

A corpus-based account of the development of English *such* and Dutch *zulk*: Identification, intensification and (inter)subjectification*

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Abstract

On the basis of synchronic English language material, Bolinger (1972) has put forward the hypothesis that intensifying meanings or “degree words” often develop from identifying expressions. This paper will empirically test Bolinger’s hypothesis by means of in-depth diachronic study of the development of such—one of Bolinger’s central examples—and of its Dutch cognate zulk in historical text corpora. To this aim, a detailed cognitive-functional account will first be provided of the (differences between the) identifying and intensifying uses of such and zulk, with attention for diachronic changes affecting the syntax and semantics of these uses, cross-linguistically as well as language-specifically. It will be shown that, as predicted by Bolinger (1972), the proportion of identifying uses decreases over time in favor of the intensifying uses both in English and Dutch. The comparison between such and zulk will, however, show that, despite the close relation between these two languages, the development does not run strictly parallel in English and Dutch, thus endorsing a view that language change does not necessarily follow predetermined pathways. We will argue that minute differences in the syntax of such and zulk steer the diachronic course these elements follow. Finally, Bolinger’s shift from identification to

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intensification will be discussed in terms of its relation to existing (inter)subjectification hypotheses.

Keywords: Such, zulk, identification, intensification, degree, noun phrase, determiner, adjective, anaphora, cataphora, (inter)subjectification.

1. Identification vs. intensification

In his (1972) book on degree words, Bolinger points out that expressions that have an identifying function can often also be used for intensification. This polysemy is attested, amongst others, in adverbs (1)–(2), adjectives (3)–(4) and nominal constructions (5)–(6). This article is specifically concerned with *such*, one of Bolinger's (1972) key examples. The difference between identifying and intensifying *such* is illustrated in (7)–(8).

- (1) *He is **truly** one of the greatest players who has ever donned a Leeds shirt, or ever will.* (BNC 1985–1994)
- (2) *Of course this is a **truly** shocking affair* (BNC 1985–1994)
- (3) *This purification of the mind is effected by an absolute and scientific scepticism, to which the mind voluntarily determines itself for the **specific** purpose of future certainty.* (CLMETEV 1817)
- (4) *A time would no doubt come when those with a **specific** liability to skull fracture would all be eliminated.* (CLMETEV 1902–1903)
- (5) [following a series of questions from Faithful] *Then Talkative at first began to blush; but, recovering himself, thus he replied: "You come now to experience, to conscience, and God; and to appeal to him for justification of what is spoken. This **kind of** discourse I did not expect."* (CLMETEV 1678)
- (6) *The inquiry is believed to have cost well over £1m already. Sir Nicholas, a former Scottish solicitor general, said: "This is absolutely absurd. To spend this **kind of** money . . . can not be justified.* (BNC 1985–1994)
- (7) *a skier coming from behind must choose his route in **such** a way that he does not endanger skiers ahead.* (CB Times 1990–1996)
- (8) *She's **such** a happy, friendly gregarious person and very, very responsible* (CB Times 1990–1996)

In (1), *truly* is a truth-identifying adverb (Bolinger 1972: 90), whereas in (2) it is a reinforcing adverb. The meaning of (2) comes close to *very shocking* and, as Bolinger points out, *truly* here occupies the same position as a degree adverb submodifying an adjective. Something similar is going on in (3) and (4). The adjective *specific* in (3) singles out one particular weekend, and as *such* aids

the primary determiner *the* in its identifying function (Ghesquière 2009: 325). In (4), on the other hand, *specific* heightens the degree of liability to skull fracture, rather than point to a specific instance or kind of liability (Ghesquière 2009: 330). The same distinction is discernible in “type nouns” like *kind of* (Brems and Davidse 2010). In (5), *this kind of* anaphorically refers to a type of discourse, and has an identifying function, whereas in (6) it stresses the amount of money, rather than directly referring back to the £1m mentioned before.

As becomes clear from the data under (1)–(8), elements like *truly*, *specific*, *kind of*, *such* etc. display variation of identifying and intensifying meanings in their use. Bolinger posited that this functional variation may be the synchronic result of a diachronic change, whereby the elements have acquired intensifying semantics over time.

The shift by which a morpheme from the determiner system . . . passes from identification to intensification is typical of a kind of wholesale migration in that direction. (Bolinger 1972: 61)

In this study, we will put Bolinger’s hypothesis to the test by examining the meaning and use of one of his key examples, English *such*, and its Dutch cognate *zulk*.

First, detailed semantic and grammatical analyses will be provided for both the identifying and intensifying uses (Sections 3, 4 and 5). A cognitive-functional framework will be adopted, crucially linking the identifying uses to the concept of phoricity and describing the intensifying uses in terms of scalarity.

Second, in contrast to most earlier studies, the cognitive-functional accounts of *such* and *zulk* will be based not only on synchronic but on diachronic corpus material as well. To this date, no detailed diachronic data study on *such* has been carried out, leaving the diachronic development posited by Bolinger (1972) a so far unfalsified hypothesis. The elusive syntactic and semantic nature of English *such* and Dutch *zulk* has led to a number of synchronic studies, which have dealt with issues such as the position of *such* in the layered structure of the noun phrase and the differences between the contemporary identifying and intensifying use of *such* (a.o. Altenberg 1994; Mackenzie 1997; Spinillo 2003; Wood 2002). Diachronic studies in contrast are largely absent from the literature and, apart from Van de Velde (2009, 2010), quantified corpus data do not feature prominently in the literature on *such*. The few studies that do explicitly address diachronic issues mainly make use of anecdotal evidence, see e.g., Bolinger (1972) or Duinhoven (1988). In the present article, we will adduce the historical data needed to assess the validity of Bolinger’s (1972) hypothesis that degree words can develop from identifying words (cf. esp. Section 6).

Third, the comparative aspect of this paper will allow us to test the cross-linguistic validity of the proposed pathway from identification to intensification. Like *such*, Dutch *zulk* will be shown to display variation between identifying and intensifying uses, as in (9) and (10) respectively. This is not surprising, as the semantics of *zulk* make it prone to the same kind of pragmatic strengthening as *such* (cf. Section 6).

- (9) . . . *maar zulke mensen, rijke vreemdelingen in uitheemsche kleeren, reizend voor plezier, kijkend uit nieuwsgierigheid, hooren die in hun huis?* (DBNL 1921)
 but such people, rich strangers in foreign clothes travelling for fun, looking out-of curiosity, belong those in their home?
 ‘. . . but such people, rich strangers in foreign clothes, travelling for fun, looking around out of curiosity, do they belong in their homes?’
- (10) *We zijn allemaal zulke afschuwelijke hypocrieten.* (DBNL 1969)
 ‘We are all such terrible hypocrites.’

The corpus data, however, also reveal interesting differences in the way *zulk* developed, as compared to *such*. Whereas over the centuries the intensifying uses of Dutch *zulk* gradually became predominant over the identifying ones in the corpus data, this trend is reversed in the contemporary data for which we again found a larger proportion of identifying uses than intensifying uses. As noted by Hilpert (2008: 7), in relation to Germanic future constructions, such “synchronic differences raise the question of when and how they emerged diachronically, and whether the purported grammaticalization paths are really as general and uniform as it has been assumed”. We will show that the development of *such* and *zulk* cautions us against viewing pathways of change as inevitable. As Traugott (2001: 3) puts it:

Changes do not have to occur. They also do not have to go to completion, in other words they do not have to move all the way along a cline, or even continue down it once they start out on it.

The reason for the (temporary) halt in the development of *zulk*, we will argue, is twofold. First, *zulk* can be shown to have been more successfully recruited into the determiner category than *such*, which affects both its syntax and its semantics (Section 3.3). Second, competition with the *zo('n)*-construction has slowed down the rise of intensifying *zulk*.

A fourth and final issue to be addressed in the present study is how the shift from identification to intensification relates to existing (inter)subjectification hypotheses (Section 7). It will be shown that the phoric, textual nature of identifying *such* and *zulk* discussed in Section 3.1 may prove to be problematic for

Traugott's (2003) cline leading from objective to subjective to intersubjective meaning. In contrast, the pathway from identification to intensification can be plausibly incorporated into Traugott's (1982) cline of semantic change leading from the propositional to the textual to the expressive domain of language.

2. Methods and corpora

To trace the diachronic development of English *such* and Dutch *zulk*, we have consulted a number of corpora that span the entire period of written records in both languages, from Old English/Dutch to Present-Day English/Dutch. This time span has been split up in the customary sub-periods Old E/D, Early Middle E/D, Late Middle E/D, Early Modern E/D, Late Modern E/D and Present-Day E/D. Due to differences in the corpus set-up for English and Dutch, the boundaries are not set at exactly the same date, but overall, the periods are highly comparable, see Table 1.

For Old English we made use of the 1.5 million word annotated *York-Toronto-Helsinki Parsed Corpus of Old English Prose* (YCOE). For the Middle English period, we consulted the second edition of the *Penn-Helsinki Parsed Corpus of Middle English* (PPCME), currently consisting of roughly 1.2 million words of running text. Our Early Modern English data come from the *Penn-Helsinki Parsed Corpus of Early Modern English* (PPCEME), totaling around 1.8 million words. For Late Modern English we used the extended version of the *Corpus of Late Modern English Texts* (CLMETEV), consisting of 15 million words of written prose (see De Smet 2005 for further details). Present-Day English data were drawn from the Times section of the *COBUILD* corpus, providing us with 5.8 million words of contemporary English. Additional examples were taken from the other British subcorpora of the CB corpus (UK Spoken, containing spontaneous speech; UK Books, containing British novels), the BNC corpus and the Internet.

Old Dutch data were gathered from the citation corpus of the *Oudnederlands woordenboek* [Old Dutch dictionary] (ONW), available online at <http://gtb.inl.nl> [accessed July 2010]. The ONW is an exhaustive corpus based on

Table 1. *Periodization of English and Dutch corpus data*

Old English	<1150	Old Dutch	<1200
Early Middle English	1150–1350	Early Middle Dutch	1201–1300
Late Middle English	1350–1500	Late Middle Dutch	1301–1500
Early Modern English	1500–1710	Early Modern Dutch	1501–1700
Late Modern English	1710–1920	Later Modern Dutch	1701–1900
Present-Day English	1990–1997	Present-Day Dutch	>1901

a total number of 28,000 citations. For Middle and Modern Dutch, the text collection of the cd-rom *Klassieke literatuur; Nederlandse letterkunde van de Middeleeuwen tot en met de Tachtigers* was used, which consists of 2.5 million words in total. For Present-Day Dutch, we queried a selection of 20th century texts of the *Digitale Bibliotheek voor de Nederlandse Letteren* [Digital Library of Dutch Literature] (DBNL), available online at <http://www.dbnl.org> [accessed July 2010]. This selection comprised about 2.3 million words. As for English, additional examples were drawn from the Internet and in Section 6 we used another corpus to inquire into the diachronic competition between Dutch *zulk* and *zo'n*. This corpus is a compilation of the 1841–1930 volumes of the literary and cultural journal *De Gids*, comprising about 68 million words.

The corpora were queried with the aid of the *Abundantia Verborum* software (Speelman 1997), and have been statistically analyzed with SAS. Kendall's tau-b test was used to assess whether there was a significant change in the syntax and semantics of *such/zulk* over time. This non-parametric test is used to measure the correlation between two ordinal variables.¹ 'Time' was inserted as the independent variable, with the six periods in Table 1 as ordered values. The response variables were treated as a binary variable (e.g., identifying use vs. intensifying use) in each case, which can be treated as an ordinal scale. Kendall's tau-b tells us whether the period is correlated with the use of a certain construction (or meaning/use of a certain construction): do 'low' values on the time scale (older periods) show a preference for A (e.g., identifying use of *such*) and do 'high' values on the time scale (more recent periods) show a preference for B (e.g., intensifying use of *such*)? The advantage of a correlation measure over well-known tests like Chi-square or Fisher's Exact test is that it takes into account the ordinal nature of the time variable, and tests for a more particular kind of association than Chi-square, which tests for any kind of dependency between the variables, and might lead one to reject the null hypothesis in cases where we have, for instance, a pattern of change with a bimodal distribution. Moreover, correlation measures give us an idea of both effect size and significance.

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1. Test values range from -1 , indicating a perfect negative monotonic correlation, to 1 , a perfect positive monotonic correlation. A 0 test value indicates absence of correlation. This value gives us the effect size. In order to assess the significance of the association, we need to calculate a confidence interval. With an alpha level of 5%, the standard error multiplied by 1.96 is added to and subtracted from the test value. If the interval obtained includes 0 , significance cannot be guaranteed. Still, even if we see a statistically significant correlation, the confidence interval may dramatically shift over the different periods, due to differences in sample sizes or corpus composition. This should be kept in mind when analysing the data in this paper. The results we obtained can only be considered as an indication of what is going on, and are amenable to further, more fine-grained statistical techniques (see for instance Hilpert and Gries 2009).

3. Identifying *such* and *zulk*

3.1. Identification, generalized instantiation and phoricity

Such and *zulk* have been used in identifying constructions from their earliest appearance in the corpus data. Examples from Old Dutch and Present-Day Dutch are given in (11a) and (11b), and examples from Old English and Present-Day English are given in (12a) and (12b), respectively.

- (11) a. *Vnderleged mich mid bluomen, umbeleged mich mid epholon, wanda ich mines wines minno siechon. . . . So ich in **sulichemo** bedde geligon mid minon winon, so is sin winstra under minemo hoyueda ande sin zesewa umbegriphed mih.* (ONW ca. 1100)
Underlay me with flowers, surround me with fruits because I mine:GEN beloved:GEN love sick.am . . . so I in such bed lie with my beloved, so is his left under my head and his right encloses me.
'Lay flowers around me, and surround me with fruit, because I am sick of love for my beloved. If I lie in such a bed with my beloved, then his left hand is under my head and his right hand embraces me.'
- b. *Ik zeg niet dat een schrijver nooit tweemaal of tienmaal eenzelfde formule mag hanteren, indrukwekkende oeuvres werden op **zulke** herhaling opgebouwd* (DBNL 1969)
I say not that a writer never twice or ten.times a.same formula may use impressive oeuvres became on such repetition up.built
'I am not saying that a writer can never use the same formula two times or ten times; impressive oeuvres have been built on such repetition'
- (12) a. *þa forþon þe þa Langbearde wæron ealle ongytende þone man swa mycles mægnes, hi woldon him bringan heapmælum to lace ge þa oxan ge þa nytenu, þe þær gehergode wæron. Ac se Drihtnes wer forsoc, þæt he **swylcum** lace onfon nolde* (YCOE 1050–1150)
'All the Lombards, by this perceiving him to be a man of rare virtue, began in all haste to present him with the gifts of such oxen and other cattle as before they had taken from others: but the man of God utterly refused all such presents'
- b. *The teaching of mixed-ability classes becoming the norm must be avoided at all costs. Very marginal benefits come from **such** teaching and the system must allow for some form of streaming.* (CB Times 1990–1996)

The above examples illustrate typical identifying uses of *such* and *zulk*. Functionally, *such* and *zulk* contribute to the identification of the intended NP referent. More specifically, the identifying information they provide helps the hearer to determine the kind or type of which the NP referent is an instance (cf.

a.o. Carlson 1978: 219; Duinhoven 1988: 130; Payne and Huddleston 2002: 435; Spinillo 2003: 198; Wood 2002: 98). This type-identification follows from the specific referential semantics *such* and *zulk* invoke: they set up “phoric”² relations in the discourse as they invite the reader to connect the NP referent with the referent of another preceding or following NP or stretch of discourse.

For *such*, Halliday and Hasan (1976: 313) have argued that the phoric relations it sets up entail comparative reference, i.e., the referent of the *such*-NP is further identified through comparison with another discourse referent. Accordingly, *such* is claimed to evoke not a relation of identity but one of similarity or likeness. The NP referent is like the discourse referent(s) in relation to which it is interpreted, but not identical to it. Both with *such* and *zulk*, the NPs they occur in introduce instances into the discourse as instances of a type exemplified or described by the related referent. In example (11b), for instance, *zulk* invites the reader to link the NP *zulke herhaling* ‘such repetition’ to the preceding description of the repeated use of the same formula—two to ten times—and to interpret it as an instance of that type of repetition. Similarly, in (12b), the NP *such teaching* invites the hearer to think of one instance of teaching of the kind with mixed-ability classes.

The type-identification and referential information typically provided by *such* and *zulk* is compatible with Langacker’s (2005: 170ff, 2009: 9) notion of generalized instantiation³, i.e., “a particular kind of abstraction involving instances of a given type”. Generalization is a specific conceptual mechanism that allows language users to establish mental contact with a particular discourse referent “through the mediation of **fictive** or **virtual** entities conjured up for that purpose” (Langacker 2005: 170) [emphasis original]. More specifically, NPs with *such/zulk* involve a type of dual reference (Ward and Birner 1995: 732), i.e., reference not only to a known type (retrievable from the preceding

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2. Phoric elements contribute to the identification of an NP referent by invoking another discourse referent functioning as its antecedent (a.o. Martin 1992: 98; De Mulder 1998: 2). In other words, phoric NPs embody “directives indicating that information is to be retrieved from elsewhere” (Halliday and Hasan 1976: 31). Depending on where this information is to be retrieved from, three main types of phoric relations can be distinguished: anaphora, i.e., the antecedent can be found in the preceding text; cataphora, i.e., the antecedent is retrievable from the following text; and exophora, i.e., the antecedent is to be found in the discourse context rather than the text itself (cf. Halliday and Hasan 1976: 14f; Martin 1992: 14f; Willemsse 2005: 91–92; Breban 2010).
 3. Generalized instantiation is distinct from generic reference. Generic statements refer to an arbitrary instance which is taken to be representative of the whole category which it is an instance of (Langacker 1991). Generalized statements have weaker implications in the sense that they do not necessarily apply to all the members of a category. Rather the generalization is typically a local, text-bound generalization based on a number of contingent occurrences rather than a global generalization to a class as such as part of the structure of the world, which is characteristic of generic reference (cf. Willemsse 2005: 189).

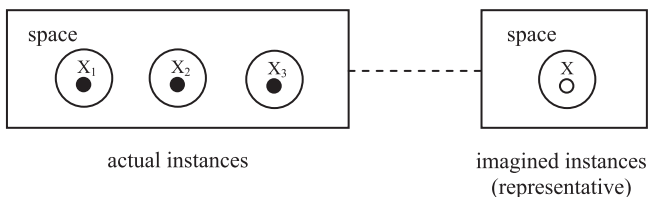


Figure 1. *Generalized instantiation* (Langacker 2009: 10)

or following text) but also to a new instance of that type in the discourse (introduced by the *such/zulk* NP).⁴ In (13), the NP *such legs* is interpreted through comparative reference to the description in the previous sentence: the legs in question are another instance of the type instantiated by Gullit's legs allowing sportsmen to block attacks, slow the pace and instigate counter-attacks. In (14), the NP *such excrement* is understood as evoking a mass of instances generalizing over the actual occurrences mentioned in the following *as*-clause, such that this set of occurrences is perceived as being alike in significant respects (cf. Langacker 2005: 170). Visually, the generalized instantiation expressed by *such excrement* can be represented as in Figure 1. x_1 , x_2 and x_3 correspond to the actual instances—My Hero, The Vicar of Dibley and Dad's Army—and x denotes the similar instances evoked by the NP with *such*. “The filled dots indicate that [x_1 , x_2 and x_3] are actual instances, distinguished from one another by their locations in space or in time. . . . The unfilled dot [for x] indicates that it is only imagined, being conjured up just to capture the generalization” (Langacker 2009: 10).

- (13) *Forest's retort was furious, but Gullit blocked them at every turn, slowing the pace, sweeping away the danger and still finding time to instigate some flowing counter-attacks. Linford Christie should have **such** legs.* (CB Times 1990–1996)
- (14) *All we're left with is **such** excrement as My Hero, The Vicar of Dibley and re-runs of Dad's Army, which was never funny in the first place.* (UK Spoken 1990)

4. Interestingly, (13) and (14) exemplify two semantically slightly different types of generalized instantiation: in (13) the reference to *new* instances via a shared type seems to be foregrounded; in (14) the generalized aspect is foregrounded. This distinction is apparent in their respective paraphrases. *Such legs* in (13) can be paraphrased both as ‘that type of legs’, emphasizing the reference to a known type, and as ‘similar legs’ (indefinite), emphasizing the introduction of new instance. *Such excrement* in (14) on the other hand does not allow the paraphrase with ‘similar’, only the ‘that type of excrement’ paraphrase. (Kristin Davidsen personal communication, August 2010)

The generalized instantiation expressed by NPs with *such/zulk* can be construed both through anaphora and cataphora, as illustrated by examples (13) and (14) above for English and by examples (15) and (16) for Dutch respectively.

- (15) *Maar het meest krasse bewijs van ons onbegrip is wel, dat er een algemeene, door één persoon te verrichten, geschiedschrijving bestaat en dat deze als vak beoefend wordt. Zulk een methode waarborgt reeds bij voorbaat de onwaarde der resultaten.* (DBNL 1919)

But the most striking example of our ignorance is well, that there a general by one person to conduct history.writing exists and that this a profession practiced becomes. Such a method guarantees already in advance the unvalue of.the results

‘But surely the most striking example of our ignorance is that there exists a general historiography, conducted by one person, and that it is practiced as a profession. Such a method guarantees in advance the worthlessness of the results.’

- (16) *Algebraïsche meetkunde neemt een centrale plaats in de moderne wiskunde in en heeft meerdere conceptuele verbindingen met zulke uiteenlopende gebieden als complexe analyse, topologie en getaltheorie.* (http://nl.wikipedia.org/wiki/Algebraïsche_meetkunde [accessed July 2010])

Algebraic geometry takes a central place in the modern mathematics in and has multiple conceptual connections with such diverse fields as complex analysis, topology and number theory

‘Algebraic geometry occupies a central place in modern mathematics and has multiple conceptual connections with such diverse fields as complex analysis, topology and number theory.’

Interestingly, as Figures 2 and 3 below show, English *such* and Dutch *zulk* display diachronically distinct distributional behavior in terms of their preference for either the one or the other phoric pattern. For English, the proportion of anaphoric uses of identifying *such* has always been larger than the proportion of cataphoric uses (with a 50/50 distribution in Old English), and the statistical results do not warrant a shift from one use to the other.⁵ For Dutch, however, we witness a rather dramatic decrease in the originally predominant cataphoric uses, with a statistically significant 0.42 correlation between the time variable and the type of phoricity. Cataphoric *such* and *zulk* are typically

5. Still, given the confidence intervals of the observed frequencies, it cannot be ruled out completely that *such* also exhibits a slight increase of anaphoric uses over time, as one reviewer points out.

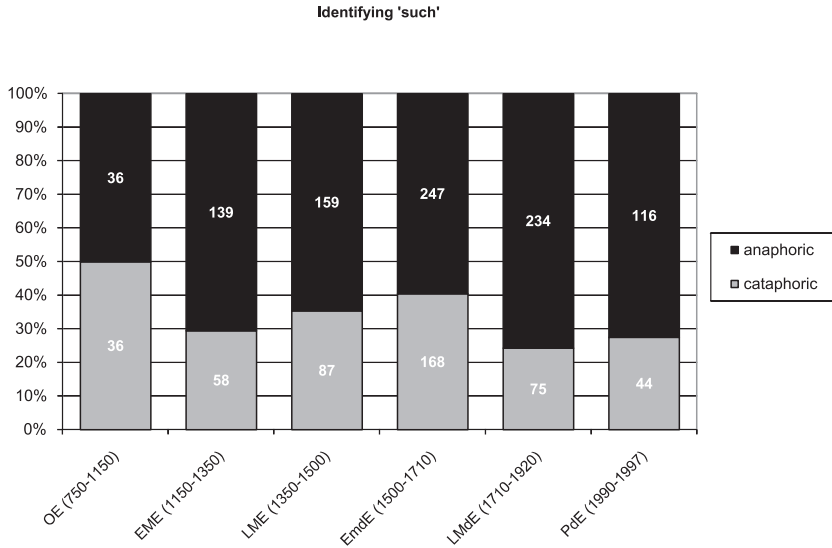


Figure 2. *Reference pattern for identifying such* (Statistics: Kendall's tau-b 0.07 [ASE 0.02])

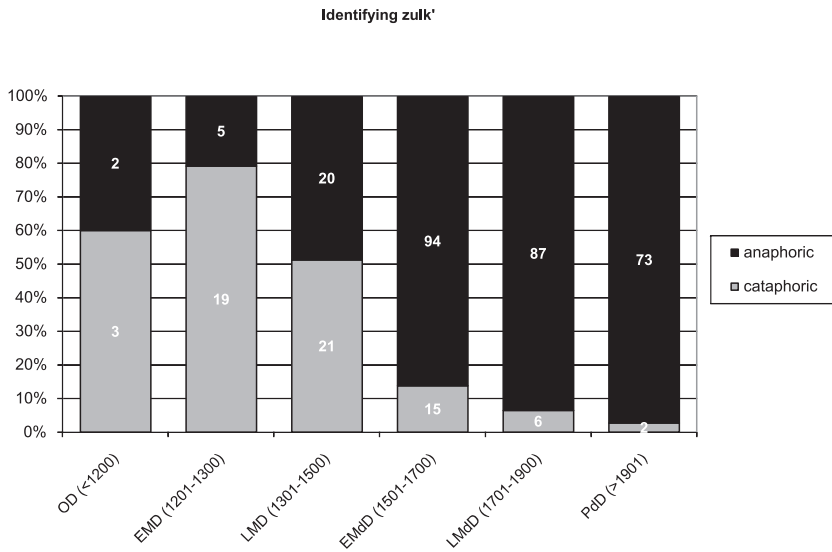


Figure 3. *Reference pattern for identifying zulk* (Statistics: Kendall's tau-b 0.42 [ASE 0.04])

realized as discontinuous constructions (De Mönnink 1996: 147) or discontinuous determiner units (Mackenzie 1997: 86), governing a following subordinate phrase or clause functioning as a “delayed complement” (Huddleston 2002: 967) to *such* as in (17), or *zulk*, as in (18). The NP and following phrase or clause form a syntactic and semantic unit as “the understanding of *such* [and *zulk*] is dependent on the material that follows the head, just as the post-head material cannot stand alone” (Mackenzie 1997: 86–87). In Section 3.3, we will argue that the distinct phoric patterning of English *such* and Dutch *zulk* is linked to their diverging affinity with the determiner class.

- (17) *The key clause of the contract stipulated that the signatories must play for the corporation at such times and at **such** venues that the corporation nominated.* (CB Times 1990–1996)
- (18) *Wanneer ze in den schemer van **zulke** dagen, dat de geluiden tot stemmen werden, in de kamer zit met stoel en hooge stoof en de aardappelen schilt en vrouw Komeijn zingt de liedjes, die ze altijd zingt . . . dan schijnen ook de woorden van de liedjes veel meer dan op andere dagen te beteekenen.* (DBNL 1921)

When she in the twilight of such days that the noises till voices became in the room sits with chair and high stove and the potatoes peels and miss Komeijn sings the songs that she always sings . . . then seem also the words of the songs much more than on other days to mean ‘When she sits in the room with her chair and high stove and peels potatoes in the twilight of such days when the noises became voices, and Miss Komeijn sings the songs that she always used to sing . . . then the words of the songs as well seem to have more meaning than on other days.’

3.2. *Definiteness*

In Section 3.1, we have argued that determiner complexes with *such* and *zulk* express dual reference through generalized instantiation. Building on this, we claim that the identifying information provided by *such/zulk* NPs is typically definite with regard to type-identification and indefinite with regard to instance-identification (cf. Ghesquière forthcoming). *Such/zulk* NPs introduce more abstract, representative entities into the discourse, while at the same time comparatively referring to exemplified or described discourse referents in the preceding or following context. Determiner complexes with *such/zulk* hence have a dual function: they mark a certain shift in the discourse as they introduce new instances, but they also aid textual cohesion by setting up phoric relations within the discourse. We can say that *such* and *zulk* evoke both indefiniteness and definiteness, albeit on different conceptual or cognitive levels: an indefinite instance gi_1 on the generalized instantiation plane and a definite type

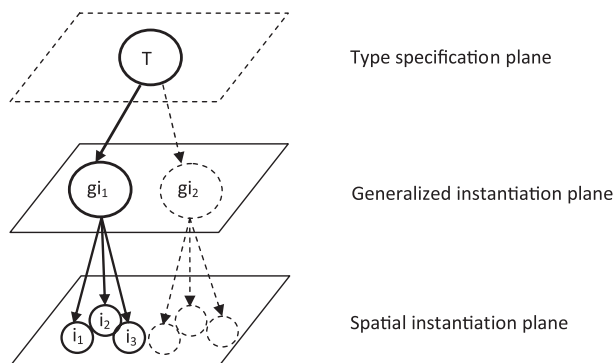


Figure 4. *Type specification and generalized instantiation (based on Breban and Davidse 2003: 296)*

T on the type specification plane (see Figure 4). The instances or concepts evoked by *such/zulk* NPs are not instantiated in the spatial domain, but on the generalized instantiation plane as they instantiate a new, representative instance of a known type. This type *T* is available either through a following or preceding description, as in (13) and (15), or through an enumeration of exemplary instances, as in (14) and (16). In the latter case, it is these spatially distinct instances that are realized on the spatial instantiation plane and that are generalized over. For example (14), for instance, the spatial instances represented as i_1 , i_2 and i_3 in Figure 4 correspond to the TV series *My Hero*, *The Vicar of Dibley* and *Dad's Army*, and the referent of the NP *such excrement* corresponds to the generalized instance gi_1 . As such, determiner complexes with *such* or *zulk* evoke one (with singular nouns) or more (with plural nouns) new instances of a known type, representing “an abstraction from actuality which captures the commonality inherent across a set of actual instances” (Langacker 2005: 170).

The apparent internal conflict between definiteness and indefiniteness was already noted for Dutch *zulk* by Duinhoven (1988: 128)⁶:

sulc is dus **tegelijktijd bepaald en onbepaald**. Ook al zijn de bedoelde individuen door middel van *sulc* niet geïdentificeerd, via de aangewezen eigenschap of categorie zijn ze toch min of meer bekend [*zulk* is **at the same time definite and indefinite**. Even though the intended instances are not identified by means of *zulk*, through the characteristic or category pointed at they are to some degree known (emphasis added)].

6. Later Duinhoven (1988: 129) does claim that in Present-Day Dutch the definite reading has ousted the indefinite reading, as the demonstrative aspect is now prevalent.

The association of prenominal *such* with indefiniteness is clear from the fact that, introducing new instances, it has a clear preference to occur in NPs headed by indefinite determiners, viz. the indefinite articles *a(n)* in singular NPs and the zero-determiner \emptyset with plural and mass head nouns, as in (19) and (20) respectively. In (19) the indefinite article *an* signals that the reader is not supposed to know the specific instance invoked by the NP, but *such* indicates that the reader does know an instance like it, i.e., an instance of the type “an idea so simple, so obvious and yet so useful that the immediate assumption is that everybody else must already know it”. Although in Present-Day Dutch *zulk* is largely incompatible with other determiners (cf. Section 3.3), it did occur with the indefinite article *een* (21) until quite recently. In plural NPs as in (22) there is of course no overtly realized determiner, but it is, in the light of the growing incompatibility of *zulk* with determiners, less plausible to posit the presence of a zero-determiner here than it is in English plural NPs with *such*.

- (19) *Occasionally one comes across an idea so simple, so obvious and yet so useful that the immediate assumption is that everybody else must already know it. **Such an** idea is Mike Timms's* (CB Times 1990–1996)
- (20) *Not long ago I met an old lag who protested at being removed to one of the newer and more comfortable prisons with **such** modern refinements as private lavatories.* (CB Times 1990–1996)
- (21) *Het is een vrijblijvende mening, en er ligt een groot verschil tussen het geven van **zulk een** mening, en er ook werkelijk iets voor doen.* (DBNL 1969)

It is a noncommittal opinion and there lies a big difference between the giving of such an opinion and there also really something for do
‘It is a noncommittal opinion, and there is a big difference between expressing such an opinion and actually acting upon it.’

- (22) *Ik heb steeds beseft dat Van Gennep een kleine uitgeverij is die **zulke** processen niet wezenlijk kan beïnvloeden* (DBNL 1985)
I have always realized that Van Gennep a small editor is that such processes not really can influence
‘I have always realized that Van Gennep is a small editor that cannot really influence such processes.’

Moreover, both *such* and *zulk* occur in existential sentences of the type exemplified in (23)–(24), which is a classical diagnostic test for indefiniteness (Lyons 1999: 16).

- (23) *I'm ever so grateful when anyone helps me like that . . . I think it's lovely that there are **such** people.* (CB UK Spoken 1996)
- (24) *Er zijn **zulke** groepen in een aantal regio's* (<http://bdvereniging.nl/beroepsontwikkeling.php> [accessed July 2010])

There are such groups in a number regions
 ‘There are such groups in a number of regions’

While closely associated with indefiniteness, determiner complexes with *such* and *zulk* also have a clear affinity with definiteness. For English, Denison (2002: 6) and De Smedt et al. (2007: 238–243) have pointed out the functional similarity between the determiner complexes *such a*∅ and *that|the sort|kind|type of*. For (25), De Smedt et al. (2007: 240) note that “[t]he referential meanings conveyed by *that sort of* in this example can also be expressed by a NP with . . . *such*: *It takes time to find **such a man***” [emphasis original]. Similarly, in (26), the NP *the kind of peace Stalin and Hitler brought to Poland* cataphorically refers to and generalizes from a concrete instance of peace described by the restrictive relative clause in the postmodifier. As with the anaphoric example, the NP in (26) can be paraphrased with *such*, e.g., “*such a peace as Stalin and Hitler brought to Poland*” (De Smedt et al. 2007: 242). In fact, the determiner complexes *such a*∅ and *that|the sort|kind|type of* differ only in that the ‘kind’ meaning is implicit in the former, whereas it is explicit in the latter.

- (25) . . . *a man I can trust and believe in. It takes time to find that sort of man, but he is worth the wait.* (www.forums.plentyoffish.com/16073117datingPostpage4.aspx/) (De Smedt et al. 2007: 240)
- (26) . . . *so it might as well go to Richard Holbroke. It was he who pitched together the Dayton accord, bringing to Bosnia the kind of peace Stalin and Hitler brought to Poland.* (CB – Times) (De Smedt et al. 2007: 241)

Above we have argued that *such* and *zulk* typically combine with indefinite determiners. However, as they refer to a known kind, *such* and *zulk* can in plural NPs also occur with definite (pre)determiners, albeit only marginally. In (27) and (28), for instance, *such* and *zulk* are preceded by the universal relative quantifier *all|al*, which can be argued to convey a “pragmatic notion of identifiability . . . by delineating all instances in the discourse context”: “knowing that *all* the instances in the current discourse context are referred to comes down to having mental contact with that instantial set” (Davidse 2004: 521).

- (27) *the two huge mobile homes where **all such necessities**—lavatories, telephones, communications and kitchens—were conveniently to hand* (CB Times 1990–1996)
- (28) *Hoewel **al zulke** getallen benaderingen zijn, had het Zuiden voor 1860 naar men zegt ongeveer 4 miljoen slaven* (DBNL 1998)
 Although all such numbers approximations are, had the South before 1860 to one says about 4 million slaves
 ‘Although such numbers are approximations, the South had, before 1860, allegedly about 4 million slaves.’

The occurrence of *such* and *zulk* in definite contexts is not restricted to the combination with *all/al*. They also occasionally occur in partitive constructions, which can be used as a test for definiteness (Lyons 1999: 16–17): the reference mass from which a part is taken needs to be definite (*any/some/all/which* . . . *of the/each/*Ø/*two/*some* . . . *books*).

- (29) *prior to November 1, 1990 the Company may not redeem any of such New Bonds from or in anticipation of moneys borrowed having an effective interest cost . . . of less than 11.36%* (CB UK Books 1991)
- (30) *Sommige van zulke dingen zul je als bedrijfskosten kunnen aftrekken* (<http://www.higherlevel.nl/forum/index.php?board=16;action=display;threadid=12933> [accessed July 2010])
Some of such things shall you as company.costs can deduce
'Some of such things you will be able to deduce as running costs.'

3.3. *Such and zulk and the determiner class*

In light of their (intricate) relation to the notion of definiteness, it is logical that pronominal identifying *such* and *zulk* are strongly linked to the determiner system. Both *such* and *zulk* can be argued to be in an ongoing process of gradient category shift from modifier to determiner (Van de Velde 2009, 2010), comparable to the shift witnessed for *several* and *various* (Denison 2006; Breban 2010). However, whereas *zulk* syntactically behaves almost completely determiner-like today, *such* still displays both adjective and determiner characteristics (Van de Velde 2010: 290).

This observation can be supported by a number of arguments. First, as mentioned in Section 3.1, there has been a dramatic decline in the cataphoric use of identifying *zulk* over the centuries. When used cataphorically, *such* and *zulk* typically form syntactically discontinuous units with a clausal or phrasal complement. These complements then basically function as modifiers of *such/zulk*, and can thus be called “submodifiers” (Halliday 1994: 192) in the NP. Submodification by means of a complement clause is typical of adjectives, and the loss of the ability of *such/zulk* to take their own (sub)modifiers ties in with the idea that these elements gradually acquire determiner characteristics over time. In the course of the grammaticalization from adjective to determiner, they lose the syntactic possibilities associated with adjectives, in a process of “decategorialization” (Hopper 1991). For English identifying *such*, the proportion of cataphoric uses has always been smaller than that of anaphoric uses, yet has never dropped much lower than 30% (cf. Figure 2).

Second, *zulk* has lost its ability to occur as a subject complement. As a result, the Middle Dutch construction in (31) is ungrammatical in Present-Day Dutch. Again, the loss can be considered part of a decategorialization process. Subject complement position is typical of adjectives and the loss of this construction is

hence a good diagnostic for shifts from the adjectival to the determiner category (Van de Velde 2009, 2010). Identifying *such*, in contrast, in Present-Day English still occurs as a subject complement, as in (32).

- (31) *Si mochten sulc zijn*
they might such be
'They might be/may have been such' (13th century, Duinhoven 1988: 129)
- (32) *Not too many people return from six days in Paris weighing half a stone less. Such, however, was the curious fate last week of your columnist* (CB Times 1990–1996)

Third, *such* combines more freely with other determiners than *zulk*—the combinations in (33)–(35) are all ungrammatical in Present-Day Dutch, an occasional example like (36) from the first half of the 20th century notwithstanding—which is again in line with the idea that *zulk* is a more fully-fledged determiner. Mutual exclusivity with other determiners, and in particular with an article, is one of the key characteristics of real determiners (Quirk et al. 1985: 254; Pullum and Huddleston 2002: 539; Dryer 2007: 161).

- (33) *Early in December, any such discussion would have been sacrilegious.* (CB Times 1990–1996)
- (34) *we have taken a fresh look at the management of the bookshop to ensure both that it is open on each such occasion and that suitable material is on display* (CB UK Books 1993)
- (35) *We know there should be <M01> Yeah. <M02> some such budge factor but <M01> Yeah. But at the moment it's completely arbitrary* (CB UK Spoken 1994)
- (36) *Op elk zulk een papiertje* (1947, WNT, s.v. *trekken*)
On each such a paper.DIMINUTIVE
'on each such slip of paper'

Fourth, in terms of the combined use with modifiers or secondary determiners (Breban 2010), *such* and *zulk* also behave differently. Whereas in Present-Day Dutch the use of *zulk* after adnominal modifiers such as *other* is “virtually excluded” (Van de Velde 2010: 278), English *such* is still found both before and after (*an*)*other* (cf. Denison 2006: 284). If *other* indeed functions as the watershed between (post)determiners on its left and plain adjectives on its right (Breban 2009: 13), then *zulk* behaves again more determiner-like than *such*.

- (37) *ende noch andere sulke sendinge*
and still other such gifts
'and such other gifts' (MNW, s.v. *sendinge*) (15th century, Van de Velde 2010: 278)

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- (38) *Road deaths, drownings, poisonings and **other such** accidents account for approximately 75,000 children's deaths per year.* (CB Times 2004)
- (39) *The old wisdom "hard cases make bad law" now seems to be considered hopelessly outdated, along with **such other** dusty notions as "innocent until proven guilty".* (CB Times 2001)

Summarizing we can say that, although both *zulk* and *such* have lost some adjectival properties over time and gained characteristics of the determiner class, *zulk* is currently closer to a prototypical determiner than *such*. In Section 6 this observation will be linked to the different proportions of identifying and intensifying uses of English *such* and Dutch *zulk* in the data.

4. Intensifying *such* and *zulk*

In this paper intensification is understood as the measuring or heightening of the degree of a certain evaluative or scalar notion inherent in the modified element. Although intensification is, as illustrated in the introductory paragraphs, not restricted to any particular word class, it is most typically associated with adverbs, such as English *so* and *very* and Dutch *zo* and *heel* in (40) and (41).

- (40) a. *he surely did not expect **so** vigorous a response.* (CB Times 1990–1996)
- b. *It was a **very** pleasurable experience.* (CB Times 1990–1996)
- (41) a. *De Nederlandse militairen hadden op een **zo** snelle nederlaag niet gerekend.* (DBNL 1986)
The Dutch soldiers had on a so quick defeat not counted
'The Dutch soldiers had not counted on so quick a defeat.'
- b. *Ik vind de stedelijke invloeden van **heel** groot belang.* (DBNL 1980)
I find the urban influences of very great importance
'I find the urban influences of very great importance.'

In the English examples above, the intensifying adverbs *so* and *very* measure the high degree of vigor and pleasure associated with the NP referents in (40a) and (40b) respectively. Dutch *zo* and *heel* in (41a) and (41b) intensify the quickness of the defeat and the degree of importance respectively. Both the English and Dutch adverbs thus have scope over and intensify only the adjectives immediately following them.

In the literature, *such*, like the typical intensifying adverbs, has been argued to modify only one element in the NP, viz. a modifier of the head noun in NPs such as *such a silly man* or a property associated with the head such as messiness in *such a mess* (a.o. Allerton 1987: 15; Altenberg 1994: 227; De Mönnink 2000: 149). Against this, we would like to argue that both English *such* and Dutch *zulk* have scope over the entire NP in which they occur (cf. Bolinger

1972: 88–89; Spinillo 2003: 201), be it only in terms of one dimension, viz. gradability (cf. Ghesquière forthcoming). Unlike *so* and *very*, *such* and *zulk* intensify not only the gradable notions expressed by the following noun-modifiers but they intensify the degree of all gradable type specifications in the NP, inherent in the head noun, in the modifier(s) of the head noun, or in both the head and its modifiers, as in the a, b, and c examples below respectively. Whereas *so* and *very* are adjective-intensifiers, *such* and *zulk* have the entire nominal description in their scope.

- (42) a. *It used to be **such** a thrill when you saw English cars on the road on the continent. You used to hoot and wave.* (CB Times 1990–1996)
 b. *It's not just that it played **such** an important part in my life, but the fact that the nurses and doctors there do **such** terrific work* (CB Times 1990–1996)
 c. *Having survived **such** a harrowing personal tragedy, Casey also had to negotiate a serious lowpoint in his training career.* (CB Times 1990–1996)
- (43) a. ***Zulk** onweer en dan alleen in huis* (DBNL 1921)
 Such thunderstorm and then alone at home
 'To be home alone with such a thunderstorm!'
- b. *onze maatschappij waarin publiciteit en consumptie **zulk** een belangrijke rol spelen.* (DBNL 1969)
 our society wherein publicity and consumption such an important role play
 'our society in which publicity and consumption play such an important role'
- c. *We zijn allemaal **zulke** afschuwelijke hypocrieten.* (DBNL 1969)
 we are all such terrible hypocrites
 'we are all such terrible hypocrites'

The difference in modificational scope of *so/zo* and *very/heel* on the one hand and *such* and *zulk* on the other is also evident from their distinct behavior in predicative constructions. Whereas the predicative paraphrases of the NPs in examples (44) and (45) illustrate the restricted scope of *so/zo* and *very/heel* over the following modifier only, *such* and *zulk* do not allow for this kind of periphrasis (46).

- (44) a. ***so** vigorous a response; the response is **so** vigorous*
 b. *a **very** pleasurable experience; the experience is **very** pleasurable*
- (45) a. *een **zo** snelle nederlaag; de nederlaag is/kwam **zo** snel*
 a so quick defeat; the defeat is/came so quick
 b. ***heel** groot belang; het belang is **heel** groot*
 very great importance; the importance is very great

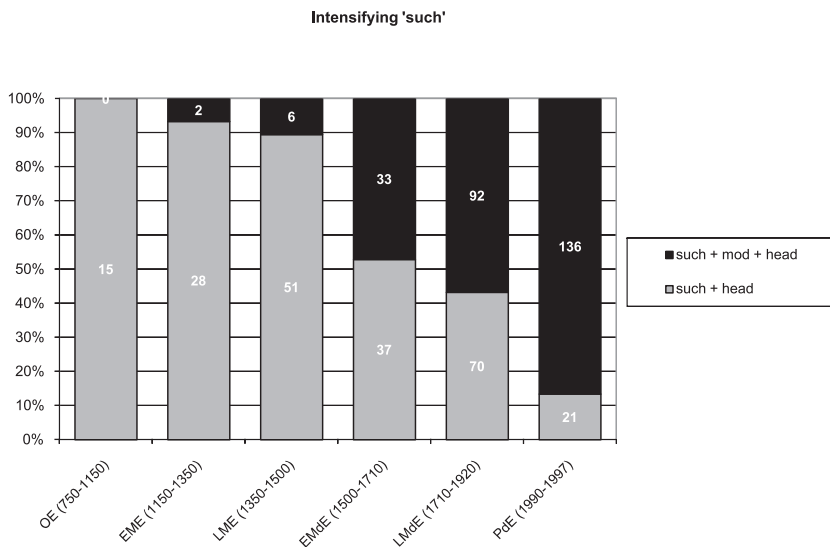


Figure 5. Modification patterns intensifying *such* (Statistics: Kendall's tau-b 0.50 [ASE 0.03])

- (46) a. *such* an important part; *the part is *such* important
 b. *zulk* een belangrijke rol; *de rol is *zulk* belangrijk
 such an important role; the role is such important

The extended scope of intensifying *such* and *zulk* ties in with the diachronic observation that the earliest intensifying uses are attested in NPs consisting only of *such/zulk* and a head noun. Only in later stages could additional modifiers intervene between the intensifiers and the head, a construction that later becomes the predominant one in the corpus data (see Figure 5 and Figure 6). Both for English and Dutch the change in proportion of both constructions is statistically robust.

Although *such* and *zulk* enter into constructions syntactically distinct from those set up by *very/heel* and *so/zo*, they are semantically quite similar. All these intensifiers can be argued to be scalar degree modifiers (Paradis 1997, 2001, 2008; Kennedy and McNally 2005), which indicate a range on a scale. More specifically, they typically function as boosters, which have a reinforcing effect on the modified properties (Paradis 2008: 321), as they scale them upwards from an assumed norm (Quirk et al. 1985: 445). *Very* in *a very tall boy*, for instance, raises the degree of tallness attributed to the boy above an assumed standard (cf. Kennedy and McNally 2005: 369). Similarly, *such* in *such a nice man* boosts or intensifies the degree of niceness associated with the NP referent, placing it high on an open-ended scale of niceness.

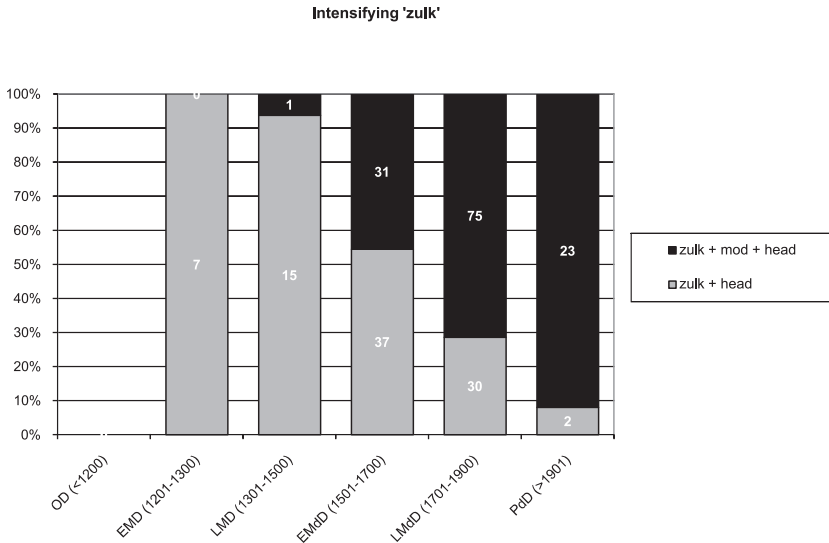


Figure 6. *Modification patterns intensifying zulk* (Statistics: Kendall's tau-b 0.43 [ASE 0.05])

5. Identification—intensification: A vague boundary

Based on the preceding discussion of the identifying and intensifying uses of *such* and *zulk*, one might get the impression that these two functions are distinguished by a clear and strict boundary. For English, Altenberg (1994: 234) has argued that “[i]f there is a contextual referent but no gradable element, *such* is interpreted as identifying; in the reverse situation it is interpreted as intensifying”. The diachronic and synchronic data, however, threw up a certain number of vague examples of both *such* and *zulk* that simultaneously evoke both a referential, identifying reading and an emphatic, intensifying reading. In these vague uses there are “two or more semantic features simultaneously playing a role in the interpretation of the [NP] structure: grasping the meaning of such a structure involves incorporating two or more different semantic features into one global interpretation” (Willemsse 2007: 562).

Examples (47) and (48) illustrate the typical vague uses of *such* and *zulk*, syntactically realized as simple anaphoric NPs with a gradable head noun (47) or gradable modifiers (48). On the one hand *such* in the NP *such pressure* in (47) aids identification of the NP referent through backward reference to the implied embarrassment and disclosure, while on the other hand emphasizing the quantity or extent of pressure exerted. *Zulk* in (48) at the same time anaphorically refers to the enumeration of ‘prophets’ as well as intensifies their authoritativeness.

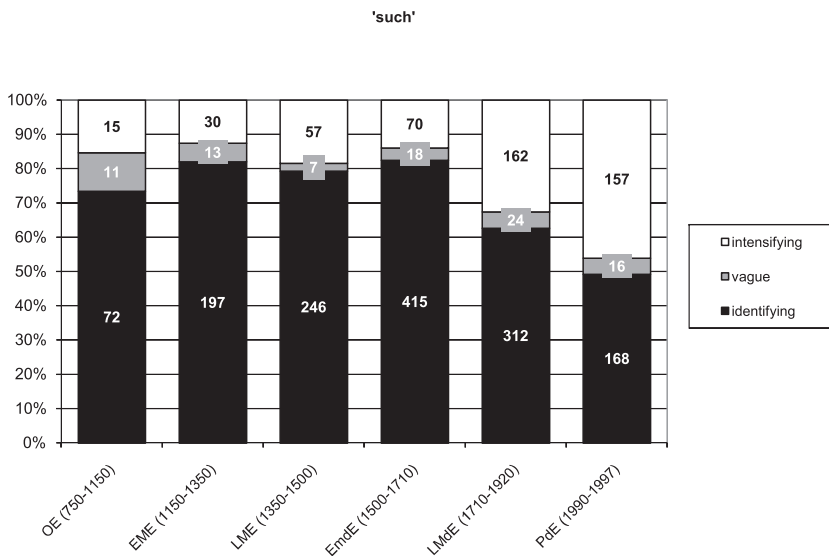


Figure 7. *Diachronic distribution of identifying and intensifying use of such* (Statistics: Kendall's tau-b 0.23 [ASE 0.02])

- (47) *The opposition's list of 125 Tory mps who act as part-time consultants and advisers is calculated to embarrass those named as well as the government and force the disclosure of their extramural earnings. There should be no need for **such** pressure.* (CB Times 1990–1996)
- (48) *. . . denk aan Che Guevara, Marcuse, Böll, Martin Luther King, Soltsjensyn, de profeten van een nieuwe rechtvaardiger wereld—maar dat lijkt nu wel definitief voorbij. Hoor jij nog **zulke** gezaghebbende stemmen van het menselijk geweten?* (DBNL 1985)
- . . . think of Che Guevara, Marcuse, Böll, Martin Luther King, Soltsjensyn, the prophets of a new juster world—but that seems now well definitively over. Hear you still such authoritative voices of the human consciousness?
- ‘Think of Che Guevara, Marcuse, Böll, Martin Luther King, Soltsjensyn, the prophets of a new, juster world—but that seems definitively over now. Do you still hear such authoritative voices of human consciousness?’

Diachronically, the number of vague uses is never very high for *such* nor for *zulk* (cf. Figure 7 and Figure 8). Nevertheless, they illustrate the close link between the identifying and intensifying uses and support the idea of a genetic relation between them (cf. Section 6).

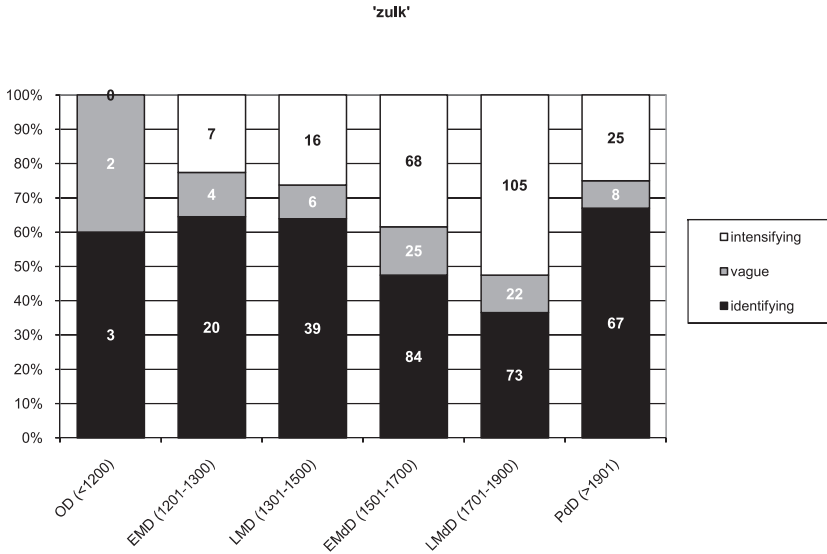


Figure 8. Diachronic distribution of identifying and intensifying use of *zulk* (Statistics: Kendall's tau-b 0.04 [ASE 0.04])

6. Corpus distribution and development of identifying and intensifying uses

Intensifying *such* is a ‘degree word’ of which Bolinger (1972) hypothesizes that it has developed from an identifying source meaning. Bolinger bases this hypothesis on synchronic English data only however. As a consequence, the question arises whether or not historical corpus data confirm such a shift. On the whole, the data in Figure 7 and Figure 8 support Bolinger’s hypothesis. The rise of intensifying uses is clearest in English, where the proportion of intensifying *such* increases from 17% in Old English to 48% in Present-Day English, if we ignore the vague contexts. This shift is statistically significant. In Dutch we found an even more spectacular rise from 0% intensifying *zulk* in Old Dutch to 59% in the Late Modern Dutch period, but this trend is reversed in Present-Day Dutch, where the proportion of intensifying *zulk* has again dropped to 27%. Overall this reversal eliminates the statistical significance of the shift, but when we ignore the Present-Day Dutch data, Kendall’s tau-b rises to 0.22 (ASE 0.04), almost exactly the same value as for the English data.

The ‘emerging’ or newer character of the intensifying uses is further supported by the changing modification patterns of these uses. Both intensifying *such* and *zulk* shift from exclusively modifying the head noun to predominantly modifying the head of the NP and/or a gradable modifier of the head (see Figure

5 and Figure 6). This is a remarkable trend as intensification is typically associated with adjectives and intensifying meanings of *such* and *zulk* might consequently have been expected to originate in the *such* + modifier + head construction, rather than in the *such* + head construction. The trend makes sense, however, if the intensifying use gradually encroaches on the identifying use: the rise of the intensifying meaning of *such* and *zulk* is not due to the presence of the adjective, but arises naturally, i.e., through pragmatic strengthening (see below).⁷

Figures 7 and 8 clarify that the shift from identification to intensification should not be thought of as a catastrophic ‘reanalysis’ but rather as a change of proportions. Whereas the earliest truly intensifying uses of Dutch *zulk* are attested only in the Middle Dutch data, intensifying uses of English *such* are found from the Old English period onward. The English data thus invite critical reflection upon the scenario traditionally envisaged for semantic change, viz. from A to A/B and sometimes to B (a.o. Traugott and Dasher 2002: 11). Although it cannot be excluded that English *such* has undergone an A to A/B shift that is not reflected in the data or that took place in the period preceding written attestation, we should be careful in postulating a discrete change from a period without to a period with intensification. Similarly, due to the limited amount of data for the oldest period, we cannot rule out that Dutch *zulk* has always had intensifying uses, and that there has consequently also been a slow, proportional rather than a discrete change.⁸

This gradual, proportional shift from identification to intensification is an intuitively plausible process. The intensifying meaning may easily have arisen or become more prominent by pragmatic strengthening, a process well-documented in language change (Traugott and Dasher 2002; Traugott 2003). The intensifying meaning was then an implicature at first, which was later fully semanticized. The identifying function of *such* follows from its phoric nature: in its identifying use, *such* refers either anaphorically or cataphorically to a “kind”, characterized by a specific feature or characteristic. Often, this feature will be a scalar, gradable notion. An NP like *such a problem*, for instance, can be reasonably assumed to have originally functioned as a phoric NP referring to a specific kind of problem described or illustrated in the context. The reason for picking up the NP in the ensuing discourse will often be that we are dealing with a kind of problem that is in some way “remarkable”, e.g., by means of its importance or impact. Over time, this might have led to the inference that the use of *such* entails intensification. Bolinger formulates this as follows:

7. We owe this observation to Hendrik De Smet (personal communication, August 2010).

8. We thank the anonymous referees and an associate editor for their comments concerning the A to A/B shift in semantic change and for pointing out that Bolinger himself most likely envisaged the shift from identification to intensification as a change in proportions rather than a discrete or abrupt change.

the identifier has fallen out of many contexts except in formal register, giving way to the intensifier, probably because the ‘suchness’ of something is so likely to be an intensifiable characteristic. We begin by viewing it as pointed to, and end by viewing it as worthy of note, hence as enhanced. (Bolinger 1972: 91)

What is more surprising, is the sudden reversal of this shift in Present-Day Dutch. Which factors came into play to slow down or even block the increasing frequency of intensifying uses of *zulk* as observed for English *such*?

A first factor that may have played a role are the different degrees to which *such* and *zulk* belong to the determiner category. As argued in Section 3.3, *zulk* is closer to the determiner prototype than *such*. As the core business of prototypical determiners is ‘identification’, this may explain why the new determiner *zulk* once more becomes more involved in identification than intensification. Note that the shift of *zulk* to the determiner category came to completion in the 20th century (Van de Velde 2010: 293), i.e., at the time when the trend towards more intensification was reversed (see Figure 8).

A second factor that may explain why Dutch *zulk* shows a relapse into the old identification function is that *zulk* loses ground to competing constructions with *zo* ‘so’ (see Duinhoven 1988: 131; De Rooij 1989: 199; WNT s.v. *zulk*; and also Demske 2004 for the idea of competition between *solch* and *so* in German). Historically, constructions with *zulk* such as (49) are increasingly replaced by constructions such as (50).

(49) *zulk mooi weêr* (1887, KlasLit)

such beautiful weather
‘such beautiful weather’

(50) *zo’n mooi weer*

so a beautiful weather
‘such beautiful weather’

The gradual replacement of *zulk* by *zo’n* is corroborated by quantified corpus data. Figure 9 represents the results of a corpus study covering 90 years of late 19th century and early 20th century texts (see Section 2), divided into three 30-year-periods. We looked for the combination of *zo’n* (and its orthographic variants) or *zulk* optionally followed by the indefinite article and one of the 12 frequent attributive adjectives *groot* ‘big’, *klein* ‘small’, *goed* ‘good’, *slecht* ‘bad’, *nieuw* ‘new’, *oud* ‘old’, *hoog* ‘high’, *laag* ‘low’, *lang* ‘long’, *kort* ‘short’, *mooi* ‘beautiful’, and *lelijk* ‘ugly’, including inflected forms and orthographic variants.⁹ As Figure 11 shows, we observe a steady and statistically significant

9. The attributive adjective was included in the search string to reduce the number of irrelevant hits with the multifunctional adverb *zo*. For a more complete picture of the competition between *zulk* and *zo’n* additional patterns would have to be included as well. We leave this for further research.

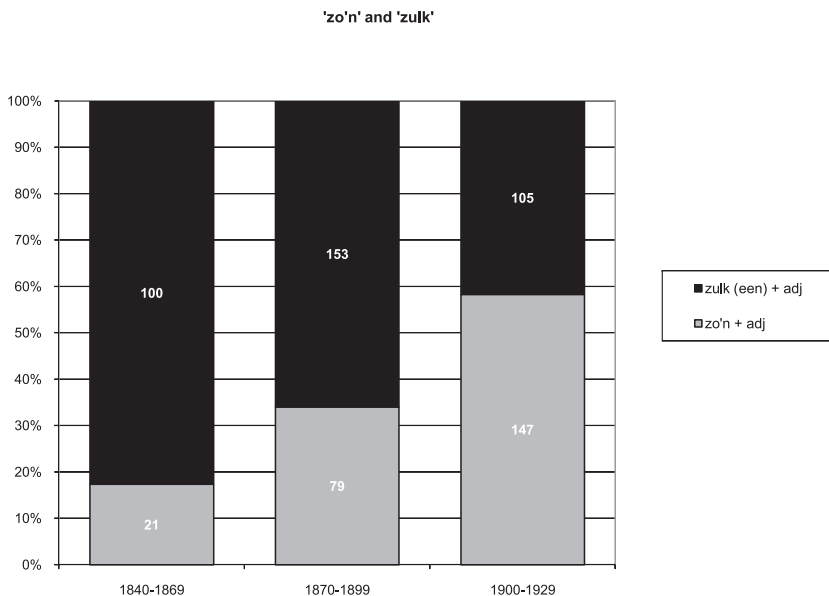


Figure 9. *Diachronic competition between zo'n and zulk* (Statistics: Kendall's tau-b 0.31 [ASE 0.03])

rise of *zo'n* at the expense of *zulk*. As a result, *zulk* is currently much more infrequent than *such*. In our Present-Day English and Dutch corpora, *such* is 23 times more frequent than *zulk* (977 vs. 43 occurrences per million words of running text).¹⁰

Why would the gradual ousting of *zulk* lead to a revival of its identifier use? We would like to hypothesize that endangered constructions are more likely to survive longer in their older, more prototypical functions than in newer uses. Support for this claim comes from the ditransitive construction in Dutch and English, which ranges over an increasingly smaller range of lexical-semantic domains. The construction however survives better in its prototypical “caused-reception” use than in its more peripheral “dispossession” use (Coleman and De Clerck 2011). In much the same way, identifying *zulk* may have

10. In English, the construction with *so* is far less popular than in Dutch. The construction in example (50), for instance, is not grammatical in English: “The use of *so* is becoming antiquated with premodifying adjectives, and is already impossible with mass and plural nouns” (Bolinger 1972: 87). In constructions without a modifier (e.g., *zo'n man* ‘so a man’), the use of *so* is ungrammatical as well.

endured the competition with the *zo'n* construction better than intensifying *zulk*.

7. (Inter)subjectivity and (inter)subjectification

The diverging historical developments of English *such* and Dutch *zulk* have shown that language change does not always uniformly proceed along predetermined pathways of change. Idiosyncratic semantic and syntactic characteristics and language-internal factors were argued to have influenced the developmental paths followed by these elements. In this section, we take a somewhat broader perspective, focusing not on the small differences in the developments of *such* and *zulk*, but on the distinct development of *such* and *zulk* on the one hand and other intensifiers on the other hand.

How can the development of intensifying meanings be conceptualized in terms of existing subjectification hypotheses? Traugott (1982) posited a cline of semantic change in early grammaticalization as represented below:

propositional (> textual) > expressive (Traugott 1982: 256)

The propositional meaning component is concerned with “truth-conditional relations”, which are “subject to referential verification”. “The textual component has to do with the resources available for creating a cohesive discourse” and “the expressive component bears on the resources a language has for expressing personal attitudes to what is being talked about” (Traugott 1982: 248). Clearly, intensifying meanings are part of the expressive component of language as they convey strongly subjective speaker-stance vis-à-vis the NP referent. In the literature, it has been argued that intensifying meanings of adjectives typically develop from propositional meanings. For instance, for *absolute* and *complete* Paradis (1997, 2008) and Ghesquière (2010) have posited a shift from property attribution, as in *an absolute standard* and *the complete establishment*, to intensification, as in *absolute bliss* and *a complete idiot*, foregrounding the speaker’s attitude and thus conveying highly subjective meanings. The development of *such* and *zulk*, however, cannot be understood as a change from propositional to expressive meaning. Rather the shift from identifying to intensifying meanings constitutes a shift from the textual to the expressive domain. As referential items, *such* and *zulk* contribute to the cohesion of the text, i.e., “a potential for relating one thing in the text to another” (Halliday and Hasan 1976: 27). As such, they form part of the textual component of the linguistic system, which “comprises the resources that language has for creating text . . . : for being operationally relevant, and cohering within itself and with the context of situation” (Halliday and Hasan 1976: 27). Traugott’s (1982) early cline of semantic change can thus accommodate the development of intensifying meanings of adjectives such as *absolute* and *complete*, i.e.,

from propositional to expressive, and of English *such* and Dutch *zulk*, i.e., from textual to expressive.

More recently, however, Traugott (2003) has developed a somewhat different view on subjectification and Traugott and Dasher (2002) and Traugott (2003) added the notion of intersubjectivity and intersubjectification to theory formation on semantic change. Now, subjectification is understood as a process whereby “meanings become more deeply centred on the speaker” (Traugott 2003: 129). Intersubjective meanings then are best understood as “crucially involv[ing] SP/W’s attention to AD/R as a participant in the speech event” (Traugott and Dasher 2002: 22) and intersubjectification is accordingly defined as “a mechanism whereby meanings become more centred on the addressee” (Traugott 2003: 129). Traugott’s (1982) hypothesis was hence transformed into the cline of unidirectional intersubjectification below. The second line represents the approximate matches between Traugott’s and Halliday and Hasan’s (1976) terminology.

non-/less subjective > subjective > intersubjective
 ideational interpersonal (Traugott 2010: 34)

In this revised cline, the shift posited for adjectives such as *absolute* and *complete* from propositional to expressive meaning is reinterpreted as a change from non-/less subjective meaning to subjective meaning. The propositional meanings can be objectively verified and do not require interpretation or evaluation by the speaker. As intensifiers, the adjectives foreground the attitude of the speaker toward the NP referent and are thus subjective.

Where should the textual meanings conveyed by identifying *such* and *zulk* be situated in the intersubjectification cline? The textual component of language, which occupied a prominent position in Traugott’s (1982) pathway of semantic change, now seems to have disappeared from the cline, which raises questions regarding its relation to (inter)subjectivity. Although Traugott (2007a, 2007b, 2010) in defining intersubjectivity focuses mainly on the coding of meanings oriented towards the social self of the AD/R, Ghesquière (2009) and Breban (2010) have argued that textual, referential meanings can also be intersubjective, as they deal with the alignment of speakers’ and hearers’ attention. To argue this claim Ghesquière (2009) invokes Diessel’s (1999, 2006) work on demonstratives. Demonstratives, like the determining elements *such* and *zulk*, serve to create a “joint focus of attention” (Diessel 2006: 465), in which the SP/W has to take the perspective and the concerns of AD/R into account, which is a prerequisite to arrive at successful communication. Such deictic, textual meanings, as conveyed by the demonstratives and *such* and *zulk*, by which the speaker negotiates discourse referent tracking for the hearer, can be considered to be textually intersubjective. Intersubjectivity then encompasses not only meanings oriented toward the social self and face of the hearer (Trau-

gott and Dasher 2002), i.e., attitudinal intersubjectivity, but also textual meanings negotiating discourse referent tracking by SP to H, i.e., textual intersubjectivity. Such an extended notion of intersubjectivity is in accordance with Traugott's own (1995: 47) broad view of subjectification, which encompasses both a text-creating and an attitudinal component. Similarly, Carlier and De Mulder (2010: 269) hold that intersubjectification then "concerns more globally items that materialize the strategic interaction between speaker and hearer and reflect the active role of the speaker to orient and to guide the hearer in his interpretational tasks". Moreover, the extended notion is compatible with Traugott and Dasher's (2002: 31) definition of intersubjectification as "a change which results in the development of meanings that explicitly reveal recipient design: the designing of utterances for an intended audience (Clark and Carlson 1982) at the discourse level". However, if one considers the identifying, referential uses of *such* and *zulk* to convey textually intersubjective meanings and these uses historically precede and perhaps even gave rise to the subjective intensifying uses, as predicted by Bolinger (1972), this would entail a diachronic shift from intersubjective to subjective meaning.

8. Conclusions

This study has shown that the diachronic development of English *such* and Dutch *zulk* adheres to the pathway of change proposed by Bolinger (1972) leading from identification to intensification. Both *such* and *zulk* have identifying uses in which they aid identification of the NP referent by setting up phoric relations in the discourse (Section 3). The two elements, however, tend to be increasingly used as intensifiers over time (Sections 4, 5 and 6). This trend is statistically robust, and can be understood to be the result of a process of pragmatic strengthening (Section 6). Furthermore, the change revives Traugott's (1982) original view on subjectification, as it establishes a shift from textual to expressive meaning (Section 7). Importantly, the observed changes do not constitute a wholesale shift, with one stage of purely identifying use, and an endpoint of purely intensifying uses. What changes are the proportions. And even then, the trend is not uniform. Dutch *zulk* relapses into its old identifying use in the 20th century. Such deviations from the expected path of change should perhaps not be particularly surprising. As Fischer (1997: 265) noted:

grammaticalisation is not an inexorable process driven by semantic factors, but a potential semantic process that may be stopped (or not really get underway) at any moment due to language specific grammatical circumstances which it encounters on its path.

In Section 6, it was argued that the specific syntactic changes affecting *zulk* and the competition with other constructions can plausibly account for the fact that the development of *such* and *zulk* does not run strictly parallel in English and

Dutch. The contribution of these factors to the distinct diachrony of *such* and *zulk* could only be established by comparing the (minute) differences between English *such* and Dutch *zulk*. In doing so, we hope to have shown that a contrastive approach can shed further light on the tortuous trails of the general syntactic-semantic pathways that have been put forward in grammaticalization theory and elsewhere.

Received 16 August 2010

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Accepted 27 January 2011

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