The indefinite article - Indefinite? - Article?

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1 Introduction

Perlmutter (1970) argued that the indefinite article is categorically different from the definite article, and proposed that it is a clitic version of the numeral *one* (cf. also Roehrs (2009)). But there are, as Perlmutter himself pointed out, instances of a swell as of *one*, that don't seem to have the semantics of the numeral. Hence a divorce of a (and of *one*) from *numeral*-hood is called for (cf. Kayne (2009)). Furthermore, there are instances of what looks like the indefinite article (e.g. German *ein* or its Dutch etc. counterpart) which occur in contexts from which the indefinite article is supposed to be excluded: with plural nouns, with non-count nouns, in definite noun phrases, etc. This state of affairs was addressed by Bennis et al. (1998), and others since, by reference to a so-called *'spurious article'*, homophonous with the traditional indefinite article *een/ein*.

The goal of the present paper is twofold: First of all, I argue that German *ein* is not always an 'indefinite article', and, pursuing the idea that there is only one *ein*, it is hence never an 'indefinite article'. Secondly, I explore some consequences for the structural representation of certain function words which contain *ein* as one of their components, in particular *kein* as well as its English counterpart *no*. The discussion promotes a strongly non-lexicalist view, advocating a syntactic derivation of function words that involves movement (cf. Leu, 2008a, 2010).¹

2 Zooming in on the "indefinite article"

The traditional term *indefinite article* is useful for a number of purposes (lexicography, language teaching, etc.). But from the perspective of theoretical linguistics, it stands in the way of a better understanding of the nature of, e.g., German *ein*.

2.1 einem: ein+em

Consider (1).

(1) mit einem Trick German with a.DAT trick

Most linguists would agree that einem in (1) is the German indefinite article. It is, however, also immediately clear that this is an imprecision. It entails, for instance, that em of einem in (1) is part of the indefinite article. However, arguably the same em occurs in definite contexts (2a,b) and in adjectival contexts (2c), i.e. in the absence of an indefinite article. And finally, the indefinite article sometimes occurs without the em (2d).

- (2) a. mit d-em Trick \Rightarrow -em occurs in definite contexts. with the-DAT trick
 - b. mit ihm \Rightarrow -em occurs in definite contexts. with him.DAT
 - c. mit rot-em Wein \Rightarrow -em suffixes to non-articles (e.g. adjectives). with red-DAT wine
 - d. Ein Trick genügt. \Rightarrow sometimes the "indef. art." occurs without -em. A trick suffices

Hence we can conclude that -em is not part of the "indefinite article." In fact this em is a dative case marker.

¹Aspects of this work were inspired by R. Kayne's spring 2011 NYU lectures in morphosyntax. For helpful discussion I'm particularly grateful to Oana Săvescu and Raffaella Zanuttini.

2.2 ein: [...]+ein

Many linguists would presumably agree with the idea that *em* is not literally part of the indefinite article in (1), and will point out that what s/he meant is really *ein*, as e.g. in (3a). It is further also widely agreed upon that the indefinite article has certain properties: It marks the containing noun phrase as indefinite (3a), and distributionally speaking it is incompatible with plural nouns (3b) and with non-count nouns (3c).

(3)			The indefinite article is	
	a.	Ein Hund hat mich angebellt. a dog has me at.barked	indefinite	
	b.	(*Eine) Hunde haben mich angebellt. (a) dogs have me at.barked	incompatible with plural nouns	
	c.	(*Ein) Wissen ist (*eine) Macht. (a) knowledge is (a) power	incompatible with non-count nouns	

But given these properties we can, with the same kind of argument as above in section 2.1, question whether *ein* is really the "indefinite article." Consider examples (4), which show that sometimes *ein* occurs in definite contexts (4a), that sometimes *ein* occurs with plural nouns (4b), and that sometimes *ein* occurs with non-count nouns (4c).²

(4)			ein occurs
	a.	Dein Bier wird warm. your beer gets warm	in definite contexts
	b.	Meine Freunde sind schon da. my friends are already here	with a plural noun
	c.	Ich brauche k ein Wasser. I need no water	with a non-count noun

Hence we can conclude that *ein* is not the indefinite article. But if so, then what is the 'indefinite article'? - And what is *ein*? - The rest of the paper is devoted to addressing these two questions.

3 What is the "indefinite article"?

The proposal in this section is that the indefinite article does not exist.³ What exists is a set of zero-operators which constitute a subset of operators that occur to the left of ein. Consider the examples in (5).⁴

(5)	a.	m-ein Buch	'my book'	b.	k-ein Buch	'no book'
		d-ein Buch	'your book'		no book	
		s-ein Buch	'his/her book'			
	c.	welch ein Buch	'what a book'	d.	was für ein Buch	'what kind of book'
		which a Buch			what for a book	

The element *ein* can be preceded by a person element, as in (5a), which has referential properties and is associated with possessor semantics. Or it can be preceded by an element that is associated with negative quantification (5b). Or it can be preceded by a wh-element, as in (5c,d), which is associated with illocutionary force as well as quantificational properties, and which syntactically is

²Bennis et al. (1998) discuss occurrences in Dutch of a "spurious" article, i.e. an indefinite article occurring with mass nouns, plurals, and proper names in certain environments (cf. Haegeman (2007); Leu (2010); Roehrs (2009)).

³The idea that there is no "indefinite article" has been proposed previously, cf. Vater (1982) and subsequent work, who treats German *ein* as a Q head, distinct from the category of the definite article.

⁴Cf. also Roehrs (2009) for discussion of morphologically complex words involving ein.

clearly a phrasal constituent. Let us refer to the set of things that precede ein in each of the above examples as operators.

The noun phrases in (5) enter into distinct quantificational / referential / (person-)deictic relations with the containing clause and the context of utterance. Notice that it is the constituent preceding ein that determines most of the semantic properties of the noun phrase. Assuming that it is correct to attribute to the noun phrase in (6a) certain semantic aspects in the realm of quantification and/or referentiality not shared with all the examples in (5), it (almost) follows from compositionality that the right analysis of (6a) features a zero-operator, as represented in (6b).⁵

ein Buch (6) a book $[OP^{IA}]$ + ein Buch b.

We may ask how OP^{IA} is integrated in the noun phrase, or, more narrowly, what the relation between ein and OPIA is. I will try and answer one aspect of that question, by looking at other occurrences of ein. In a number of (related) cases, it has been argued that the relevant derivations involve movement of a constituent to the left of ein. I will briefly mention a few earlier proposals and relevant considerations and suggest treating OP^{IA} analogously.

3.1 Wh - ein

One case in which wh-elements have been argued to have the effect of moving a noun modifier to the left of the indefinite article is that of English degree fronting (Bresnan, 1973; Hendrick, 1990; Troseth, 2004; Leu, 2008a).

(7) b. [how big] (of) a t_{howbig} book...? a [pretty big] car

Following the lead of English degree fronting, a similar partial derivation is also supported (to varying degrees of obviousness) for the occurrences of *OP ein NP* in (5).

A first plausibly very similar case is that of Germanic was für (Leu (2008a), cf. also Vangsnes (2008a,b)).

(8)was für ən Buch German what for a book $[[XP \text{ was für}] [\exists n [Buch t_{XP}]]]$ b.

Was für is a basically adjectival modifier with a wh-element. The was für constituent can occur to the left of ein, or it can occur to the right of (the counterpart of) ein (for details see Leu (2008a, chapter 5)), suggesting that when occurring to the left of ein it moved there.

The case of welch ein seems very similar to that of was für (Leu, 2008a, chapter 6). Bennis et al. (1998) and Corver (2004) suggest an analysis in which the wh-element comes to precede n by means of leftward movement.

(9)wat n boeken Dutch what a books

b. $[DP \text{ wat}_j [D' \text{ } D[X \text{ 'n}]_k] [XP \text{ boeken } [X' \text{ } t_k \text{ } t_j]]]]$ Notice in this example that the *n* precedes a plural noun (cf. also Haegeman (2007) on West Flemish wek).

3.2 Possessive *m-ein*

In a similar vein, Den Dikken (1998) and Corver (2004) propose that the possessive determiner (the Dutch cognate of German) mein be analyzed as involving movement of the possessor to the left of n. Notice that the two components that make up mijn ('my') do not form a constituent on this view.

⁵The IA superscript to the operator OP is a notational means to distinguish the null operator from the overt elements that precede ein in (5), and which form a natural class with OP^{IA} in the currently relevant respects.

(10) a. mijn boeken Dutch my books

b.
$$[DP \ [PP \ P\emptyset \ mij]_j \ [D' \ [D[X \ `n]_k] \ [XP \ boeken \ [X' \ t_k \ t_j]]]]$$

The idea that at some point in the derivation the possessor moves to the left is supported for instance by the fact about Hungarian that the possesse nominal supports agreement morphology, agreeing with the possessor (Szabolcsi, 1994). Assuming no upward probing, the possessor must originate in a position lower than the agreement head (or in its Spec).

3.3 k-ein

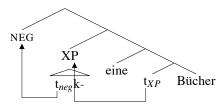
Finally, we are left with the negative determiner *kein* ('no'). Recalling the above argument from English degree fronting, note that such degree fronting can be triggered not only by a wh-element but also by a negative element (Troseth, 2004), as in (11).

(11) a. a [very good] student \Rightarrow b. [*(not) very good] (of) a $t_{notvery good}$ student

Hence NEG can also trigger noun phrase internal movement in such cases. Let me propose, by analogy to the above cases, that *kein* involves movement of a constituent containing k to the left of ein (Leu, 2008a).

(12) $[_{xAP} \text{ NEG k-}]_j \text{ eine t}_j \text{ Bücher}$

(13)



3.4 ein and the indefinite article

I mentioned earlier that in a number of cases, e.g. (9), n (i.e. ein) can occur with mass nouns, plurals, and even proper names, and often doesn't seem to contribute indefiniteness. Bennis et al. (1998) conclude that in such cases it is not the indefinite article, but a what they call *spurious article*.

Let us agree with this conclusion.⁷ But let us note that this results in a case of homonymy between the "spurious" *ein* and the "real article" *ein*. Furthermore, not only do the two articles sound the same, but they also exhibit identical inflectional properties, both with regard to their own inflection and with regard to the inflection "triggered" on a following adjective. Hence settling for accidental homonymy would mean declaring defeat. The proposal in (6), on the other hand, offers an immediate and simple remedy to the accidental quality of this homonymism, at the expense of the postulate of a (possibly single-membered) set of silent operators.

3.5 Conclusion

I conclude that what traditional grammatical descriptions call the *indefinite article* is really a conglomerate of components of a partial derivation in which *ein* is merged and a (phonetically zero) operator moves to the left of it.⁸

⁶The idea that kein ('no') is (at least) bi-morphemic seems standardly accepted (Zeijlstra (2004); Penka and Zeijlstra (2005); Roehrs (2009), cf. also Klima (1964)). In fact, its Old High German ancestor nihein seems to derive from (at least) three components, being composed of ni+uh+ numeral ein, i.e. 'not + and/also + one' (Pfeifer, 2003).

⁷In Leu (2008b) I disagreed with it for reasons that are obviated by the present proposal.

⁸Indefinite noun phrases have a number of possible readings (Diesing, 1992; Ihsane, 2008). It is conceivable that these should be distinguished (in part) in terms of different operators. The question of why they are non-overt in what looks like a systematic fashion would become increasingly salient.

(14) Proposal: $[OP^{IA} [ein ...t Buch]]$ In other words, I propose that ein is never the indefinite article.

4 What is ein?

Assuming the preceding discussion to be on the right track, we know what ein isn't, namely an indefinite article. But we still don't know what ein is.

The goals of this (somewhat programmatic) section hence are (A) to find a unifying theme that characterizes all the occurrences of ein in (5), and (B) to explore certain immediate structural/derivational consequences.9

4.1 ein and numerals

In one of its occurrences, ein is traditionally called a numeral. The idea that the indefinite article ein and the numeral ein are related is widely acknowledged (Perlmutter, 1970; Kayne, 2009; Roehrs, 2009, among others) and should be taken seriously.

Let us consider Kayne's (2009) proposal that the numeral *one* is really the indefinite article adjacent to a silent SINGLE.

(15)a. a single book

> b. one SINGLE book

This proposal immediately unifies the two uses of ein distinguishing them in terms of the context of occurrence. The unification aspect is appealing and I want to retain it.

Kayne (2009) further discusses other numerals and proposes that they occur in the specifier of the indefinite article, in which case the indefinite article remains unpronounced. I will directly adopt the essence of this proposal, in combination with Kayne's (2005b) proposal that (certain) quantity expressions (e.g. many and few) are accompanied by a (silent) nominal NUMBER. Specifically, I adopt the idea that the numeral interpretation derives from association with such a (silent) nominal NUMBER. Thus we arrive at the idea that the numeral use of *ein* has the representation in (16).

(16)numeral |1|: ein Buch SINGLE ein NUMBER Buch

The intuition behind the proposal leans on the observation that ein is related to in (as is certainly the case in locative expressions¹⁰). Similarly, the intuition is easily accessible in my corresponding proposal for numerals higher than one (in English):

(17)numerals > |1|: four books four IN NUMBER books

4.2 M-ein and French possessives

In section 3.2 we encountered the idea that possessive determiners like mein ('my') consist of two elements: a possessor and a functional element that relates the possessor and the possessee.

[18] $[DP \ [PP \ P\emptyset \ mij]_j \ [D' \ [D[X \ `n]_k] \ [XP \ boeken \ [X' \ t_k \ t_j]]]]$ In the case of German *mein* that relating element is *ein*. Possibly this should be related to French (19b,c), suggesting a correspondence between German (ei)n and French de/à (cf. Kayne (1994); Den Dikken (1998); Corver (2004); Leu (2008a)).

(19)a. m-ein Buch b. le livre de Jean c. un ami à moi the book of John a friend of me my-ein book

⁹Den Dikken (2006) foreshadows aspects of the present proposal by generating spurious *een* as the relator of a small clause, on a par with Dutch/German als, English as and the like, i.e. prepositional elements.

¹⁰To the extent that this parallelism is not accidental, we will consider that the locative aspect of the occurrences of ein in einbrechen ('break in'), hinein ('in') etc. are not so much reflexes of inherent semantic properties of ein, but should rather be ascribed to a component analogous to NUMBER in (16) and (17), but with the relevant semantics, e.g. a silent nominal PLACE (cf. Kayne (2007)).

4.3 K-ein and French and English negatives

Finally, let me address kein. I noted, in section 3.3, that kein consists of (at least) two constituents k- and -ein, and that the position of k- to the left of ein is the result of syntactic movement.

(20) a. keine Bücher b.
$$[NEG k-]_j$$
 eine t_j Bücher no books

I also noted that k may not be the actual carrier of negativity, but that it is associated with an (often) silent negative morpheme n. This is, of course, well motivated within a Germanic (and more widely an Indo-European) context. Let us, therefore, start with a look at a number of occurrences of negative n in English and German.

(21) a. **n**-ot b. **n**'t c. **n**-icht d. **n**-o
$$\Rightarrow n$$
 is a negative morpheme **n**-o one **n**-ever **n**-ie **n**-ein

It is clear that in the examples in (21) n is a negative morpheme, and presumably the same negative morpheme across all the examples in (21). A next step involves addressing the constituent structure of the remaining parts of the words in (21). In English, an element o is isolable, as well as a t. The presence/absence of these elements is syntactically constrained (e.g. n't is restricted to finite contexts, contrary to not).

The recognition of the morpheme status of n and o must be extended to the examples in (22ab'). Let us agree that the o in (22a) is the same as the one in (22a'), and that the o in (22a') is (morphosyntactically) the same as that in (22b). In all three cases, a negative constituent, n, precedes o and a nominal constituent follows it. (On not see below.)

(22) a.
$$n-\mathbf{o}$$
 book b. $n-\mathbf{o}$ -thing c. n is a variant of 'of' a'. $n-\mathbf{o}$ -body b'. $n-\mathbf{o}$ -t c'. barrel \mathbf{o} monkeys

English also has (22c,c'), where, similarly, a quantificational constituent precedes o and a nominal constituent follows it. These latter instances of o are usually taken to be variants of the preposition of (or perhaps on). Phonologically they are distinct, varying within the same range as the range delimited by (22a) and (22b), impressionistically speaking. Given these parallels, I propose that the o in (22a,a',b) is a variant of of.^{11,12}

This proposal puts the potential parallelism in (23) between French and English immediately within reach.

(23) English: n o books proposal: NEG of books French: pas de livres

We note that in French the actual negative component, *n* is not immediately present, but in a removed position, reminiscent of German *kein*, to which the parallelism extends straightforwardly, given the preceding discussion.

(24) English: n o books French: pas de livres German: k eine t_k Bücher

The morphematic analysis of *n-o* must also extend to the fragment negation *no*. In other words, *n* in *No!* (and similarly in German *Nein!*) is a negative constituent moving to the left of *-o* (German *-ein*), presumably out of an elided clause (Holmberg, 2004).

¹¹Note that French object *pas un NP* versus *pas de NP* seems to correspond to German *ein-NP* ...nicht versus *kein NP*.

Baunaz (2008, p.174,370ff.) notes that in French pas un NP is the subject counterpart of object pas de NP.

¹²The idea of decomposing *not* as *n-o-t* was inspired by R. Kayne's spring 2011 seminar at NYU. *Barrel o'monkeys* was pointed out to me by Sarah Nakamaru.

(25) English: No! cf. n-o ... German: Nein! cf. n-ein ... t_n

Finally, the scope of the above discussion must include *not*. More precisely, on the set of assumptions entertained in this paper, *not* is derived in the syntax, in a way that involves movement of n to the left of o. This leaves the question of the status of t in n-o-t. Considering the facts in (22) and French (24), let me suggest that -t is a nominal constituent, akin to it.

(26) not: n o t derived by movement of n: n o t_n t NEG OF IT

This opens up the possibility that negation always originates within a nominal category. If so, we will ultimately want to understand why that should be so.

5 Conclusion

In conclusion, I have argued that the semantic contribution of the "indefinite article," e.g. in German *ein Buch*, should likely be attributed to a silent operator OP^{IA} :

This essentially implies that *ein* is always "spurious" qua *indefinite article*, in all its occurrences. In addressing the status/category of *ein*, I have propose that an analysis of *ein* should take into account certain parallels with prepositions such as *in*, *of*, *de*, and reduced variants thereof. Spinning the thread a little further I have arrived at the view that negative function words are syntactically complex and that negation may always originate within a nominal projection.

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 $^{^{13}}$ Jon Brennan and Jim Wood independently suggested to me that t in *not* may be nominal (cf. it), which, as noted, seems plausible, cf. French pas, point etc.

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