The syntax and compositional semantics of English *ONE*[1]

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Abstract

In this paper, I analyse the syntax and compositional semantics of the unity cardinal *one* in English. I argue that the three different uses of *one*, namely as a determiner, as a DP pronoun and as a prosortal can be accounted for with a single, monosemic analysis. It will be argued that an NP-ellipsis account is not able to provide a unified account of the major uses. However, it will be argued that anaphoric uses of *one* always involve predicate anaphora. Therefore, a variable-free semantics will be adopted, and it will be shown that in such a framework, one can indeed provide a uniform account for all three uses, using type-shifting operations and Skolem-functions.

Keywords: *one*, predicate anaphora, unit cardinals, variable-free semantics, Skolem-functions.

Résumé

Ce papier se propose d'analyser la syntaxe et la sémantique compositionnelle du cardinal d'unité *one* en anglais. Il sera montré que les trois utilisations différentes de *one*, à savoir les utilisations en tant que déterminant, en tant que pronom, et en tant que prosortal, peuvent s'analyser de façon monosémique, en ne postulant qu'une seule entrée lexicale pour *one*. L'article démontre qu'une analyse basée sur une ellipse d'un SN n'est pas apte à fournir une analyse unifiée de ces utilisations majeures. En conséquence, une analyse sans variable sera poursuivie, et il sera montré que dans ce cadre, on peut rendre compte de façon unifiée des trois utilisations, en se servant d'opérations de changement de type, et des fonctions de Skolem.

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Mots-clés : *one*, anaphore de prédicat, cardinaux d'unité, sémantique sans variables, fonctions de Skolem.

1. Introduction

Unity cardinals (like English *one*) are an important source in the grammaticalization of indefinite articles. In order to understand this grammaticalization process of indefinite articles, a solid understanding of the initial state is of paramount importance. While there is a very important body of work on the syntactic behavior of English *one* and what it may tell us on the constitutionality of noun phrases (or determiner phrases; see, among others, e.g., Jackendoff 1977, Miller 1992, Carnie 2006), unfortunately, rather little work has been done on the compositional semantics of such cardinals (but see Barbiers, 2005, 2007; Borer, 2005). As a consequence, the point of departure of the process of grammaticalization is not understood as clearly as would be desirable, with the unfortunate consequence that we do not have the best of understandings of what actually has to change in the process of grammaticalization leading from the unity cardinal to a full-fledged indefinite article.

The present paper aims to provide an explicit account of the compositional semantics of the unity cardinal in English, in order to serve as a point of departure for further investigating the meaning and use of such expressions. The paper focuses on *one* in English, since English provides a clear morphological distinction between the unity cardinal and the indefinite article — contrary to Romance languages, where these two elements may be prosodically different, but use the same form. This is illustrated in (2) for the French *un*, which can correspond to either the English indefinite article (see 1a) or the unity cardinal (see 1b).

(1) a. Ethel has seen a girl.
b. Ethel has seen one girl.

(2) Cunégonde a vu une fille.
C. has seen UN girl.

The central point of the paper will be the demonstration that a monosemic account of *one* in English is not only desirable on methodological grounds, but actually feasible, given the background of different uses and syntactical contexts in which such lexical elements appear. Indeed, one common feature of unity cardinals is that they generally seem to have both adnominal and pronominal uses, as is illustrated in (3) for (late) Latin, and thus show some flexibility in their syntactic distribution.

(3) a. non potes unum capillum album facere aut nigrum (Matthew 5:36)
NEG can.2SG ONE hair white make or black
'you cannot make (even) one hair white or black'

b. nemo potest duobus dominis servire aut enim unum odio habebit
no.one can two masters serve either indeed one hate have.FUT
et alterum diliget (Matthew 6:24)
and other love
'No one can serve two masters. Either you will hate the one and love the other […]'

Since allowing for these two contexts of use does not seem to be an idiosyncratic feature of English, but rather is a general property of the class of unity cardinals, an account for *one* should at least aim to deal with both contexts of use, and everything else being equal, a more general account should be preferred to a more restricted one. The paper's central claim is that a fully unified account is possible.

The remainder of this paper is structured as follows: In section 2, I will deal with the syntax of *one*, and introduce the basic distinction of the three basic types of use, and what criteria this distinction is based upon. I will consider and reject various reasons for not adopting a monosemic approach to *one*. A very simple analysis in terms of NP-ellipsis will be suggested, but ultimately, rejected. In section 3, I present the variable free analysis of English *one*, presenting explicit analyses of all three use-cases. The mechanism of how to deal with predicate anaphora will be presented. I will also show how the pluralization of *one* can be accounted for. Section 4 concludes the paper.

2. The Distribution of *ONE*

2.1. Basic Data on Adnominal & Pronominal Uses in English

In this section, I will examine the different syntactic configurations in which English *one* appears. It can be shown to have at least three *prima facie* differing uses, namely the determiner use (see 4), the pronominal use (see 5), and the prosortal use (see 6).

(4) Ethel saw one rabbit.
(5) Ethel saw one.
(6) John read a Greek philosopher; Fred read a German one.

In the determiner use, *one* has the distribution of a determiner (where it could alternate with, e.g., an indefinite article); in the case of the pronominal use, *one* seems to have the distribution of a full DP (and could be substituted by a proper noun or a personal pronoun). The prosortal use is the one familiar from the *one-replacement* test, and has the distribution of an NP (that is, it could be replaced by some arbitrary nominal constituent denoting a predicate). The term *prosortal* is taken from Brandom (1994: 438), as is example (6).[2] The prosortal use is known in the literature also as "*one*-anaphora" (see Dahl,

[2] In fact, Brandom's classification is a semantic one, and does not deal with syntax. He does not distinguish between what I call the pronoun use and the prosortal use, and which is based in this paper on distributional facts. He is probably right in doing so as far as semantics are concerned, but for the moment, I will try to make this distinction explicit.

1985), or as "*one*$_{ct}$" (where *ct* stands for *count*; see Stirling & Huddleston, 2002). The pronoun case has also been called *determinative* by Stirling and Huddleston (2002: 1513), and shares many properties with the determiner use, as we will see below.

While the determiner and the pronoun use seem to be perfectly identical to uses that occur with other cardinals (see (7a-b), which reproduce (4) and (5)):

(7) a. Ethel saw two | three | *n* rabbits.
b. Ethel saw two | three | *n*.

The prosortal uses are not as easily reproduced with cardinals.

First, the prosortal alternates in the plural with *ones*, whereas the pronoun alternates with other cardinals:

(8) a. Fred read the German one.
b. Fred read the German ones.
c. ?*Fred read the German four.
(9) a Fred saw one.
b. *Fred saw ones.
c. Fred saw three.

Second, while other cardinals can in principle be pluralized (see (10), drawn from COCA, as compiled by Davies, 2008-), this process seems to be acceptable in a much more constrained fashion than what is attested with *one*.

(10) a. […] bad things happen in threes.
b. […] they don't beat my jacks and my threes […]

Typical meanings of pluralized cardinals are cards or dice throws carrying that number, or also groups consisting of *n* members. However, it is extremely difficult to get an arbitrary noun meaning for such examples, as is illustrated in (11).

(11) *?Fred read the German fours.

It is at best extremely difficult to interpret (11) in a way according to which Fred read one (or several) set(s) of books of cardinality four.

Third, as stated by Stirling and Huddleston (2002), adjectives precede unproblematically the prosortal (which behaves like a common noun, see 12), but not the pronoun (which behaves like a personal pronoun, see 13):

(12) a. Fred saw the cute one.
b. Fred saw the cute bear.
(13) a. *Fred saw cute one
b. *Fred saw cute him.

Finally, the prosortal combines felicitously with *bona fide* cardinals (see 14), which is not the case for any other cardinal (see, e.g., 15):

(14) a. Throughout France, stairwells and elevators are cramped. Pack two or three small bags rather than one big one.[3]
b. Fred read the three German ones.

(15) a. *Fred read three German four(s).
b. *Fred read three German three(s).
c. *Fred read four German three(s).

Summing up: prosortal and pronominal uses are anaphorically dependent on some antecedent, whereas the determiner use is not. With respect to other criteria (e.g. pluralization), the determiner and the pronoun uses differ from the prosortal.

Ideally, an account for *one* should be able to deal with the determiner, the pronominal and prosortal uses — and hopefully, in a unified manner. In sections 2.2 and 2.3, I will investigate whether a unified account is possible given the data, and what would be the cost for such a move. In order to do this, I will propose a simple possible analysis for the meaning of *one*, and consider to what degree it is able to account for the three uses.

But I will first consider in section 2.2 whether it is appropriate to treat all uses of English *one* alike.

2.2. Is a Unified Approach to *One* Appropriate?

We have seen in the Latin examples in (3) that typically, unity cardinals have both pronominal and determiner uses. Therefore, separating these cases does not seem a very promising point of departure for investigating unity cardinals. However, as we have seen in section 2.1, the prosortal case seems to be different, in that it has properties in English that sets it apart from the other two cases, and also in that in languages other than English, this use is much less prominent.

If we could show that in these two cases also are different in their anaphoric behavior, this would be a strong argument for setting them apart. However, there do not seem to be clear differences, as is illustrated in (16). Both kinds of anaphoric uses of *one* are rather flexible with respect to their antecedent: a pronoun can refer back either to an unmodified noun, or to a noun modified by an adjective, as long as the antecedent is a nominal predicate (that is, of type $<e,t>$).

(16) a. Nobody needs a Porsche, but everybody wants one. [unmodified N → pronoun]
b. Nobody needs a Porsche, but everybody wants a red one. [unmodified N → prosortal]
c. Nobody needs a red Porsche, but everybody wants one. [modified N → pronoun]
d. Nobody needs a red Porsche, but everybody should buy a blue one. [modified N → prosortal]

[3] Example from COCA: News – Houston Chronicles. A search on "one [j*] one" yields 213 hits.

Therefore, at least as far as their anaphoric behavior is concerned, the pronoun and the prosortal do not seem to be sufficiently different as to warrant differing lexical entries for *one*.

As we have seen in section 2.1, the prosortal differs from the pronoun and the determiner case in that it can alternate with the plural *ones*, rather than with other cardinals. Notice that only the prosortal allows for pluralization in current English:

(17) a. *John saw ones rabbits. [determiner use, congruent number]
b. *John saw one rabbits. [determiner use, incongruent number]
c. *John saw ones [pronoun use]
d. John read the German ones. [prosortal use]

The impossibility of *one* carrying a plural mark in the determiner case may simple be a fact about English morphosyntax: number is marked only once, and only on the noun (which is why (18) is agrammatical):

(18) *John saw the-s beautiful-s rabbit-s.

If the prosortal was some kind of determiner use in disguise, how could it carry, all of a sudden, a plural mark? Like Stirling and Huddleston (2002: 1513), I take the grammaticality of (17d) as evidence that in the prosortal use, *one* occupies (at least at some point in the derivation) the position of N°. For the moment, we lack the tools to investigate this issue, but I will come back to it in section 3.4, and show that the pluralization of the unity cardinal in the prosortal use is actually not a problem.

A more general point against a unified analysis of *one* has been raised by one of the anonymous reviewers, concerning the treatment of the pronominal use as an instance of the unity cardinal. Consider (19). Under any analysis of (19) as an instance of an NP-ellipsis assuming a monosemic approach to *one*, (19) should correspond to (19b). However, as the reviewer correctly observes, the meaning of (19) is more adequately paraphrased by (19a) rather than (19b).

(19) Mary has a smartphone. John has one, too.
a. Mary has a smartphone. John has [a smartphone], too.
b. Mary has a smartphone. John has [one smartphone], too.

Crucially, the reviewer notes that uttering (19) does not commit the speaker to the idea that John has *only one* smartphone, and would be compatible with the possibility/assertion that he owns *more than one* smartphone.

Does this mean that we should abandon the analysis of *one* as a cardinal in cases like (19)? I will argue that this example actually strengthens the case for treating pronominal *one* as a cardinal expression. One of the puzzling facts of the semantics of *one* is that it behaves unlike other cardinality expressions concerning its upper bound reading, as is illustrated in (20).

(20) a. I have three children: in fact I have (even) more. (Horn, 1972: 38)

b. #Melita has one cat, in fact, she has two. (Crisma, 2015: 146)
c. #I have exactly three children: in fact I have (even) more.
d. Melita has at least one cat, in fact, she has two.

With any cardinal other than *one*, the reading obtained with an unmodified cardinal in contexts like (20a) is an "at-least" reading. That is, the unmodified cardinal *three* in (20a) does not commit the speaker that he has 'exactly three' children (as opposed to (20c), where the numeral has been explicitly modified, and which is contradictory). Without the continuation after the colon, the most probable reading would be the "exactly-reading", but this is generally assumed to be the effect of a conversational implicature.[4] With *one*, however, Crisma (2015: 146) observes that the "exactly" reading has a different status: the reading cannot be cancelled in contexts like (20b). One would have to add an explicit *at least* in order to be able to continue as in (20a). Crisma concludes that therefore, the "exactly" meaning must somehow be part of the lexical meaning of the cardinal *one*. I have argued in Schaden (accepted) that the reason why *one* is different from other cardinals in this respect is because it is the only one to have a competing form, namely the indefinite article, which behaves as we would expect from cardinals like *three*, in that it lacks the "exactly" reading:

(21) Melita has a cat, in fact, she has two.

Therefore, the infelicity of (20b) can be attributed to a blocking effect, given the availability of the more economic (21). However, if the idea of blocking is correct, and that *one* in itself does not come with a hard upper bound, we would not expect that "no more than one" reading to arise in contexts where the indefinite article is not a competitor. This is indeed the case for (19), since (22) is not grammatical.

(22) Mary has a smartphone. *John has a, too.

I therefore conclude that the unacceptability of (19) does not constitute an argument against the treatment of pronominal *one* as a unity cardinal. On the contrary, this seems to be the one context where *one* behaves like a standard cardinal.

The anonymous reviewer also contended that one should generally distinguish (at least for the pronominal case) accented *one* from the non-accented version, arguing that accented *one* does indeed behave as a unit cardinal, whereas the second does not, and corresponds to an indefinite. The examples

[4] There has been an intense discussion whether this fact requires that a lexical representation of a cardinal n should be stated as $\text{card}(x) = n$ (which is the format I will use here) or rather as $\text{card}(x) \geq n$. The first option is defended in Merin (2003) and Landman (2004: 37), whereas Roussarie (2017: 386) uses the latter version. It is impossible to do justice to this discussion here, but note that there are strategies to obtain the 'at least' reading from contextual parameters even if one uses the first option.

offered here is that it is impossible to mix accented *one* with the indefinite article (see 23a), and also, the unaccented *one* with the determiner *one* (see 23b).[5]

(23) a. Mary has a smartphone. #John has ONE, too. [one accented]
b. Mary has one smartphone. #John has one, too. [second *one* unaccented]

It is reasonable to assume that prosodic focus makes the numeral information more salient than it would be without accent, where it is more backgrounded. Assuming this, at least (23a) can be explained as an instance of a more general pattern, which is not related to the question whether there is a semantic distinction between a (possibly clitic) one_1, and an accent-bearing one_2. The observation is the following: generally, in contexts where an anaphor is intended, it is necessary to use the more specific term first, and a hypernym in the anaphor (see 24a). If this order is reversed, this leads to infelicity (see 24b):

(24) a. Mary has a corgi. John has a dog, too.
b. Mary has a dog. #John has a corgi, too.

The idea concerning the infelicity of (23a) is that *one* can be shown to be more specific than *a*. As pointed out by Le Bruyn & Pozas Loyo (2014: 256), the indefinite article does not contain any cardinality information, and cannot be used to answer a *how many* question:

(25) How many students came to see you?
a. #A student came to see me.
b. One student came to see me.

Therefore, (23a) is probably infelicitous for the same reason as (24b), since it goes from the less specific to the more specific. This explanation assumes, however, that cardinality information –while present in all cases– can be foregrounded or backgrounded according to prosodic structure. Clearly, further investigation is needed to determine whether this explanation is sufficient, but it seems premature at this point to dismiss a unified analysis based on (23a).

It is more difficult to see what is wrong with (23b).[6] The availability of the anaphor should in principle only depend on the predicate, and not on the determiner.[7] Therefore, maybe (23b) violates some constraints or expectations on intonational parallelism, with no direct bearing on the compositional semantics of *one*. Once again, this would require further investigation, possibly with recordings of the prosodic patterns that allow or disallow anaphora with *one*.

[5] Examples (23) and judgments are from the anonymous reviewer.

[6] In fact, at least some speakers accept this sentence (but maybe the infelicity depends on some particular intonational pattern or structure that I have failed to reproduce or indicate with sufficient clarity).

[7] This will be shown in detail in section 2.3.

At the current point, it does not seem to me that the data warrants the working hypothesis that we should assume several different lexical entries for *one*, and that therefore, we should attempt to provide a unified account of all uses.

2.3. The Simplest Possible Analysis, and Its Limits

Given the desirability of a unified analysis, the question is how it could be achieved. There is a simple and particularly obvious analysis that might give us a potentially unified analysis of the determiner and the pronominal uses, by assuming that in case of sentences like (26a), we face an NP-ellipsis, in analogy to what we see in (26b).

(26) a. Ethel saw one *t*.
b. Ethel saw one rabbit.

Under this assumption, *one* is not in itself an anaphoric element, but combines with a trace (which is the anaphoric element). Now, the trace seems to sit in a place where it replaces a common noun (or a full NP), which indicates that the trace should be itself of type $<e,t>$ (that is, some predicate), which will then be provided somewhere in the context.

Before moving on, let me try to justify the assumption of it being a predicate-element, and not an element of type $<e>$.[8] Let us start by considering a sentence like (27a). Its truth-conditional representation should arguably be something like (27b).

(27) a. Every poor farmer$_i$ met a rich [one_]$_i$.[9]
b. $\forall x[\text{farmer'}(x) \wedge \text{poor'}(x) \rightarrow \exists y[\text{farmer'}(y) \wedge \text{rich'}(y) \wedge \text{meet'}(x,y)]]$

The one element that is missing in (27a) and present in (27b) is the second occurrence of the predicate *farmer*.

A second argument comes from possible antecedents of *one*. An entity of type $<e>$ would refer to an individual object, and therefore, should denote some individual. Yet, the anaphoric behavior of one differs markedly from the behavior of personal pronouns like *him* (which arguably does denote an element of type $<e>$). For instance, an antecedent of *one* can occur under the scope of negation, where no referential element is introduced (see 28a), whereas this is not possible for personal pronouns (see 28b).

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[8] As pointed out to me by Nicolas Asher (p.c.), one might get away with using some more abstract *e*-type element, like a kind. However, a kind can be interpreted as a reification of an intensional set, and is therefore a disguised predicate. Using kinds would require furthermore to create possibly arbitrary kinds, only to unwrap them afterwards. It seems to me that using predicates is the more parsimonious assumption.

[9] In order to remain uncommitted for the moment to the anaphoric element (*one* itself or rather a trace *t* that *one* combines with), I will note the element [one_], and leave open all possibilities.

(28) a. Fred doesn't own a dog$_i$, but he wants [one_]$_i$.
b. *Fred doesn't own [a dog]$_i$, but he wants him$_i$.

(28b) cannot be interpreted in a way where the indefinite is under the scope of negation.[10] However, this is no problem for (28a). Therefore, the anaphoric element does not seem to contain a referential element, since there is no referential antecedent in (28a).

Finally, the antecedent and *one* are fully quantificationally independent:

(29) a. There are many obvious answers$_i$ but no easy [ones_]$_i$ in this matter.[11]
b. There is no perfect solution$_i$, but many possible [ones_]$_i$.

In (29a), *ones* is anaphoric to *answers*; in (29b), it is anaphoric with respect to *solutions*. However, the quantifiers applied to the antecedent and the anaphoric element are different (*many* vs. *no*), and the anaphor does not refer to the complement of the antecedent, either. The anaphor in (29a) might possibly be interpreted as a dynamic expansion: among the many obvious answers, there is no easy one. However, such an interpretive strategy is not available for the anaphor in (29b), since its antecedent is empty (*'among the absence of perfect solutions, there are a few possible ones').

In this simplest possible analysis, we can assume the following semantics for *one*:

(30) [[one]] = $\lambda x.[\text{card}(x) = 1]$[12]

In case of the determiner use, (30) will be combined with an NP by predicate modification (see, e.g. Heim and Kratzer, 1998). Notice that the predicate in question can be in principle arbitrarily complex, see (31), taken from Carnie (2006: 152), even though for reasons of expediency I will be dealing in this article only with rather simple cases where the antecedent is a common noun.

(31) I bought the big [book of poems with the blue cover]$_i$ not the small [one_]$_i$.

Furthermore, I will assume a Reinhart-Winter style analysis (following Reinhart, 1997; Winter, 2001) for the determiner case: *one* occupies D°, combines with a lexical NP, and a Skolem-function applies subsequently in Spec DP.[13]

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[10] It is important to note that cases where the antecedent outscopes negation with *one* are not relevant (e.g., where (28a) would be interpreted as meaning, 'there is a dog that Fred does not own ...').

[11] Example from COCA, query: [j*] [nn*] [cc*] no [j*] ONE

[12] This is not the only possible semantics for *one*, and we will revise it. Notice for the moment simply that it is the one that assumes the lowest possible type for *one* (that is, $<e,t>$ rather than $<<e,t>,<e,t>>$), and that adopting (30) implies that the cardinality predicate can apply to Linkian sums.

[13] Arguably, *one* should be placed – at least initially – lower in order to allow the D° to be occupied by a definite determiner, with which *one* can be combined in certain circumstances (see, e.g., 'the one problem I.T. can't fix'). For want of space, I will not discuss this issue any further.

Skolem-functions in this tradition are generalisation of choice-functions. They take a predicate (and possibly one or more arguments of type *e*) and yield an entity satisfying the predicate:

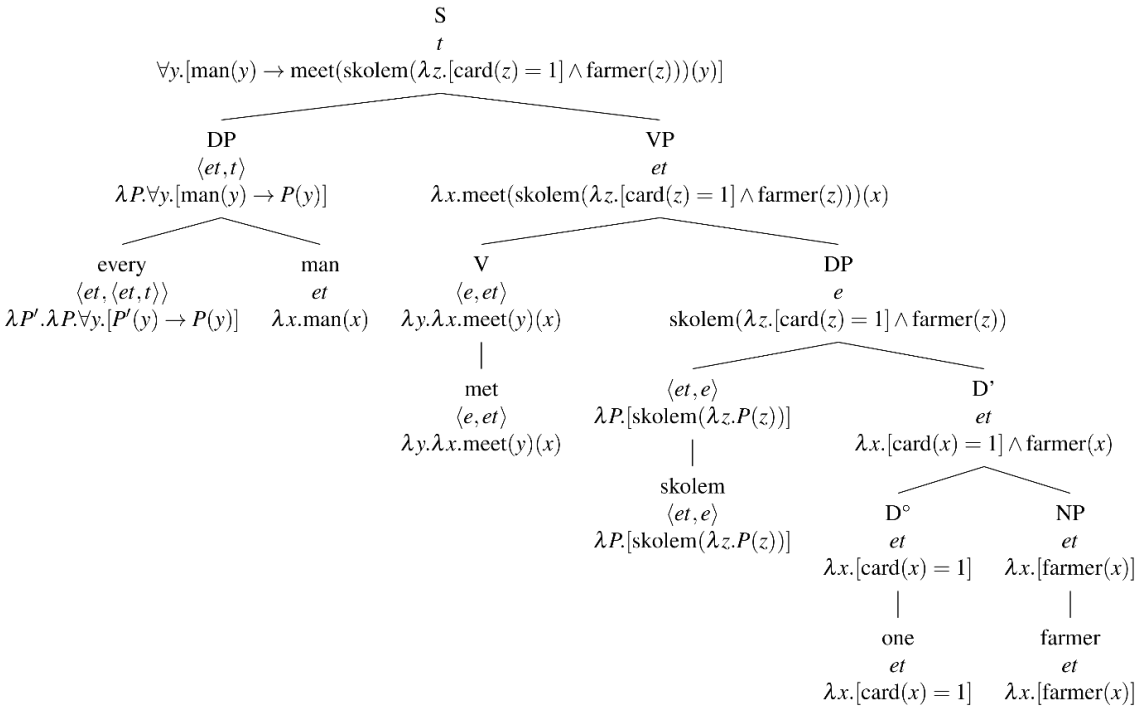
(32) a. f_0(cat) = Garfield (type $<<e,t>,e>$, choice-function)
b. f_1(cat, author-of-paper) = Akané (type $<<<et>,e>,e>$)
c. f_2(cat, Jerry, Spike) = Tom (type $<<<<et>,e>,e>,e>$)

The arity of the Skolem-function allows to model scopal (in-)dependence, without depending on syntactic mechanism such as movement. This is illustrated in (33).

(33) a. $\forall x$[mouse(x) → knows(x, f_0(cat))]
There is a single cat such that every mouse knows him (Garfield).
b. $\forall x$[mouse(x) → knows(x, f_1(cat, x))]
Every mouse knows some (possibly different) cat.
c. $\forall y$[dog(y) → claim(y,$\forall x$[mouse(x) → knows(x, f_2(cat, x, y))])]
Every dog claims that every mouse knows some cat (cats varying with both dog and mouse).

Let us now consider how such an analysis would work for the determiner use: *one* combines by predicate-modification with the NP *farmer*, and is then taken as an argument by the Skolem-function in Spec DP. This can be illustrated for the sentence (34a) in (34b), where tense and aspect have been ignored.

(34) a. Every man met one farmer. [one farmer > every man]
b.



In (34b), we have a choice-function as the internal argument of *meet*, and it assigns thus the same entity to every man. The entity chosen has to be a farmer, and it has to be of cardinality one. Therefore,

(34b) means that there is a single farmer such that every man met that farmer –which are appropriate truth-conditions for the wide-scope reading of *one* in (34a).

The case with NP-ellipsis is then a very similar one: the only difference is that instead of combining with an overt NP, *one* combines with a trace *t* of type <*e,t*> (which is illustrated in 35b for 35a). This trace might then be lambda-bound, or it can be resolved in another way (which I will not get into here).

(35) a. Every man met one *t*.
b. [$_{S}$ [$_{DP}$ Every man] [$_{VP}$ [$_{V'}$ met [$_{DP}$ skolem [$_{D'}$ one [$_{NP}$ *t*]]]]]]

So far (and from a purely semantic point of view), this NP-ellipsis account provides correct truth conditions for the determiner and the pronoun use. However, as we will see now, it runs into trouble once we consider prosortals.

The analysis of anaphoric *one* as NP-ellipsis sketched above assumes that *one* can combine in all circumstances with an NP. While this seems indeed to be the case for the pronominal use –even when there is a definite determiner in front, see (36)–, it is not appropriate for the prosortal use (see 37).

(36) a. Fred read one *t*.
b. Fred read one book.
c. Either you will hate the one *t* and love the other *t* …
d. Either you will hate the one master and love the other master …

(36a,c) can be unproblematically analysed as containing a trace because they allow a common noun in the same position (see 36b,d). This is not the case for the prosortal case, since adding a common noun at the position of the assumed trace leads to agrammaticality, as is illustrated in (37b).

(37) a. Fred read one | a | every | the German one *t*.
b. *Fred read one | a | every | the German one philosopher.

At this point, we could possibly declare that we have two different structures (and meanings) associated with *one* in English, namely the one proposed above, and another one for the prosortal. This could be interpreted as following the analysis of Stirling and Huddleston (2002).

2.4. Taking Stock

I have discussed in section 2.2 a number of examples that seemed to be more generally at odds with the proposed monosemic approach to *one* in English, and have proposed a preliminary analysis for *one* in section 2.3, which however falls short of the ambition of a unified account. I have tried to show that examples like (19), which at first sight look devastating, in fact further bolster the case for a monosemic account of *one* in terms of a unity cardinal. Other examples that seem to go against a monosemic approach are ultimately inconclusive at this point. This means that –as far as empirical

evidence is concerned– we are left with the methodological principle that we should avoid postulating several different lexical entries for a word unless there is compelling evidence to do so.

The second question is how to evaluate the analysis presented in 2.3 on the background of the data, and in relation to the analysis that will be presented in section 3. On the one hand, the preliminary analysis is simple (in any case, much simpler than what I will propose afterwards) and unifies elegantly the determiner and pronominal uses, but as indicated in section 2.3, it does not carry over easily to the prosortal uses. So, one option at this point would be to declare this to be a desirable feature of the analysis, and to abandon a unified analysis for all uses of *one* in English. After all, we have seen in section 2.1 that the prosortal sets apart *one* from the other cardinals.

However, assuming two different kinds of *one* in English does not seem to be optimal. In cases of NP-ellipses and determiner uses, it is not in itself anaphoric, or at least, it does not have to be analysed as being anaphoric. Yet, in the prosortal use, it seems to be anaphoric in nature. However, this does not necessarily mean that we need to postulate two different lexical entries for *one*. Certainly, it would be more economic to have only one type of *one*. I take it that it would be difficult to justify an ellipsis-type analysis to the prosortal case. Yet, as I will show in the remainder of the paper, there are tools at our disposal which allow us to treat an element as intrinsically anaphoric, and at the same time, as being able to combine with an NP-predicate. And everything else being equal, if it can be demonstrated that there exists one account that can successfully deal with all uses of *one*, it should be preferred to more partial accounts.

3. A Variable-Free Proposal

The basic idea that will be applied in the remainder of this paper comes from work by Jacobson (1996), who assumes that anaphoric constituents can behave syntactically in one way, and semantically in another. Jacobson's assumption is that sentences like *He saw John* in (38a) are syntactically indeed sentences, but that they are semantically of type $<e,t>$. Semantically, (38a) patterns thus with the VP "*saw John*" in (38c), while syntactically, it patterns with (38b), which is a full proposition and thus of type $<t>$.

(38) a. He saw John: sentence; type = $<e,t>$; meaning = $\lambda x[saw(x,j)]$
b. Mary saw John: sentence; type = $<t>$; meaning = $saw(m,j)$
c. saw John: VP; type = $<e,t>$; meaning = $\lambda x[saw(x,j)]$

In order to distinguish fully saturated constituents from constituents that lack semantically some part, (38a) would be written as S^{DP}: it is a sentence S that will be semantically complete once it has received a DP.

While in the work of Jacobson, the only anaphoric elements considered are personal pronouns like *him* or *they* (which can be assumed to have a base type $<e>$), we can extend the basic idea also to

predicate anaphora. Therefore, a constituent containing an anaphoric *one* –be it a pronoun or a prosortal– is a constituent lacking an NP (which is therefore written X^{NP}, for some arbitrary constituent X). Similarly, the constituents formed by *one* in the pronominal and the prosortal case would be of the types illustrated in (39b) and (39c), respectively.

(39) a. one rabbit: D'
b. one (prosortal): NP^{NP}
c. one (pronoun): D'^{NP}

I will apply this type of analysis to *one*, assuming that it can be either a NP lacking an NP (in the prosortal case), or a DP lacking an NP (in the pronominal case). In this way, we will be able to treat all uses of *one* in a unified manner.[14] I will also show in section 3.4 that the fact of pluralization of the prosortal does not pose any particular problem for this kind of analysis.

Before moving on, it will be necessary to slightly change the lexical entry for *one* in order to be able to accommodate the meanings we will need. I will assume that *one* is a predicate modifier of type $\langle\langle e,t\rangle,\langle e,t\rangle\rangle$ (see Ionin and Matushansky, 2006), yielding (40).

(40) $[[\text{one}]] = \lambda P.\lambda x[P(x) \wedge \text{card}(x,P) = 1]$[15]

The idea behind the formula is that the cardinality of an object depends on the predicate, and that one and the same physical entity can have different cardinalities according to different predicates (think of *heap of sand* vs. *grains of sand* or *cup* vs. *tea-set*).

3.1. The Determiner Case

The determiner case is basically identical to what we have seen in (34b) above, with the minor difference that *one* takes the nominal predicate as its argument, instead of being combined with it via predicate modification. The result of this operation is illustrated in (41b). The rest of the analysis and of the derivation (with the use of Skolem-functions) remains identical to what we have seen in (34b).

(41) a. John met one man.

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[14] We will see that some residual uses do not fit that easily, but it will be an important step into the right direction.

[15] For the compositional account to work from the type-perspective, it is important to assume that *one* is of type $\langle\langle e,t\rangle,\langle e,t\rangle\rangle$. Therefore, the proposed analysis is not tied to the exact semantics given in 40), as long as this basic type does not change. Other possibilities would be to assume that it is something like (ia) or (ib), where the cardinality measures either a set, or the entity denoted by *x*, rather than the more involved (40):

(i) a. $[[\text{one}]] = \lambda P.\lambda x[P(x) \wedge \text{card}(P) = 1]$
b. $[[\text{one}]] = \lambda P.\lambda x[P(x) \wedge \text{card}(x) = 1]$

b. [[one (man)]] = $\lambda x.$[man(x) ∧ card(x, man) = 1]

While this example illustrates a simple noun as argument of *one*, the proposed semantics (like the one illustrated before) could cope very well with an arbitrarily complex NP (such as *crazy old man from Tyrol with lederhosen and a big moustache*).

3.2. Pronominal and Prosortal Uses

I assume that the representation of *one* for the prosortal and pronominal uses is also (40). The basic idea –following in this Jacobson (1996)– is that the predicate can either be immediately specified by functional application, as was illustrated in (41b) for the determiner case, or it can be passed along upwards in the derivation by a type-shifting mechanism that will be specified below.

Therefore, *one* itself can become an anaphoric expression, and, as is generally the case in variable-free semantics, I will not have to stipulate the existence of a trace. In this way, we can treat both the pronoun and the prosortal use with exactly the same semantics. One type of evidence is that they both seem to require the same type of antecedent predicate, namely a count predicate.

(42) We have no [car]$_i$, but our neighbour owns one$_i$.

In a context where the antecedent predicate is not countable, and where it cannot be coerced into something countable, the anaphor with *one* is not appropriate.[11] Imagine (43ab) uttered in the context of a flash-flood, where some houses in a town have been flooded, but not all.

(43) a. *We have no [water]$_i$ in our basement, but our neighbour has one$_i$.
b. *We do not even have clean [water]$_i$ in our basement, but our neighbour has (some) dirty one$_i$.

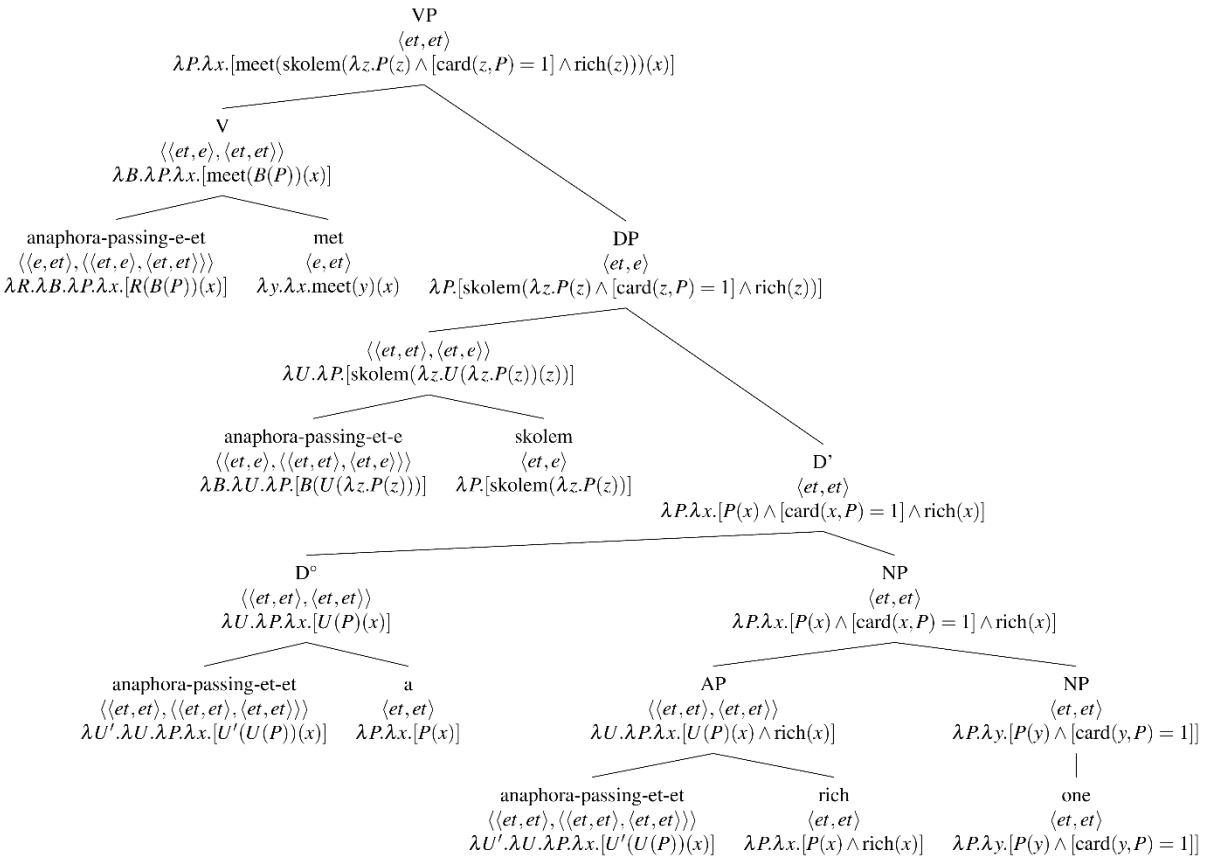
As stated above, in the variable-free analysis of *one*, the unity cardinal is analyzed as either a D' or a NP constituent lacking an NP, that is, constituents that are D'^{NP} or NP^{NP}. The lambda-abstracted predicate will be passed along in the derivation in will have to be bound at some time. A general advantage of such an analysis is that any constituent has a model-theoretic interpretation –there is no mixing with assignment functions, see Barker and Jacobson (2007). However, it comes at the cost of type-shifting, since functions that have as an argument normally something of type α must be able to take also an anaphoric constituent of type $<<e,t>,\alpha>$. Generally, the type-raising operation can be formulated as follows:

(44) Anaphora-Passing (def.): $<\alpha,\beta> \Rightarrow <<<e,t>, \alpha>, <<e,t>,\beta>>$

Anaphora-passing simply states that a function normally taking a constituent of type α as an argument and yielding β has to be shifted from the normal type $<\alpha,\beta>$ to a new type that can take as an argument the constituent containing *one*, which is $<<e,t>,\alpha>$, and it also must yield a function $<<e,t>,\beta>$, instead of simply β, in order to pass along the missing predicate. I will illustrate this type of shifting in the derivation of the VP^{NP} *met a rich one*, as illustrated in (45). The raising functors are

written as *anaphora-passing-α-β*, where –like in (44)– α denotes the type of its domain, and β the type of its range.

(45)



Notice that the meaning of the VP^{NP} is that it needs some NP-predicate and a subject to form a full sentence, and that the cardinality of the object, once its predicate will be known, is 1. The unit cardinal does not do much work here, in that it merely acts as an enforcer on the countability of the predicate. It is the Skolem function that is responsible for any quantificational effects. Instead of the indefinite article, we might as well have had another *one* as the determiner of the direct object DP, or even a quantified expression like *every*.[16]

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[16] The derivations are somewhat involved, and would require for *every* the introduction of a different type shift. Therefore, they have been omitted from the paper. However, the derivations are available on request from the author in a *LambdaCalculator* source file. The results are given in (i) below. Since it is easier to consider not lambda-bound predicates, but resolved predicates, these are the predictions we get for objects *one rich one* and *every rich one*, respectively, once they have been resolved in a sentence:

(i) a. [[Every poor farmer$_i$ met one rich one$_i$]] =
∀y[[farmer(y) ∧ poor(y)] →
meet(skolem(λz.farmer(z) ∧ [card(λz.farmer(z))(z) = 1] ∧ rich(z) ∧
[card(λx.farmer(x) ∧ [card(λz.farmer(z))x) = 1] ∧ rich(x)])(z) = 1]))(y)]

The crucial advantage for this type of analysis is that it does not require different entries for dealing with the determiner, the pronominal, and the prosortal case, and that one and the same meaning of *one* can perform the role of a determiner and of an anaphoric element.

Now, while we have a satisfying analysis for dealing with the anaphoric part of *one*, we have only resolved half the problem: we still lack a way of dealing with the binder predicate. Notice that this problem is completely independent of the anaphor issue, that is, however one may want to deal with *one* (by going variable-free, as I did, or rather using a trace-based analysis), this does not commit to a particular version of the binder-proposal (as long as the idea of a predicate anaphor is maintained).

3.3. Analyzing the Binder

Since the constituent containing *one* lacks a predicate, the scope-taking element that needs to get passed along also has to be an element of type $<e,t>$ (e.g., *dog*, or *book of poems with the blue cover*).

Ideally, the solution for the binder should be dynamic (or have dynamic potential, since there are no restrictions on sentence-boundaries, and c-command is not required), as is shown in (46).

(46) a. No red tile fell on a green one.
b. Everybody wants to have a Surface-Ultrabook. But nobody wants to buy one.

It also seems to be possible to scope out of deeply embedded contexts:

(47) All my neighbours pretend that a really huge dog$_i$ buried bones in their gardens, […]
a. […] but I only ever saw a relatively small one$_i$.
b. […] but I think that it really is a rather small one$_i$.

For (47), there is no reason to assume that something like 'there exists a really huge dog' should outscope '*pretend*', because there is no guarantee that this dog even exists, which means that the binder must be able to remain within the intensional context created by the verb *pretend*.

---

b. [[Every poor farmer$_i$ met every rich one$_i$]] =
$\forall y[[\text{farmer}(y) \wedge \text{poor}(y)] \rightarrow$
$\forall x[[\text{farmer}(x) \wedge [\text{card}(\lambda z.[\text{farmer}(z)])(x) = 1] \wedge \text{rich}(x)] \rightarrow \text{meet}(x)(y)]$

Let us start with the VP-part of the simpler (ib). It tells us that, for all farmers that have a cardinality of one with respect to the predicate *farmer* and that are rich, it will be the case that all poor farmers will have met them. This corresponds to the truth conditions of the sentence.

For (ia), there are many redundancies. It tells us that there is a Skolem function that will assign to every poor farmer an entity that satisfies the predicate of farmers that have a cardinality of one with respect to the predicate *farmer* and *which are rich*, and which additionally have the cardinality one with respect to the predicate of [being farmers which have the cardinality one wrt to the predicate farmer and which are rich] – in other words, one rich farmer. This is quite a mouthful, but it does seem the represent correctly (while inelegantly) the truth conditions of the sentence.

There does not even seem to be a clear restriction on the binder occurring necessarily before the bindee, as is illustrated in (48).[17]

(48) Brad Pitt carries one$_i$ in his car; George Clooney has one$_i$ in his bathroom. What is it about the new [Gizmo 3300]$_i$ craze?

I take it therefore that any solution to the binder-problem needs to be maximally flexible. There are at least three different approaches to the binder-problem that could be applied to the case at hand: i) Charlow (2012) and his compositional DRT approach (building on Muskens (1996)). ii) Charlow (2014), using monads. iii) Barker and Shan (2014), using continuations.

The DRT-approach relies on constructing a discourse-referent out of a predicate, and could be certainly adopted without problems; I will however implement here a very simple version of monads. The same idea could certainly also be implemented with continuations.

The way I will be dealing with the binder is a version of Church-encoding of an ordered pair representing a monad (see Church, 1936; Charlow, 2014; Champollion, 2015) as illustrated in (49):

(49) a. < binder-predicate; compositional meaning >
b. $\lambda X.[X$(binder-predicate)(compositional meaning)$]$

The purpose of this notation is to separate the binder-predicate on the one side (which needs to be prevented from undergoing semantic composition, and stored away for later use) from the standard compositional meaning of the sentence (which the binder predicate has entered at some stage).

As far as I see, we don't need to overwrite the binder-stack and manipulate/update it. The only necessity is to get a binder-predicate into the stack and get rid of it after it has done the required binding.

Dealing with elements like (49b) involves two operations, and two further kinds of type-shifting. First, we need to populate the binder-stack, and at the end, we need to move from a higher-type meaning for a sentence to its habitual truth-conditions. This is done by *predicate-reduplication* and *s-closure*, respectively.

(50) predicate-reduplication (def.): $\lambda P.\lambda N.[N(P)(P)]$[18]
(51) s-closure (def.): $\lambda S.[S(\lambda P.\lambda\, p.[p])]$

Sentences containing a binder-predicate (see 52a, with its semantic representation 52b) will not be of type $<t>$, but of type $<<<e,t>,<t,t>>,t>>$. Such a representation is perfect if we want to pass on the predicate *farmer* to the next sentence.

[17] Tentatively, one might say that like proper nouns, predicates always seem to scope at top-level.

[18] Notice that predicate-reduplication is essentially a type-shifted version of the W-operator by Curry and Feys (1958), as cited by Szabolcsi (2003).

(52) a. John met a poor [farmer]$_i$.
b. $\lambda W.[W(\lambda x.[\text{farmer}(x)])(\text{meet}(\text{skolem}(\lambda z.\text{farmer}(z) \wedge \text{poor}(z)))(j)]$

At some point however, we will want to access only the truth-conditional part, and dispose of the binder-predicate. Here is where *s-closure* enters into play: it disposes of the predicate and retrieves the truth-conditions of the sentence. Since it will ever only apply to sentences, it can be given the unique representation in (51).

One might ask why taking the trouble of having a sentence-meaning that has such a complicated type, instead of getting rid of the stack at the earliest possible occasion. The problem is that –like with any other kind of anaphora– it might be necessary to reuse the stack, as is illustrated in (53).

(53) Over the years, a mythology has developed concerning certain colors of [M&M candies]$_i$. The green *ones*$_i$ are supposedly aphrodisiac; if a red *one*$_i$ is last to emerge from a bag, make a wish and it will come true; if the last *one*$_i$ is yellow, call in sick and stay home. [Example from COCA]

In cases like (53), the binder must be passed from deep inside a PP all the way through to the sentence level, before it can be applied. Therefore, it should not be automatically triggered once hitting a DP-level. Additionally, the same binder is used here three times.

Between filling in the binder-predicate and disposing of it, we will need to do two things with it: passing it along without modifying anything, and finally, applying it to some other constituents. These will be more general operations of type-shifting, namely *binder-passing* and *binder-application*, respectively.

(54) a. Binder-Passing (def): $<\alpha,\beta> \Rightarrow <<<<e,t>,<\alpha,t>>,t>,<<<e,t>,<\beta,t>>,t>>$
b. Binder-Application (def): $<\alpha,\beta> \Rightarrow <<<e,t>,\alpha>,<<<e,t>,<\beta,t>>,t>>$

While there seems to be in principle nothing that requires the antecedent to c-command *one*, contrastive stress often turns out to be helpful, as is illustrated in the opposition between the examples in (55).

(55) a. Every RICH farmer$_i$ knows a POOR one$_i$.
b. ?*Every farmer$_i$ knows a poor one$_i$.

However, there are cases where there is no contrastive set in the context, as is illustrated in (56), taken from COCA.[19]

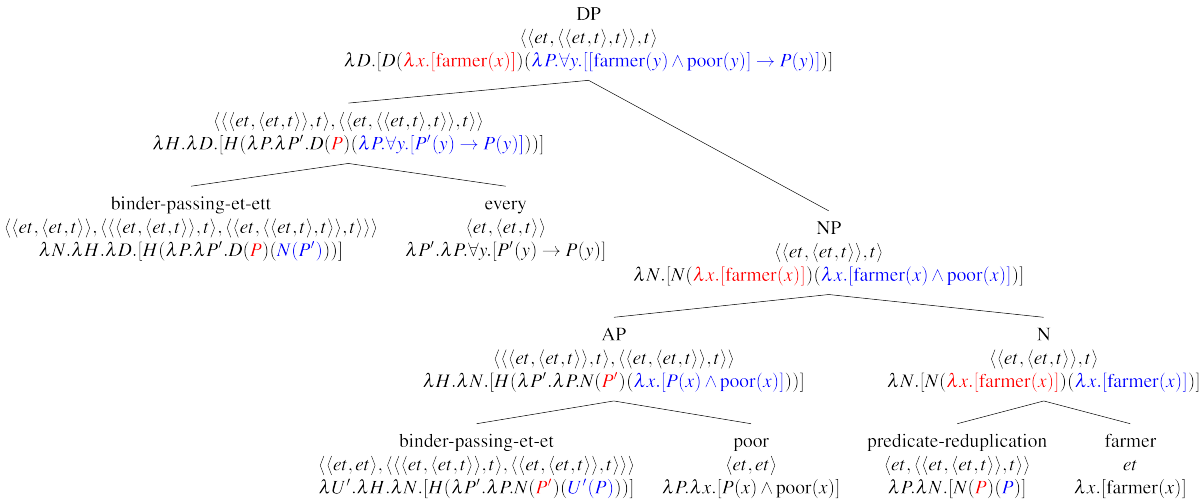
(56) According to a report recently released by the Census Bureau, the number of single fathers jumped 25% in three years […] *That change*$_i$ *reflects a larger one*$_i$: Men are increasingly considered capable and effective single parents.

Let us now turn to how this is implemented. The binder must be duplicated and stored away, while undergoing simultaneously the standard compositional process of the sentence. This is what binder-

[19] The existence of such examples was pointed out to me by Laurent Roussarie (p.c.).

passing does, and I will illustrate the process for the subject DP of the sentence *Every poor farmer met a rich one*.

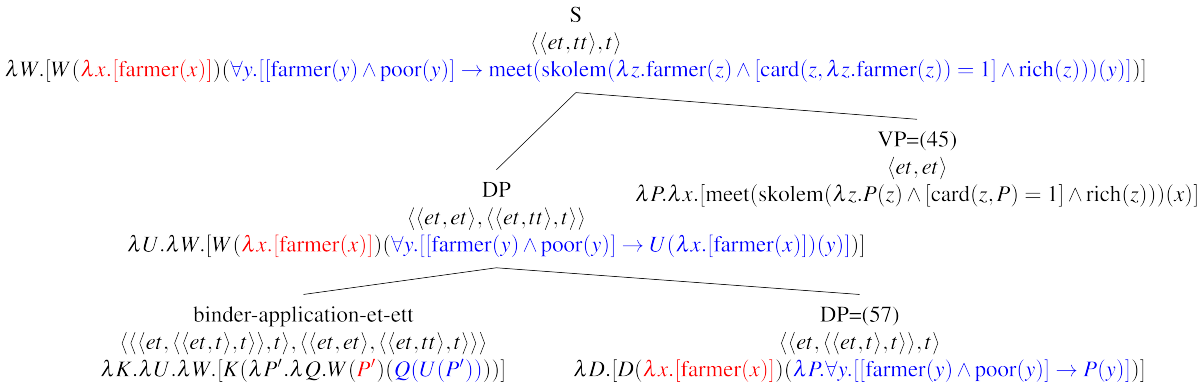
(57)



As we see, (57) has basically two parts, distinguished here by colors: in blue, the standard compositional meaning of *every poor farmer*, and in red, the meaning of the predicate *farmer*, which is stored away in order to be used at some later moment. The blue part contains the normal compositional meaning of the constituent, which changes as we move in the tree; the binder predicate in red is simply moved upwards in the tree, without undergoing any change.

At this point, we don't simply want to combine the denotation of the predicate from (57), and leave the stack unchanged. First, (57) cannot combine with a VP^{NP} of type $<<e,t>,<e,t>>$; it expects a normal VP of type $<e,t>$. Second, in our case, we want the predicate *farmer* to bind the missing predicate in the VP. We need therefore to adapt the type of the DP, and this is what the binder-application shift does for us, and is illustrated in (58).

(58)



In (58), we see once again the two ingredients: in red, the same binder predicate we had before, and in blue, the normal compositional meaning. The blue part in the lowest DP, which corresponds to (57),

is the standard meaning associated with *every poor farmer*. However, since (57) can only be combined with a standard VP meaning, and not with a VP^{NP}, as provided by (45). Additionally, we need to copy the predicate *farmer* from its store, and provide it to the VP. This is achieved by binder-application in the upper DP in (58): the predicate has been copied back into the blue part, and is now in a position where it will saturate the anaphoric NP in the VP^{NP}. At the top, we obtain then the correct truth conditions for the sentence, and we still have a full predicate store. This result can then be subjected to s-closure, in order to extract the truth-conditions, if the binder predicate is no longer required, in which case we end up with only the blue part, which is a standard proposition of type $<t>$.

3.4. The Pluralization of *One* – A Problem?

Let us come back to the issue of pluralization, which seems intuitively to be a strong counterargument against a monosemic account of *one* –which then would be an argument for the simpler analysis sketched in the beginning of the paper. The argument goes roughly as follows: If the meaning of *one* is 'the quantity is equal to 1', how can it support pluralization, when a plural means 'the quantity is higher than 1 '? Taken together with the fact is that *one* can be pluralized only in its prosortal use (see, again, 59), which is the one other cardinals lack, this might provide an argument for the ellipsis account –especially since prosortals are problematic for the ellipsis account.[20]

(59) a. *John saw ones rabbits.
b. *John saw ones.
c. John saw the green ones.

Still, there might be something in *one* that makes it inherently more amenable to pluralization than all the other cardinals. I will show that pluralization is in fact no a counter-argument against the analysis I have tried to provide here.

Let me start by giving the general idea. The basic issue is where the plural and the cardinality information are attached, respectively. If we look at *rabbit-s*, we can assume that *rabbit* has an intrinsic cardinality information attached to it, namely that the individual rabbit has a cardinality of 1. The plural *-s* then applies above that cardinality of 1, and tells us that there is a plurality of entities of cardinality 1. So, as long as the plural applies to a constituent whose cardinality is one, there should be no problem in semantic composition. This, I argue, carries over straightforwardly to cases where *one* itself is pluralized. Instead of having a noun whose lexical meaning is contained in the form itself, we have an element that merely specifies that some noun meaning has to be inferred by anaphor, and that it is a count noun. This base is then pluralized. This intuition can be formalized in a Link-style plural semantics.

[20] This is also a fact that seems to lend support to scholars questioning the cardinality-status of *one* more generally, see, e.g., Barbiers (2005, 2007); Crisma (2015).

Let me first rehearse the basics. In Link (2000), the plural is defined as an operator on a predicate, taking a predicate *P* and returning the complete join-subsemilattice generated by *P*. That means that a plural combines with some generator-set (for instance, the set of three rabbits given in 61a), and yields a set containing the same set plus all sums of elements of the set (as illustrated in 61b). From a type-perspective, Link's *-operator is of type $<<e,t>,<e,t>>$, and we can define the plural *-s* as follows:

(60) [[-s]] = $\lambda P.$[plural(P)]

Normally, (60) will combine with a count noun, and give something like *plural(rabbit)*, whose denotation (in a sample world with few rabbits) are given below.

(61) a. [[rabbit]] = {a,b,c}
b. [[rabbit-s]] = {a,b,c,a⊕b,a⊕c,b⊕c,a⊕b⊕c}

Sums like $a \oplus b$ are defined by Link as elements of type *e*, so we can use Skolem-functions on them.[21] But instead of directly applying (60) to a noun, we can also type-raise it by *anaphora-passing*, and apply it then to *one*, which will yield (62a):

(62) a. (anaphora-passing-et-et (plural))(one)= $\lambda P.\lambda x.$[plural($\lambda y.$[$P(y) \wedge$ [card(y,P) = 1]])(x)]
b. $\lambda x.$[plural($\lambda y.$[*rabbit*(y) ∧ [card(y,*rabbit*) = 1]])(x)]
c. $\lambda x.$[plural($\lambda y.$[*rabbit*(y)])(x)]

The result of (62a) will then be bound by some sortal predicate, e.g., *rabbit*, yielding (62b). So, instead of having as generator set some simple (count) predicate, we have as generator set a predicate of that same predicate, with the additional constraint that the elements be of cardinality 1 with respect to that predicate. Now, as long as the predicate is indeed countable, the cardinality predicate does not actually do any work, as I have tried to illustrate with (62c): the predicate *rabbit* itself consists of atomic rabbit elements (as seen in 61a), and it does not matter if this cardinality property is explicitly stated or not.

This reasoning makes two interesting (and as far as I know, accurate) predictions. First, this kind of reasoning cannot be applied to any other cardinal, since in that case, the cardinality condition would not be semantically redundant. And second, the premise of the anaphor being based on the predicate predicts that anaphora should work across singular-plural boundaries. This prediction seems indeed to be borne out, since the number in the antecedent and in the anaphorical expression can differ, without affecting the possibility of anaphoric interpretation, as is illustrated in (63):

(63) a. I met a few rich farmers, but no poor one. [Pl→Sg]
b. I met a rich farmer, but no poor ones. [Sg→Pl]
c. I met a few rich farmers, but no poor ones. [Pl→Pl]
d. I met a rich farmer, but no poor one. [Sg→Sg]

[21] Whether this is the best idea cannot be explored here, but for reasons of expedience, I will assume this to be the case.

Therefore, the pluralization of the prosortal is perfectly compatible with *one* having a standard cardinal meaning. However, this idea has also one unfortunate consequence: it predicts –contrary to fact– that (64a) should be acceptable and have the same meaning as (64b) –at least from the semantic viewpoint, and under the assumption that pluralization can apply to the constituent *one rabbit* as a whole. At the same time, (64c) is predicted to be unacceptable, since we have a clash in meaning between the plural entity *rabbits*, and the cardinal specification of *one*.

(64) a. *John saw [one rabbit]-s.
b. John saw rabbits.
c. *John saw one [rabbit-s].

Thus, the unacceptability of the sentence *John saw one rabbits* cannot be explained by the assumed semantics. In order to account for its ungrammaticality, I have therefore to invoke other reasons. Notice that this sentence has (at least) two parses, one of which is ruled out on semantic grounds. However, the same meaning as the acceptable parse of the sentence is available in a more economic form (namely 64b). Therefore, I assume that blocking of the less economic forms comes into play and rules out the parse (64a).

4. Conclusion and Perspectives

In this paper, I have presented a semantically unified account of English *one*, where the unity cardinal can be an anaphoric expression, but also directly combine with a (count) noun. This analysis was cast in a directly compositional, variable-free framework, with an explicit account of the binding mechanism using a simple monad.

While I have not discussed the generic use of *one* (see Moltmann, 2006), the present analysis could be extended to account for it. This would require a default interpretation/saturation of *one* with something like HUMAN (compare *no one, someone*) if binding fails –and would need to incorporate some theory of (probably indefinite) genericity (e.g., Corblin, 2012).

However, the present analysis has problems with (at least) two constructions involving *one*.

(57) We will be one.
(58) Neo is the One.

The meaning of *one* presented in (31) commits me to the question: *one what?* –which is arguably not an appropriate reaction to (57) when uttered in a romantic context. The '*messianic use*' of *one* in (58) cannot be straightforwardly accounted for by the current analysis either; this seems however to be a reading that is highly idiosyncratic of English, and it is not as easily available for unity cardinals in other languages (as French or German, see 59).

(59) Neo ist der eine.
Neo is the one

(59) would most easily be appropriate in a partitive context (e.g., if we are talking about two boys, and Neo is one of them), but in German, there is not even a hint of exalted status for Neo in such a case.

Finally, other cases of predicate-anaphora, like French possessive pronouns (see 60), could probably be analysed in the same way as *one*.

(60) Cunégonde n' a pas de voiture$_i$; elle utilise la mienne$_i$.
C. NEG has NEG of car ; she uses the mine.
'Cunégonde has no car; she uses mine.'

The possessive pronoun in (60) shows the same ability to take non-referential antecedents as *one*, but it has a different distribution, in that it is only felicitous nowadays in NP-positions (which would correspond to the prosortal use of *one*).

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