

Countability in the history of English

A first look

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The Ways English Has Developed

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Introduction

Countability:

The way we do(n't) refer to countable things

One **table**, four **chairs**, five #(pieces of) furniture

a.k.a. **count**—**mass** distinction

Research questions:

To what extent has countability in English developed over time?

What can we learn from previous research and the OED?

Main claim

Countability has changed a bit, but probably not very much since Old English.

Outline

Background

Countability/the **count**—**mass** distinction in Present Day English (PDE)

Previous research

Few and rarely used classifiers in Old English (Toyota 2009)

Continuous development of *many* and *much* (Marckwardt 2019)

Countability via the indefinite article in Middle and Modern English grammars (Tichy 2021)

Current research

The OED as a corpus (Allan 2011)

Countability environments in the OED

Conclusion

Countability has changed a bit, but probably not very much since Old English.

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Background

Ten properties of the **count**—**mass** distinction in English (Chierchia 1998).

1. Availability of plural morphology
dogs; #muds
2. Distribution of numeral determiners
one chair; #one dirt
3. Obligatoriness of classifier and measure phrases for combining with numerals. #one item of chair; one pile of dirt
4. Some determiners occur only with count nouns
many coins; #many steel(s)
5. Some determiners occur only with mass nouns
#how much Euro; how much gold
6. Some determiners occur only with plurals and mass nouns
all children; all denim
7. Some determiners are unrestricted (neutral)
my coin(s); my gold
8. Independence of the distinction from the structure of matter
shoes; footwear
9. A (predominantly) count noun can be made mass
There is rabbit in the stew.
10. A (predominantly) mass noun can be made count
The nurse drew three bloods.

Background

Count nouns and **mass** nouns

dog	mud
chair	sand
coin	dirt
Euro	rice
child	offspring
shoe	footwear
rabbit	wildlife
nurse	staff
piano	equipment
bottle	glass
computer	merchandise
book	packaging
spider	fauna
tool	mail
plate	dishware
fork	cutlery
ear	clothing
phone	electricity
cup	blood

Background

Countability environments

The determiners, quantifiers, etc. that distinguish **count** nouns and **mass** nouns

Categories by Allan (1980)

Environment	Subtype
Plural morphology	regular <i>-(e)s</i>) irregular (zero, vowel change, <i>-en</i> , <i>-ren</i> , <i>-i</i> , <i>-a</i> , <i>-ae</i> , <i>-ices</i> , <i>-im</i> , <i>-aux</i>)
Unit Denumerators	<i>a(n)</i> <i>one</i>
Fuzzy Denumerators	round numbers (<i>100</i> , <i>1000</i> , ...) approximative numbers (<i>about 50</i> , <i>around 80</i> , ...) comparative values (<i>more than 10</i> , <i>over 100</i> , ...) plural numerals <i>dozens</i> , <i>hundreds</i> , ...)
Other Denumerators	imprecise quantifiers (<i>few</i> , <i>many</i> , <i>several</i>) numbers (two, three, ...) digits (2, 3, ...)
Antecedent	precise quantifiers (<i>both</i> , <i>every</i> , <i>each</i> , <i>these</i> , <i>those</i>) <i>one</i> <i>they</i> , <i>them</i> , <i>those</i> , <i>these</i> , <i>both</i> , <i>each</i> (<i>other</i>)
Mass Environments	<i>all+N</i> imprecise quantifiers (<i>much</i> , <i>little</i>)

Background

Countability classes

Rather than just **count** and **mass**, Present Day English has several classes of nouns

This depends on which countability environments they occur in.

Acceptability judgments: (Allan 1980)

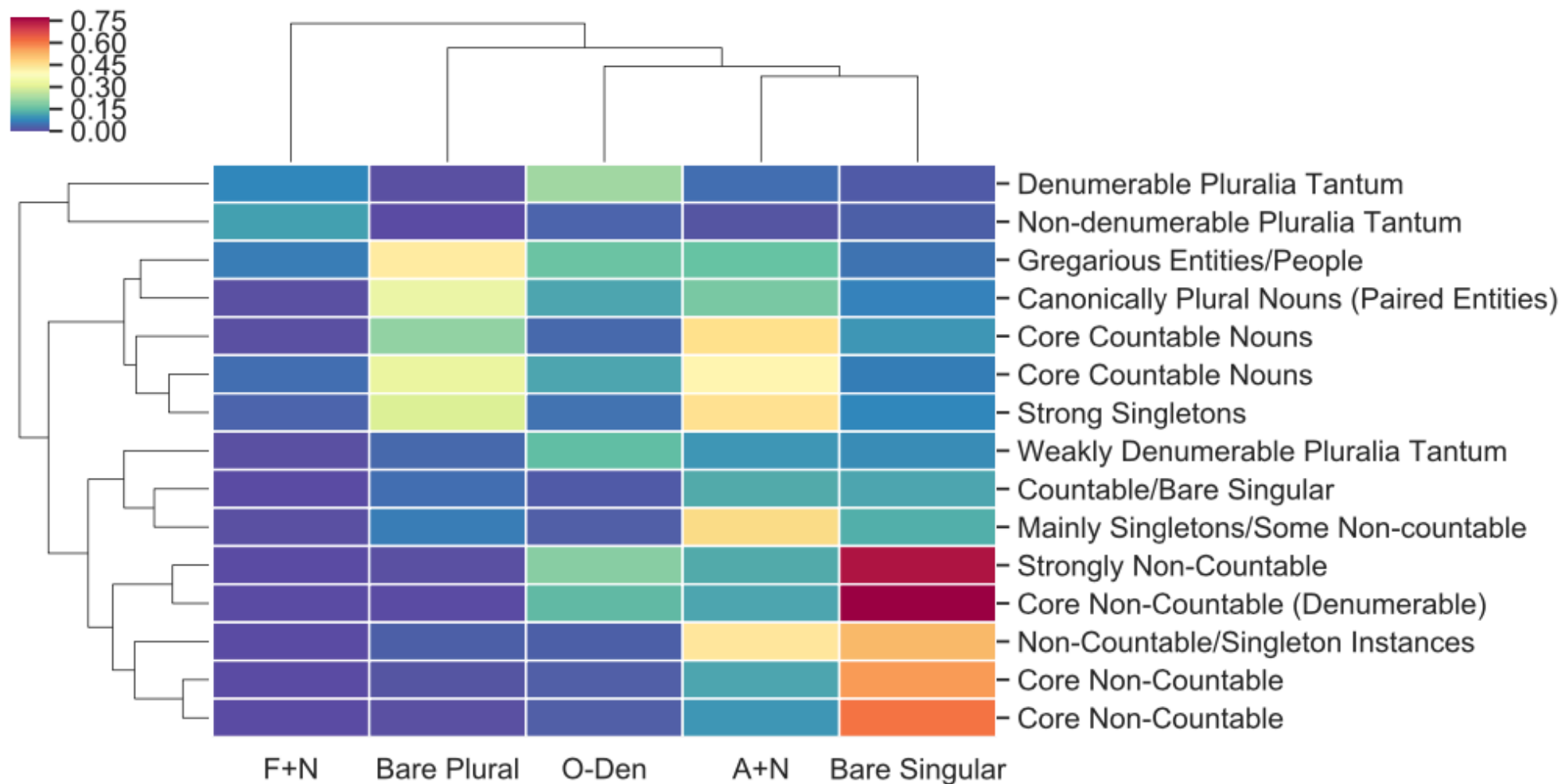
Morphosyntax	<i>car</i>	<i>oak</i>	<i>cattle</i>	<i>Himalayas</i>	<i>scissors</i>	<i>mankind</i>	<i>admiration</i>	<i>equipment</i>
N ... <i>them</i>	+	+	+	+	+	+		
<i>a(n)</i> N	+	+		+		+	+	
<i>all</i> N.SG	+		+	+	+			
<i>about 50</i> N.PL	+	+	+		?			
<i>many</i> N	+	+						

- (1) Cars are not a great transportation solution because they cost a lot.
- (2) Sarah bought John a car.
- (3) #All car should be cleaned today.
- (4) About 50 cars were caught in the traffic jam.
- (5) Many cars are not properly maintained.

Background

Countability classes.

Corpus study of the Corpus of Contemporary American English (COCA) (Grimm & Wahling 2021)



Heatmap of noun clusters' distributional tendencies across countability environments (Grimm & Wahlang 2021)

Background

Summary

Countability in PDE is a complex phenomenon with many properties.

Quantifiers, determiners, etc. can be grouped into kinds of countability environments that distinguish either a **countable**, or **not countable** property of nouns

Nouns can be categorized into one of several (2, 8, 16, ...) classes based on the countability environments in which they are used.

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Countability via the indefinite article in Middle and Modern English grammars (Tichy 2021)

Current research

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Previous research

Few and rarely used classifiers in Old English (Toyota 2009)

Evidence: counting constructions in the Helsinki corpus

- (6) Nim anne sester wines &
take.IMP.SG. one.ACC.SG sester.ACC.SG wine.GEN.SG and
twegen wæteres
two.ACC.SG water.GEN.SG
'Take one sester of wine and two sesters of water.' (*Quadrupedibus* 151)

Before 1350	1350-1500	1500-1700	1700-1900	Total
1 (5.0%)	7 (35.0%)	9 (45.0%)	3 (15.0%)	20 (100%)
sester;	an ear of; a grain of; a loaf of; a piece of; a sheet of; a slice of; a strip of;	a block of; a blade of; a bunch of; a cake of; a cut of; a lot of; a speck of; a stick of; a suit of;	an article of; a bit of; a drop of;	

The appearance of classifiers in the Helsinki corpus (Toyota 2009)

Claim: Old English nouns were treated more uniformly;
not really distinguished as **count** or **mass** (Toyota 2009)

Previous research

Continuous development of *many* and *much* (Marckwardt 2019)

Many, developed from *monig*, which generally occurred with plural nouns

Much, developed from *mycel*, which generally occurred with singular nouns

Evidence: a number of OE texts

Anglo-Saxon Chronicle, Ohtere and Wulfstan, Beowulf, Maldon, Trinity Holmes, Generydes, Life of St. Editha, Seven Sages, Alfred's Orosius, Bede, Alfred, Boethius, Aelfric, Homily on St.-Gregor

(7) Ðā wæs on morgen mīne gefræge
Then was on morning as.I.have.heard.said

ymb þā gif healle gūðrinc monig. (Beowulf, 837-38)
around the gift hall warrior many

(8) næfre swā mango gesceafta, ond swā micla, ond swa fægra
never so much dispensation, and so many, and so fairly

Claim: The PDE distribution of *many* and *much* seems to reflect a continuation and development of OE uses

Previous research

Countability via the indefinite article in Middle and Modern English grammars (Tichy 2021)

Early grammars of English seem to distinguish **count** and **mass** nouns

Count nouns get glosses with the indefinite article—e.g. *anus*, *a narce*—**mass** nouns don't.

Evidence: 50 prominent dictionaries and grammars from 1400-2000

e.g. The Treatise of Walter de Biblesworth, French-English word-list *Nominale Sive Verbale*, *Metrical Vocabulary* and *Names of the Parts of the Human Body*, *A Latin and English Vocabulary*, etc.

Eventually, more attention and environments distinguish count and mass nouns are noted

Claim: The PDE **count**—**mass** distinction developed, in part, due to the development and distribution of the indefinite article

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The OED as a corpus (Allan 2011)

“the evolving OED still offers unparalleled access to a large amount of information about word histories, and alongside other data sources it presents an opportunity to interrogate current theories about semantic motivation and patterns of change” (Allan 2011, p. 37)

It is important to “to pay close and critical attention to the chronology of semantic change presented in OED entries, and to view this chronology as a starting point for further research” (Allan 2011, p. 37)

Current research

Methodology

Examine OED entries for:

1) Entry of a countability environment into English

less came from Germanic

2) Initial use of present sense and other relevant senses

less as a quantifier for amount since Germanic

3) Consistency of count/mass bias of environments

less as a quantifier for *folk* ('folk', OE); people, nation, army, etc.

Recall

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Mass Environments	<i>all+N</i> imprecise quantifiers (<i>much</i> , <i>little</i>)

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Other Denumerators	numbers (<i>two, three, ...</i>) digits (<i>2, 3, ...</i>) precise quantifiers (<i>both, every, each, these, those</i>)
Antecedent	<i>one</i> <i>they, them, those, these, both, each (other)</i>
Mass Environments	<i>all+N</i> <i>imprecise quantifiers (<i>much, little</i>)</i>

Current research

1) Entrance of countability environments into English

The determiners, quantifiers, etc. that distinguish **count** nouns and **mass** nouns

Environment	Form			
	Germanic	OE	ME	ModE
Unit Denumerators				
<i>a(n)</i>		<i>an</i>	<i>a(n)</i>	<i>a(n)</i>
Fuzzy Denumerators				
<i>few(er)</i>	*	<i>feoo</i>	<i>few</i>	<i>few</i>
<i>whon</i> ('few')		<i>hwon</i>	<i>whon</i>	
<i>many</i>	*	<i>mænig</i>	<i>many</i>	<i>many</i>
<i>several</i>				<i>severall</i>
Other Denumerators				
<i>bo</i> ('both')	* <i>bo-</i>	<i>bo</i>		
<i>both</i>			<i>both</i>	<i>both</i>
<i>each</i>	*	<i>aelc</i>	<i>eah</i>	<i>each</i>
<i>every</i>		<i>æfric</i>	<i>every</i>	<i>every</i>
<i>these</i>	*	<i>ðæs</i>	<i>these</i>	<i>these</i>
<i>those</i>		<i>ðás</i>	<i>those</i>	<i>those</i>
<i>tho/thae</i> (Northern/Scots)		<i>ðá</i>	<i>tho</i>	<i>thae</i>
Mass Environments				
<i>mickle</i> ('much', Northern)	*	<i>mycel</i>	<i>micel</i>	<i>mickle</i>
<i>much</i>			<i>much</i>	<i>much</i>
<i>little</i>	*	<i>litel</i>	<i>little</i>	<i>little</i>
<i>less</i>	*	<i>laessa</i>	<i>less</i>	<i>less</i>

Current research

2) Initial use of present sense and other relevant senses

Few: “not many; amounting to a small number”, early Old English

As both determiner and predicate

Several definitions related to number

Used with mass nouns, particularly *broth*, *gruel*, and *porridge*

Whon: “few, a few”

Many: “designating a large indefinite number”

As predicate, pronoun, and noun

Early uses included singular nouns (now obsolete)

Severall: A: “existing apart, separate”, incl. as a vague numeral (chief current sense)

B: “Pertaining to an individual person or thing”

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A bit of change

Classifiers were few and rarely used in Old English (Toyota 2009)

Several did not enter English until Modern English

But not very much

Many and *much* show consistent development since Old English (Marckwardt 2019)

Countability developed with the *indefinite article* (Tichy 2021) [~Old English]

Most environments have existed in similar form since (before) English

Conclusion

Future work

Continue review of words and senses

Bo(th), each, every, these, those, tho/thae, mickle, much, little

Consistency of **count**/**mass** bias of environments

To what extent do **count**/**mass** nouns occur in each environment?

Thank you!

Any questions?

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