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One among many: anaphoric one and its relationship to numeral one.

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Abstract

One anaphora (e.g., *She has a better one*) has been used as a key diagnostic in syntactic analyses of the English noun phrase, and '*one*-replacement' has also figured prominently in debates about the learnability of language. However, much of this work has been based on faulty premises, as a few perceptive researchers, including Ray Jackendoff, have made clear. Abandoning the view of anaphoric *one* (A-ONE) as a form of syntactic replacement allows us to take a fresh look at various uses of the word *one.* In the present work, we investigate its use as a cardinal number (1-ONE) in order to better understand its anaphoric use. Like all cardinal numbers, 1-ONE can only quantify an individuated entity and provides an indefinite reading by default. Owing to unique combinatoric properties, cardinal numbers defy consistent classification as determiners, quantifiers, adjectives or nouns. Once the semantics and distribution of cardinal numbers including 1-ONE are appreciated, many properties of A-ONE follow with minimal stipulation. We claim that 1-ONE and A-ONE are distinct but very closely related lexemes. When 1-ONE appears without a noun (e.g., *Take ONE*), it is nearly indistinguishable from A-ONE (e.g., *TAKE one*)—the only differences being interpretive (1-ONE foregrounds its cardinality while A-ONE does not) and prosodic (presence versus absence of primary accent). While we ultimately argue that a family of constructions is required to describe the *full* range of syntactic contexts in which *one* appears, the proposed network accounts for properties of A-ONE by allowing it to share (inherit) most of its syntactic and interpretive constraints from its historical predecessor, 1-ONE.

1. **Introduction**

This paper concerns a little word with a fraught history in syntactic theory—a word that has been used for decades to justify specific assumptions about the hierarchical structure of noun phrases (see, e.g., Baker 1978; Radford 1981; Cowper 1992; Carnie 2012) and wielded as a weapon in the debate concerning learnability of phrase-structure categories (Baker 1978; Hornstein and Lightfoot 1981; Radford 1988; Lidz et al. 2003; cf. Akhtar et al. 2004; Regier & Gahl 2004, Foraker et al. 2009; Tomasello 2004). The word is *one*, and it is illustrated in its anaphoric use in (1a-b):

1.a. "So the metaphor that you used before of the loaf of bread, I think, is a fantastic **one**." (COCA corpus, Davies 2008)[2]

[1] The order of authors is alphabetical; each contributed equally.

[2] Here and below, quotation marks are used to indicate examples retrieved from the 450 million-word Contemporary Corpus of American English (Davies 2008).

b. "I think one old law is worth two new **ones**."

Critical assessments, ranging from the classic observations of Jackendoff (1977) to more recent observations by Culicover and Jackendoff (2005) to an in-depth corpus study by Payne et al. (2013), have persuaded us that *one* anaphora does not ultimately bear on either nominal constituent structure, or the innateness of syntactic knowledge, and that *one* anaphora does not vindicate the use of hierarchical syntactic structure to represent the complement-modifier distinction. This literature is reviewed briefly here. After a purely structural account is dispatched, we turn to the main goal of the present paper: to provide a full and explanatory analysis of the range of uses of the word *one*, including the acceptable uses in (2-3) and the infelicitous or unacceptable uses in (4):[3]

2. 1-ONE:
   a. that **ONE**[4]
   b. Chris found two shells and Pat only found **ONE.**
   c. a mere **ONE**
   d. "Should the patients take **ONE** of them?"
   e. "I did that for exactly **one year**."
   f. "I hear she [still] has had **a good one semester** as a senior."

3. A-ONE:
   a. **THAT one**
   b. Chris found a job and Pat found **one**, too
   c. a happy **one**
   d. "I felt a **twist** of pure misery, and a stronger **one** of anger."
   e. "Miriam's relationship with Donatello rehearses **the one that she maintained with the Model.**"
   f. "I think one old law is worth **two new ones**."

4. a. ??Fred found a job and Bill found one job, too.
   b. ??a happy one man
   c. ??She found a one.

Following Jackendoff (1977), Culicover & Jackendoff (2005), and Payne et al. (2013; henceforth PPSB), we argue that *one* can be either a cardinal number, 1-ONE, as in (2), OR an anaphoric pro-form referring to a member or members of a discourse-active set, A-ONE, as in (3). We differ from these authors in that we simultaneously argue for strong parallels between 1-ONE and A-ONE, both with regard to their grammatical behavior and with regard to their semantics. We

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Constructed examples and those retrieved from other sources appear without quotes; in the latter case, the source is indicated (e.g., Google).

[3] Anomalous uses are indicated by a preceding ??.

[4] In these and subsequent examples, small caps represent points of prosodic prominence.

demonstrate not only that almost all properties of 1-ONE follow from the fact that it is a cardinal number—as might be expected—but also that many properties of A-ONE follow from its relationship to 1-ONE. These properties include the following: (a) both appear in the same range of elliptical constructions (i.e., those in which there is no head noun following the form); (b) both evoke the class of individuated entities, and (c) both receive indefinite interpretations by default.

The key differences that we establish are these: (a) only 1-ONE can precede a head noun (e.g., *one boy*), and (b) when it occurs without a head noun, 1-ONE must receive a sentence accent, which results in its cardinality being foregrounded. By contrast, A-ONE (a) never occurs with a head noun (which is why it is considered an anaphoric expression) and (b) is non-focal and accordingly de-accented; its cardinality is backgrounded. A further difference is that A-ONE can appear in plural form (*ones*), in which case it denotes a set of entities.

We first demonstrate that 1-ONE does not consistently behave like any single grammatical category, whether that category be modifier, determiner or something else: while (2a-2f) are instances of 1-ONE, *one* in (2a) and (2c) acts like a noun (*that ONE, a mere ONE*; cf. *that thing*), *one* in (2b) acts like a noun phrase (*only found one*; cf. *only found that thing*), *one* in (2e) acts like an indefinite article (*exactly one year*; cf. *exactly a year*), *one* in (2f) acts like a modifier (*a good one semester*; cf. *a good final semester*) and *one* in (2d) acts like a (plural) noun or quantifier (*one of them*; cf. *tons of them, many of them*). Second, in a departure from prior literature, we argue that it is not possible to distinguish A-ONE from 1-ONE simply by appeal to grammatical-category differences, For example, we argue that the expression in (2a), *that ONE,* is an instance of 1-ONE while that in (3a), *THAT one*, is A-ONE; the only difference is focal status and, correspondingly, prosody. The treatment that we propose leverages the fact that both A-ONE and 1-ONE occur in a range of independently motivated grammatical constructions. This perspective is distinct from a bottom-up view in which lexical items, particularly 'heads,' uniquely determine the internal composition of the phrases in which they occur.

Finally, we observe that the distributional profile of both *one* lexemes includes a halo of more idiosyncratic noun phrase constructions, exemplified in (5). These are considered idiosyncratic here because the *one* form cannot be replaced by any other cardinal number.

5. a. "There aren't any tourists. **Not a one."**
   b. It's **one** helluva buzz. (A. Notaro, *Back after Break*, cited in OED)
   c. "**One** should not do everything **one**self."[5]
   d. Nell wasn't **a great one** for compliments. (1996, OED)
   e. "**I, for one,** am prepared for anything."
   f. **one another**
   g. "that's **a good one**."
   h. "Then grab lunch and **a cold one** at Moat Mountain Brewing Company."
   j. "Not a one of them was on my side."

[5] We include the generic use of *one* to refer to a person in this list (5c), although it is more widespread than many of the other cases on the list. See section 6.1.

Ultimately, we argue that a *family of constructions* is required to capture *one's* full range of combinatoric behaviors (see also e.g., Jackendoff 2002; Lakoff 1987; Goldberg 1995; Jackendoff & Goldberg 2004; Michaelis and Lambrecht 1996, Michaelis 2012). Each construction is a learned pairing of form and function, and each is motivated and related to other constructions in a way that minimizes stipulation. Implementations of the 'family' idea within construction-based approaches range from inheritance network diagrams (e.g., Goldberg 1995, Goldberg & Jackendoff 2004; Lambrecht and Michaelis 1996, Ruppenhofer and Michaelis 2001) to the hierarchy of construct types proposed within Sign-Based Construction Grammar (Sag 2012, Michaelis 2012). Here, in the interest of simplicity, we will represent interpretive and formal commonalities among anaphoric and cardinal nominal constructions as literal points of overlap. In our analysis, we adopt the same general constructionist perspective that Jackendoff has also advocated in recent years (e.g., Culicover & Jackendoff 2005).

The remainder of this paper is structured as follows. In the following section, we review evidence suggesting that a model of *one* anaphora based on syntactic replacement is not tenable. In section 3 we outline several basic functions of 1-ONE, while in section 4 we detail the relationship between 1-ONE and A-ONE, which we argue is a very close one. Departing from prior accounts, we also observe that neither 1-ONE and A-ONE can be consistently assigned to any familiar syntactic category. Section 5 clarifies some general issues that situate our proposal in a larger context. In section 6, we briefly examine the idiosyncratic constructions illustrated in (5), before offering concluding remarks in section 7.

2. A-one does not replace an N/

Many treatments of *one* have sought to establish that anaphoric *one* must refer to (or 'replace') a particular syntactic constituent, namely an N/, which is a phrase that is larger than a noun but smaller than a noun phrase. Because children seem able to interpret *one* early and without unambiguous input, this led to the claim that *one* anaphora demonstrates 'innate' knowledge of the structure of noun phrases (Baker 1978; Hornstein and Lightfoot 1981; Radford 1988). For example, Lidz, Waxman, and Freedman (2003), using looking time as a proxy for interpretation in a preferential-looking study, found that 18-month old infants looked significantly longer at a second yellow bottle than at a red bottle, after hearing (6):

6. "Look! A yellow bottle. Now look do you see another one?"

Thus infants seemed to prefer to interpret *another one* as *another yellow bottle*, not *another bottle*. Lidz et al. claimed that this preference validated the syntactic replacement model, in which *one* must replace an N/ (here, *yellow bottle*), and further claimed that it provided evidence of innate knowledge of the structure of noun phrases.

However, as Ray Jackendoff and others have observed (see Jackendoff 1977; Lakoff 1968; Payne et al. 2013; Culicover & Jackendoff 2005, Dale 2003),

anaphoric *one* need not in fact represent an **N**/ constituent; it can also represent a bare nominal (7-8), a multi-word nominal expression as distinct from its complement (9), a discontinuous phrase (10), a subpart of a compound word (11), or an entity in the non-linguistic context (12):

7. "Miriam's **relationship** with Donatello rehearses the **one** that she maintained with the Model." [*one* =relationship]
8. "I felt a **twist** of pure misery, and a stronger **one** of anger." [*one* = twist]
9. He brought me that **big, beautiful box** of chocolates and this **one** of pralines. [*one* = big, beautiful box]
10. that silly **picture of Robin** from Mary **that's on the top shelf** and this **artful one** from Susan [*one* = "picture of Robin that's on the top shelf)"] (Culicover & Jackendoff 2005:13)
11. They'll wait at the bus stop but you'll wait at the **one for the cable car**.[6] [*one* = stop]
12. [at a bakery] …ohh **give me that one** too. (Google) [no linguistic antecedent; referent of *one* recoverable from context]

In addition, as we will show in section 4, anaphoric *one* can serve syntactically as a full noun phrase (*She FOUND one*)—an affordance previously attributed only to cardinal-number *one*.

If *one* is not restricted to referring to **N**/, how are we to account for Lidz et al.'s (2003) finding that *another one* was interpreted as "another yellow bottle" in (6)? Following Tomasello (2004), and Akhtar, Callanan, Pullum and Scholtz (2004), we attribute this finding to two non-syntactic facts: the bottle was just described as yellow, and *another one* refers to an additional exemplar that is relevantly similar to an entity in the context . To see this, imagine that the Lidz et al. study had used the prompt (13) rather than (6):

13. Look! A bottle! It's yellow! Now do you see another one?

There is no constituent corresponding to *yellow bottle* in (13)—according to anyone's theory. Nonetheless, the most natural response to (13) is to look at another yellow bottle rather than at a red bottle. This is not a matter of syntactic constituency; it is instead a fact about the properties that language users assume to be relevant when they search the context for additional exemplars of an evoked type.[7]

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[6] The compound *bus stop* is generally assumed to be a noun, so that *one* in (11) appears to refer to a subpart of the noun ("stop") (see also Culicover & Jackendoff 2010).

[7] As Payne et al. (2013) make clear, Lidz et al.'s finding is not actually predicted by their syntactic analysis, since they assume the phrase-structure rule N'→N and thus the following structure: [[The]$_{D}$ [[yellow]$_{AP}$ **[[bottle]$_{N0}$]$_{N/}$**]$_{N/}$]$_{NP}$. This analysis entails that the bare noun *bottle* is both a N *and* a **N**/. Thus if the

Thus we assume, in line with Culicover & Jackendoff (2005), PPSB, and Dale (2003), that interpreting a *one* anaphor is not a matter of syntactic replacement but instead one of construal: *one*, whether determined or determinerless, refers to an entity that is ***relevantly similar*** to an entity that is recoverable from the linguistic (or non-linguistic) context. A user of *one* might intend to contrast members of a contextually salient set (e.g., *I have a better one*), to 'zoom in on' an exemplar (e.g., *The youngest one is in college now*) or to describe a repeated event (*Another one showed up*). All such uses represent contextual enrichments of the similarity relation evoked by *one* (see also Luperfoy 1991; Culicover & Jackendoff 2012).

Having shown that the interpretation of *one* provides no evidence for a particular hierarchical structure for nominal expressions (let alone innate syntactic knowledge), we now turn to our primary goal: to achieve a deeper understanding of the distribution and combinatorial properties of anaphoric *one.* We argue that these patterns are best discerned by observing anaphoric *one*'s relationship to the cardinal number *one* (1-ONE).

3. Cardinal number *one* (1-ONE)

In this section we detail the interpretive and grammatical properties of cardinal number *one*. The use of *one* as a cardinal number specifying a particular quantity, as in (14), is perhaps the most widely attested function of the word:

> 14."My first full day in this rain forest sweatfest results in exactly **one** hour of orangutan watching"

In this section we review the various semantic and grammatical properties of cardinal numbers. Although we will see that cardinal numbers cannot be neatly subsumed under any familiar grammatical category, whether determiner, quantifier, adjective or noun, we will also see that the special semantic and grammatical properties of cardinal numbers in general, and cardinal *one* in particular, explain many of anaphoric *one*'s semantic and grammatical properties.

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interpretive constraint is simply that *one* must refer to an $\mathbf{N}^{/}$, *one* in (6) should have been interpreted as referring to "bottle" just as readily as "yellow bottle".

3.1. **Cardinal numbers receive an indefinite interpretation by default**

Notice that without a preceding definite determiner, cardinal numbers, including 1-ONE have interpretations akin to those of indefinite articles like *some*; that is, they default to an indefinite (existential quantification) reading.[8] For example, (15) implies that the three men in question have not previously been discussed and are thus not uniquely identifiable.

15. She saw three men.

If the three men have already been introduced into the discourse, as in (16), a definite determiner is required (16a-b):

16. Context: I just met a few new people including three women and three men.
    a. ??Three men left early.
    b. The three men left early.

The default indefinite interpretation of cardinals is also demonstrated by the fact that nominal expressions containing cardinal quantifiers can appear post-verbally in the existential *there* construction, a classic if imperfect test for indefinite reference (Keenan 2003):

17. a. There are three women on the roof.
    (cf. ??There are the women on the roof.)

Because numerals act like indefinite articles unless preceded by a definite determiner, adding the indefinite article *a* to 1-ONE, would be redundant.[9] That is, since *one* and *a one* have identical semantics, *one* has come to preempt the formulation *a one* (cf. also PPSB):[10]

18. I'd like to have maybe two kids and adopt (??**a) one**.

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[8] A similar generalization was captured in formal terms by Jackendoff (1977: 130) by means of a rule of "Cardinal *a* deletion" (see also Perlmutter 1970).

[9] Note that *some*, normally an indefinite determiner, *can* be added to cardinal numbers, but it does not in this case have its normal indefinite interpretation. Instead, *some three thousand* means "roughly or approximately three thousand." *Some* has also been grammaticalized with *one* yielding *someone*, which necessarily refers to a person. The fact that *some* is not combined with cardinal numbers as an indefinite determiner provides additional support for the claim that adding the indefinite determiner, *a,* to 1-ONE results in redundancy. But see section 6.6 for the negative polarity case of <*not*> *a one*.

[10] Redundant expressions can be used emphatically (e.g., *one single solitary example*) and *a one* seemed to be used this way in the 1800s, as in (a), but this use has become obsolete and nowadays *a one* is simply preempted by *one*.
(a) 1839 Dickens *Nicholas Nickleby* ix. 82 Well... You *are* a one to keep company. (OED)

The *definite* determiner may freely precede 1-ONE, because, we suggest, it is not redundant, but instead serves to signal that the unique individual mentioned is already familiar, as in (19). Here again, the same is true for other cardinal numbers (20).

19.a. "Stu was **the one person** he'd always loved with his whole heart."
b. **"The one type of insurance** most people are likely to need is disability insurance."
c. "You could open a whole string of lemonade stands!" "Um. Let's start with **just the one**."

20.a "The Druze serve **the full three years** of army service."
b. "Mexican officials escorted **the three children** off the plane."
c. …just **those three**.

There exists one systematic exception to the restriction barring the indefinite article from combining with a cardinal number. The indefinite article *can* precede 1-ONE (21-23) and other cardinal numbers (24-26), when the cardinal is preceded by an adjectival modifier:[11]

21. "Butterfat content for sherbet might be **a mere one percent** or less." (*a one percent.)
22. "**a scant one week** after he died" (*a one week)
23. "There will be **a lucky one contestant** randomly brought back in a pre-match." (Google) (*a one contestant)

24. "TV star Kirstie Alley lost **a whopping 30 pounds**." (*a 30 pounds)
25. "The site has grown to **a staggering 60 million members**." (*a 60 million members)
26. "She guessed it would be **a good five hours** before the bus would return." (??a five hours)

We postulate that the indefinite determiner is required in this context because the cardinal number is no longer serving as a determiner, but rather as a modifier.

3.2. Semantic properties of 1-ONE

It is tautological that cardinal integers, including 1-ONE, can only modify nominal expressions that denote countable entities. This restriction does not arise from properties of real world referents but rather from the manner in which entities are

[11] Jackendoff (1977: 130) noted cases like (21)-(23) (*a beautiful two weeks; a dusty four miles*) and suggested that ONE did not allow this type of modification citing *(*a beautiful one day*).

apportioned. Notice that the following is acceptable, because beer typically comes in bottles, glasses or cans, which are countable:

27. I love craft beer but typically drink just ONE.

Some theorists have argued that cardinal numbers entail only a lower bound, so that *three* in the absence of contextual provisos means "at least three" (Horn 1989; Ansombre and Ducrot 1983). Examples like (28) seem to support this analysis, since it can be answered in the affirmative even if the speaker is older than 21.[12]

28. [Bartender:] Are you 21?

Consider, however (29a) and (29b). If *ten* actually meant "at least 10", (29a) would be acceptable. And if *five* means "at least 5," (29b) should also be acceptable. But as Koenig (1991) observes, both are decidedly odd:

29.a.This book costs ten dollars. ??In fact it costs forty dollars. (adapted from Koenig 1991: 144):
b. ??This book costs ten dollars so it costs five dollars.

Koenig further argues that if *three* means "at least three" it is unclear why *at least 3* is not actually redundant; nor is it clear how *at most three* means what it does. Thus, we follow Koenig (1991), and the intuitions of most native speakers, and assume that *three* means "3"—that is, that cardinal numbers have 'two sided' interpretations with both upper and lower bound fixed as a matter of linguistic convention.

In order to explain the apparent 'one sided' reading in (28), we note that in such cases, sufficiency is what is at stake; in such contexts, a lower-bound-only interpretation is allowed. That is, in (28), we understand *why* the bartender is asking about our age and understand that 21 is the lowest age at which it legal to drink. Crucially, contexts like (28) do not demonstrate that the cardinal number *21* means 'at least 21'; rather, no other ages are relevant to the inquiry. If, by contrast, a prospective date asks *Are you 35?*, it is *not* generally considered truthful to respond "yes," if you are actually 55. We conclude therefore that the upward entailing or 'interval' reading is a product of context.[13] Thus, for the remainder of

[12] The type of sentence that is traditionally used to support the idea that numbers refer to lower bounds are those like (a), which are judged to be acceptable in the literature.

(a) I have three children. In fact, I have four.

We submit that only trained linguists or philosophers would find this pair of sentences felicitous in a neutral context. We use what we find to be a more compelling example, (28).

[13] In fact, upward-compatible readings are not privileged, as 'at most' readings are sometimes warranted too. For example, as Jackendoff (personal communication) points out, *thirty two* means 'at most thirty two' in the context of a discussion about falling temperature:

this study we will assume that cardinal numbers are 'punctual' in the sense of Koenig 1991: they fix both upper and lower bound. Accordingly, we assume that 1-ONE means 'at least one and no more than one.'

3.3 1-ONE and other cardinal numbers do not behave consistently like quantifiers, nouns, adjectives or determiners

Our focus in this section is on the grammatical properties of 1-ONE. Jackendoff (1977) suggests that 1-ONE is a quantifier while other cardinal numbers are nouns. PPSB label 1-ONE a "determinative," a class that includes determiners like *the,* as well as quantifiers like *every*.[14] Is 1-ONE a quantifier, a determiner, a noun or something else? As discussed below, 1-ONE patterns with other cardinal numbers, which themselves have properties that distinguish them from nouns, determiners, adjectives and quantifiers. The facts are summarized in Table 1, using tagmemic formulas in which "__" indicates the position of the target word in various types of noun phrases.

[Insert Table 1 here]

Table 1: The noun phrase constructions in which 1-ONE, other cardinal numbers, quantifiers, collective nouns, determiners, and adjectives can and cannot occur. The * sign is equivalent to ?? and indicates unacceptability. The % sign indicates lexical variability within the class.

We are primarily interested in the constructions in which the quantified noun is unexpressed, since these are the cases that are most closely related to A-ONE. These are the first four constructions shown in Table 1. In such instances, the quantified entity is recoverable from context. These elliptical constructions are thus particularly relevant to the anaphoric use of *one,* which, because it does not combine with a nominal expression, does not overtly express the type of entity referred to. Therefore we briefly describe these constructions in 3.3.1-3.3.4 below. Additional constructional contexts for numerals are provided in (5-8) of Table 1,

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(a) A: It's freezing cold out there. Is it 32 (degrees) yet? B: Yes, in fact it's 28.

The availability of both upward- and downward-compatible readings for numbers is additional evidence that interval readings are contextually computed.

[14] After submitting this paper, we received a paper by Kayne (forthcoming) who suggests wholly unifying a- ONE and 1-ONE. Specifically, Kayne proposes treating *one* as a morphologically complex determiner: "w- + an", where "w-" is a (singular) classifier and *an* the indefinite article, and that *one* always occurs with a noun, which may be silent. To account for the fact that *one* may occur with other determiners, (*the one man; a cheerful one, one blue one*), Kayne suggests that two, possibly identical, determiners may co-occur.

simply to further elucidate the ways in which numerals differ from quantifiers, nouns, determiners and adjectives.

3.3.1. *Buy one, get one free* [___]$_{NP}$

Bare 1-ONE can function as a noun phrase, without a head noun as in (30a), as can other numerals (30b). On the other hand, quantifiers (30c) and nouns that refer to portions (30d) vary in acceptability in this context, while neither non-deictic determiners nor adjectives are acceptable (30e,f).

30. a."I'd like to have maybe two kids and adopt **one**."
(interpretation: 'one kid')
b. I'd like to have maybe two kids and adopt **three**.
c. I'd like to have maybe two kids and adopt **several/??every**
d. I'd like to have maybe six kids and adopt **half/??part.**
e. I'd like to have maybe two kids and adopt **??the / ??a/**
f. I'd like to have maybe two kids and adopt **??small**.

In the case of cardinal numbers other than *one*, the head noun may optionally be present without any noticeable change in meaning:

31. She bought three things ≈ She bought three.
32. I only want those three things. ≈ I only want those three.
33. They are just three members of the set. ≈ They are just three of the set.

We return to this fact below, where we argue that this semantic equivalence only holds for *one* when the bare *one* receives a sentence accent (as in 34). When unaccented, bare *one* in NP position is interpreted as A-ONE (35).

34. She bought one thing ≈ She bought ONE. (1- ONE)
35. She bought one thing ≈ She bought one. (A-ONE)

3.3.2. *ONE of the set* [___ of NP]$_{NP}$

1-ONE can occur in the partitive construction without a head noun as in (36a), as can other numerals (36b), quantifiers (36c), and nouns that designate portions (36d), but not non-determiners (36e) or adjectives (36f):

36. a. "one of the holy grails"
b. three of the holy grails
c. all of the men/some of the men
d. part of the problem/half of the solution
e. ?? the of the problem
f. ?? tall of the children

3.3.3. *The/that ONE;* [<def. det> (adj)* ___]

1-ONE and other cardinal numbers can be preceded by a definite or deictic determiner (37a-b), as can nouns that designate portions (37d) and some but not all

quantifiers (37c) and adjectives (37f). This is not possible for determiners, as shown by (37e):

37.a. that ONE
b. those three
c. those few/??some/%all/
d. those parts/pieces
e. ??the the
f. the poor/ ??the pinkish

3.3.4. *A mere* ONE: [*a* <adj> ___]

We discuss in more detail a final construction because it is especially relevant to our understanding of modification constraints on A-ONE. Cardinal numbers allow the entity being quantified to be unexpressed in combination with an indefinite article when and only when an attributive adjective is also present, as in (38a-d) Often, the adjective (e.g., *pitiful, respectable, healthy*) assesses the quantity named by the cardinal number relative to a contextually inferred scale (this pattern is referred to as Type 2 by Solt 2007):

38.a. "I was struck by Henry Hyde saying we've whittled it down to **a pitiful three**."
b. "The team's overall figure (67 percent) improves to **a respectable 74**."
c. "She has lowered her cholesterol to **a healthy 161**.**"**
d. "Lennon's album of oldies, 'Rock 'N' Roll,' sold **a dismal 32,000**."

This option is available for 1-ONE as well, as shown in (39a-c):

39.a. "the interplay between multiple weaker, though not equal, powers rather than by the deployment of **a singular one**"
b. "However, after seeing the ample size of the taco, **a mere one** was sufficient." (Google)
c. "Out of the almost two billion needed, **a scant one** was inside the protection of the Bridge. (Google)

Cardinal numbers other than *one* also allow an adjective to describe the unexpressed entity rather than its cardinality (Solt's Type 1 pattern). The attested examples in (40a-c) illustrate this possibility.

40. a. "Thousands entered, but only **a lucky two** were selected to fly out to California." (Google)
b. "**An unfortunate three** were in their path, though, and the companions had no time to go around them." (Google)
c. "Three embryos were implanted in the woman and **a remaining three** are frozen." (Google)

This latter possibility appears to be foreclosed for 1-ONE. If the adjective is intended to modify the unexpressed single entity in a way parallel to that in (40a-c), *one* tends to be interpreted as A-ONE as in examples (41-42):

41. "She was a good beachcomber, **a lucky one.**"

42. "He had jobs of all kinds and occasionally tried to improve himself with **a respectable one**."

Instead, there exist other ways to describe an entity by means of an evaluative adjective while indicating its cardinality as one:

43. one lucky one. ('1-ONE lucky A-ONE')
44. a single lucky one ("a single lucky A-ONE").

3.4. Summary of interpretive and grammatical properties of 1-ONE

We have seen that 1-ONE patterns with other cardinal numbers, which themselves have overlapping but distinct distributions with quantifiers, determiners, adjectives and nouns.[15] In particular, 1-ONE shares the following properties with other cardinal numbers:

1) Cardinal numbers yield an indefinite interpretation by default (they are indefinite except when following a definite or deictic determiner); accordingly, they cannot follow an indefinite determiner except when a modifier precedes the head nominal, as in, e.g., *a ??(lucky) one contestant*.
2) Cardinal numbers denote a particular quantity (or an interval in restricted contexts); the quantity denoted by 1-ONE is 'no more and no less than one'.
3) Cardinal numbers do not accept plural inflection, unless referring metonymically to sets of sets or labels: e.g., *You can buy them in threes; Ones on this side, twos on that side*.
4) Cardinal numbers can co-occur with or without a head noun in several constructions that differentiate them from determiners, quantifiers, adjectives, and nouns that denote portions (see Table 1).

We are now in a position to relate anaphoric *one* (A-ONE) to cardinal number *one* (1-ONE).

4. Relating A-ONE TO 1-ONE

In this section we demonstrate that A-ONE shares interpretive and grammatical properties with 1-ONE; our analysis requires that the boundary lines that have delimited the two in prior literature be narrowed. We argue that the 1-ONE/A-ONE

[15] See Barbiers (2007) for interesting discussion of the ordinal form for "first" in Germanic languages.

distinction arises from discourse context, and that discourse context can in turn be used to explain a salient aspect of A-ONE's combinatoric behavior—the strong tendency of A-ONE tokens to be modified (e.g., *a yellow one*).

Recall that cardinal numbers can optionally combine with a head noun without any noticeable change in meaning (section 3.3.6). This is also true of 1-one, but only 1-one requires a primary accent when the head noun is not present as in (45-47):

45. She bought **one hat.** ≈ She bought **ONE** (no more than one).

46.He's just **one member** of the class ≈ He's just **ONE of the class** (he may not represent the other members).

47. I only want **that one hat**. ≈ I only want **that ONE** (no more than one).

Put differently, the accented and unaccented versions of *one* are interpreted differently in constructions 6-8 of Table 1—all constructions in which the quantified entity is not expressed. This is clear from the contrast pairs in (48-51).

48.a. She bought ONE (no more than one).
b. She BOUGHT one (instead of not buying any).

49.a. He's just ONE of the class (he may not represent the other members).
b. He's just one of the CLASS (he's like the other members).

50. a. I only want that ONE (not more than one).
b. I only want THAT one (I don't want a different one).

51. a. ONE is MISSING (the other is still there).
b. Now one's MISSING (it was here before).

We postulate that **in contexts in which no quantified head noun is expressed, *one* is interpreted as 1-ONE if and only if it construed as a focal argument or a new or contrastive topic, and as such receives a sentence accent**.[16] When construed as 1-ONE, *one* foregrounds its cardinality. When construed as A-ONE, one does not evoke a numerical scale; in such cases we can say that its cardinality is

[16] The accent placement principle operative here is described by Lambrecht and Michaelis 1998) as the Discourse Function of Sentence Accents, which captures the fact that both focal arguments and new or contrastive topic referents receive prosodic prominence. (An example of a new or contrastive topic is found in 49a). The principle is stated thus: "A sentence accent indicates an instruction from the speaker to the hearer to **establish** a pragmatic relation between a denotatum and a proposition" (1998: 498).

backgrounded. As an instance of A-ONE, *one* is neither focal nor new or contrastive, and therefore does not receive a sentence accent.[17]

To see the relevance of discourse context to 1-ONE/A-ONE disambiguation, consider the following three context questions, and note that each determines whether or not *one* receives a sentence accent ("#" indicates pragmatic infelicity):

52.Q: *How many* books do you want?

a. I want ONE. (1-ONE)
b. #I WANT one. (A-ONE)
c. #I want a USED one. (A-ONE)

53.Q: *Which* book do you want?
[the use of singular *book* presupposes a singular cardinality.]

a. #I want ONE. (1-ONE)
b. #I WANT one. (A-ONE)
c. I want a USED one. (A-ONE)

54.*Q: Do you want a book or not?*
[singular *book* again presupposes a singular cardinality]

a. #YES, I want ONE. (1-ONE)
b. YES, I want one. (A-ONE)
c. YES, I want a USED one. (A-ONE)

The fact that A-ONE backgrounds its cardinality explains why it so commonly occurs with modifiers: while 1-ONE is used when what is relevant is *how many* (52), A-ONE is used when what is relevant is either *which one* (53) or *whether or not* (54). The context in (53), in which *one* denotes an individual in contrast to others belonging to the same general category, is the only context in which a property restriction (e.g., *a used one* as against *a new one*) is needed to satisfy the demands of informativeness ('say enough').

The present analysis differs from that of PPSB in treating (54b) as an instance of A-ONE. For PPSB, A-ONE is necessarily a count noun and 1-ONE is necessarily a determiner. On the PPSB account, we cannot identify a singular *one*

[17]While the deaccentuation of A-ONE seems to suggest that it denotes a topical entity like *it* does in the sentence *I found it*, indefinite pronouns (e.g., *something*) cannot generally be construed as having topical referents (??*As for something, it's broken*). There is, however, a discourse-pragmatic property that unites indefinite pronouns (which do not denote topical entities) and definite pronouns (which typically do): namely, no referent-recovery effort is expected, either because the referent's identity is already obvious or because it is irrelevant for present purposes (Lambrecht and Michaelis 1998: 515).

token as A-ONE unless it is preceded by a determiner. This view entails that tokens like that in (48b), *She BOUGHT one,* and (54b), *YES, I want one,* are not A-one but rather 1-ONE. It is equally clear that plural *one* is A-ONE; cardinal numbers do not take plural inflection outside of the metonymic uses (e.g., *Put ones on this side and twos on the other*). This combination of claims would seem to lead PPSB to the conclusion that the (a) examples in (52-55) below are instances of 1-ONE, while the attested plural (b) examples in (52-55) are instances of A-ONE.

55.a. The image was **one that we'll never forget**.
b. "The images are **ones that we'll never forget**."

56. a. Their assignment is **one I love**, like direct mail or white papers
b. "Their assignments are **ones I love**, like direct mail or white papers."

57.a. This is important, it's from Italy, but there is **one from here** as well.
b. "This is important, it's from Italy, but there are **ones from here** as well."

58.a. This scope is **one to watch**
b. "these two scopes are **ones to watch**."

However, the only detectable difference between the (a) and (b) sentences above is that *one* is plural in the (b) sentences and singular in the (a) sentences. Rather than stipulating that the (a) sentences illustrate 1-ONE and the (b) sentences A-ONE, as PPSB might, we treat the *one* tokens in both (a) and (b) sentences as instances of A-ONE. By assessing as instances of A-ONE all unaccented tokens of *one* that function as NPs—that is, that fill complement positions like direct object without benefit of a determiner—we account for the close semantic relationship between the singular and plural forms in (53-58): both denote instances of an already established type (e.g., *images* in (55b)).

By distinguishing accented and unaccented versions of *one* when there is no head noun, we also account for the variable interpretation of *one* in (48-51): the prosodically prominent tokens are 1-ONE and therefore convey the quantity "1"; the unaccented tokens are A-ONE, which serve as anaphoric pronouns without evoking a numerical scale.

One potential objection to the account we offer is the following: the sentences in (55a), (56a), (57a) and (58a) could not be instances of A-ONE because pronouns cannot in general be followed by modifiers (cf. ??*I want it that I love,* ??*The comedian embarrassed them in the front row*). This constraint seems to be captured by the treatment of pronouns as maximal phrasal categories (NPs). However, while demonstrative pronouns are commonly viewed as NPs akin to the personal pronouns *he*, *she*, *it*, etc., *that*, like *one* in, say, (55a), welcomes post-modifiers, both clausal and prepositional:

59.a. "a journey longer than **that from Boston to Washington**"
b. "I try to account for my life and change **that which I can**."

One could not plausibly claim that *that* in (59a-b) is the demonstrative determiner, as the nominal *journey* seems awkward following *that* in (59a) and there is no obvious candidate for nominal head following *that* in (59b). Thus, we assume that what is otherwise a determiner is a pronoun in (59a-b), just as what is otherwise a cardinal number is a pronoun in (55a), (56a), (57a) and (58a).

By acknowledging that A-ONE can fulfill the function of an NP, we can explain the difference in felicity between (60), on the one hand, and (61-62), on the other:

60. Mommy has a belly button and Shira has one too. (A-ONE)
61. #Mommy has a belly button and Shira has one belly button too. (1-ONE)
62. #Mommy has a belly button and Shira has ONE. (1-ONE)

Example (60) is quite natural, as is expected if the unaccented *one* is an instance of A-ONE that denotes an instance of the type 'belly button'. The examples (61) and (62) evoke 1-ONE, which is always used to convey cardinality; (61) and (62) both therefore imply that Shira may have had some other number of belly buttons—an implication that makes sense only in combination with very unusual background assumptions. The critical point here is that (60) would not have a coherent analysis if we were to assume, as PPSB and others do, that the *one* in *has one too* is an instance of 1-ONE. If it were an instance of 1-ONE, it would have a missing nominal complement. Since there is no nominal that could make sense in this position, that analysis cannot go through. This means that (60) illustrates A-ONE rather than a context of elision involving 1-ONE.

The examples in this section therefore support the view that *one,* with neither a head noun following or a determiner preceding, is A-ONE *when it is unaccented*. Like uncontroversial instances of A-ONE, this undetermined, unaccented *one* is necessarily anaphoric and is interpreted as expressing the existence of entity with no invocation of a numerical scale.

We are now in a position to see the strong parallels that exist between 1-ONE and A-ONE. The two are compared in Table 2.

	NP constructions	***Examples***	**1-ONE**	**A-ONE**
Quantified head noun (N) is present; patterns in #1-9 welcome all cardinal numbers (*n*), including *one*				
1	*n* <adjective>$^{+}$ N	*one book; (cf. three books)*	✓	NA
2	a <adjective>* *n* N	*a mere one member (cf. a whopping sixty members)*	✓	NA
3	N *n*	*chapter 1; (cf. day 60)*	✓	NA
4	*n* N of the N	*one book of the series (cf. three books of the series)*	✓	NA
5	<def.det> *n* <adj>$^{+}$ N	*that one book (cf. those three books)*	✓	NA
Quantified head noun is absent. 1-ONE must be accented.				

6	*n*	*buy* ONE/*one* *(cf. buy three)*	✓ ONE	✓ *one*
7	*n* of NP	ONE/*one of the set* *(cf. three of the set)*	✓ ONE	✓ *one*
8	<def. det> <adj>$^{+}$ *n*	*that* ONE/*one* *those ones* (*cf. those three*)	✓ ONE	✓ *one*
9	*a* <adjective>* *n*	*a scant one* *a happy one*	✓ ONE	✓ *one*

Table 2: Noun phrase constructions that occur with any cardinal number, *n*, (including 1-ONE) and with A-ONE. N=noun; *n* = cardinal number; <def. det.> = definite determiner; adj =optional adjective. $^{+}$ = 0 or more; * = 1 or more.

One essential distinction is that A-ONE is not compatible with the presence of a head noun, as it would not in this case be anaphoric. Beyond this difference, A-ONE's distribution overlaps with that of 1-ONE (see the noun phrase constructions in 6-9 in Table 2). That is, A-ONE and 1-ONE are differentiated by their accent patterns, but otherwise 1-ONE can appear wherever A-ONE can appear. Thus once the semantics and distribution of cardinal numbers are appreciated, many grammatical properties of both 1-ONE and A-ONE follow with minimal stipulation.

Our treatment of cardinal numbers (including 1-ONE), A-ONE, and the relationship between them, is represented in Figure 1. The distributional behavior of cardinal numbers is captured in the darker grey box as a list of tagmemic formulas. Each of these formulas represents a noun phrase construction, and each of these constructions can be combined with a *class of words* that includes cardinal numbers. In particular, cardinal numbers share certain distributional behaviors with determiners, adjectives and nouns, but they do not behave consistently like any of these grammatical categories. For example, determiners as well as cardinals can co-occur with count nouns to form noun phrases (*a boy, one boy*). Adjectives, as well as cardinals, can combine with determiners and count nouns to form noun phrases (*the handsome three boys; the handsome happy boys*). Certain nouns as well as cardinal numbers can appear in the partitive construction (*found part of the pizza; found three of the group*). We therefore suggest that cardinal numbers comprise a special grammatical category.

1-ONE is a *lexeme* or lemma: an uninflected word that pairs form and function.[18] Its form is /wΛn/, and it denotes the numeral 1. As a member of the grammatical category of cardinal numbers, 1-ONE shares its distributional

[18] Instead of *lexeme*, the term *construction* could be used on the assumption that word forms are a type of construction, insofar as both are learned pairings of form and function at varying levels of abstraction (e.g., Goldberg 2006). But we here follow common terminology in differentiating word forms (*lexemes*) from phrasal syntactic patterns (*constructions*). We intend *lexeme* to be interchangeable with *lemma*.

properties with other cardinal numbers. 1-ONE is only distinguished from other cardinal numbers in that it necessarily receives a sentence accent whenever the head noun is unexpressed; this is represented by capital letters in Figure 1 ("*n* = **ONE,** two, three…").

A-ONE is a distinct lexeme from 1-ONE because it has its own function, but critically, its distribution and aspects of its function are *inherited from* (i.e., shared with) 1-ONE. In particular, A-ONE occurs in the same set of constructions as 1-ONE and other cardinal numbers without a head noun. The arrow in Figure 1 represents a default inheritance relationship, which allows us to capture what is shared between A-ONE and 1-ONE, as well as what is distinct. While 1-ONE must be accented in these constructions, A-ONE cannot be. With regard to function, A-ONE, like the cardinal numbers, evokes an individuated (countable) entity, and is interpreted as indefinite by default. Unlike 1- ONE, A-ONE does not foreground its cardinality, and A-ONE can receive plural inflection, in which case it refers to an aggregate and not a singleton.

The inheritance relation that we postulate appears to recapitulate the historical development that yielded A-ONE from 1-ONE. We suggest that this development involved "pragmatic strengthening: (Traugott 1988): a split within a lexical category that occurs when a happenstance contextual implication of a word is taken to be a distinct sense of that word (as when the *post hoc, ergo propter hoc* mode of inference caused the temporal connective *since* to develop an additional, causal sense). 1-ONE/A-ONE differentiation appears to have begun through pragmatic strengthening during the Middle English period in contexts like (63). In this passage, from *The Canterbury Tales*, the Middle English original is shown with interlinear glosses and instances of *one* (*oon*) are shown in boldface:

> 63. *Bothe in* ***oon*** *armes, wroght ful richely,*
> both under one coat of arms, very richly wrought,
> *Of whiche two, Arcita highte that* ***oon****,*
> of which two, Arcite was-named that one.
> (Chaucer, *The Canterbury Tales* 1012-1013)

This passage exemplifies both major functions of one: 1-ONE (*oon armes*) in the first line and A-ONE (*that oon*) in the second. While *one* (*oon*) in the second instance implies a numerical upper bound (only one of the two was called Arcite), this implication is backgrounded here: the referent denoted by *that one* is non-focal and non-contrastive; the focus is instead the clause-initial argument *Arcita* ('of which two, ARCITE was-named that one'). Thus it would appear that the elliptical contexts, in which *one* appears without an accompanying nominal, were rich contexts for reanalysis of the numeral as a pronominal anaphor.[19]

[19] While *The Canterbury Tales* appears to contain no instances of plural *one*, plurality is frequently conveyed through the combination of *many* and *one* ('many a one'), as in *As it were blody dropes many oon* 'as if it were bloody drops, many a one' (2340) and *Yemen on foote, and communes many oon* 'Yeomen on foot and

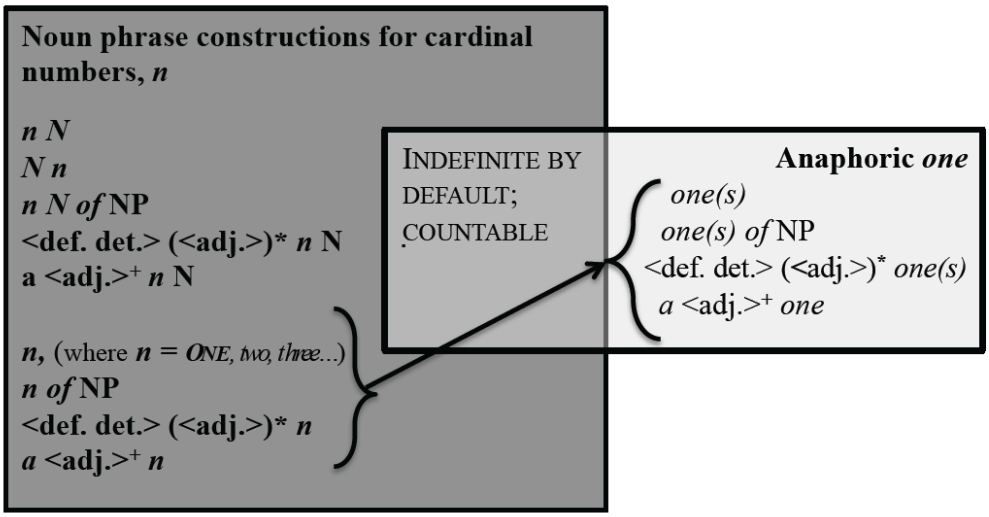

Figure 1: Tagmemic formulas representing the noun phrase constructions that combine with cardinal numbers and anaphoric *one*. N=noun; n = cardinal number; <def. det.> = definite determiner; (adj)=optional adjective. *=0 or more; + = 1 or more.

5. **Should all numerals including 1-ONE be treated as anaphors?**

One might argue that we do not take our proposal far enough. Once we recognize the close relationship between anaphoric and cardinal uses of *one*, we could choose to treat all cardinal numbers as anaphoric when they appear without mention of the quantified entity (e.g., *She bought three*).[20] These cases are conventionally considered elliptical, not anaphoric, based on the following alternation:

64. She bought three. ≈ She bought three things.
65. I only want those three. ≈ I only want those three things.
66. They are just three of the set. ≈ They are just three members of the set.

In such cases, the quantified entity is an optional sister to the cardinal number, in contrast to standard cases of anaphora, which involve the expression of either the anaphor *or* a referentially equivalent lexical expression, but not both.

---

foot soldiers, many a one' (2509). Such examples are suggestive of a grammaticized pronominal function (A-ONE).

[20] We are grateful to Ray Jackendoff (personal communication) for nudging us toward this treatment, which he recalls first suggesting to his grade-school teacher!

But we can alternatively view cardinal numbers as alternating with deictic *anaphors*, as in (67):

67. She bought those. ≈ She bought three.

We do not assume that anaphoric or elliptical expressions contain invisible or inaudible elements, but only that the required interpretation be recoverable on the basis of the linguistic or extralinguistic context (cf. also Culicover & Jackendoff 2005; 2012). In other words, the surface structure of a 'bare cardinal' like *three* in (67) is indistinguishable from that of an anaphoric pronoun.

If cardinal numbers appearing without mention of the quantified entity are considered anaphoric, the relationship between 1-ONE and A-ONE is correspondingly strengthened. If we adopt this perspective, then the difference between what we have thus far referred to, respectively, as A-ONE and 1-ONE is the fact that the cardinality is emphasized when *one* is accented, and is backgrounded when *one* is not accented.

68. a. I want ONE. (anaphor with cardinality emphasized)
b. I WANT one. (anaphor with cardinality deemphasized)

In both cases, the word *one* serves as a cue to retrieve an entity of the relevant type from the linguistic or non-linguistic context. The only uniquely anaphoric expression, if we follow this view, would be the plural anaphor, *ones,* which clearly does not convey the cardinality of "1" whether emphasized or deemphasized.

At the same time, it is clear that singular *one* is distinct from other cardinal numbers in allowing its cardinality to be deemphasized or backgrounded to the extent that it does. Other cardinal numbers, whether accented or not, cannot avoid conveying their cardinality. Note that *two* in the second clause of (69), unlike prosodically weak *one* as used in (55), repeated below as (70), necessarily evokes a cardinality, and thus the possibility that Shira may have had some number of ears other than *two:*

69. # Mommy has {(two), (a pair of), ()} ears and Shira has two too.
70. Mommy has a belly button and Shira has one too. (A-ONE)

To summarize, we do not here take a strong position on whether bare numerals are anaphoric or elliptical, since there is no obvious basis on which to choose between the two analyses. But we suggest that 1- ONE and A-ONE are two distinct but closely related lemmas, in that the existence of A-ONE does not simply follow from pragmatics; it is a conventional, learned aspect of English. We distinguish, A-ONE from 1-ONE, not based on the potential for anaphoric reference, but rather based on the fact that A-ONE deemphasizes the numerical scale to an extent not possible for cardinal numbers. We view the existence of the plural anaphor, *ones*, as the natural extension of this fact.

6. Idiomatic NP constructions involving ONE

For special issue of *Cognitive Science* in honor of Ray Jackendoff.

In accordance with a growing consensus (e.g., Bybee 2010; Culicover 1999; Goldberg 2006; Jackendoff 2002; Tomasello 2003), we view a language as presenting a continuum of idiomaticity, or generality, of expressions; a constructionist approach describes this continuum with an array of constructions of correspondingly graded generality. Thus, in addition to the general patterns outlined above, we also recognize a set of contextually restricted patterns involving *one*, as described in the following subsections. To see that these cases are somewhat distinct from 1-ONE cases described above, we note that no other cardinal number may be substituted for *one* in the examples (we thank Peter Culicover, p.c., for this observation).

6.1. *One* for all

In certain formal registers, *one* is used as third-person generic pronoun referring to a human:

71.. "**One** should not do everything **oneself**."

72.. "**One** must always look for other solutions."

This *one* is used to imply any arbitrarily chosen person, and since something that is true of any arbitrarily chosen member of a group is true of all members of the group, this use of *one* implies a generality that does not hold of anaphoric uses of *one*: it expresses universal rather than existential quantification.

6.2 a <adjective> *one* (referring to humans)

In certain cases in which no linguistic antecedent or contextual referent is present, *one* is typically understood to refer to a human, as in (73) and (74):

73. Nell wasn't **a great one** for compliments, she didn't like people. (K. Atkinson, *Behind the Scenes at the Museum* (1996), cited in the OED)
74. He's **a brave one**, dammit. That's for sure. He's a proper Herod. (W. Mysliwski, *Stone Upon Stone*)

Another case in which *one* is necessarily interpreted as referring to a human is mentioned in 6.3.

6.3. <NP>, for one, (referring to humans)

The parenthetical expression [<NP>, for one,] also restricts the interpretation of *one* to humans, or entities construed as animate, as in (75-77). The phrase indicates that a particular property holds of at least one person and implies that there are, or are likely to be, others to whom it also applies.

75. "And **I for one**, I've always dreamed of eating a hot pocket with the president and Batman."

76. "If CITES doesn't ease the ban at next year's gathering, **Zimbabwe for one says** it will start selling off its ivory and rhino horn stockpile."

77. Who could be against those things? Well, **Obama for one**, followed by House Speaker Nancy Pelosi, House member Barney Frank, and everyone else who favors what is question-beggingly called *reform*. (Google)

6.4 one another

The expression *one another* denotes an argument of a reciprocal predication. It is not restricted to animate entities, as the following attested example demonstrates:

78. "I'm happy to do this radio interview with you today, and, you know, I write books, and all these things are **connected** to **one another**."

Yet, corpus searches reveal that it is highly likely to occur with animates. Among the top 8 collocates of *one another* in COCA are *respect, communicate, interact, relate, compete, related,* and *contact*.

6.5. a good one (a joke); a cold one (a beer)

The phrase *a good one* can be used without a linguistic or extralinguistic antecedent to refer to some type of joke or trick.

79. Mr. LESKO: laughs That's **a good one**"

By contrast, the phrase *a cold one* is conventionally used to refer to a commercially distributed unit of beer (this usage is more prevalent in COCA than the use of *a cold one* to refer to a day's weather):

80. "But giving up a relaxing cocktail, glass of wine or **a cold one** with friends can be difficult for any dieter."

6.6 Particular one

The usage at issue here is an exception to our claim that accented cardinal *one* necessarily implicates a numerical upper bound. It is illustrated in (81):

81.. "**One doctor** said he receives just $1,700 in fees for prenatal care and delivery."

While *one* in (84) would receive prosodic prominence, the sentence is not construed as implicating that one and only one doctor made the comment in question. Instead, *one doctor* is construed as meaning 'a particular doctor, as distinct from other doctors'. In this function, *one* is highly compatible with indefinite *this* (*This one doctor said*…). The 'particular one' usage is closely related to a correlative usage in which a predication takes both a *one* NP and an (*an)other* NP as arguments:

82. "They want their leaders to be prosperous. **One hand** washes **the other**."
83. "Which is why you can't record two channels, or watch **one** while recording **another**, anymore." (Google)

For special issue of *Cognitive Science* in honor of Ray Jackendoff.

While the 'particular one' usage pattern is idiosyncratic, it represents a contrastive function similar to that of cardinal *one*: the latter contrasts the denoted cardinality with any higher one ('one and no more than one') while the former contrasts the denoted exemplar with others of the same type.

6.7. a one (as negative polarity item)

There is a slightly archaic phrase, *a one*, which behaves as a negative polarity item. Specifically, *a one* can only occur in the context of a negative, which lends it the interpretation of "a single one."[21]

84. "There aren't any tourists. **Not a one."**
85. "there's **hardly a one** of them who didn't get badly into drugs or cults or booze."
86. "**Nary a one**, Madam President, other than a hot toddy."

7. Conclusion: A network of related cases

We have noted a number of regularities derivable from properties that 1-ONE shares with other cardinal numbers and that A-ONE shares with 1-ONE. These common properties additionally allow us to relate the idiosyncratic constructions described in section 6 to the two more general patterns that license, respectively, A-ONE and 1-ONE. The full network of constructions we propose is diagrammed in Figure 2.

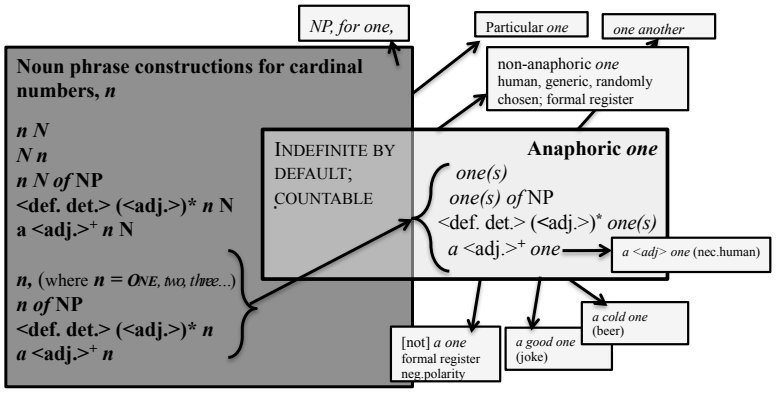

Figure 2: Family of NP constructions involving cardinal numbers and *one.* N = noun; n = cardinal number; <def. det.> = definite determiner; (adj)=optional adjective.

This present analysis does not conform to certain widespread assumptions about syntax. We not only abandon the view of *one* as a form of syntactic replacement (Jackendoff 1977; PPSB; Culicover & Jackendoff 2005), but also

[21] The OED notes a distinct, archaic idiomatic interpretation of *a one*: "a person who is remarkable, outrageous, impudent, or otherwise distinctive; esp. in ***you are a one***".

describe syntactic differences among uses of *one* without relying on grammatical category differences. While syntacticians normally think of a word as 'having' a grammatical category that determines its contexts of occurrence, we have seen that both 1-ONE and A-ONE fill constructional slots that are otherwise reserved for determiners, quantifiers, adjectives or nouns (depending on the construction). In this way, the present account is radically construction-based: combinatoric behaviors are attributed to constructional affordances rather than head-driven selection.

Both the interpretive and combinatoric potentials of A-ONE are motivated by 1- ONE. In particular, the fact that A-ONE refers only to countable entities, and the fact that it is interpreted indefinitely are attributable to properties of cardinal integers, including 1-ONE. Moreover, we have argued that the range of constructions that welcome A-ONE is identical to those in which 1-ONE occurs (when the nominal is elided). The two are distinguished in terms of information structure, with only 1-ONE potentially construed as a focal argument or discourse-new topic; correspondingly 1-ONE receives a primary accent when it appears without a head noun, while A-ONE does not. The discourse-pragmatic contexts that invite the A-ONE reading lend themselves naturally to modification due to general Gricean constraints.

A network of constructions—including several highly contextually restricted idiosyncratic constructions—is required to describe the full range of conditions governing the meaning and use of *one*. While *one* may not, in the end, illuminate the structure of the noun phrase, it does offer a window into the nature of our knowledge of language.

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Table 1: Cardinal numbers do not have combinatoric properties that are consistently like those of quantifiers, nouns, determiners, or adjectives.