *additive* and *subtractive bilingualism* in particular, see Baetens Beardsmore 1982: 19-24, 31-35; Lambert 1990: 203-208, 213-214.

[2] For a detailed classification of bilingual education programs, see Baker 1996: 172-197; Romaine 1995: 242-247.

thoroughly researched and probably the most successful type of enrichment bilingual education.[3]

The main aim of LISA is additive bilingualism in its students, who acquire a second language while at the same time maintaining and developing their mother tongue. Although the teachers' commitment, parental involvement as well as the students' appreciation of their school and the resulting positive impression of LISA are obvious to anyone who visits the school, no study has ever been conducted on the effectiveness of this - at least for Austria - rather novel approach to instruction. The goal of the empirical research study summed up in the present article was to test the assumed advantages of using English as the language of instruction in this Austrian school. To achieve this goal, a comparative as well as developmental study was designed, setting the English proficiency of students of two LISA classes against that of students of the same age groups taught according to two other types of curricula.

2. Research Methods

The 75 subjects participating in the study were drawn from three different types of school: first, LISA, which constitutes the focus of the study; second, a regular Austrian high school, or *Realgymnasium* (hereafter referred to by its abbreviation *BRG*), which is a school with a science rather than a language bias. For reasons of pure curiosity, a third school type was included in the study, which is the 'F'-branch ('F' being short for *French*). While the amount of English input in F-classes does not differ from the usual high school curriculum, F-students receive instruction in French as early as in grade seven (age 13). My interest was to investigate whether the ambition to learn a third language would have any effect on the English proficiency of these students.

In order to pin down the developmental progress the students make in their second language acquisition, two age groups were taken into account. Since the oldest LISA students were in the 5th LISA class at the time of data collection, the 5th classes (grade nine; ages 14-16) were chosen; the second age group were 11-13 year-olds from the 2nd classes (grade six). From each of the six classes a sample of 12 students was drawn. Instead of a random sampling procedure, care was taken to include children with high, average, as well as weak second language skills in each class. (The selection was primarily based on the students' grades and the teachers' judgements.)

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[3] For details on Canadian immersion, see Cummins & Swain 1986: 37-56.

As for the LISA classes, 3 students were classified as native speakers: one boy from grade six had been raised bilingually; and two students from grade nine had spent their childhood in the United States. Naturally, these native speakers were considered an important part of LISA and were therefore not to be ignored in a representative cross-section of these classes. However, in order to avoid any criticism claiming that the LISA classes scored better only because of these native speakers, data was collected from three additional (non-native) high scoring students (one from the 2nd, and two from the 5th LISA class), and, wherever relevant, both results of the analyses - including and excluding the native speakers - will be provided.

To make the data from different proficiency levels as well as from diverse school types comparable, the study was based on a wordless 24-page picture book, called *Frog, Where Are You?,* by Mercer Mayer (1969). This particular booklet has been employed extensively in linguistic research (cf., for instance, Bamberg 1987; Berman & Slobin 1994).

The 75 subjects were interviewed informally in a one-to-one setting and were asked to tell the picture story in as much detail as possible in the English language. Any lexical items not available to them were to be paraphrased. All the narratives (hereafter also referred to as 'frog stories') were audio-recorded and transcribed and then analyzed and compared with respect to the linguistic domains of vocabulary on the one hand, and grammatical aspects of the English verb on the other.

3. Analyses and results

3.1. Vocabulary

3.1.1. Analysis with focus on specific lexical items (nouns)

The measuring device typically applied in linguistic research for an analysis of vocabulary knowledge is type-token ratios. (cf. Faerch, Haastrup, Phillipson 1984: 80-85) Since they cannot, however, take account of the semantic appropriateness of lexical expressions, type-token calculations were not considered useful for the purpose of my study. (The unreliable results produced by a type-token calculation are demonstrated in Griessler 1998: 63-66.)

The approach preferred here was an *episodic analysis*: the frog story was divided into eight basic episodes and the objects, or, in many cases, the animals central to each episode were focused on. The lexical items or communicative strategies used by the students with reference to the following concepts were investigated: (1) the *boy*, the *dog*, and the *frog*; (2) the *jar*; (3) the *bees* as

well as the *beehive*; (4) the *gopher*; (5) the *owl*; (6) the *deer* and its *antlers*; (7) the *pond*; and finally (8) the *log*. Due to the use of a picture storybook as an elicitation device, all the narratives in the database necessarily operated with the same underlying concepts, which made the data easily comparable.

The overall outcome of the episodic analysis verified the hypothesis that LISA students would generally distinguish themselves by greater lexical variety. They excelled by far in the use of animal names and specific terms of reference. Particular target-language terms like *jar*, *beehive*, or *antlers* were available to LISA students only, which is probably the effect of the use of English as the language of instruction in subjects like natural history and science.

Equally important, in cases where LISA students could not retrieve specific lexemes, they produced the best examples of descriptions and paraphrases. One girl from the grade six LISA class, for instance, hardly hesitated when she turned to the scene with the gopher, an animal unknown to her, but simply produced the following quite witty paraphrase:

(1) *Suddenly he felt something biting his nose. It was a* [sic] *animal Peter never saw before.* [LISA, grade 6]

Furthermore, the episodic analysis revealed that in the narratives told by LISA students hardly any episodes were ignored or avoided, which means that, on average, their stories were the most complete and detailed, and therefore generally also the longest ones of the entire database. Finally, incomplete sentences in which a lexical item is replaced by a pause, were not to be found at all in the LISA data; in other words, it never happened that a LISA student was entirely unable to express his or her communicative intentions.

Reduction and avoidance strategies were primarily applied by the students from the BRG, the school type that was predicted to come off worst in an analysis of English proficiency. Most instances of pauses in the place of lexical items occurred in the BRG data. The twelve-year-olds from this school also made lexical errors, such as the use of *sea* to refer to the pond. Inappropriate lexemes such as *flies* instead of *bees*, hyperonyms (e.g. *animal*), and unspecified expressions of reference (e.g. *tree* for *log*) were primarily made use of by the subjects from both BRG classes, and - to a minor extent - by F-students. Phenomena of L1 interference were also encountered much more frequently in the data collected in the non-LISA classes. BRG students as well as a few subjects from the F-classes even switched codes within their English narratives and used German lexemes to refer to the bees, the beehive, and the deer; eg.:

(2) *the* Korb *with the bees fall from the tree* [BRG, grade 6]

(3) *Suddenly a* Hirsch - oder? na - *a horse with two horns came and take the boy away.* [F, grade 6]

The general pattern to be deduced from the episodic analysis of the frog stories is that the students attending LISA, as opposed to the other two school types under investigation, were equipped with of greater lexical variety and made more efforts toward lexical specification. Although the LISA classes surpassed all the others, F-students still outperformed those of the BRG. A developmental progress in the students' lexical second language proficiency from grade six to grade nine became obvious in all three school types.

TABLE 1 exemplifies these findings; the figures refer to the percentages of students using the target item *beehive* (which was available to LISA students only!) or an appropriate paraphrase (such as *the home of the bees*, or *the house of the bees*) - as opposed to interference phenomena (*'Korb', 'Bienenstock'*), and reduction and avoidance strategies.[4]

TABLE 1: Percentages of Students Using Beehive or an Acceptable Paraphrase

Grade 6 LISA	**Grade 6 F**	**Grade 6 BRG**	**Grade 9 LISA**	**Grade 9 F**	**Grade 9 BRG**
77%	58%	25%	86%	67%	42%

3.1.2. Verbs of motion

While the episodic analysis with its focus on nouns only provided some insight into the students' lexical proficiency levels, a most interesting and revealing enterprise in the frame of my study was the analysis of verbs of motion. In a narration of the frog story, the expression of motion is inevitable. The progression of the plot is aligned to the protagonists' movement from one place to another in search of their runaway pet frog. As a matter of fact, expressions of movement make up for almost 30% of all the predicates used in the 75 narratives of my database. They do not only include activity predicates like *go* or *run*, and change-of-state verbs (e.g. *fall*), but also the causative counterparts of such verbs (e.g. *push*). Furthermore, expressions consisting of non-motion verbs + particles, which in combination express movement or a change of location, were also classified as verbs of motion (e.g. *scare off, pull down*).

[4] For further tables providing results of the episodic analysis, see Griessler 1998: 68-89.

As expected, the highest number of motion verbs, speaking in terms of tokens, occurred in the data of the two LISA classes, followed by the F-classes, with the BRG ranking last. This implies - as was also suggested by the episodic analysis - that LISA students, on average, told the longest and most detailed narratives. More revealing with regard to the subjects' vocabulary knowledge was an analysis of the different types of motion verbs used in the frog stories. The results of this analysis suggest an unequivocal pattern, demonstrated by the figures presented in TABLE 2; the figures refer to the average number of different types of expressions of movement which a student of a specific class showed command of in the situation of oral storytelling.

TABLE 2: Average Number of Types of Motion Verbs Used by a Student:[5]

Grade 6 LISA	**Grade 6 F**	**Grade 6 BRG**	**Grade 9 LISA**	**Grade 9 F**	**Grade 9 BRG**
9.17 (8.83)	7	6.17	9.33 (8.92)	8.25	6.75

In both LISA classes, on average, a student made use of more than nine *different* verbs of motion in his or her narrative (the figures are only slightly lower if the native speakers are excluded from the sample), while an average BRG student only showed command of six types of motion verbs. The F-branch is, as hypothesised, in the middle, exceeded by LISA, yet above the level of the BRG. Particular emphasis should be put on the fact that the LISA students from either age group clearly outperformed not only their peers but any students from the other school types.

Turning to the amalgamated data of the twelve subjects from each class, it is again interesting to compare the number of different motion verbs which occurred in the data of each class. The results correspond to the pattern set forth by previous analyses: while in the grade six LISA class 27 *different* verbs of motion were made use of *appropriately* (or, 23, if the sample excluding the native speaker is considered), the corresponding number for the F-class of the same age group is 18; in the BRG class no more than 15 different verbs expressing movement occurred. As for grade nine, the figures are 32 for LISA (or 30, when the native speakers are substituted); 28 for the F-branch, and only 16 for the BRG. Apart from the fact that the LISA classes again scored best, a developmental progress in lexical variety from the twelve-year-olds to the fifteen-

[5] The figures in parentheses refer to the samples of the LISA classes excluding the native speakers. Interestingly, the native speakers made no significant difference.

year-olds becomes evident from these figures. This progress is especially high for the F-classes, while it is insignificantly low within the BRG category.

An analysis of *verb + satellite* combinations provided the same results.[6] All the students in the sample used particles and prepositions to describe locative trajectories, and the diversity of English verb + satellite combinations found across the database was impressive. The LISA students, however, were again at the top of their respective age groups, showing command of about thirty types of motion expressions *more* than the BRG-classes. The performance of both F-classes was once again to be ranked between the other two school types.

Looking at expressions of movement from a qualitative rather than a quantitative aspect, an analysis showed that LISA students had at their disposal a greater variety of lexically more specified motion verbs and made increased reference to the manner of motion, which in English is typically incorporated in the verb root. Basic verbs of movement like *go* and *run*, as well as polysemous general-purpose verbs like *put, get,* and *take*, which can express movement when combined with a satellite, were, of course, used throughout the entire sample, since they are characteristic especially of spontaneous spoken discourse. They were, however, excessively used by BRG students, which hints at a lack of vocabulary knowledge. The most basic motion verb *to go*, for instance, was used in more than 25% of all instances in the BRG, while the corresponding percentages for the other classes ranged from 15 to 20%.

Verbs conflating movement and manner occurred in the data of each class (e.g. *fly, jump, climb*). More specific verbs of motion, however, such as *attack* or *chase* instead of the periphrastic expression *run/fly after*, or *escape* instead of *go away*, were exclusively used by the older age group as well as - and this is particularly interesting - by grade six LISA students. This progress in second language proficiency corresponds to English language development in native speakers, who make increased use of lexically specified words and of motion verbs that express the manner of movement as they mature linguistically. (cf. Berman & Slobin 1994: 153) The fact that the grade six LISA students ranked with the older age group in this respect, is proof of their advanced second language development. Grade nine LISA students showed even further developmental progress; they distinguished themselves from all the other subjects of the sample by their use of highly specified verbs of motion incorporating the feature of manner, such as *plunge* and *tumble*.

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[6] *Satellites* are particles in expressions of movement which usually give information on the path of motion; for more information on *satellites* and on *verb-framed* versus *satellite-framed* languages, see Slobin 1996; Talmy 1991.

On the whole, LISA students displayed a richer array of expressions of movement than their peers. As was the case with animal names and other terms of reference in the episodic analysis, they also showed the greatest concern for lexical specification and possessed the means necessary to express this concern in the domain of motion verbs. Instead of using periphrastic expressions, they showed command of a range of lexemes which incorporate the reference to motion and in many cases to the specific manner of motion in the verb roots.

The explanation for our findings is to be looked for in the large amount of English input LISA students are confronted with daily, which unmistakably results in considerable vocabulary knowledge. This allows for greater lexical specification and greater attention to linguistic detail. As for the control groups from the other two school types, they displayed levels of second language proficiency which were, as hypothesised, below those of the LISA classes. In accordance with our expectations, the subjects from the F-branch showed a clearly better performance with regard to reference to motion events than the BRG students, who ranked last in all aspects of the analysis.

3.2. Verbal morphology

The narratives of my database were produced in a situation of more or less spontaneous speech; the subjects had little time to consciously think of grammatical rules. Furthermore, the device of the picture book distracted their attention from linguistic form. As a result, the degree of morphological correctness reflects the subjects' *acquired systems*, as opposed to *conscious grammar*, in their second language development. (cf. Krashen 1982: 17)

The analysis of morphological errors provides an even more clear-cut picture of the LISA students' advanced English language proficiency than the analysis of lexical knowledge. The majority of errors classified as errors in morphology were incorrect past verb forms (58%); another large proportion (33%) was due to the students' lacking command of the 3rd person present tense *-s*; the rest were errors in subject-verb agreement, past participle and progressive constructions.

Setting the total number of verbs used in a narrative against the absolute error frequency, we arrive at the percentages displayed in TABLE 3, which refer to the errors in verbal morphology made in each class:

TABLE 3: Verbal Morphology: (1) Verbs Total, (2) Absolute Error Frequency, (3) Morphological Errors in Percent:

	Grade 6 LISA	**Grade 6 F**	**Grade 6 BRG**	**Grade 9 LISA**	**Grade 9 F**	**Grade 9 BRG**
Verbs	715 (657)	533	394	687 (727)	645	603
Errors	35 (39)	59	115	10 (10)	31	44
% Errors	4.9% (5.9%)	11.1%	29%	1.5% (1.4%)	4.8%	7.3%

The figures presented in line one show that the total number of verbs as produced by the twelve subjects of each class was highest in both LISA classes, which suggests again that the students attending LISA, on average, told the longest and thus most detailed narratives. While students from the grade six LISA class used about twice as many verbs as their peers from the BRG, the latter made three times as many errors. From this, the high error frequency of 29% resulted for the grade six BRG class. The LISA class was the only class of the younger age group with a morphological correctness of over 90% and thus ranked with the grade nine classes. As was often the case in the analysis of lexical variety, the younger LISA students also outperformed the older BRG students in the domain of verbal morphology. The grade nine LISA class was the only class that could pride itself on as many as 10 out of 12 subjects who did not make a single morphological mistake. What becomes evident from the figures displayed in TABLE 3, is a clearly decreasing error frequency from grade six to grade nine in each of the three school types, which suggests a developmental progress of the students' proficiency in English grammar.

Among the most interesting findings of my study were undoubtedly the results of the analysis of the 3rd person singular *-s* morpheme. The difference in English proficiency between LISA and the other school types was hardly anywhere so obvious as it was in this domain of grammar.

TABLE 4: Third Person Singular -s: (1) Obligatory Occasions, (2) Number of Errors, (3) Percent of Realization per Class:

	Grade 6 LISA	**Grade 6 F**	**Grade 6 BRG**	**Grade 9 LISA**	**Grade 9 F**	**Grade 9 BRG**
Occasions	117 (86)	38	69	177 (154)	120	28
Errors	7	16	58	0	8	4
Realization (%)	94% (91.9%)	57.9%	15.9%	100%	93.3%	85.7%

As the figures in TABLE 4 express, developmental progress is much higher in non-LISA than in LISA classes. However, what is most striking with respect

to the 3rd person *-s* analysis, is the performance of the twelve-year-old LISA students. While the younger BRG subjects had an error rate of almost 85%, the grade six LISA students performed outstandingly by providing the *-s* suffix in more than 90% of its obligatory contexts. The LISA students thus seem to have *acquired* this morpheme, to have internalised it into their grammar, which is an amazing achievement for second-year learners of English. This early acquisition of the present tense morpheme can again only be explained by the large amount of English input LISA students are confronted with daily at school. Hearing and using their second language in situations outside formal instruction helps the children to internalise linguistic structures and to reach perfection in using them, as the 100% score of the grade nine LISA students proves.

As far as past tense inflections are concerned, LISA students again displayed the highest command of subject-predicate agreement and auxiliary constructions. Irregular verbs, however, posed a problem to the subjects across the sample, including LISA students. As opposed to rule-governed aspects of language, such as the third person *-s* and the regular past, irregular past verb forms require item-centred learning. Everyday English input and communication at school helps to internalise rule-governed linguistic aspects; less frequent irregular past verb forms, however, have to be learned as individual lexical items. Nonetheless, frequent exposure to English input seems to be a factor of major importance for the acquisition of the irregular past, and, as a matter of fact, LISA classes still outperformed the other schools. The BRG classes, as hypothesised, came off worst in the analysis of past tense verb forms (as was the case for all investigated aspects of verbal morphology).

The detailed analyses of morphological inflections has shed an interesting light on the discussion about the natural order hypothesis. It has been claimed that the past, and in particular the irregular past, is acquired before the 3rd person present tense *-s* in second language learning (cf. Krashen 1982: 13). At first sight my study seems to support this hypothesis: 13% of all predicates used in the past across the database were inflected incorrectly, while the overall error rate in the use of the present tense suffix was 18%. But for the LISA classes, as we have seen, the reverse is true; LISA students distinguished themselves by their above-average command of the 3rd person *-s* morpheme. This suggests that an approach to schooling which combines formal instruction with immersion education might have an effect on acquisitional and accuracy orders. However, this issue necessarily requires further research.

Besides the analysis of the formal aspects of the English verb, the subjects' control over the functional use of verb forms to express tense was also investigated. The overall results were again in line with the outcome of my analyses:

LISA students performed best in establishing as well as maintaining tense continuities, while especially the younger BRG subjects shifted extensively between the tenses. Furthermore, it was primarily LISA students who showed command of the perfect aspect and managed linguistically to meet the requirements of tense sequence.

4. Conclusion

After detailed analyses in the two linguistic domains of vocabulary and grammatical aspects of the verb, the results, to my great delight, all beautifully correspond with each other and suggest an unequivocal pattern: the English proficiency of LISA students - as reflected in the measurements employed - is highly superior to that of their peers enrolled in the other two programs; in many respects grade six LISA students could even easily compare to the older age group of the other school types.

Facing these results, we tend to immediately attribute the success of LISA to its special characteristic of using English as the language of instruction. The large amount of English input the students receive at school and the rich opportunity to practice this language in subjects outside formal language lessons, are undoubtedly major factors which may lead to high achievement levels. That other factors play a role as well, however, becomes evident from the analysis of the F-students' performance. The decision to include this school type in my study turned out to be of great value, since the analysis proved highly revealing with regard to the factors involved in successful second language acquisition. The fact that F-students are more proficient in English than their peers from the BRG, strongly suggests that factors such as foreign language learning experience, language aptitude, attitude and motivation, and parental interest can have a major impact on second language learning achievement.

While these are all crucial components in language learning, there are at least two additional major factors which account for the extraordinary success of LISA and which should be a particular concern in language pedagogy. One is the role of teachers and their commitment, which must not be underestimated. And the other is the teaching methodology of using the students' second language as a medium of instruction in all subjects. By integrating language and academic instruction, the students not only receive the maximum amount of input possible in a school environment; a further advantage is that the second language is embedded in a highly meaningful communicative context, which facilitates language learning.

My study has provided sufficient evidence for the superior levels of English proficiency of LISA students. The English language, however, is not the only

concern of the school; additional goals include (a) the continued development of the students' first language, (b) academic achievement, and (c) cultural understanding and tolerance. To analyse these domains at LISA leaves plenty of opportunity for future research. For now we can draw conclusions from the evaluation of immersion programs. Immersion education, as it has been claimed, has no detrimental effects on either first language development or performance in curriculum subjects - a conclusion which has been confirmed by LISA teachers.

To gain a language at no expense - it almost sounds too good to be true. Yet as my study has shown, at the *Linz International School Auhof* students acquire high levels of English language proficiency, apparently without losing their German mother tongue or lagging behind in academic achievement. And what is more, they acquire English in an extraordinarily agreeable school environment, among motivated classmates and devoted teachers. Considering that the status of a language is only one among many factors which account for the effectiveness of a bilingual education model, the fondest hopes of adapting the immersion or the LISA model to minority language communities are, to my mind, justified - provided that negative attitudes toward linguistic minorities can be done away with. (The attitudinal bonus of the English language is of course not easily transferable to other languages.) Schools like LISA may be the very institutions in which unfavourable attitudes toward languages and their speakers might be changed.

At LISA, children not only learn to appreciate linguistic diversity, but they also develop a greater understanding of and tolerance for people of different cultural backgrounds. To foster a harmonious coexistence of people, therefore, we should educate our children in obviously effective institutions like LISA, and implement more LISA-like schools, not only in Austria, but across Europe, and all around the world.

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A new view on why, how and in how far **-ing** *prevailed over* **-ind**

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0. Introductory overview

Sixty years ago the French linguist Fernand Mossé published his 'thèse,' which consisted of an evaluation of the up until then most comprehensive text corpus in regard to the history of the syntactic structure nowadays commonly called *continuous form* or *progressive form*[1]. One important chapter of his dissertation dealt with the phonetic and morphological clash of the present participle and the gerund (cf. Mossé 1938: 77-106). Several monographs and articles had already appeared on this topic, among which van Langenhove (1925), Callaway (1929), as well as several contributions by Curme (e.g. 1912) and Einenkel (e.g. 1920, 1921) represent the most important ones. In the course of the two decades that followed, the syncretism of {-iN} and {-indW} was to remain a matter of great interest for historical linguists. This is demonstrated by

[1] The corpus consists of a vast literature covering not only all kinds of text-types (glosses, translations of Latin literature, ecclesiastical as well as secular texts), but also covering all periods from Old English to Early Modern English.

the works of Rooth (1941/42) and Dal (1952). As regards the more recent past, mention must be made of the dissertation by Houston (1985) and an article by Wright (1995) as well as the phonetic comparison of the sound chains /iN/ and /ind/ in Middle English and Bavarian drawn by Gleißner (1979). In a brief critical summary in a festschrift for Karl Brunner, Mossé (1957) shed, once more, light on the various hypotheses for the clash of the two morphemes put forward up to then. The following contribution was stimulated by the fact that many of the hypotheses have been brought up to explain the formal syncretism of the gerund and the present participle, but fail to explain why it was {-iN} that finally prevailed over {-ind}. The basic ideas to be expressed will be, first, that spelling and pronunciation have to be clearly distinguished from one another; second, that the reasons for the functional merging of *-ing* and *-ind(e)/-and(e)* have to be kept apart from the reasons for the eventual dominance of the former; and third, that it is necessary to see the latter development within the frame of London's growing importance as a standard variety. Starting with Mossé's works, I shall outline the principal views on this diachronic problem and shall then discuss some of the weaknesses inherent in them and make a few alternative suggestions.

1. The spreading of *-ing*? Views of Mossé and others

The diachronic situation is well known: whereas in Old English the gerund was marked by the suffix *-ing* and the present participle by the suffixes *-inde/-ande/-ende*, both categories started to gradually fall together in morphological respects in Middle English times. The most fundamental sources that have been held responsible for the speakers' (and writers') confusion regarding the above-mentioned morphemes are Celtic influence, French influence, Latin influence, the articulatory proximity, sociological and stylistic reasons. All of these hypotheses are well-argued and well-grounded. What seems less appealing to me, though, is the search for a **monocausal** explanation. As a matter of fact, I consider Mossé's (1957: 157) **polycausal** interpretation (cf. below) the most convincing. However, most of these hypotheses, be they monocausal or polycausal, are only able to explain the formal syncretism of the gerund and the present participle, but fail to clear up why it was {-iN} that finally prevailed over {-ind}. I agree with Mossé (1957: 165) when he states, 'en principe, il aurait été naturel que l'anglais conservât, comme toutes les autres langues germaniques, un participe présent en *-nd(-)*. C'est sa disparition qui est anormale et qu'il faut expliquer.' Viewing the problem from a different angle, we may also wonder why it was not a form with a final dental that was generalized

for the gerund, since this is exactly the form that we find in Latin and French (and even in Celtic paradigms), i.e. languages that are said to have had their share in the respective English development. As to Mossé's interpretation, a few critical remarks may be passed.

(a) Mossé (1957: 167) is of the opinion that *-ing* prevails over *-ind* according to the principle of language economy and argues that the former shows a wider range of syntactic possibilities (the latter being more or less restricted to the use of forming a verbal adjective). This, however, is rather a description than an explanation. {-iN} was the respective morpheme for the gerund, {-inde} the one for the participle. Now the question must be why {-iN} gradually gained in syntactic richness. Why should a present participle not expand its functions to the same degree? Is an adjective (here: the present participle) not even more flexible than a noun (here: the gerund), since the former can, in the English and other Germanic and Romance languages, easily be converted into a noun but not vice versa?

(b) Mossé (1957: 167) emphasizes the significance of French and Latin influence for the victory of *-ing*. But this is not all too convincing from the phonetic-morphological view-point. Both the gerund and the participle in French as well as in Latin have shown the phonetic feature *n* plus dental from time immemorial. In mediaeval Latin the participle often occurs in positions where the gerund would be expected in classical Latin; in Old French, the two forms have fallen together due to the regular development of Old French *auslautverhärtung* (compare e.g. the development of the Latin participle *cantantem* > **cantant(e)* > OFr. *chantant* to the developement of the Latin gerund *cantandum* > **cantand(u)* > **chantand* > OFr. *chantant*).

(c) On the basis of his corpus Mossé (1957: 171) describes the **high frequency** of the phonetic tendency *-in* > *-ing* at the time. But the examples given are rather unfortunate: they are all French borrowings (OFr *con(n)in* 'rabbit,' *carrion* 'carcass,' *vin* 'wine'), and their English reflexes ending in *-ing* more probably demonstrate an attempt to imitate the French nasal vowel[2]. It is also strange to see Mossé contradicting, without further comment, his own observations from the year 1938 when he stated, 'il [= le phénomène de *-in* > *-ing*] est beaucoup plus **sporadique**' (Mossé 1938: 91; emphasis mine). Moreover, it is certainly true that we are witnessing some sort of 'réaction

[2] It must be mentioned that these instances represent merely isolated cases. Nasalization in French words, particularly the sound ã, is more often reflected by a diphthong, e.g. ME *chaunge(n)* beside *change(n)*. On the other hand, Mossé's comparison to MHG instances like *slinden* > ModHG *schlingen* are more valuable here (cf. also Gleißner 1979), since they show that the alternation *-nd- ~ -ng-* is a general articulatory phenomenon not only restricted to English.

d'hypercorrection' here. However, this does not change the fact that the problem why *-ing* prevails over *-ind* is left unsolved.

What needs to be examined, then, is whether the right premises were taken as a starting point. In other words, is the question of why *-ing* prevails over *-ind* really the right question? Is it really correct that the former prevails over the latter?

2. Viewing the need for a first distinction: spelling vs. pronunciation

A glance at the *Linguistic Atlas of England* (Orton *et al.* 1978), Trudgill's (1974) studies and Houston's latest article (1991) suffices to show that a variant ending in a dental – i.e. [-ɪn] or [-ʷn] – can still be found in all diatopic and diastratic varieties[3] and not merely down to the early nineteenth century as Mossé (1957: 167) claims. To put it more bluntly, the present-day pronunciation [-ɪn] is not the result of a Modern English phonetic reduction: nothing is deleted, [-ɪn] and [-ɪŋ] both consist of two sounds even if speakers, influenced by the spelling with the apostrophe, might consider the former a shortening of the latter. In my opinion (and here I agree with Houston 1985), these forms reflect the regularly developed shapes of ME *-ind(e) ~ -and(e) ~ -end(e)* (to ModE /-ɪn/ ~ /-ʷn/). I consider it more appropriate to make the following distinction, which was already more or less expressed by Rooth (1941/42):

(1) the phonetic development: due to the influences and assimilations mentioned above, the sound chain /-ɪn/, or /-ʷn/, finally becomes the morpheme for both functions – participle and verbal abstract (as well as for the inflected infinitive) – in many, if not most English varieties.[4] Even if inherent variation does exist in some varieties, the form with a dental is then clearly the dominant one.

(2) the graphic development: here <-ing> is generalized after a phase of (inherent) variation.[5]

It seems that the second development requires a little more explanation. For this purpose, the corpus Mossé put together sixty years ago should again be

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[3] With varying frequency (see Houston 1991: 243f., 251f.).

[4] A number of studies have shown that [ɪn] prevails over [ɪŋ] in many English varieties (i.e. sociolects). Cf., for instance, Fischer 1958 for New England, Trudgill 1974 for Norwich, England, or Horvath 1985 for Sydney, Australia.

[5] The term inherent variation stems from Labov and stands for the linguistic phenomenon that variation of a certain form occurs in one single idiolect (of a speaker as well as a writer).

taken into account. His records prove that in London the spelling <-ing> occurs later than in other regions of the British Isles, viz. for the first time in Davy's works between 1307-1315 where it is even the sole morpheme (cf. Mossé 1938: 80ff.), whereas it is found earlier in the central south (1225), in the eastern Midlands (1225-1250), in the south-east (1280-1290), in the western Midlands (1205).[6] In addition, more recent examinations of records are now available, namely the ones by Samuels (1972: 167f.) and Wright (1995). They show that after Davy the clearly dominant variant until 1370-1380 was, as a matter of fact, <-and>, which is traditionally labeled as a 'feature of northern dialect'[7]. Then, however, <-ing> quite rapidly caught on as the almost exclusively used **graphic** variant, earlier and more prominently than in the south-eastern, central and eastern Midland dialects, and roughly at the same time as in those of the western Midlands, which were not in direct geographical contact with London. This regularity of *ng*-forms in London documents dating from the last third of the fourteenth century had already been demonstrated by Morsbach (1888: 135ff.) and Frieshammer (1910: 97).

3. The victory of <-ing>: signs of explanatory views

Still, the 'reason' for this development has not yet been clarified. For this purpose Rooth's article (1941/42) must be more closely looked at. Although Rooth sees primarily phonetic reasons behind the clash of the verbal abstract, the present participle and the infinitive, it is nevertheless he who – in my view – provides the decisive clue in this debate. Rooth (1941/42: 84f.) describes how *-ing*, after a period of hypercorrect use, spreads from the south to the Midland dialects from 1300 onwards; but [-ɪN][8] continued to be used as a variant regarded as purely dialectal. With the acceptance of *-ing* by Davy and Chaucer in the **written** language, *-ing*, according to Rooth, embarked on its triumphal march. Rooth's precise observation is of paramount importance. However, as regards the problem of why it was *-ing* that Davy, Chaucer and others decided to generalize, Rooth's explanations (1941/42: 85) are rather

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6 Rooth (1941/42) is therefore wrong when he claims that *-ing* appears in the Midlands only from around 1300 onwards. Visser (1972: II,1096), too, wrongly considers *-ind* to be the main variant in London documents before Chaucer's time.

7 Unfortunately there is not enough room for a more detailed discussion of the presence of <-and> in pre-Chaucerean London scripta here; Wright (1995) views this fact as the result of Latin influence, Macrae-Gibson (1971) as an originally London feature supported by the French superstratum.

8 This is probably the form Rooth (1941/42) means when he gives [ɪ].

vague: ‘Es ist wahrscheinlich, dass sie von Davy und Chaucer, die Beziehungen zum Hofe hatten, als die ‘richtigen’, ‘feinen’ aufgefasst wurden.’

Another, but equally cautious interpretation is suggested by Wright in her most recent article on the matter. On the basis of bilingual London trade and commerce documents from Middle English times, she argues that there existed a mesolect of Latin and English which – *idealiter* – would have shown clearly classifiable forms: ‘{-ing} served this function well as it could not be anything other than English’ (Wright 1995: 376).

In her dissertation Irwin, too, investigates the graphic decline of the *nd*-forms and proposes as possible causes (1) the stability of the spelling *V+ng*, (2) the rather important role of nominal endings in a sentence, (3) the possibility of perceiving even a shortened and weak pronunciation of *-ng* as a biphonematic group (cf. Irwin 1967: 189f.). While the second suggestion appears rather impressionistic, theses 1 (sociocultural) and 3 (cognitive) are in my opinion fairly plausible.

Macrae-Gibson (1971: 19f.), finally, views the replacement of *-and* by *-ing* in the London area in the light of latter’s greater utility as a rhyming syllable, since stressed syllables in *-and* were lengthened and rounded to *-ond*.

4. A complementary view: the normative role of London

Comparing the explanatory models mentioned here, I get the impression that they all underrate London’s impact particularly in the fourteenth century after England’s loss of Normandy.[9] In this respect Fisiak (1995: 70f.) reports the following development:

> The process of urbanization began. The number of towns constantly grew as did the size of all the existing ones. London and other cities attracted more and more people, not only from neighbouring areas but also from distant ones. [....] the Black Death (1348 – 50) [...] caused a 30 to 40 per cent drop in the population of England and consequently an increase in the value of labour, which automatically resulted in even greater mobility of the society. [....] The rising prestige of English and its changing role in the course of the thirteenth century can also be evidenced by the increase of English literature for ‘polite circles’ [...].

Blake (1992: 12) also emphasizes that ‘the most important area for the development of writing standards is that of London and its immediate environs.’ Similar statements were already made by Morsbach (1888: 7) – even if he

[9] Although the London dialect, at that time, cannot yet be regarded as having a normative function.

dates the beginning of the standardization process as late as ca. 1380;[10] but as early as 1344 a bill to the chancellor (i.e. an official document!) is written in English for the first time (cf. Fisiak 1995: 75). In view of this position of London we can now add some new explanatory points to the descriptive ones, always keeping in mind the necessary distinction between graphic and phonetic variants:

Step 1: In the middle of the fourteenth century, London distinguishes itself by showing a clear dominance of the variant <-and>, mainly used as participle marker, whereas the verbal noun retains the original form <-ing> (cf. Wright 1995: 376). Some neighboring areas, on the other hand, already varied greatly in their choice between *-ing*, *-inde*, *-ende* (i.e. spelling and pronunciation). In other words, London shows itself hostile to innovation and constitutes a more conservative region as a result of its prestige and its function as a model.

Step 2: Especially users of a London script aim at achieving supraregional importance and morphological bi-uniqueness, while other local standards still accept variation and local particularities. In this respect the following observations seem important to me:

(a) ad supraregional importance: The spellings <-ind(e)>, <-and(e)>, <-end(e)> had gained only regional acceptance (*grosso modo* we find *-ind* in the south, *-end* and *-and* in the Midlands, *-and* in the north and in London), even if their respective pronunciations might already have fallen together in the form [-Wn]; <-ing>, on the other hand, existed in all regions (including the north, albeit less frequently there). In other words: [-Wn] is then not a form characteristic of a dialect (i.e. diatopically marked) as Rooth (1941/42: 85) claims, but characteristic of spoken language (i.e. diamesically marked). It is, in my view, incorrect to explain the victory of <-ing> as the avoidance of a dialectal feature.

(b) ad morphological bi-uniqueness: In this respect mention must be made of the inherent overload of the morpheme variant {-Wn} / <-en> after the loss of final *-d*: i.e. recorded {-Wn} / <-en> (cf. Visser 1972: II,1081) resp. hypothetical {-W} / <-e> (after the apocope of *-n* in unstressed syllables) would then have been the marker not only of the gerund and the present participle, but also for the inflected and the non-inflected infinitive as well as the past participle of strong verbs of classes V, VI, and VII, the vocalism of which was identical in the past participle and present/infinitive, and also – again, a scribal problem – of class I. The latter did show long *i* in the present participle and short *i* in the

[10] The beginning of standardization can be dated earlier, for Morsbach (1888: 8) himself states that the London variety at about 1380 already represents ‘vollkommen den Typus der neuenglischen Schriftsprache”, and this change did certainly not take place overnight.

past participle, but length was not immediately and not always reflected in the spelling. Moreover, the enormously wide-spread variation /-ɪN/ ~ /-Wn/ (and the growing influx of people from different regions to London) could have caused the stability of a final /-n/ in the participle and in the gerund down to the present day, whereas it became regularly silent in other grammatical morphemes: the infinitive, the present plural and in most past participles.

Step 3: The final victory of the graphic variant <-ing> is eventually completed fairly rapidly, again because of the growing impact of the London standard language, which had already started to take on a normative role and therefore attempted to be free from regionalisms and to distinguish itself by unambiguous (regular) morphemes. This was again in contrast to the Midland dialects, which often allowed numerous morphemic variants, since here the constraint of a model was absent. The variant <-ing> fulfilled these requirements.

5. Summarizing view

Let us recapitulate the important steps in the development of *-ing*. First of all, the graphic development has to be viewed separate from the phonetic development: The dominating area of *-ing* is spelling, whereas no predominance of either variant can readily be determined for pronunciation, but there is an overall tendency in many varieties for using [-ɪn] or [-Wn]. The victory of <-ing> may especially be explained by the growing importance of London English, which, as an upcoming normative variety, needed to consist of supraregional and unambiguous markers. However, I would like to stress that the theories mentioned by Wright (the English-ness of the {-ɪN} in Latin-English texts) or by Irwin (e.g. stability of the spelling <-ing>) are not falsified by the new points I have mentioned here. Rather, they all complement each other. It is important to me to show that an isolated, irregular morphological development like the one dealt with in this article probably always needs a polycausal explanation. And I hope that this contribution has made it obvious that linguists, in order to find out what the various causes for the irregular development may have been, not only need to ask *why* a certain development took place, but also *why exactly this* development took place and not another.

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IMPRESSUM:
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