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Journal of English Linguistics 2007 35: 293
DOI: 10.1177/0075424207307597

Journal of English Linguistics
Volume 35 Number 4
December 2007 293-324

10.1177/0075424207307597
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The Grammaticalization of Small Size Nouns

Reconsidering Frequency and Analogy

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This article discusses the grammaticalized status of low-frequency small size nouns (henceforth SSNs), such as *jot of*, *scrap of,* and *flicker of*, which cannot have engaged in the spiral routinization processes with attrition, decategorialization, and grammatical reanalysis characteristic of "default" grammaticalization. The proposal to account for the grammatical status of low-frequency complex prepositions in terms of grammaticalization by analogy is partially rejected. Corpus studies on nine SSNs show that mere analogy with one highly schematic construction, *a*+SSN+*of*, as instantiated by frequent *a bit of*, cannot be the sole factor involved in the grammaticalization of infrequent SSNs. Instead, more complex analogies with different quantifier models are involved which incorporate polarity sensitivity, similar to *some* and *any*, and which seem to serve as distant models in these analogies. However, in contrast to *some* and *any*, which can be used generally in quantifying contexts, the infrequent SSNs are further characterized by specific collocational and pragmatic values, and their appearance seems restricted to particular discourse contexts. More generally, the present article supports the claim that grammaticalization as such directly works on and results in (at least partially) substantive constructions, rather than schematic ones. It furthermore makes a claim for caution in describing what serves as a source for analogical extension, both in terms of describing all of the factors that come into play and deciding on the specific level of schematicity at which these need to be described.

Keywords: *analogy; collocations; constructional schematicity; grammaticalization; low-frequency items; polarity sensitivity*

Introduction

This article discusses the grammaticalization manifested by a specific set of size noun expressions[1] which all denote a small amount of something, viz., *bit of*, *flicker of, jot of, scintilla of, scrap of, shred of, skerrick of, smidgen of,* and *whiff of*.[2] I will refer to these expressions as *small size nouns* (henceforth also SSNs, and SN for the general term *size noun*). SSNs and their grammaticalization are looked at in the context of the SSN construction, which consists of a SSN, mostly preceded by

an (indefinite) determiner and sometimes (adjectival) premodifiers, and typically followed by *of* and a second nominal (i.e., N2), e.g., *a little bit of horseradish sauce*.

Similar in certain respects to SN constructions containing *bunch of* and *loads of* for instance, SSN constructions, with the SSNs listed above, have all at least partially grammaticalized from [SSN]+[*of*+N2], e.g., *a scrap of paper*, to [SSN+*of*]+[N2], e.g., *(not) a scrap of evidence*.[3] The original head noun status of the SSN is grammatically reanalyzed as a quantifier. That is, it fulfills the same basic function of indicating size as regular quantifiers, such as *many* and *much*, without, however, necessarily having acquired the full syntactic behavior of the latter (Langacker 1991; forthcoming; see note 4). In this grammaticalized use, N2 has head status (cf. Brems 2003). Examples (1) to (5) illustrate quantifier uses of SSNs (SSN expressions are in italics). (All examples in this article, unless otherwise marked, are derived from the COBUILD corpus and reproduced here with the kind permission of HarperCollins Publishers. For more information on the COBUILD corpus, see the fourth section and http://www.collins.co.uk.)

(1) Sources say there has been a *bit of* hold-up assembling a cast.
(2) It's all I look forward to at the end of the day it gives me a *flicker of* comfort.
(3) Conquest had shown not a *skerrick of* remorse.
(4) This is all done without the slightest, merest ghost of a *scintilla of* irony.
(5) If our attention lapses for even one generation, a *smidgen of* time on any geological scale, transformations in the land that are truly dangerous could catch us unawares.

With the exception of *bit of*, all of the SSN expressions looked at have a low frequency, both within the SSN construction and outside of this construction, and are not common in the English lexicon. This raises some important theoretical questions with regard to the grammaticalized status I claim them to have, since high frequency and lack of lexical specificity are generally considered as either important indicators or conditions for delexicalization and grammaticalization, especially in usage-based models of grammar. Increase in frequency is moreover often considered a consequence of grammaticalization (e.g., Bybee 2003a, 2003b; Heine, Claudi, and Hünnemeyer 1991; Hoffmann 2004). How can these infrequent items have acquired grammaticalized quantifier status if they cannot have engaged in spiral routinization processes, with ensuing attrition and grammatical reanalysis, so typical of gradual grammaticalization (cf. Bybee 2003a; Haiman 1994)? Hence, other explanations need to be sought.

Hoffmann (2004) explains the grammatical status of low frequency complex prepositions, such as *in presence of* and *at cost of*, as being licensed by analogy

Author's Note: I would like to thank Kristin Davidse for discussing earlier versions of this article. In addition, I would like to thank the anonymous reviewers of a previous version of this article, as well as Dirk Noël (personal correspondence), for the generous comments they made. Needless to say, the positions taken in the present article are entirely my own, and so is the responsibility for any inaccuracies or mistakes.

between the infrequent patterns they occur in and very frequent structurally similar sequences, such as *in front of*. At first blush, this approach could work rather well for low frequency SSNs, too, with *bit of* as the high-frequency structure functioning as the source of the analogy. However, actual quantitative and qualitative corpus analyses of SSN constructions suggest a more complex picture than simple structural analogy at a highly schematic level with *a bit of*. The infrequent SSNs individually display very specific polarity restrictions as well as collocational restrictions and semantic prosodies, i.e., preferences for either positive or negative collocates (cf. Louw 1993; Bublitz 1996). If *a bit of* is not "restricted" in these ways, how can one posit that it functions as an analogical model for infrequent SSNs which do display these constraints, and that moreover appear to be vital for their delexicalization and grammaticalization? (See the fourth section, below.)

In this article I claim that mere structural analogy cannot be the sole factor in the formation of SSN quantifiers, though more complex analogies with different quantifier models appear to be at work. Instead of claiming that only one highly schematic structural schema, *a*+SSN+*of*, as instantiated by *a bit of*, has analogically pulled the infrequent SSNs towards quantifier status, I argue that the infrequent SSN quantifying expressions divide into two groups according to their polarity sensitivity. In this respect, polarity-sensitive quantifiers *some* and *any* also have to be brought into the picture as distant models. However, in contrast with *some* and *any*, which can be used generally in quantifying contexts, the SSNs are restricted to very specific discourse contexts. Pragmatico-semantic values such as downtoning vs. amplifying (cf. Quirk et al. 1985) and the establishment of new collocational sets and semantic prosodies interact with the specific polarity preferences of infrequent SSNs relative to (the original semantics of) each SSN. These pragmatically enhanced polarity contexts seem to function as "highly constrained pragmatic and morphosyntactic contexts" for the delexicalization and grammaticalization of the SSNs at hand (Traugott 2003, 645). This split in the pragmatic and collocational properties of SSN quantifying expressions gives support to Noël's (2005) partial criticism of Hoffmann that constructions serving as input and output of grammaticalization are not highly schematic in nature, as suggested by Hoffmann (2004), but rather semantically very specific and (at least partially) substantive.[4] In this article, questions of constructional schematicity and analogy as discussed by Hoffmann and Noël are looked at in the light of the empirically observable properties of SSN constructions in corpus data.

The structure of this article is as follows. In the second section, I present in more detail the proposals made by Hoffmann (2004) in his study of low-frequency complex prepositions, with a discussion of his claim that grammaticalization, rather than always applying to individual content words as is often claimed, may also apply to constructional schemas. After a discussion of these more general theoretical questions, I move to SSN-specific issues in the next sections. In the third section, I introduce the notion of polarity sensitivity as a potentially very specific feature of SSNs in their functioning as quantifiers. Taking into account this basic polarity distinction, the fourth and fifth sections discuss the results of a corpus analysis of nine SSNs, paying attention

to the main semantic, pragmatic, and syntactic features of SSN quantifying expressions. *Bit of* is discussed first and is considered as a possible analogical model in the vein of Hoffmann (2004); then the infrequent SSNs of the two polarity groups are presented. The final section ties the main descriptive and theoretical observations into a conclusion, integrating Hoffmann's ideas on constructional analogy with the more specific pragmatics of polarity-sensitive contexts, collocational changes, semantic prosody, and the scalar semantics of SSNs (cf. Israel 2004; Brems 2003).

In this way, this article aims to draw attention to the fact that one needs to be very careful in identifying what served as a source for analogical extension, both in terms of describing all of the specific factors that come into play and deciding on the specific level of schematicity at which these need to be described.

Hoffmann (2004): Frequency and Analogy in Low-Frequency Complex Prepositions

Hoffmann (2004) discusses the theoretical and methodological problems involved in positing grammaticalization processes for low-frequency complex prepositions that consist of a preposition-noun-preposition string (henceforth P-N-P strings), such as *in presence of*, *at cost of*, and *by dint of*. Because of their low discourse frequency, it is disputable that they can undergo the spiral processes of routinization, with ensuing semantic and phonological attrition and grammatical reanalysis, so typical of gradual grammaticalization. Importantly, Hoffmann (2004) at all times remains cautious about claiming that the infrequent P-N-P strings indeed have grammatical status, admitting that this hypothesis is largely intuition-based (e.g., Hoffmann 2004, 204). Interestingly, his effort to confirm this intuition leads to the conclusion that the grammatical status of the infrequent complex prepositional patterns can only be partially supported by such established parameters as (relative) internal invariation, decategorialization, wide distribution of the infrequent patterns across genres, and relative lack of combinatorial restrictions such as collocating verbs or specific contexts of use. In addition, a distinction between conceptual frequency and (absolute and relative) lexical frequency is introduced that more accurately assesses the importance of frequency for the entrenchment or saliency of certain lexical items and its influence on grammaticalization (Hoffmann 2004, 180, 190, 199, 202, 203, 204, 206). Nevertheless, all of these are in their own way inconclusive, mostly because low-frequency items by definition do not yield sufficient results to confirm these tendencies in a decisive manner.

In his search for a frequency and routinization-independent criterion that can account for the grammatical(ized)[5] status of low-frequency complex prepositions, Hoffmann arrives at the notion of grammaticalization by analogy (Hoffmann 2004, 195). Infrequent complex prepositions have acquired grammatical status because of their analogy to structurally similar variants with a high frequency, such as *in front*

of and *in view of*. Infrequent complex prepositions copy the grammatical status of the frequent ones, which do seem to have grammaticalized gradually, with the P, N, and P progressively coalescing and losing in semantic and formal autonomy, so as to become one complex unit.

Hoffmann (2004) is cautious about the general applicability of his analogy model to other infrequent constructions, saying that this "would require further analysis" (195). However tentative the proposal is, it is explicitly proposed for "low-frequency units of language" beyond the ones studied in Hoffmann (2004, 171, 172, 195) and as hinted at in the introduction of this paper, it could work well for infrequent SSNs too. There clearly is some sort of analogical pull coming from the highly frequent SSN expression *bit of*. Nevertheless, a few important differences between the case of low-frequency SSNs and low-frequency complex prepositions are apparent and need to be addressed before the detailed discussion of the corpus analysis is presented. In addition, there are some consequences of Hoffmann's proposal that could be problematic for grammaticalization theory as such, as well as for the specific grammaticalization of SSNs (see the fourth and fifth sections, below).

Firstly, there is a difference between infrequent P-N-P strings and the infrequency of the SSNs. Hoffmann's 132 complex P-N-P strings are infrequent as sequences, but the nominal elements in them need not be infrequent at all, and in fact only sometimes are. *In presence of, under mistake of,* and *in proof of*, for instance, are among the most infrequent P-N-P strings analyzed in his study (with only five attestations each), but the nouns incorporated in the complexes are not themselves infrequent, lexically specific, or uncommon. Some infrequent P-N-P sequences are merely uncommon variants of more frequent complex prepositions, e.g., *in face of* is a variant of the much more frequent *in the face of*. Others are claimed to be unrelated to more common complex prepositions and do not contain rare lexical items either, e.g., *in presence of* and *in awareness of* (Hoffmann 2004, 182–185). Infrequent nouns appear only in *by dint of* and *in contradistinction to* (Hoffman 2004, 182). Just like the infrequent SSNs, the rare nominal elements occurring in P-N-P sequences are largely restricted to that specific construction (see table 1).

In contrast with Hoffmann's low frequency P-N-P strings, not only the SSN patterns as such are infrequent, but all of the SSNs in them are both infrequent and rare (viz., *scintilla* and *skerrick*). Hoffmann (2004) does not distinguish between infrequency of the P-N-P pattern and infrequency of the nominal item it incorporates (e.g., Hoffmann 2004, 170, 172–173). This is nevertheless an essential difference, because it is the infrequency and semantic specificity of the lexical item that can preclude it from engaging in default grammaticalization by gradual routinization. In principle, the infrequent SSN expressions relate to the frequent ones, like a P-N-P string such as *by dint of* relates to an established complex preposition like *in front of*. The other infrequent P-N-P strings should in principle be taken out of the equation in comparing Hoffmann's case with that of the infrequent SSNs.

Secondly, for infrequent P-N-P strings, straightforward analogy with a frequent complex prepositional model can be envisaged. The infrequent P-N-P patterns have not only copied grammatical status, but also seem to have copied all of the semantic and formal features that go with it. In other words, Hoffmann does not point out any specific differences in the functioning of infrequent P-N-P patterns in comparison to the frequent complex prepositions. The only difference seems to be the frequency with which they are attested in corpus data. With regard to this focus on formal analogy, it has to be noted that Hoffmann creates some circularity by stating that his final list of infrequent P-N-P strings is selected because they "were felt to be suitably parallel in usage to the established, more frequent complex prepositions" (Hoffmann 2004, 182). Of course such circularity is equally the consequence of the interaction of an intuition-fuelled hypothesis and its empirical testing.

Thirdly, even though Hoffmann's analogy proposal is tentative in its formulation and range of application, it nevertheless leads to some far-reaching consequences for certain conceptions of grammaticalization. Hoffmann, for instance, hypothesizes that, if his particular analogy proposal is sound, it might have consequences for a theory of grammaticalization in that,

> [c]ertain aspects of grammaticalization rely much less on the nature and context-dependent use of individual content words than previously assumed. In such an approach, grammaticalization would result in the establishment of constructional schemas whose slots can be filled with suitable lexical items (Hoffmann 2004, 195).

This statement is at right angles to an important tendency in grammaticalization theory as advocated by Traugott (2003) and Hopper and Traugott (2003), who explicitly argue that historically grammaticalization operates in highly specific contexts that trigger delexicalization and grammaticalization in the first place. Consider Hopper and Traugott (2003, 18) who define grammaticalization as

> the change whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and once grammaticalized, continue to develop new grammatical functions.

Several studies of grammaticalization have stressed that the specific semantics of grammaticalizing lexical items can play an important role in their concrete development, for instance through lexical persistence (Hopper 1991; also Brems 2003).

Thus, the potential interaction between schematic constructions and grammaticalization is currently a subject of debate (e.g., Haspelmath 2004; Himmelmann 2004; Hopper and Traugott 2003; Lehmann 2005; Noël 2005; Traugott 2003) and whether schematic constructions can be the output of grammaticalization processes has not yet been established.

Polarity Sensitive Contexts in SSN Constructions

Traugott (2005) discusses a "brief case study" of *shred of* and *bit of* in the larger context of the interaction between grammaticalization and (inter)subjectification. Following Israel (1996), these SSN expressions[6] are referred to as polarity (sensitive) items (henceforth P(S)Is)[7] as well as quantifiers (Traugott 2005, 5–6). The eight low-frequency SSNs looked at in this study were chosen because of their suspected polarity sensitivity, which, following Traugott (2005), was hypothesized to be a potentially important factor in their grammaticalization. *Bit*, *jot*, *shred* and *smidgen* were chosen from Traugott's (2005, 6) list of PSIs ("drawn from Israel's extensive list of PSIs in English," personal correspondence), with *bit* and *smidgen* classified as positive PIs and *shred* and *jot* as negative PIs. *Whiff* comes from Israel (2004, 716) and is classified as a positive PI, and *flicker, scintilla, scrap,* and *skerrick* were added because they all incorporate small size implications and are rare. Polarity sensitivity was found to be positive for *flicker* and negative for *scrap*. The main motivation for the choice of these SSNs, however, was that they all have low frequencies, but still offer a sufficiently large data set.

To see how polarity sensitivity can be an important parameter in these studies, let us first look at a definition of the concept as provided by Israel (2004).[8] Polarity items are defined as "a class of constructions which do not themselves express negation or affirmation, but which are *restricted to* sentences of one or the other polarity" (Israel 2004, 701–702, emphasis mine). Polarity sensitivity is hence a distributional phenomenon that distinguishes between negative PIs and positive PIs, depending on the polarity they are most sensitive to, since PSIs "vary in their sensitivities" and polarity sensitivity does not have to be absolute (cf. Israel 2004, 713).

With regard to how certain linguistic units become sensitive to polarity in the first place, Israel (2004, 709), rather unhelpfully, notes that "[i]ntuitively, they are constructions whose use or interpretation is sensitive to polarity." The main question with regard to the corpus study is whether polarity sensitivity might systematically create highly constrained environments that trigger specific processes of grammaticalization for the various SSNs (cf. Traugott 2003, cited above). If so, the emergence of such polarity restrictions has to be accounted for by explaining its impact on the grammaticalization of the individual SSNs, and it will have to be built into a model of grammaticalization by analogy.

The following types of negation markers are taken into account in the corpus study: negative adverbs such as *not*, *without*, *never*; near-negative adverbials, such as *scarcely* and *hardly*; negative quantifiers, such as *not a single*; and negative verbs, such as *fail to*, *deprive of any*, etc., as illustrated in examples (6) to (9), with the negation markers underlined and the SSN as well as the N2 in italics:

(6) One lady commented approvingly that she could <u>not</u> detect a *skerrick of grease or fat* in the dish.

(7) You've never shown me a *scrap of kindness*, so why would I expect you to now?
(8) But inquiries by the highest-ranking police in the State have failed to produce a *shred of evidence*.
(9) Though they have enjoyed scarcely a *jot of Bath's success*, there should be a fellow feeling between the clubs.

Israel (2004, 713) stresses that "a comprehensive theory of sensitivity must be attuned to the needs of individual polarity items." In his own way, and from the specific point of view of polarity research, Israel hence refers to the importance of the individual properties of lexical items within the larger contexts they function in, viz., either negative or positive polarity contexts. This ties in with Traugott's (2003) and Hopper and Traugott's (2003) claims about specific conditions for grammaticalization. Goldberg (2006), in the context of usage-based construction grammar, similarly argues for the incorporation of item-specific knowledge, in addition to generalizations, and stresses the interaction between these two. This then gives support to the intuition expressed in the previous section that context/constructions and the lexical items in them both contribute significantly to the possible changes they may be involved in.

Introduction to the Corpus Analysis

The corpus used for the analysis is the COBUILD Wordbank, which contains some 56 million words from spoken and written registers and from different regional variants, viz., British English, American English, and Australian English. No register or regional restrictions were incorporated into the query, since the SSNs looked at, except for *bit*, are too infrequent to impose such restrictions. For each SSN the query was of the form: "SSN + (of)," with no further specifications. This allows for all types of premodification of the SSN and the element following *of*, ensuring that potential variety in the determiner and polarity markers preceding the SSN is captured. By not specifying a word class after *of* in the query string, I allowed the SSN or SSN+*of* to be followed by non-nominal elements. For the low-frequency SSNs, the corpus extractions are exhaustive, for *bit* the total number of 4,976 attestations was restricted to a random sample of 200 concordance lines. Table 1 represents the frequencies of the SSNs, both within and outside of the SSN construction. It is clear that all of these SSNs (except *bit of*) have low to very low frequencies.[9]

As in Brems (2003), "grammaticalization" refers to the actual grammatical reanalysis of (S)SNs from (lexical) head noun status to (grammatical) quantifier status, in which the original structure [(S)SN]+[*of*+N2] is re-bracketed as [(S)SN+*of*]+[N2]. Similar to SNs, this (covert) structural reanalysis of SSNs is claimed to be brought about by delexicalization, i.e., loss of lexical content of the (S)SN, which allows the specific lexical semantics of (S)SNs to make way for a more generalized quantifier

Table 1
Frequencies of 9 Small Size Nouns (SSNs)

	Frequency within the SSN Construction	Absolute Frequency
Bit	4976 (sample = 200)	17 829
Jot	8	36
Flicker	62	87
Scintilla	5	5
Scrap	85	280
Shred	46	48
Skerrick	4	5
Smidgen	12	15
Whiff	118	133

meaning and hence combine with a larger range of N2 collocates. The grammaticalization of SNs has at present resulted in a layered semi-stable "system" of SN constructions which includes head uses and quantifier uses, as well as some ambivalent cases, with some SNs displaying a higher degree of grammaticalization than others.

Based on corpus studies of nine SSN expressions, I claim that these SSNs have been reanalyzed as quantifiers in a process of grammaticalization. This claim relies on the following semantic and formal criteria. Firstly, the main formal reflex of the reanalyzed status of SSNs is substitutability by such quantifiers as *a little/a bit of*, in the pattern (indefinite) determiner+SSN+*of*, e.g., *a smidgen of trust* ("a little trust"). This is impossible for the head use of SSNs, without changing the meaning of the latter, e.g., *the shred of skin* (* "the little skin"). This substitutability test formally reflects the functional unity that developed from the chunking of previously "autosemantic" signs, very typical of grammaticalization (e.g., Lehmann 1985, 308 on coalescence; cf. Bybee 2003a). Secondly, one can clearly observe semantic generalization, implemented, as in Brems (2003), as "extension of collocational range," e.g., *a whiff of rotten eggs/garlic* in the head use versus *a whiff of sentiments/economic slowdown* in its quantifier use, where N2 can be concrete as well as abstract, count, and uncount (cf. Himmelmann's 2004 host-class expansion). Thirdly, the grammaticalization parameter of "decategorialization" applies, in the sense of the loss of features prototypically associated with the (more) lexical category to which the grammaticalizing unit formerly belonged (cf. Hopper 1991). SSNs lose in "nounness" and are typically attested only in the singular in their quantifier use. They are furthermore mainly restricted to indefinite determiners, e.g., *not a shred of evidence*, except in constructs such as *not the remotest jot of nostalgia*, in which the definite article is most likely triggered by the intervening superlative adjective. The occurrence of such adjectival premodifiers might seem to detract from the decategorialization claim. However, in these cases the expression *not the remotest* can be considered to constitute a single negative

polarity item. Israel (2004, 716) includes several PIs that are multiple-word strings, e.g., *in the slightest* and *be all that*. Furthermore, Brems (2003) argues that grammaticalized SN uses allow for two restricted types of premodification, parallel to the two main paths of grammaticalization, viz., quantitative and qualitative uses. Such premodifiers do not intrude upon the internal cohesion of the grammaticalized SSN structure, but rather reinforce or echo it, as in *a little whiff of insurgency* or *a little bit of soppy sentiment*. These premodification patterns are clearly different from the ones attested in head uses, which do emphasize the independent head noun status of the SSN, e.g., *the first whiff of cranberry sauce* or *a sixteenth-century scrap of parchment*. Finally, for some SSNs syntactic extension of the grammaticalized meaning to other contexts is attested, which Himmelmann (2004) lists as a parameter for grammaticalization. Concord patterns, such as subject-verb concord and pronominal concord (with either SSN or N2) are difficult to check since the SSN and N2 always agree in number in my data. Furthermore, subject-verb concord is not just necessarily a reflection of grammatical status, but can be influenced by notional concord or even proximity concord.

The corpus analysis of nine SSNs, presented in the fifth section below, distinguishes between SSNs that have head status and quantifier status. In addition to the head use and quantifier use, tables 2–10 in the fifth section also represent the ambivalent uses of SSNs, i.e., ambivalent between a head and quantifier reading, often involving metaphorization and/or lexical persistence (Hopper 1991). This category subsumes both vague and ambiguous instances, two rather different concepts. In keeping with their nature, both concepts are defined in several ways in linguistics (e.g., Lessau 1994; Crystal 1991). In this study, ambiguous instances of the SSN construction refer to those cases in which two separate readings can be distinguished, relying on two distinct ways of contextualization. The idea is that either interpretation (i.e., head or quantifier) cancels the other one out within these specific contextualizations, e.g., *Since then Lewis had not shown a flicker of remorse for the injuries she had caused*. The abstract uncount N2 (*remorse*) fuels the quantifier reading, whereas *shown* enhances the other reading.

Vagueness is used here more or less in the sense of Geeraerts (1993, 228). A vague unit of language cannot and in fact need not be reduced to one of the meaning layers it incorporates, because vague cases thrive on precisely this tension. In the specific case of (S)SNs, vague readings are irreducible blends that appeal to both the lexical and grammatical meaning of SSNs, but do not really allow disambiguation in the way that ambiguous polysemous senses do, e.g., *In Berlin there was a whiff of Weimar in the air*. Ambiguous cases are instances that allow for two separate readings and often indicate transitional contexts, whereas vagueness in this study can be a more definitive stage.

In the fifth section below, the corpus results of the nine SSNs are discussed systematically in terms of the following features: extension of collocational range, with possible collocational reclustering; semantic prosody; amplifier and downtoner uses of the quantifying SSN expressions; and polarity sensitivity. In addition to these

systematic features, SSN-specific characteristics such as lexical persistence are discussed when relevant.

Collocational reclustering here refers to the fact that some SSNs in their quantifier use may develop specific and sometimes rather restricted collocational patternings in the sense of significantly favored collocates (see discussions of *(not) a shred of* and *(not) a scrap of*, below), or, in the case of *bit of*, a specific semantic prosody cluster. Semantic prosody refers to a specific relation between various collocates of the same node. To use Bublitz's words:

> Apparently, words can have a specific halo or profile, which may be positive, pleasant and good, or else negative, unpleasant and bad. Whenever some such word is uttered, it prompts ahead and "sets the scene" (Sinclair 1992, 8) for a particular type of subsequent item. It opens not just any slot but one with a definite semantic set-up . . . With prosody we refer to the fact that a feature extends its domain, stretches over and affects several units. (Bublitz 1996, 11)

Depending on whether a node typically evokes neutral, negative, or positive collocates, it has a neutral, negative, or positive semantic prosody, e.g., the node *load of* typically has a negative semantic prosody as it teams up with collocates such as *bullshit*, *crap*, *nonsense*, etc.

Pragmatically, SSNs can function either as amplifiers or as downtoners, the two main types of pragmatic marker distinguished by Quirk et al. (1985). As they explain: "Amplifiers scale upwards from an assumed norm" (590). Amplifiers are further subdivided into maximizers and boosters. Maximizers "denote the upper extreme of the scale," e.g., *absolutely*, *completely*, *extremely*, *in all respects*, etc. Boosters "denote a high degree, a high point on the scale," e.g., *badly*, *deeply*, *highly*, *terribly*, *a great deal*, etc. (Quirk et al. 1985, 590). The second type of pragmatic marker is the downtoners, which "have a lowering effect, usually scaling downwards from an assumed norm" (Quirk et al. 1985, 590). They further divide into minimizers and diminishers. Minimizers "are negative maximizers," meaning "(not) to any extent," e.g., *barely*, *hardly*, *at all*, *in the least*, etc. Diminishers "scale downwards and roughly mean 'to a small extent,'" e.g., *only*, *merely*, *quite*, *slightly*, *partly*, etc. (Quirk et al. 1985, 597). Downtoning seems the pragmatic function most in keeping with the original semantics of all SSNs, but we will see that, due to polarity effects and ironic reversals of meaning, amplification is at stake as well, especially in subjectified uses of SSNs.

The following section starts with *bit of*, which in an approach such as Hoffmann's would have to be regarded as the frequent construction serving as an analogical model for the infrequent SSNs. The second and third subsections deal with the positive polarity SSNs *whiff of* and *smidgen of*, and the remaining subsections deal with the negative polarity SSNs *jot of, flicker of, scintilla of*, *scrap of, shred of,* and *skerrick of*.

Individual Discussion of SSN Constructions

Bit of

Contrary to the SSNs discussed in the following subsections, *bit* has a high text frequency, with 4,976 attestations of the SSN construction *bit of*. The delexicalization and grammaticalization of *bit of* can therefore be explained by "default" routinization, given its high frequency and long ancestry of quantifier-like use (cf. *Oxford English Dictionary*, henceforth OED).

Bit is clearly a deverbal nominal derivation from *to bite*; hence the first meaning of *a bit (of)* is "a bite of" or "a mouthful of." From denoting a small morsel of food, the expression generalized to non-food: "a small piece, a fragment (of something); a small portion or quantity, a little" (cf. *New Shorter Oxford English Dictionary*, henceforth NSOED).

Table 2
Frequencies for *bit*

Head use		Quantifier use		Ambivalent use		Total
Number	Percent	Number	Percent	Number	Percent	Number
0	0	199	99.5	1	0.5	200

Let us discuss the general characteristics of the grammaticalization process of *bit of*. Unlike the other SSNs examined here, *bit* is not very uncommon and was never infrequent in the English lexicon, which makes it more conducive to delexicalization and ensuing grammaticalization through routinization.

Except for one ambivalent case, all instances of *bit of* included in the sample are grammaticalized. In its strict quantifier use, *bit of* typically has downtoning quantifier semantics. Through delexicalization, the collocational range of N2 has become very wide, with a predilection for (often abstract) uncount N2s:

(10) Despite the African violet's reputation as a somewhat difficult houseplant a *bit of inside knowledge* does wonders.
(11) Nature is not averse to a *bit of wife or children bashing* and certainly has no conscience in that regard.
(12) And yet, on reflection perhaps a little *bit of soppy sentiment* might be just what sport needs at the moment.
(13) There's a little *bit of horseradish sauce* if you want it.

In this quantifier use, *bit of* is usually preceded by the indefinite article *a*, and together they form a coalesced string, though premodifiers can be inserted between the article and *bit*, as in (12).

As illustrated by the various N2s in (10)–(13), *bit of* does not have a specific semantic prosody. N2 in (10), for instance, is positive, but in (11) it is clearly negative. The lack of a specific semantic prosody in the quantifier use of *bit of* can be taken as a further sign of its high level of grammaticalization (cf. Himmelmann's [2004] notion of context expansion). The quantifier use of *bit of* is likewise polarity-independent. Both positive and negative polarity contexts occur, possibly with a preference for positive polarity, but no systematic preference patterns can be detected. Here are examples with positive (14) and negative polarity (15):

(14) I wrapped the bogey in a *bit of Rizla cardboard*.
(15) Lovey, it makes not one *bit of difference* to me whether you're hungry or not.

In (14) *bit of* has a downtoning value, whereas in (15) the negation turns the meaning into an emphatic one.

Contrary to most of the other SSNs discussed later on, *bit of* has engaged in further grammaticalization developments beyond the development of a quantifier meaning, which can be said to be the result of subjectification and intersubjectification[10] (cf. Traugott 1988, 2005):

> The semantic change whereby meanings are recruited to encode and regulate attitudes and beliefs, and once subjectified, may become centered on the addressee (based on Traugott 2003). (Traugott 2005, 3)

The subjectified and intersubjectified uses I will discuss concern cases where N2 is preceded by the indefinite determiner *a(n)*, with in some cases an adjective in between the determiner and *bit*. N2 is typically negatively evaluated. Subjectification and intersubjectification furthermore interact and are not easily distinguished.

I will first discuss the subjectified use of *bit of*. Some typical examples of this subjectification mechanism are:

(16) Century 21, opposite World Trade Centre. A *bit of a trek* from Soho, but it's worth it.
(17) Feeling as you do it would be unfair to marry your girlfriend. She deserves better than this and that is why you are feeling a *bit of a rat*.
(18) It is hard to avoid the feeling that video games are a *bit of a con*; an electronic circus which transfixes the audience while the ringmaster empties its pockets.

In these subjectified cases, the downtoning quantifier semantics are reversed and translate into an emphatic (ironic) evaluation, e.g., *a bit of a con* is "rather a big con." In ironic uses the referent of N2 can be animate (17) or inanimate ([16] and [18]); in each case, N2 is typically evaluated negatively by normal standards.

In these examples different mechanisms often interlock, viz., understatement, irony, hedging and face work[11] (Brown and Levinson 1978, 1987), with the latter two linking

up with intersubjectification. The speaker in each case ironically reverses the downtoning quantifier semantics to convey a rather emphatic evaluation, with the hedging capacities of *bit of* as a safety net in terms of possible face damage to the hearer, allowing for defeasibility of the ironized meaning. Despite some intersubjective features, this "ironic" use can hence be labeled a subjectified use in keeping with Traugott's definition of subjectification, because its prime function is to express a speaker's (negative) attitude (cf. Traugott 2005 based on 2003; Sperber and Wilson 1991).

The *bit of* string in these cases also introduces an important categorization, e.g., in (16) it really is a long way from Soho and in (18) video games are a real con according to the speaker. This observation correlates with Traugott's remark on the various semantic features that diachronically come into play in the grammaticalization and subjectification of *bit of* (Traugott 2005, 8). Traugott describes one of those stages of *bit of* as displaying an "exemplar" meaning, viz., something is a possibly inadequate example of a certain category, but still an example of that category.

In addition to these subjectified reversal cases, *bit of* can also be used intersubjectively as a hedge, with downtoning semantics. Again we mostly have structures in which a typically negative N2 is preceded by *a(n)*:

(19) I'm going to going to test you now Gwyneth so you we've got an examination coming up now *bit of an oral examination*.
(20) So I'm just wondering whether they're not putting themselves at a *bit of a disadvantage* by just assuming that they know.
(21) Wright: Isn't there a *bit of a double standard* there?

Examples typically come from the spoken subcorpora and are part of conversations or interaction between various speakers. In keeping with Traugott (2005, but see my note 11), I call this hedging use an intersubjectified use, since it centrally signals the speaker's concern for and alertness to the possible impact of his or her words on the hearer. As mentioned earlier, distinguishing between subjective and intersubjective cases is not always straightforward, since some intersubjective features can be detected in the subjectified use, but also because the interpretation relies very much on contextual and prosodic clues that are not always available in the corpus data.

Finally, *bit of* can also function as a degree modifier with adjectives (22) and can be used independently as an answer (23) (cf. Traugott 2005, 9):

(22) We were *a bit slow* getting ourselves into gear.
(23) Q: Did you like the movie? A: *a bit* (Traugott 2005, 8).

In these extended uses, *of* is typically left out.[12]

In conclusion to this subsection it can be noted that *bit of* is used both in negative and positive polarity contexts, which suggests that it is independent from either polarity context in order to function as a quantifier. The infrequent SSNs, in keeping with Israel's and Traugott's classification, divide into two groups for their functioning as

quantifiers based on their polarity sensitivities. One subset typically functions in positive polarity contexts, whereas the other typically relies on negative contexts. I first discuss the positive polarity SSNs and then the negative ones.

PPI: *Whiff of*

Whiff originally meant "a slight puff or gust of wind" (cf. OED). Unsurprisingly, the collocational range of *whiff* in its lexical head use mainly extends to gas and odors, especially malodorous ones:

(24) If you're lucky you'll also catch a *whiff* of *cat's pee*!
(25) It smells good, too, not one *whiff* of *rhino dung* or the scent of the sun on an old canvas tent, as you might expect from the name.
(26) It is as if the turkeys, having voted for Christmas, are now troubled by the first *whiff* of *cranberry sauce*.

Table 3
Frequencies for *whiff*

Head use		**Quantifier use**		**Ambivalent use**		Total
Number	Percent	Number	Percent	Number	Percent	Number
48	40.68	60	50.85	10	8.47	118

When grammaticalized, *whiff* is typically preceded by the indefinite article, possibly with an adjective in between. In this use it can combine with a wide variety of abstract collocates, both count and uncount:

(27) Bankers Trust senior economist Rory Robertson said the figures showed there was "only a *whiff of an economic slowdown.*"
(28) There is an unpleasant *whiff of scapegoat-hunting* in the latest assault on the banks to come from Deputy Premier Tom Burns.
(29) But as to what Jerry Brown will do, whether he's still got a little *whiff of insurgency* left.
(30) You gave him a *whiff of power* and it's turned him into a corrupt megalomaniac.
(31) Everyone with a *whiff of sanity* in his or her veins should have no traffic with that way.
(32) And, catching a *whiff of huge margins* and changing consumer attitudes, discounters are moving in.

Most of the N2s are negative and some are neutral. Hence we can say that *whiff of* mainly has a negative semantic prosody. Pragmatically *whiff of* functions mostly as

a downtoner, with *whiff* often describing a minimal unit of N2, e.g., (27), (30), and (31), or a persistent small unit, e.g., (29), emphasized by adverbials, choice of verbs and adjectives, stress, etc., e.g., *only a* in (27), *still left* in (29), *from a little power to a megalomaniac* in (30), and stress on *whiff* in (31).

In addition to clear lexical and grammatical uses, *whiff of* also has several ambivalent instances, which mostly seem to be vague. In most of these cases, N2 is an abstract noun but construed in such a way that it can evoke concrete olfactory associations in its connotations. These ambivalent instances typically have the original lexical semantics alluded to by the use of verbs, adjectives, or other parts of speech in the co(n)text, e.g., (33)–(36):

(33) It's not as if I ever had any emotional attachment to kitchen-sink or rough-stuff Englishness in the first place, but I can still detect the *malodorous whiff of adolescence* oozing off men whose history is turning into nothing more than a prelude to some misbegotten self-humiliation.
(34) Most dahlias are tainted with a *whiff of vulgarity*, their outsized blooms being associated with the obese marrows and inedible onions lined up at a village harvest festival.
(35) In Berlin, where I was the week before last, there's a *whiff of Weimar* in the air.
(36) I yearned for the proximity of the old adobe, the talismanic power of the crucifix and candles, the ancient *whiff of miracle*.

Most of these cases describe an atmosphere, usually rather nostalgically ([35] and [36]), or disapprovingly ([33] and [34]).

Whiff of seems to display at least a degree of grammaticalization. The corpus data do not include the degree modifier uses or independent answer use that *bit* has.

PPI: *Smidgen of*

Smidgen and its spelling variants *smidgeon*, *smidgin, smitchin,* and *smidge* are from a colloquial register and originally North American. The word's origin is uncertain, as well as the period in which its size noun use arose,[13] but it is probably an alteration of English dialect *smitch*, which means "soiling mark" (cf. OED, NSOED, and Webster online[14]). The corpus attestations did not confirm the dictionary indication "American English," since three attestations come from the American subcorpus, eight from the British subcorpus, and one from the Australian subcorpus.

Table 4
Frequencies for *smidgen*

Head use		Quantifier use		**Ambivalent use**		**Total**
Number	Percent	Number	Percent	Number	Percent	Number
0	0	12	100	0	0	12

All twelve attestations display grammaticalized uses, both with concrete nouns and abstract nouns:

(37) A dash of love, a pinch of understanding, a *smidgen of trust*—all the ingredients for a lasting friendship.
(38) Take a spoonful of sodium bisulphate, a cup of locust-bean-gum ether thickener and a *smidgen of glycerine*.
(39) Jefferies is terrified of even a *smidgen of what he calls "negative thought."* If it is not fun, it is not happening.

Smidgen is not strongly associated with negative contexts. It typically has the meaning of a very minimal unit of something, hence the frequent occurrence of *even*, e.g., (39).

Smidgen has a fairly unrestricted collocational range, allowing both abstract and concrete nouns, and it does not favor a specific semantic prosody. Pragmatically, *smidgen* functions as a downtoner. Just like *whiff*, the corpus data for *smidgen* do not display the degree modifier uses or independent answer uses that *bit* has.

NPI: *(Not) a skerrick of*

With only five attestations in the entire corpus, and only one of these occurring outside the SSN construction,[15] *skerrick* is the most infrequent of all small-size nouns in this study, and all of these attestations are grammaticalized in the SSN construction. *Skerrick* is originally a dialectal form and is now mainly associated with Australian and New Zealand colloquial language. All corpus attestations are from Australian newspapers. The word's etymology is unknown (cf. NSOED); the OED relates *skerrick* to *scuddick*, which denotes an extremely small coin or amount. The OED also lists as a first, but obsolete, meaning of the spelling variant *scurrick* "a half-penny," illustrated with a quotation from Grose's 1823 *Dictionary of the Vulgar Tongue*.[16] The earliest examples cited in the OED are from the 1800s, with an example from 1841 possibly hinting at the monetary meaning (*Not worth a skerrick* by R.W. Hamilton in the OED).

Table 5
Frequencies for *skerrick*

Head use		Quantifier use		Ambivalent use		Total
Number	Percent	Number	Percent	Number	Percent	Number
0	0	4	100	0	0	4

When grammaticalized in the SSN construction, *skerrick* means "a very small amount of." N2 is typically an abstract uncount noun; two examples refer to evidential/epistemic notions ([40] and [41]) and another to an emotional concept (42):

(40) If there is one beach on the Sunshine Coast that can have a *skerrick of a claim* to being undiscovered, this is it.
(41) Mr. Bullock says there is not one *skerrick of evidence* to involve this man.
(42) Conquest had shown not a *skerrick of remorse*.

In one case N2 is a concrete uncount noun:

(43) One lady commented approvingly that she could not detect a *skerrick of grease or fat* in the dish.

Looking at the exhaustive corpus examples (40)–(43), we can say that the semantic prosody of *skerrick* is fairly neutral.

Skerrick is clearly a NPI and appears with negation and emphatic words, such as *one* instead of *a*, which produces an emphatic meaning of "zero attestation" of N2 in a given domain. Again, no degree modifier uses or independent answer uses are attested.

NPI: *(Not) a jot of*

With eight attestations in its SSN use, *jot of* is also very infrequent. Originally *jot* or *iota* referred to the smallest letter of the Greek alphabet or smallest part of any writing (cf. OED and NSOED). These source semantics are very conducive to the delexicalization leading to the denotation "the very least or a small amount of something" (cf. OED from the seventeenth century). No head uses were attested, which means that *jot of* is fully grammaticalized, at least in my data. In this grammaticalized use it typically has uncount abstract nouns as collocates, of which the semantics are rather far removed from the original graphological semantics of *jot*:

Table 6
Frequencies for *jot*

Head use		Quantifier use		Ambivalent use		Total
Number	Percent	Number	Percent	Number	Percent	Number
0	0	7	87.5	1	12.5	8

(44) Yet, although this is a serious cook's kitchen, there's not a *jot of stainless-steel professionalism* about it.

(45) When he is away from Billingshurst he feels not the remotest *jot of nostalgia* for the place.
(46) Though they have enjoyed scarcely a *jot of Bath's success*, there should be a fellow feeling between the clubs.

The semantic prosody of *jot* of is on the whole fairly neutral.

This SSN, like *skerrick*, is used in emphatic, negative contexts, where negation combines with superlatives, e.g., (45), plain negation as in (44), or near-negative adverbials, e.g., (46). Also note the presence of adversative and concessive connectors, such as *yet*, *although,* and *though*, equally reinforcing the contexts in which *jot of* appears. Just like *skerrick*, *jot* gives rise to an emphasized meaning, which seems slightly stronger than that expressed by *skerrick*, possibly because of its source semantics. *Jot* does seem to have adverbial uses that are similar to *bit*'s degree modifier use, with verbs ([47] and [48]) and adverbs (49). *Jot* seems to retain its negative polarity preference and sometimes appears with emphatic markers, e.g., (48). *Of* is lost:

(47) The woman who has given every indication of not caring a *jot* for her appearance appeared with her hair freshly coiffed and colored.
(48) It means only that she has not changed one *jot*.
(49) Just as every seeker who comes to me for a prophecy believes what he wants to believe and not one *jot* else.

I found 22 instances of such adverbial use, two with adverbs and the others with verbs. All of the latter belong to one of the following two semantic fields, which suggests strong collocational preferences: "change (for the better)" (*advance*, *alter*, *help*, *improve* and *change*) and "be/consider important" (*care for*, *matter*, *bother*, *worry about* and *give for*). Example (49) is a figurative "graphological" context.

NPI: *(Not) a scintilla of*

Just like *skerrick*, *scintilla* has only five overall attestations in the COBUILD Corpus, all of which feature in the SSN construction. *Scintilla* derives from Latin and originally means "a spark" (cf. OED, earliest example in the *Corpus of Historical English* dates from 1570[17]). The earliest example of a quantifier use dates from 1734. Again, no head uses were attested within these corpus data. In the grammaticalized attestations, N2 has three epistemic collocates ([50]–[52]) and one emotional collocate (53):

(50) If only the loyalist paramilitaries would move, then that would deprive the IRA of any *scintilla of justification* for holding on to their weapons.
(51) This is all done without the slightest, merest ghost of a *scintilla of irony*.
(52) He was treated as if he was a murderer. Yet there is not one *scintilla of evidence* to justify his arrest.
(53) He said he received a "very warm welcome, not a *scintilla of resentment.*"

Table 7
Frequencies for *scintilla*

Head use		Quantifier use		Ambivalent use		Total
Number	Percent	Number	Percent	Number	Percent	Number
0	0	5	100	0	0	5

Scintilla has a neutral semantic prosody; only *resentment* is negative.

Similar to *jot of* and *skerrick of*, *scintilla of* functions in emphatic negative contexts of zero-attestation, viz., negative verbs (50), negation (+superlative) ([51]–[53]), and contexts with concessive and adversative markers, viz., (50) and (52). No degree modifier uses or independent answer uses are attested.

NPI: *(Not) a shred of*

Shred derives from late Old English *scread(e)*, corresponding to Old Frisian *skred* which means "hair-cutting, clipping of coin" and Middle Low German *schrot* and *schrat*, which refer to a "cut-off piece" (NSOED). The word's literal meaning in present-day English is "a fragment, a broken piece of something; specifically (rare) a shard of pottery"; also "a finely cut strip of some material, especially paper, the peel of a fruit or vegetable, etc." (cf. NSOED). *Shred* and *scrap* (discussed below) share a number of semantic features in their literal meaning and in fact also share some collocates, both in their literal use and quantifier meaning. *Shred* is, however, much more grammaticalized than *scrap* with 93 percent of the attestations in my corpus data being quantifier uses, while *scrap* is still predominantly used lexically.

Table 8
Frequencies for *shred*

Head use		Quantifier use		Ambivalent use		Total
Number	Percent	Number	Percent	Number	Percent	Number
3	6.52	43	93.48	0	0	46

In its quantifier use *shred* has one very strong collocate, viz., *evidence*, which occurs 17 times (out of the total 43 quantifier uses). Cognate epistemic concepts also occur frequently, e.g., *fact*, *truth*, *doubt,* and *proof*. Other semantic sets are *self-respect*, *self-esteem,* and *decency*; *anxiety*, *comfort,* and *dreaminess*. Overall, *shred* has a neutral to positive semantic prosody. Examples of literal head uses are:

(54) That accounts for the plaster you saw on his wrist and the *shred* of *skin* and dried blood under her fingernails.
(55) The flame he got by touching a match to a small *shred* of *birch bark* that he took from his pocket.

Shred of is an NPI. In its quantifier use, it typically functions in negative and/or emphatic contexts, designating a minimal unit of the noun following *of*:

(56) The allegation is unfair and untrue and was made under protection of parliamentary privilege without a *shred of supporting evidence*. It is plainly an act of cowardice.
(57) I submit the reason she couldn't remember the brownies was that, in order to salvage some *shred of self-respect*, she had to suppress knowledge of behavior which she had been conditioned to view as vile and inexcusable.

Neutral epistemic collocates are particularly frequent in negative contexts, whereas in contexts that affirm a minimal unit, positive collocates, such as *self-esteem* and *courage*, are typical.

Pragmatically *shred of* functions mostly in negative polarity contexts and as an emphatic marker. In combination with negative markers such as *not* or *without* or negative verbs, etc., it expresses zero-attestation, the total denial of any presence of N2. In those contexts, it is often used with the rhetorical effect of signaling the conspicuous absence of something that should be there, for instance in the courtroom, as in (56). When preceded by *some*, *even a*, etc., *shred of* asserts the presence of a minimal unit, sometimes despite contrary forces or in complicated circumstances (57). No degree modifier use or independent answer use is attested.

NPI: *(Not) a scrap of*

Scrap derives from the Old Norse verb *skrapa* "to scrape" and its plural form originally referred to fragments of uneaten food, especially as constituting the remains of a meal. Another lexical meaning is *scrap* as a small, detached piece (cf. NSOED).

Table 9
Frequencies for *scrap*

Head use		Quantifier use		Ambivalent use		Total
Number	Percent	Number	Percent	Number	Percent	Number
56	65.88	29	34.12	0	0	85

Ironically, perhaps, in view of this study, *scrap*, despite its relatively high frequency, is still predominantly used lexically, with only 34.12 percent grammaticalized uses. In its head use, *scrap* mainly has *paper* and its co-hyponyms as collocates, e.g., (58)–(59); only one collocate relates to food (60):

(58) A sixteenth century *scrap* of *parchment*, yellow with age, bears the signature of Guillaume Debande.
(59) He was looking in his pockets for that *scrap* of *paper* where he wrote the address of the building they were looking for.
(60) He scooped up the *scrap* of *bread* he had been saving, tucked it inside his yellow shirt, and sat down.

In its grammaticalized use, *scrap* also has some collocational favorites, viz., *evidence* occurs twelve times. The remaining 17 collocates range from similarly epistemic concepts such as *information* and *data*, to emotional ones, such as *kindness*, *self-esteem*, and *honor*, to more isolated ones, such as *light*, *energy*, etc.:

(61) Yet according to John Studd, "There is not a *scrap of evidence* that progesterone therapy for PMS works."
(62) You've never shown me a *scrap of kindness*, so why would I expect you to now?
(63) I just feel that somehow we're missing some thing or other that would help us." And they needed every *scrap of help* they could get, Rhodry realized.

The predilection for "epistemic" nouns might be explained as a metonymic shift from paper to the information that can be contained on a piece of paper. As mentioned above, *scrap* and *shred* share collocates and collocational reclustering in their quantifier use.

The semantic prosody is mainly neutral with a few instances gravitating towards positive prosody, such as *kindness* and *honor*. *Scrap of* almost always occurs in emphatic and negative contexts. Pragmatically *scrap of* in combination with the negation functions as a minimizer. There are no instances of degree modifier uses or independent answer uses.

NPI: *(Not) a flicker of*

Flicker derives from Old English *flicorian*, *flycrian*, cf. Low German *flickeren* and Dutch *flikkeren*. In its original meaning it referred to the sound made by a bird, viz., "to flutter." Henceforth it came to express "(cause to) flutter rapidly, quiver, undulate, wave to and fro." It further extended to such meanings as, "to flash up and die away rapidly (and repeatedly); (of flame) to burn fitfully" (cf. NSOED).

Table 10
Frequencies for *flicker*

Head use		Quantifier use		Ambivalent use		Total
Number	Percent	Number	Percent	Number	Percent	Number
12	19.4	23	37.1	27	43.5	62

In its original meaning, *flicker* is mainly used with regard to light and eye movements and facial expressions in general:

(64) He was aware that Houston was watching every *flicker of his eyelids*.
(65) Virginia Verran's recent paintings use a skid of brush and a *flicker of light* against dark to suggest changing speed.

Of all the low frequency SSNs, *flicker* is most accurately described as being grammaticalized to a degree only. Often, supposedly grammaticalized uses are in fact cases of metaphorization of N2 to an abstract noun, and in true quantifier-like uses *flicker* still carries quite a lot of lexical meaning, too, in that it almost always incorporates an element of suddenness and brevity and almost always relates to a reaction that is visually attestable. Examples (66) to (68) illustrate ambivalent uses, in the sense of ambiguous between a literal reading and a quantifier reading.

(66) The man looked at him, a *flicker* of *surprise* at the fluent German crossing his face.
(67) She hit the first one with a seven and the second with a king and then she went bust herself without the slightest *flicker* of *emotion*.
(68) Since then Lewis had not shown a *flicker* of *remorse* for the injuries she had caused.

Example (69) illustrates a vague ambivalent case, in that the quantifier meaning is bound up here with the metaphor of a romance that extinguishes:

(69) A flash of inspiration five minutes from time by Adrian Littlejohn yesterday extinguished the last *flicker of romance* from an FA Cup second round that had delivered few of its usual emotional highs for the non-League contingent.

In the actual quantifier uses, the lexicality of *flicker* is least apparent, though still there to some extent. The context of facial expressions is virtually absent and the meaning here most closely approximates that of "a little":

(70) It's all I look forward to at the end of the day it gives me a *flicker of comfort* and is the only means I have of forgetting all my problems.
(71) It was warmer inside, though there was hardly a *flicker of chilli* in the food.

A flicker of seems to prefer emphatic negative contexts, though affirmative contexts are also represented in the concordances, e.g., (70), but the *all* and *only* still indicate a "negative" context. When combined with negation (and in most cases a superlative), *flicker of* functions as a minimizer, e.g., (67) and (68). In rare affirmative sentences it functions as a downtoner, but with a boosting value, e.g., in (70) the comfort is not much, but it does provide a positive contrast with the remainder of the speaker's day.

Discussion

With every case study of a specific grammaticalization process, it becomes more and more clear just how variable, obviously within very specific bounds, critical factors in grammaticalization can be (cf. Traugott forthcoming). In the case of (S)SNs, I claim that collocational changes are essential in driving and marking the head/modifier shift (cf. Brems 2003). For SSN constructions, polarity preferences add to this by providing a highly constrained context in which the infrequent SSNs can develop quantifier uses.

Not all SSNs have acquired a quantifier use to the same extent (cf. "synchronic grammaticalization" in Lehmann 1985). Highly frequent *bit of* for instance has grammaticalized to a very high degree, extending its grammaticalized use into new syntactic contexts (cf. Traugott 2005) and going on to further (inter)subjectification. Within the set of infrequent SSNs there are also differences, with *whiff*, *scrap,* and *flicker* displaying only 50 percent or less of quantifier uses, even though *whiff* is one of the most frequent SSNs. *Scrap of* has 34.12 percent quantifier uses versus 65.88 percent head uses and is also quite frequent, even though there is a relatively big discrepancy between its overall frequency (i.e., 280 attestations) and frequency within the SSN construction (i.e., 85 attestations). For some reason *scrap* is not as constructionally fixed as some of the other SSNs. Still, in the case of *jot* there is also a difference between these two frequencies (8 out of 36 attestations are within the SSN construction), which does not seem to have influenced the development of a prevalent quantifier use and even an extended adverbial use. In the case of *flicker* the predominant use is the ambivalent use, with many ambiguous instances, which suggests little delexicalization on the part of the SSN, and instead mostly relies on metaphorization of N2 collocates. *Flicker* has hence only grammaticalized to a very limited degree and as such should perhaps be taken out of the grammaticalization claim.

How can it be explained, then, that very infrequent SSNs managed to grammaticalize to these various extents? As discussed in the fourth section, there is partial compliance with several grammaticalization parameters, which seems to hint towards a "normal" path of grammaticalization or, rather, which are normally only attributed to traditional gradual processes of grammaticalization (cf. Lehmann 1985; Bybee 2003a; Traugott 2005). However, considering the infrequency of the SSNs,

and the fact that most of the grammaticalization criteria referred to apply to later stages of grammaticalization, as argued by Hopper (1991) and Heine (2003), it is not at all clear whether the infrequent SSNs themselves engaged in gradual grammaticalization processes. It is just as probable that they grammaticalized by analogy with a frequent model that did grammaticalize gradually, the grammaticalized behavior of which they "copied." If so, their analogy model is not the polarity-independent general semantics of *a bit of*, but a more specific, polarity-defined constructional schema that also incorporates specific collocational properties and semantic prosody.

Infrequent SSNs seem to follow quantifier models that are also PIs, such as *some* and *any*, but that at the same time incorporate more specific collocational and discourse values. The grammaticalized polarity-defined SSN constructions cannot be used in just any quantifier context, whereas *some* and *any* can. Infrequent SSNs are restricted to very specific discourse schemas, e.g., *not a* SSN *of* in reactive or adversative discourse registers, also often used as a rhetorical strategy (*shred*/*scrap*), where reference is made to the absence of a quantity of something that should have been there, and which may incorporate annoyance or disbelief, e.g., (41), (42), (44), (52), (56), (61), and (68). The relationship with polarity is hence much further schematized in *some* and *any* than it is in the SSN constructions, which hints at relatively low grammaticalization (cf. Traugott forthcoming on highly constrained contexts that first set off grammaticalization and later make way for generalization to various contexts). Infrequent SSNs seem to display only a distant modeling with partially polarity-dependent quantifiers, and even more distant modeling with polarity-independent ones, i.e., with the most schematized quantifier construction. One way of looking at this is to translate the different levels of schematicity involved in the grammaticalization of the SSNs into Traugott's (2006) distinction between "macro-constructions, i.e., the highest level of schematization," e.g., the quantifier construction with *many*/*little*; meso-constructions: "sets of similarly-behaving constructions, e.g., *kind*/*sort of* vs. *a bit*/*lot of*"; and micro-constructions: "individual construction-types, e.g., *a lot of* vs. *a bit of*." (Traugott 2006, 2; examples in quotation marks are Traugott's).

It seems that at present we can at best describe an analogical model at the meso-constructional level, i.e., some specific polarity-dependent model. The individual SSN constructions, each with their own individual collocational specifics and strong polarity restrictions, then constitute micro-constructions. The question is whether the meso-constructional model will ever give way to a macro-constructional one, which would be the eventual outcome hypothesized for normal grammaticalization processes. However, as noted by Traugott (forthcoming), grammaticalizing elements can sometimes congeal in their initial facilitating but constrained contexts for grammaticalization, similar to idiomatization. It has also been amply argued that grammaticalization is a non-deterministic process that does not have to go on to completion (e.g., Hopper and Traugott 2003; Fischer 1999). I therefore tentatively venture that these infrequent SSNs will not go on to fully macro-constructional status, precisely because of the very specific expressive purpose they serve as quantifying expressions (see note 4).

An important question, then, is how the specific polarity-quantifier alliances arose and how they motivate the emergence of quantifier uses for these infrequent SSNs. How do the semantics, pragmatics, and syntax of SSNs interact with the semantics, pragmatics, and syntax of either polarity? Israel (2004) does not provide many generalizations over the specifics of both polarity contexts and concludes that PIs as a whole are inherently scalar and polarity sensitivity is a lexical property of PIs. All PIs simply seek out contexts where they can discharge these already inherent lexical properties (Israel 2004, 717). This does not, of course, explain why certain PIs prefer negative contexts, while others prefer positive ones; polarity sensitivity in its entirety is explained away as an inherent property.

Traugott (2005) seems to propose the following generalizations about the prototypical quantifier meanings in positive polarity contexts and negative polarity contexts respectively, which tie in with the corpus observations discussed in the second through ninth subsections of the fifth section. In positive polarity contexts, SSNs typically have a downtoning, diminishing quantifier meaning (cf. Traugott 2005), i.e., they designate a very small quantity, a minimal unit of something which is nevertheless asserted and affirmed, as in (72) and (73), emphasized by *even* in (72) and stress on *whiff* in (73):

(72) Jeffries is terrified of even a smidgen of what he calls negative thoughts.
(73) Everyone with a whiff of sanity in his veins should have no traffic with that way.

Since affirmation and positive polarity contexts are the unmarked case (see Israel 2004, 706–707), the question in fact mainly centers on the NPIs and what gears them so strongly to negative polarity. It seems that appropriate use of a negative sentence requires a context in which the information it negatively conveys is somehow particularly relevant and the negative formulation is meaningful in conveying this message (Israel 2004, 706). When a speaker decides to formulate an affirmative predicate X and symbolize it as "*not* 'antonym of X,'" two effects can be obtained, depending on the semantics of X. On the one hand, the possibly crude semantics of X may be backgrounded and the intended meaning can thus be hedged behind two words. On the other hand, using a complex predicate with a negative marker can also do the opposite, viz., draw attention to it and lay emphasis on the symbolized meaning. This ties in with how Israel (2004, 708) sums up the two main pragmatic functions of negation as expressing indirection or attenuation (e.g., hedges, euphemism), and strengthening or emphasizing.

I want to argue that in negative polarity contexts, SSNs prototypically combine two effects: on the one hand minimizing quantifier meaning, and on the other hand strengthening or emphasizing that minimal quantity pragmatically. The minimizing meaning is typically that of zero-attestation, which translates into an emphatic evaluation, as in (74) and (74'):

(74) There was not *a trace of corruption* in him.
(74') "He is very honest" (my reformulation).

In (74), quantification of the feature "corruption" in the person results in zero-attestation, which is conveyed by the emphatic statement in (74').

In this context one can also wonder why SSNs are associated with their specific polarity preferences in the first place. What is it in their lexical semantics that makes them click with either positive or negative polarity contexts? The pragmatic effect of indicating zero-attestation is one that all SSNs could in principle lay claim to, in that all SSNs by definition denote a small quantity. What is it that makes *skerrick*, *jot*, *shred*, *scintilla,* and *scrap* more suitable for expressing this zero-attestation meaning? As pointed out by Israel (2004, 719), "Every polarity item has its own history," and the lexical semantics of the PIs attribute greatly to this individuality. *Jot,* of course, originally referred to the smallest letter in the alphabet, and *skerrick,* to an extremely small coin; *scrap* and *shred* refer to remnants, and hence might stress surprise at the fact that there is something left at all, which all helps the zero-attestation meaning. Yet, can a *jot*, *scrap*, *shred*, etc. truly be said to refer to smaller things than a *smidgen* for instance? Or does the fact that most of these NPIs consist of only one syllable have an impact on their association with negative polarity contexts? But what about *skerrick* and *scintilla*, then, and *whiff*, which also has one syllable but is a positive polarity item? The fact that *whiff* is less well suited for expressing zero-attestation might be attributed to the fact that it originally referred to something unbounded and gas-like. All of these hypotheses are nothing more than guesses, and again, much of the nature of polarity sensitivity needs far more explaining than it receives here.

Conclusion

In conclusion, the case of the infrequent SSNs focuses attention on the fact that one has to be very cautious in describing what served as analogical source for what. It also addresses other theoretical issues. Firstly, it addresses the importance of context-dependent grammaticalization and the influence of lexical items in it, as advocated by an important strand in grammaticalization studies, such as Traugott (2003) for instance. Secondly, the case studies of infrequent SSNs can provide food for thought in the more general discussion held in grammaticalization theory, viz., whether grammaticalization can operate on and lead to the establishment of schematic constructions (e.g., the emergence of fixed word order) or not (cf. Haspelmath 2004; Himmelmann 2004; Hopper and Traugott 2003; Lehmann 2005; Noël 2005; Traugott 2003). A specific subpart of this question pertains to the precise level(s) of constructional schematicity grammaticalization operates on (Traugott 2006 and forthcoming).

Against Hoffmann (2004) and with Traugott (2003), then, I want to stress the importance of specific contexts interacting with the specific lexical semantics of items.

I think the grammaticalization of SSNs proves that even in cases where constructional analogy might be involved, these factors critically influence and steer grammaticalization paths. Grammaticalization hence is seen as "centrally concerned with the development of lexemes in context-specific constructions (not merely lexemes *and* constructions)" (Traugott 2003, 627; italics Traugott), and "it may be more accurate to say that a construction with particular lexical items in it becomes grammaticized, instead of saying that a lexical item becomes grammaticized" (Bybee 2003b, 602).

Notes

1. Brems (2003) discusses the delexicalization and grammaticalization of size noun expressions, such as *bunch(es) of*, *load(s) of*, *heap(s) of,* and *pile(s) of*. Size nouns are defined broadly as nouns that incorporate size and/or shape implications in their lexical and grammatical semantics. It is claimed there that the grammatical reanalysis from head to quantifier is paralleled by delexicalization processes. The latter are mainly operationalized in terms of extension of the collocational range of the SN and collocational reclustering.

2. On the motivation for the selection of these specific SSN expressions, see the third section.

3. Size nouns such as *bunch(es)*, *load(s)*, *pile(s),* and *heap(s)*, within the SN construction, have all grammaticalized to different extents and at present seem to constitute semi-stable systems, with each SN displaying layered uses that range from fully lexical to (nearly) fully grammatical quantifier uses. The relative lack of grammaticalization in certain SNs, such as *pile(s)* and *bunches,* is hypothesized to be, among other factors, a consequence of lexical persistence (Hopper 1991) and possibly prosodic features, respectively (M. A. K. Halliday, personal correspondence). In addition, one might say that the (expressive) power of SNs as a means of quantification lies precisely in the tension between their lexical and grammatical semantic potential. This, in my opinion, seems to suggest that the semi-stable layered SN systems will probably never come to completion, in the sense of all of these SNs developing an exclusively grammatical quantifier meaning. The lexical origins of most SNs can always be rekindled or alluded to by modifiers and verbs, even in grammaticalized instances, e.g.,

> Lorry loads of insincere flattery, and He is tainted by the strong whiff of dressing-room discontent.

Lexical persistence also imposes further restrictions for the felicitous use of quantifier SNs, for instance in terms of boundedness and spatial proximity of the N2 referents, as in *A bunch of rivers* (Paul Thibault, personal correspondence).

4. Noël (2005, 2006), in keeping with the ideas expressed in this article, disagrees with Hoffmann on whether grammaticalization can have schematic constructions as its final output. However, Noël does believe quite strongly in nearly purely formal analogy as a mechanism in grammaticalization. As such Noël's ideas do not conflict with the points made in the present article. See "Discussion."

5. Hoffmann (2004) systematically seems to equate "being grammaticalized" with having "grammatical status" and being "units of language structure" (171), "indivisible units which are retrieved from memory as one single chunk" (181), or "units of storage in the mental representation of grammar" (184), in a way reminiscent of Goldbergian Construction Grammar (Goldberg 2006). However, grammatical status can also be achieved through lexicalization, for instance. If the infrequent P-N-P strings copied their grammatical status from more frequent complex prepositions, motivated by their being formally and functionally parallel, it could be argued that they did not so much grammaticalize as were simply promoted to grammatical status through analogy. I will not go deeper into this question here, but simply want to point out possible terminological confusion in Hoffmann's formulations. His application of grammaticalization parameters is fully sound, though.

6. Neither Traugott (2005) nor Israel (1996, 2004) uses the term *SSN expression*. In Traugott's terminology, (small) size nouns shift from a partitive construction to a degree modifier construction, in which the size noun has modifier status (Traugott 2005, 7).

7. Traugott (2005) refers to "polarity sensitive items," whereas Israel mostly refers to "polarity items."

8. Polarity sensitivity is dealt with by several authors, but Israel (2004) is chosen here because of his clarity and focus on the pragmatics and semantics of polarity sensitivity. Israel (2004, 716) does not discuss SSNs as such, but includes what I call SNs in his list of PIs.

9. Only SN uses are counted here. Instances of *scrap* with the meaning of "fight" are excluded. In the case of *smidgen,* spelling variants mentioned in the *Oxford English Dictionary* (OED), such as *smidgeon*, have four hits and *smidge* is unattested. In the case of *skerrick*, none of the spelling variants in the OED yielded corpus attestations in the COBUILD corpus.

10. Traugott's definitions of subjectification in fact subsume developments both towards textual meanings and towards evaluative meanings. I will not go deeper into the discussion of how subjectification should be defined (see De Smet and Verstraete 2006), but stick to the general distinction between subjectification and intersubjectification offered in Traugott's definitions included here, which relate the former to focus on the speaker and the latter to focus on the hearer. In Traugott (forthcoming) the distinction between (inter)subjectivity and (inter)subjectification is stressed. For the former the meaning only has to be present pragmatically; in the latter case it has to be semanticized. Some of my cases of (inter)subjectification would hence be considered (inter)subjectivity by Traugott.

11. Face theory is a theory of politeness formulated in Brown and Levinson (1978) and (1987), which tries to explain how and why social relations are encoded in language in the way they are. It argues that all people in society have two kinds of face, which both have specific needs. One face is the negative face, which is associated with the right to personal sovereignty and freedom from imposition. The other face is the positive face, which typically seeks approval from other people and is associated with the human need to be liked and respected. All utterances can pose a threat to either face. Therefore people are guided by face-protecting principles of politeness in their verbalization acts. One could refer to this as "face work."

12. Traugott (2005) does not explain why the *of* disappears in this use. Compare Denison (2002, 12–13) on "SKT-nouns," *sort/kind/type*, which proposes alternative historical pathways of change in the development of a subtype of the "binominal construction" with an adjective between *sort/kind* and the head noun in the *of*-phrase, e.g., *a kind of imperfect analogy*, into the "adverbial construction," where the SKT-noun functions as a degree modifier for an adjective/adverb/preposition as such, e.g., *kind of imperfect*. Denison (2002, 12) rejects this pathway of change and instead thinks it is more plausible that the adverbial construction arose via the "qualifying construction" that refers to peripheral members of a category, e.g., *I suppose it's . . . a sort of holiday*. The hedging semantics/pragmatics of the latter are merely extended to more syntactic contexts in the adverbial construction. He does not explain why the indefinite article disappears in this construction and not in other grammaticalized uses of the SKT-nouns. Even though *bit of a* can also be said to have a qualifying use of some sort, e.g., *he's a bit of a botanist*, it does not retain the *of* in extended degree modifier uses such as (22), whereas *sort* and *kind* do. I cannot conclusively explain this, other than invoking phonological attrition.

13. A first query in the Helsinki Corpus in combination with other historical corpora did not yield data to check this. The OED is likewise inconclusive.

14. http//:www.webster.com

15. The attestation outside of the SNN construction is a SSN construction to some extent, since it is a substitute for *morsel* that occurs in a SSN construction; the *or* following *skerrick* seems to be a typological error for *of*:

> I, too, stood upon the shore and watched the sea lions tumble in the waves and gulped for the heartlessness of my species I, who wouldn't know how to find a morsel of food or a skerrick or natural clothing for myself if the planet were suddenly to turn needy and all the supermarkets were closed.

16. This ties in with Kel Richards's account. Richards is a writer and presenter of the "Daily Wordwatch" feature on Australian Broadcasting Corporation (ABC) news radio who offers the following etymology for *skerrick* on the ABC website (http//: www.abc.gov.au/classic/breakfast/index2002-12-full.htm):

> *Skerrick* is one of those words that began life as a British dialect word, came to Australia with the early settlers, and survived here in colloquial Australian English while fading out of existence in the land of its birth. It's recorded in Australia as early as 1854 (in a book called *Gallops and Gossips*) in the statement: "I have plenty of tobacco, but not a skerrick of tea or sugar" (which is, clearly, the modern sense of the word). So, where did the word come from? The 1823 edition of *Grose's Dictionary of the Vulgar Tongue* records the word "scurrick" which is said to be thieves' cant for a half-penny (it's recorded in the same sense, in the same year, in a *Dictionary of Turf* by "Jon Bee"). And this word "scurrick" is sometimes recorded as "scuttick" and sometimes as "skid-dick" so it is probably the origin of "skerrick"—especially as the meaning seems to match: a half-penny being "a small amount."

The following example with *skerrick* from the NSOED might be a (relatively recent) illustration of this obsolete monetary meaning:

> These wadless blokes of the Never-Never have to pay road, car, petrol, State, Federal and Unemployment Relief taxes, and never get a *skerrick* in exchange (F. Clune: *Roaming Round Darling* 1936, italics mine).

17. *The Corpus of Historical English* is compiled by Mark Davies and largely based on the examples given by the OED. It contains 37 million words and covers the Old English period up until the 1900s. For more information see http://view.byu.edu/che/.

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