

## Of of from ‘from; Rethinking the partitive cycle

Kurt Erbach\*

**Abstract.** This paper argues that, in the history of English, *of* was reanalyzed from having a ‘path-from-source’ meaning to a ‘part-of’ meaning. This departs from previous claims that the change was a matter of grammaticalization. While some have characterized reanalysis (i.e. a change in structure without a change in overt realization) and grammaticalization (i.e. when a form becomes more grammatical) as at least potentially overlapping in nature, this paper follows definitions that separate the two as receiver driven and sender driven phenomena respectively. In this light, and with other characteristics of the two phenomena in mind, the change in the realization of partitive expressions in English is cast in a new light and argued to account for the change seen in the history of English.

**Keywords.** diachrony; English; grammaticalization; reanalysis; partitive; genitive

**1. Introduction.** A key change in the history of English is the general loss of case inflection, which is intertwined with many other changes, including the way that partitives are expressed in English. A partitive expression, in the strict sense, denotes two entities and the fact that one is a part of the other. In Old English, partitives were most commonly formed with nominal juxtaposition and genitive case on the nominal denoting the whole as in (1) where ‘one’ is the part and ‘little ones’ is the whole. (In this paper, “part” and “whole” will be used to refer to the two nominals, cf. “container” and “substance” or “upper” and “lower” elsewhere.) In Present Day English partitives are formed with the preposition *of* between the two nominals, as in (2) where *a lot* is the part and *these guys* is the whole.

(1) Old English (CH 34, 153 in Koike 2006:52)

ne forseon ænne þyssera lytlinga  
NEG neglect one.M.ACC DEM.PL.GEN little.one.PL.GEN  
‘do not neglect one of these little ones’

(2) Present Day English (COCA, Davies 2009)

A lot of these guys have played for three years

(3) Old English (Beowulf 11570)

efne swa of hefene  
behold such from heavens  
‘behold such from the heavens’

In Old English, *of* had a meaning like that of present day *from* and was used to denote an object’s path from its source as in (3), where ‘such’ is on a path from ‘heaven’. Previous analyses have characterized the change in the meaning of *of* as both grammaticalization (i.e. becoming more grammatical) and as reanalysis (i.e. a change in structure without a change in surface form). More specifically *of*’s older, ‘path-from-source’ meaning developed into the more grammatical

\* Thanks to Remus Gergel for the opportunity to work on this project as part of my Habilitation at Universität des Saarlandes. Author: Kurt Erbach, Goethe Universität–Frankfurt, Universität des Saarlandes ([erbach@hhu.de](mailto:erbach@hhu.de))

and newer ‘part-of’ meaning without any change in form or grammatical category (Koptjevskaja-Tamm 2001; Seržant 2021).

Unlike previous accounts of the diachrony of English partitives, which focus on English genitives in general or cross-linguistic patterns in partitives, the focus of the present paper is *of*’s change in meaning in the context of grammaticalization and reanalysis theory. While many definitions of grammaticalization and reanalysis have been proposed (Bisang 2017), I will focus on Detges & Waltereit (2002), who define grammaticalization as a phenomenon that is sender initiated, with a strict, one-way directionality, while reanalysis is receiver initiated with unspecific directionality. These definitions situate grammaticalization and reanalysis as distinct phenomena, as opposed to one being at least overlapping to some degree (see, e.g. Eckardt 2006:22).

Following Detges & Waltereit’s (2002) definitions of grammaticalization and reanalysis, I will argue that *of*’s change in meaning is an instance of reanalysis—i.e. that the ‘part-of’ meaning is not a grammaticization of the ‘path-from-source’ meaning, rather the ‘part-of’ meaning is essentially a replacement of the ‘path-from-source’. Moreover, this analysis predicts both the variation that we see in partitive forms across Germanic languages and the pragmatic inferences that occur with partitives.

This paper is structured as follows. In Section 2 I will briefly review work on the various aforementioned definitions of grammaticalization and reanalysis. In section 3, I will concisely cover the relevant differences between partitives in Old English and Present Day English. In Section 4, I will analyze the change in *of* as reanalysis in the sense of Detges & Waltereit (2002). In Section 5 and I will discuss the predictions that follow from this analysis and see that they are born out in Germanic languages. In Section 6, I conclude that the change in *of* is best characterized as reanalysis rather than grammaticalization.

**2. Background.** There are many definitions (and reviews thereof) of grammaticalization and reanalysis (see, e.g. Bisang 2017; Narrog & Heine 2011; Eckardt 2006; Campbell & Janda 2000: i.a.). At their most basic, the terms might be defined as follows: grammaticalization is the phenomenon whereby some linguistic element becomes more grammatical (Campbell & Janda 2000:114), and reanalysis is “change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation” (Langacker 1977:58). Exemplifying both, Simpson & Wu (2002) characterize the change in meaning of *pas* (‘step’, French) to a marker of negation in colloquial French as grammaticalization—from lexical, ‘step’ denoting to grammatical, NEG denoting—and reanalysis—from a VP element to NegP element. While other definitions have been proposed, these might be the most common.

Detges & Waltereit (2002) contextualize the processes of grammaticalization and reanalysis within the behavior of interlocutors. Grammaticalization is characterized as a phenomenon in which senders initially use linguistic forms creatively to adhere to conversational maxims and the later routinized use of these forms result in the use becoming part of the grammar. Going back to the grammaticalization of *pas* (‘step’, French), Detges & Waltereit (2002) argue that ‘not walk a step’ was used as a more informative means of expressing ‘not walk at all’, the latter being the meaning taken up by receivers, and routinized use led to the loss of the ‘at all’ meaning, hence becoming more grammatical. On the other hand, reanalysis is characterized as phenomenon in which receivers are simply doing what they can to understand what speakers say. This is exemplified by receivers taking up the novel use of *pas* and eventually assigning it a new grammatical category. In this way, grammaticalization and reanalysis are seen as distinct phenomena that

are nevertheless intertwined.

Apart from the definitions of grammaticalization and reanalysis, there is a further characteristic attributed to reanalysis that is worth mentioning. Eckardt (2006) and others argue that pragmatic inferences that arise with forms that are eventually conventionalized as part of the meaning of the form when it undergoes reanalysis, at least, if the inferences occur frequently enough. For example, the German nominal modifier *lauter* ('only') meant 'pure' around 1500. An analysis of 'pure' might be formalized such that a certain predicate, P, applies to all parts of an entity—i.e. the entity is pure P. Accompanying such a denotation of 'pure' may be the inference that the entity characterized as 'pure' does not contain any pollutants—i.e. did not contain anything else. As the modifier developed, this inference became a conventionalized part of the meaning of *lauter* ('only'). For more on this analysis of *lauter* ('only', German) see Eckardt (2006:202).

Turning briefly to partitives, there is considerable debate over the semantic contribution of *of* in partitive expressions. Some argue that partitive *of* denotes a part-of relation,  $\leq$ , as opposed to a proper-part relation,  $<$ , (see e.g. Baker 1978; Hoeksema 1983; Ionin et al. 2006; Marty 2019:among others). The part-of relation is defined such that a whole can be considered a part of itself—i.e. the part can be equal to the whole—while the proper-part relation is defined such that this allowance is excluded—i.e. the part cannot be equal to the whole. An argument for the proper-part relation includes the intuition that (4a) is ungrammatical and the assumption that this is due to the part, *two*, not being a proper part of the whole, *her eyes*. On the other hand, 4b denotes a part that is equal to its whole, which presents a challenge to those that assume partitive *of* denotes the proper-part relation.

- (4) a. #Leda rinsed two of her eyes.
- b. Leda spent the thirty minutes of her break napping.

Marty (2019) argues that proper-part interpretations are presupposed, not-at-issue content rather than the at-issue contribution of *of*. For example, if the proper-part interpretation in (5a) was at-issue content, then it could be directly negated as in (5c), however this is considered to be marked as a follow-up to (5a). As not-at-issue content, an acceptable way to negate the proper-part presupposition in a follow-up to (5a) is that in (5b).

- (5) a. Sue talked to three of John's lawyers. (Marty 2019:150)
- b. Hey, wait a minute! I didn't know John had more than three lawyers.
- c. #No, I disagree! John only has three lawyers.

With these and further examples, Marty (2019) characterizes the proper-part interpretations of English partitives as the result of presupposition rather than the propositional content of *of*. Building on Eckardt (2006 i.a.) and Marty (2019), the proper-part presupposition might be considered a conventionalized inference that accompanies partitive *of* as a result of this form having undergone reanalysis.

In summary, grammaticalization and reanalysis can be conceptualized as follows: grammaticalization is a sender driven process whereby a more lexical form is used in a more grammatical way that is meant to be more informative than existing uses; reanalysis is a receiver driven process whereby the interpretation of a particular form is accompanied with inferences that become conventionalized. The next section, 3, will review data on partitives in the history of English,

which will then be discussed in the context of this conceptualization of grammaticalization and reanalysis in Section 4.

**3. Data.** This section reviews how partitives were formed from Old to Present Day English. In brief, Old English partitives were formed with the whole inflected with genitive case marking. As case was lost, *of* shifted from denoting a ‘path-from-source’ relation to a ‘part-of’ relation, and it was increasingly used in partitive expressions between the part and the whole.

In addition to the Old English partitive in (1), further examples are given in (6)–(8).

- (6) Old English (CHom\_II, 35:267.234.6022 in Allen 2008:85)

Gif ure ænigum sum ungelimp becume  
If 1PL:GEN any:DAT.PL some mishap comes  
‘If a mishap befalls any of us

- (7) Old English (CHom\_I, 28:412.52.5492 in Allen 2008:88)

se mæsta dæl þæra arleasra  
the greatest part the:GEN.PL impious:GEN.PL  
‘the greatest part of the impious

- (8) Old English (CHom\_II, 10:84.108.1689 in Allen 2008:88)

and him of anim þæs fises dæl ðe he gefangen hæfð  
and him of take the:GEN.SG fish:GEN.SG part that he caught has  
‘and take from him a part of the fish which he has caught

In (6), the genitive-marked whole occurs before the part, which is uncommon for partitives where the genitive-marked whole typically occurs after the part (Allen 2008:115). This stands in contrast to other uses of the genitive—e.g. possessive—which typically occurred before the head noun Old English (Allen 2008:87, 114). In (7), the part is literally the Old English word meaning ‘part’ occurring in the now standard position before the whole, though this contrasts with (8), which shows that this too could occur after the genitive. (8) also shows the earlier use of *of* in English, namely expressing the ‘path-from-source’ relation.

While partitive genitives were less frequent than other genitives, and while non-partitive genitives typically occurred before the head noun, partitive genitives survived longer in English than other partitives (Allen 2008:159). Intertwined with this loss are some of the first examples of *of* shifting in its directional use: (9) might be argued to simply be a simple abstraction of the path-based meaning of *of*, though, in reality, the preciousness is projected by, for example, the parents, rather than being something that inherently emanates from the daughter.

- (9) Old English (Festis 242 in Allen 2008:160)

for þære deorewurðnyse of þære forme dohter  
for the:F.DAT.SG preciousness:(F)DAT.SG of the:F.DAT.SG first daughter(F)  
‘because of the preciousness of the first daughter

Despite the encroachment of *of*, partitive genitives, such as (10), are found across Early Middle English and pre-headed pronominal partitives (11) are found across all of Middle English (Allen 2008:163–165).

- (10) Middle English (CMVICES1,29.314 in Allen 2008:164)  
 ne ðurh nan ðare þinge ðe hie baðe muȝen don  
 nor through none the:GEN.PL things that they both may do  
 ‘nor through none of the things that they both may do
- (11) Middle English (CMKEMPE,226.3662 in Allen 2008:163)  
 in strawnge cuntre wher her neipyr is knowyn  
 in strange country where 3PL.GEN neither is known  
 ‘in a strange country where neither of them is known

Though the most frequent word order of Old English partitives parallels that Present Day English, with the part occurring before the whole as in (7), the majority of genitive nouns occurred with the genitive before the noun it modifies—e.g. the whole before the part in (6). For this reason, (Allen 2008:170) argues the increase in *of*-genitives is not a simple replacement of genitive inflection with the preposition. Instead, the influence of Latin, and eventually Norman French, is seen to play a part, as several instances of *of* partitives in Old English are in translations of Latin texts (12).

- (12) Old English (cowsgosp,Lk\_(WSCp):24.22.5677 in Allen 2008:73)  
 eac sume wif of urum us bregdon  
 also some women of our:DAT us amazed  
 ‘Also some women of our people amazed us.  
 Latin: et mulieres quedam ex nostris terruerunt nos

This section has shown the development of partitives from Old English to Present Day English. The earliest Old English examples of partitives occur with the whole in genitive case, more frequently after the part except in the case of pronouns. This order of nouns differs from other uses of the genitive case, which were collective more frequent than partitive genitives, but nevertheless fell out of use before partitive genitives. Well before deflexion resulted in the near total loss of case in English, *of* was used to mark partitive relations, most commonly in translations of Latin texts, and eventually more generally, though genitive partitives lasted across the Middle English period. In Modern English genitive partitives are lost entirely and *of* is used in expressions of partitivity instead.

**4. Analysis.** In the context of what is known about the use of genitive case marking and the preposition *of* in Old and Middle English, I argue that reanalysis, not grammaticalization, best characterizes the change in the use of *of*. In this section, I’ll analyze the data within the definitions of grammaticalization and reanalysis discussed in Section 2.

Regarding basic definition of grammaticalization—i.e. becoming more grammatical—there is no clear basis for characterizing a ‘part of’ meaning as more grammatical than a ‘path-from-source’ meaning. One might argue that a path might be visualized at least in the negative space between two objects, let alone though a trail left behind by something, like footsteps, and thereby ‘from’ denotes this space. At the same time, it might be argued that the idea of a ‘part of’ something being an atom in its own right is arguably more abstract than such an aforementioned path. However, a counterargument might be that, in the most concrete sense, ‘part of’ denotes the space

that is occupied by both the part and the whole, and is therefore just as concrete as ‘from’. In either case, whether or not the ‘part of’ meaning developed from the ‘from’ meaning, the grammatical status of *of* remains unchanged: it is a preposition in both cases and thereby not clearly grammaticalization.

Following the definition of reanalysis by Langacker (1977), we might also say that the change from ‘from’ to ‘part of’ is not clearly reanalysis. On the one hand, this change does fit this definition of reanalysis in that there is no modification to the overt use of *of*—i.e. no affix or otherwise is added or removed. Likewise, it is not clear if there should be assumed any change in the structure of *of*: in (3), (8), (9), and (12), *of* seems to be the head of a PP that takes a DP. At best, one can argue that the semantic structure of *of* changes across these examples, from denoting a ‘path-from-source’ relation to a ‘part of’ relation. In this way—i.e. semantically—we might say that *of* has undergone reanalysis.

Following the definitions of Detges & Waltereit (2002), the change in partitive structure is better characterized as reanalysis rather than grammaticalization. Because they characterize grammaticalization as motivated by using a more informative expression, it is not clear why *of*, meaning ‘from’ should be more informative than genitive case as a means of expressing the partitive relation. Notably, the choice to use *of* in translations of Latin partitives is a means of being more faithful to the surface structure of the source text, but it does not follow the aforementioned definition of grammaticalization. Instead, despite this choice, receivers of *of*-partitives in Old and Middle English would have to reanalyze the forms to understand what is said. In the broadest sense, the change from ‘from’ to ‘part of’ could be called a change of grammatical category in that the roles of the arguments of *of* have changed, that is, from ENTITY and SOURCE-OF-ENTITY to PART and WHOLE.

Finally, further support for partitive *of* resulting from reanalysis is the that status of its ‘part of’ meaning. Recall that there is debate over partitive expressions denoting a part-of relation as opposed to a proper-part relation, and Marty (2019) argues that the proper-part interpretation is a presupposition that can be false. In the context of arguments that, during reanalysis, inferences that occur frequently enough are conventionalized as part of the meaning (Eckardt 2006:i.a.), the argument over the status of *of* may simply be an observation of *of* having undergone reanalysis: the presupposition that partitives express a proper-part relation is the conventionalization of earlier inferences that arose with the earliest uses of *of* in partitive expressions.

In summary, partitive *of* cannot straightforwardly be analyzed as an example of grammaticalization but it can be analyzed as an example of reanalysis under the definitions given discussed here. Initial use of partitive *of* might have been driven by translation of Latin and French or at least influence thereof, and the reception thereof required reanalyzing the meaning of *of* as expressing ‘part of’ rather than ‘from’. This is not to say that the general loss of case in English and the increasing abstraction of *of* from ‘from’ was unimportant, rather the direct line of a grammaticalization path from ‘from’ to ‘part-of’ is less clear. Finally, the proper-part interpretation in Present Day English partitive expressions can be seen as the conventionalization of inferences that regularly occurs under reanalysis.

**5. Discussion.** This section compares the analysis in Section 4 with previous analyses of the diachrony of partitives, namely a series of grammaticalization-based changes that has been dubbed “the partitive cycle”.

Koptjevskaja-Tamm (2001) presents a discussion of the diachrony of partitives in circum-Baltic languages, though examples from English are also brought under discussion. Across the Germanic subset of the circum-Baltic languages, as in English, genitive case was used early on in the expression of partitivity. Likewise, along with the general loss of genitive case inflection, these languages see an increase in the use of prepositions in partitive expressions: *af* ('of', Danish), *von* ('from'/'of', German), and *med* ('with', Swedish) (13).

(13) Swedish (Koptjevskaja-Tamm 2001:546)

en bukett med blommor  
a bucket with flowers  
'a bucket with flowers'

Koptjevskaja-Tamm (2001) sees the change in Germanic prepositions as parallel instances of a grammaticalization path whereby separative/ablative prepositions can give rise to partitive 'of' and comitative/associative contexts can give rise to partitive 'with'. However, no definition of grammaticalization is given such that it is made clear how the partitive meaning is more grammatical than the previous meanings. At the same time, Koptjevskaja-Tamm (2001) characterizes the early constituency of such partitives as containing two constituents—e.g. [*a cup*] [*of the tea*]  
—while later uses are one constituent—e.g. [*a cup of the tea*]  
—thereby constituting an instance of reanalysis, which is also not explicitly defined. Seržant (2021) characterizes this change as part of “the partitive cycle”, whereby partitives grammaticalize into faded partitives—e.g. *cup of the tea I like best*  
—which does not denote the subset relation, then this grammaticalizes further into pseudo-partitives—e.g. *cup of tea*  
—which is said to denote only a measure expression rather than also denoting a parthood relation.

While the notion of a partitive cycle accounts for how certain kinds of meaning arise, it could be said that the data does not straightforwardly support this sort of cycle in this particular case. For one, as argued above, the characterization of the change in *of* as grammaticalization is not supported, at least by the definitions of grammaticalization discussed herein. Furthermore, as seen in (14), genitive case, prepositional measures, and juxtaposed measures all occurred at the same point in time in Old Swedish, even in the same sentence, which suggests that the development of prepositional pseudo-partitives did not necessarily exclusively follow the development of prepositional partitives.

(14) Old Swedish (stgatalagen Kr. 2: pr. in Wessn 1970 in Koptjevskaja-Tamm 2001:545)

rea spn hueti-s ok en yn rugh ok en yn biug ok fiura  
three bushel wheat-GEN.SG and one barrel rye and one barrel barley and four  
yn hstakorn ok r m tu las fobr and ry pund m smr  
barrel-PL horse.barley and there with two load forage and three pound with butter  
ok fiughur pund m flsk ok et halft pund m uax  
and four pound with pork and one half pound with wax  
'three bushels of wheat and one barrel of rye and one barrel of barley and four barrels of  
horse barley and therewith two loads of forage and three pounds of butte'

In other words, it is unclear why we should see prepositional pseudo-partitives before prepositional partitives so early in the development of prepositional partitives if the former is supposed

to develop from the latter. These points present challenges to the the previous analyses of the diachrony of partitives in English.

Differently from the grammaticalization-path analysis, the analysis argued for in this paper, is that *of* was reanalyzed to mean ‘part of’ rather than ‘from’ in the history of English. This reanalysis is not a directional change as the grammaticalization path is said to be, so it should not be surprising to find variation in way partitives are expressed, on the contrary, one might argue that variation would be predicted since various factors may affect change in a given language and thereby exactly which forms might get reanalyzed, if any. The present claim naturally predicts the existing variation in partitive constructions across European languages (e.g. Koptjevskaja-Tamm 2001:558)—e.g. pseudo-partitives using *with* in Swedish (13) compared to the relative consistency in the grammaticalization of ‘have’+participle perfect tense in various European languages (Eckardt 2006:6). In other words, the assumption that the change of *of* from ‘from’ to ‘part-of’ is due to reanalysis entails that such an internal language change is not necessarily as expected to occur across languages and thus contributes to the explanation of distinct partitive structures in European languages. Conversely, the previous analysis of this change as grammaticalization does not account for this crosslinguistic fact, rather it has to assume two grammaticalization paths that converge, one for ‘from’ and one for ‘with’.

**6. Conclusion.** In conclusion, under the definitions of grammaticalization and reanalysis assumed here, the diachrony of partitive expressions in English are better analyzed as reanalysis as opposed to grammaticalization. Early *of* expressions meant something like ‘path-from-source’ and *of* was reanalyzed to mean ‘part-of’ in later uses wherein the proper-part presupposition arose via conventionalization of earlier proper-part inferences. All together, this discussion underlines the importance of defining key terms when using them to characterize a given phenomenon, especially when those terms have been defined in various ways as is the case with grammaticalization and reanalysis.

Moving forward, further work on the use of *of* in the history of English could help clarify the nature of its development. Most of what is known about the development of *of* seems to come from diachronic work addressing intersecting phenomena, such as partitives. As this is the case, a careful study of the use of *of* in the history of English, as well as *af* (‘of’, Danish), *von* (‘from’/‘of’, German), and *med* (‘with’, Swedish), would help clarify the picture even further and provide clearer understanding of how partitive expressions have changed in these languages.

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