Loss of Morphological Case in English and Danish

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Abstract

This paper examines why case morphology was lost in English and Danish. This is done by first outlining the developments of case from the earliest stages of both languages until case was left only on the personal pronouns as in the present-day varieties of the languages. I present two hypotheses that may contribute to an explanation of this loss of case: distinctiveness and structural vs. nonstructural case. Furthermore, a comparison of English and Danish is made in order to better understand what factors may or may not cause languages to change on the basis of these two hypotheses. References to other Germanic languages are made when it proves useful. I argue that, while it is possible that phonological distinctiveness plays a part in the development, it is more likely that the non-structural cases have a higher susceptibility to loss than structural cases since nonstructural cases are easier to replace. This is done by considering the nouns and the personal pronouns respectively in relation to the two hypotheses.

1. Introduction

Present day English and Danish are very case-poor languages. In fact, the only case they have left is on pronouns, and there are only two cases: nominative and oblique. This was not always so. Like all other Germanic languages, English and Danish derive from Proto-Germanic, which had six cases and inflected for case on all nominal categories, meaning pronouns as well as nouns, determiners, adjectives, and numerals. If we compare the situation to other present-day Germanic languages Icelandic and Faroese are the most case-rich, German a little less so due to a comparably high level of syncretism, and English and Danish, as well as for example Dutch and Swedish, have almost no case left.

In this paper, I will consider what has made some of the Germanic languages lose their case morphology while others have retained it. A comparative analysis between English and Danish is chosen because the two languages have developed similarly in terms of case. However, while the developments may have been similar, they happened separately. For this reason, a comparison might help us understand what could or could not be the underlying causes of case impoverishment and whether an explanation can be applied to both languages.

In Section 2, I will account for the development of case in English and then in Danish. I will start by outlining the functions of case and briefly explain the case system in English and Danish today. Then I will go through the developments from Old English and Old Norse up until the case system has become impoverished enough to look like it does in the present-day versions of the languages.

In Section 3, I will outline two hypotheses that may account for some of the loss of case. In Section 4, I will discuss the two hypotheses, first in relation to nouns as an example of case development for the word classes that have lost all their case distinctions, and then in relation to the personal pronouns since this is where case can still be found in both English and Danish. In Section 5, I give a short conclusion.

2. Case from Proto-Germanic to Present Day English and Danish

The case system is one of the systems of language that encodes grammatical information. That means it can help us understand what is conveyed, i.e. who did what to whom etc. A constituent such as a noun phrase (NP) can be assigned case because of its structural role in the sentence. When the subject is assigned nominative it is an example of *structural* case. Another example is in some languages if the genitive indicates possession. Alternately, a constituent can be assigned *lexical* case, for example by specific prepositions or verbs. In Present Day English and Danish, this is less obvious due to the disappearance of most case distinctions, so that today all prepositions and verbs assign the same case (oblique case). For the sake of illustration, the German preposition *mit* assigns dative whereas the preposition *durch* assigns accusative.

As mentioned, English and Danish only have two cases left. These cases are nominative and oblique, and they are only visible on pronouns as shown in Table 1.

	(Present Da	y) English	(Present Day) Danish		
	Nominative	Oblique	Nominative	Oblique	
1 st person sg.	Ι	me	jeg	mig	
2 nd person	you	you	du	dig	
3 rd person	he/she/it	him/her/it	han/hun/den/det	ham/hende/den/det	
1 st person pl.	we	us	vi	OS	
2 nd person	you	you	Ι	jer	
3 rd person	they	them	de	dem	

Table 1: Personal pronouns of Present Day English and Danish

This means that in these two languages, case is limited when compared to other Germanic languages such as German or Icelandic which each have four cases on both pronouns and other nominals: nominative, accusative, genitive, and dative. Despite sharing the same linguistic lineage and, in effect, a similar case structure, we consider English and Danish to have developed independently from each other at the time. As we will see, however, the loss of case in both English and Danish seems to have happened in parallel. In this section, I will present the development of case in the two languages, first in English and then in Danish, up until case was only left on pronouns as we see it today.

2.1 The development of case in English

2.1.1 OLD ENGLISH (700-1100)

Proto-Germanic had six cases: nominative, accusative, genitive, dative, instrumental and vocative (Hejná and Walkden 2022, 312). In the Old English period (OE), ca. 700-1100, the case system looked similar to the one in German today. The vocative was gone, and early on, the instrumental merged with the dative, leaving behind only a few traces on some pronouns and adjectives. Also already in OE, there was a heavy erosion of case on nouns, reducing the endings so that for many of them the nominative and accusative were no longer distinguishable. As an example, consider the feminine nouns, which had the same form in the accusative, genitive and dative in the singular (Los 2015, 38). As a result, the cases were only weakly differentiated, although more clearly so on the pronouns than on the nouns. Compare for example a masculine, neuter, and feminine noun such as *stan* 'stone', *scip* 'ship' and *talu* 'story, tale' in Table 2 with the personal pronouns in Table 3.

Table 2: Inflection of the Old English nouns stan, scip and talu (Hejná and Walkden 2022, 251)

	Masc.	Neut.	Fem.
Nom sg.	stān	sċip	talu
Acc	stān	sċip	tale
Dat	stāne	sċipe	tale
Gen	stānes	sċipes	tale
Nom pl.	stānas	sċipu	tala
Acc	stānas	sċipu	tala
Dat	stānum	sċipum	talum
Gen	stāna	sċipa	tala

Table 3: Personal pronouns of Old English (Lass 1992, 117)

		1 st person			2 nd persor	n
	Singular	Dual	Plural	Singular	Dual	Plural
Nom	ic	wit	wē	þū	git	gē
Acc	mē	uncit/unc	ūs	þē	inc	eōw
Dat	mē	unc	ūs	þē	inc	eōw
Gen	mīn	uncer	ūre	þīn	incer	eōwer
	3 rd	person sing	ular	3 rd person plural		
	Masc.	Neut.	Fem.		All gender	ſS
Nom	hē	hit	hēo		hi(e)	
Acc	hine	hit	hīe		hī(e)	
Dat	him	him	hire		him/heom	
Gen	his	his	hire		hira/heora	

While there is quite a bit of syncretism on the nouns to the extent also outlined above, the case forms of the personal pronouns, on the other hand, are more explicitly separated from each other due to their suppletive conjugation. This is true even though syncretism between accusative and dative is already

happening, at least in the 1^{st} and 2^{nd} person. Despite this high level of syncretism, a noun phrase would often be unambiguous as to case because all nominals were marked. An example of this is Example A

A. $p\bar{a}m$ halum men the_{DAT.SG/PL} healthy_{DAT.SG/PL} man_{DAT.SG/NOM-ACC.PL} 'to the healthy man' (Los 2015, 39)

While the determiner and the adjective are both clearly dative, they can be either singular or plural. The noun, however, can be either dative, singular, or nominative or accusative plural. The encoded information therefore collectively tells us that this determiner phrase (DP) is dative singular.

2.1.2 MIDDLE ENGLISH (1066-1500)

language works

The period with the heaviest erosion of the case system was between the late 10^{th} century and the 13^{th} century, i.e. in the early part of the Middle English (ME) period, where the English language almost lost its entire case system (Blake 2001, 177). The first development in the case system was that the accusative and dative forms of the nouns merged, which in some areas of the country happened already in the early 12^{th} century. In other areas of the country, the distinction between accusative and dative survived well into the 13^{th} century and even in one dialect into the 14^{th} century (Allen 2002, 68–69). The dative ending *-e* replaced the accusative endings, and then this *-e* was lost as well which meant that nouns could only be marked for the genitive case or left unmarked (Traugott 1972, 122).

Whereas the nouns practically no longer had any distinction between cases, the nominative-oblique distinction was still in place with the pronouns as it is in PDE. The dative form was also generalized for most of the pronouns, which left them with a three-case system of nominative, oblique and genitive (Allen 2002, 68–69). This pronoun system can be seen in Table 4.

	1 st	person	2 ⁿ	^d person	3 rd pe	erson
	Sg.	Pl.	Sg.	Pl.	Sg.	Pl.
Nom	ich, I	we	þou, þu	3e(e)	he/s(c)he/hit	þei
Obl	me	ous, us	þe(e)	eow, zou	him/hire/(h)it	hem, þem
Gen	mīn	our(e)	þīn	eower, ower	his/hire/his	hire

Table 4: Personal pronouns of Middle English (Brunner 1970, 58–61)

The genitive was lost as a case later than the other two oblique cases, both on the pronouns and the other nominal categories. It was still a case in the beginning of ME because we find examples where it attached itself to all nominals in a phrase as we see in Example B and C, which are both examples from the earlier part of ME.

B.	<i>Offnane</i> of nogen 'of the fe	OBI ((Orm 16137	in Allen 2002, 63)
C.	0	<i>arcebiscopes</i> archbishop _{GEN} e of the archbisho	<i>gearnunge</i> desire op of Canterbury'	<i>of Cantwerbyrig</i> of Canterbury (PC 1114.34 in Allen 2003, 6)

Here we see that the determiners *no* and *the* are still inflected for genitive in agreement with the nouns *man* and *archbishop*. In the following period, the inflectional genitive slowly disappeared as the other cases had done before. Already during the early part of ME, the genitive began to be reanalysed in the mental grammars, i.e. the cognitive language structures of L1 speakers, as a clitic just like in PDE, gradually losing its status as inflectional case marker. However, genitive case was still found on nouns as well as on adjectives and determiners. The two types of genitive, the inflectional case marking and the clitic, coexisted for some time, with both being present in the same text (Allen 2002, 64). As such, the genitive seems to have been the most robust of the oblique cases, as it survived the longest.

Nevertheless, it is the general assumption that case as a morphological category was lost (except on pronouns) during ME, and as a result, case stopped being part of mental grammars (Allen 2002, 62). This becomes clear if we look at how the inflection of the noun *stone* has changed from OE through Early and Late Middle English (EME and LME respectively), in Table 5. As far as LME goes, the case distinction on nouns is as good as gone, and the paradigm is similar to PDE. We are then left with a more theoretical question of categorizing the genitive marker as either a case or a clitic. This question cannot be answered by looking at the paradigm in isolation.

	OE	EME	LME
Nom sg.	stān	ston	stoon
Acc	stān	ston	stoon
Dat	stāne	stone	stoon
Gen	stānes	stones	stoon(e)s
Nom pl.	stānas	stones	stoon(e)s
Acc	stānas	stones	stoon(e)s
Dat	stānum	stonen/-es	stoon(e)s
Gen	stāna	stone(s)	stoon(e)s

Table 5: Inflection of the noun stone in Early and Late Middle English (Lass 1992, 109)

2.2 The development of case in Danish

language works

Let us now turn to Danish. The development of Danish is difficult to separate from the other Scandinavian languages, because they developed into separate languages from Old Norse rather late. It wasn't until around 950-1000 that dialectal differences began separating the Western and Eastern Scandinavian varieties from each other, and not until after the 15th century that the differences had become significant enough to talk about Danish and Swedish as two separate languages, although the discussion of language vs. dialect is often political (Perridon 2013, 135).

2.2.1 OLD NORSE (800-1100)

The demise of the case system begins in the Old Norse (ON) period (800-1100). The dative was limited to being used in fixed expressions somewhere between the ON period and the Early Middle Danish (EMD) period (1100-1350) (Jørgensen 2002, 217–18). In Danish, the accusative took over from the dative forms in many contexts, and this asymmetric relationship between two cases is referred to as participation (Jensen 2012, 149; Hansen 2021, 63). It is important to note that in English, the dative form took over from the accusative forms as mentioned in Section 2.1.2 which highlights that the two languages did not develop in entirely the same way.

At this time, the nouns had already lost many of their distinct case forms as can be seen in Table 6 where the paradigms of three different nouns are shown.

	Masc.	Neut.	Fem.
	hestr	land	bœn
	'horse'	'land, country'	'prayer'
Nom sg.	hestr	land	bœn
Acc	hest	land	bœn
Dat	hesti	landi	bœn
Gen	hests	lands	bœnar
Nom pl.	hestar	lond	bœnir
Acc	hesta	lond	bœnir
Dat	hestum	londum	bœnum
Gen	hesta	landa	bœna

Table 6: Inflection of the Old Norse nouns hestr, land and bæn (Faarlund 2004, 24; 29-30)

If we look at the ON pronouns in Table 7, we see a high level of syncretism between the accusative and dative in general, and in the 3rd person, where neuter singular as well as all plural forms are no longer inflected differently for case at all.

			2 nd person			
	Singular	Dual	Plural	Singular	Dual	Plural
Nom	ek	vit	vér	þú	it	ér
Acc	mik	okkr	OSS	þik	ykkr	yðr
Dat	mér	okkr	OSS	þér	ykkr	yðr
Gen	mín	okkar	vár	þín	ykkar	yðar
	3 rd	person sing	gular	3 rd person plural		
	Masc.	Neut.	Fem.	Masc.	Neut.	Fem.
Nom	hann	þat	hon	þeir	þau	þœr
Acc	hann	þat	hana	þeir	þau	þœr
Dat	honum	þat	hennar	þeir	þau	þœr
Gen	hans	þat	henni	þeir	þau	þœr

Despite the syncretism between accusative and dative, the genitive was still very distinct in the pronouns and elsewhere, with no less than six different morphological genitive endings for the nouns (-*s*, -*ar*, -*u*, - \emptyset , -*a*, and -*na*) depending on gender, number and stem-type (Perridon 2013, 136).

2.2.2 MIDDLE DANISH (1100-1525)

In the Early Middle Danish (EMD) period (1100-1525), the first manuscripts written in Danish, which have been preserved, appeared not long after the Viking Age had properly ended. By then, the number of genitive endings had been reduced; nouns in the genitive case could have $-\alpha$ or -s as their ending, or they simply had no distinct ending altogether. Since many words in other cases also ended in $-\alpha$, the -s ending became the only distinct genitive ending (Perridon 2013, 137). So, in EMD, the case system was heavily reduced, with one of the consequences being that there was a large amount of syncretism between the case endings, making it more difficult to unambiguously mark a nominal phrase for case.

One of the problems we have when looking at Middle Danish (MD) is that there is a gap of sources. In the period of transition between ON and MD not many sources have survived which makes it difficult to know exactly what happened between roughly 1000 and 1250 where the first texts begin to appear in the vernacular (Jensen 2002, 162; Perridon 2013, 135). It should be noted that something similar is also true for English in relation to the period after the Norman Conquest in 1066. In this period, most texts were either in French or Latin, and the texts that we do have in English are mostly written by members of the church or nobility as was also the case for Danish at this time (Wright 2020, 5; Hejná and Walkden 2022, 169).

The case system had developed differently in different areas. In Jutland, Funen and Zealand, the old case system had already disappeared or would soon do so. However, in Scania, Halland and Blekinge, the old case system had remained, apart from the strong masculine nouns where the nominative form had lost its *-r* ending and thereby became identical to the accusative (Perridon 2013, 135).

As for the genitive, it had also taken many steps towards becoming the clitic we know today. As Perridon (2013, 138) explains, in ON when creating a definite NP in the genitive case, you would inflect the noun for genitive and attach the definite article *inn*, in genitive *-ins*, to the genitive noun

for example *landsins* (country_{GEN}-the_{GEN}, 'the country's') where *lands* is the genitive inflection of *land* with the genitive definite article attached. However, in EMD, you would attach the ending *-ens* or *-æns* to the nominative/accusative form of the noun instead, for example *landæns* (country_{NOM/ACC}-the_{GEN}, 'the country's') which means that nouns were no longer inflected for genitive, only the postnominal definite article. Furthermore, for plural indefinite nouns, it was possible to use their regular nominative/accusative forms, but it was also possible to use the *-s* ending rather than their usual genitive forms of either *-a* or *-æ*. For example, *frændær* could be inflected as *frændærs* rather than *frænda*. This means that in the 13th century, the genitive had gone a long way towards being a clitic rather than an inflectional case. In texts from 1450 and onwards, the Present Day Danish (PDD) construction with *-s* attached at the right edge of the phrase, in other words as a clitic, seems to have become the normal way to construct a genitive such as in *hin døthæs arwyng* ('the heirs of the deceased').

In the Late Middle Danish period (LMD, 1350-1525), Danish dialects west of Oresund had only one form for all cases on weak nouns, which means that morphologically visible case was only left on strong nouns as in Table 8.

Table 8: Inflection of LMI	<i>mann</i> (Perridon 2013, 138)
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-	
	mann
	'man'
Nom	mann
Acc	mann
Dat	mann(e)
Gen	mannes

In fact, Petersen (2018, 226) argues that the surviving case forms on the nouns that we find in texts from around 1425 are used so sporadically that we can no longer assume they had a decisive function. This means that both the accusative and the dative forms had now become the same as the nominative forms for the nouns, as can be seen in Table 8, where the dative ending -e has become optional.

The pronoun system had been reduced in number in part because the dual number was lost, but not because of more syncretism, which can be seen in Table 9, where the personal pronouns from around 1350 are illustrated.

	1 st person		2 nd person		3 rd person	
	Sg.	Pl.	Sg.	Pl.	Sg.	Pl.
Nom	iak	wi	thu	i	han/hun/thæt	the
Acc	mik	OS	thik	ither	han/hana/thæt	them/the
Dat	*mer	OS	*ther	ither	hanum/henni/thæt	them
Gen	min	war	thin	ithar	hans/henna/thæt	therra
* ui	nattested					

Table 9: Middle Danish	nersonal prop	ouns (Jensen	2018 6	1. Howe 2013	309)
Table 9. Whule Damsh	personal pron	iouns (jensen	2010, 0.	1, 110 we 2013,	309)

As a result, it was only the pronouns which really distinguished between nominative and oblique, whereas both old accusative forms (for example *mig*, *dig*) and old dative forms (for example *ham*, *dem*) have been generalized and preserved.

By the time LMD ended and the Early Modern Danish period (1525-1700) began, the loss of morphological case had reached the point where the only remains of the differentiated oblique cases were in fixed expressions in the same way as is true for PDD such as in Example D.

D.	Acc	i vilde <u>n</u> sky
	Dat	slippe af syn <u>e</u> , på tid <u>e</u>
	Gen	til fod <u>s</u> , til liv <u>s</u> , til bord <u>s</u> , til land <u>s</u> , til sø <u>s</u>

These are all instances where the preposition previously assigned either accusative, genitive, or dative, and we can assume that, because the expressions were used often, the case endings were at some point interpreted as part of these expressions. As a result, they have been preserved rather than being lost along with the other case endings once case was lost as a category.

3. Possible explanations for case impoverishment

In this section, I will briefly go over two hypotheses concerning the loss of case. The first hypothesis has to do with structural and non-structural case, and the second one has to do with phonological distinctiveness of the case morphology itself.

3.1 Structural and non-structural case

Los (2015, 40) argues that the functions of the nominative and accusative cases are more difficult to replace if not by word order whereas the syntactic functions of other cases can often be signalled with adpositions. Adpositions are, however, rare with syntactic functions often associated with nominatives and accusatives. This may be the reason why both English and Danish are left with a nominative and an oblique object-case created through a merger of the accusative, dative, and the lexical genitive. Since the dative and accusative merged, they were both technically lost and subsumed under the same structural oblique case.

This could be related to the distinction between *structural* and *non-structural case*. Structural case expresses a syntactic dependency which means that nominative in OE and ON (as well as PDE and PDD) is structural as it is assigned to subjects, and therefore the nominative depends on the presence

of a finite verb (McFadden 2020, 291). Accusative is also a structural case and it is 'assigned by default to potential subjects that are not assigned nominative case, and to objects that are not assigned a lexical case' (Faarlund 2004, 22). Non-structural case, on the other hand, can be divided into *inherent case* which is related to licensing of thematic roles, and *lexical case*, that is where certain verbs and prepositions can assign a specific case to a theme (Woolford 2006, 112). A thematic role has to do with semantic meaning. For example LOCATION denoting where something takes place such as *(they talked) in the living room* or *(the monster lives) under the bed* where the preposition tells us that we are talking about a location. Since the dative would most commonly have been assigned lexically or related to thematic roles such as GOAL or the BENEFICIARY of an action it makes sense to call it a non-structural case. The genitive was also often assigned lexically by for example a verb or a preposition or, most commonly, as related to possession as also mentioned in section 2.

However, there are exceptions with certain verbs or prepositions governing the accusative, and as a result, the accusative can also be considered non-structural in these particular contexts (Faarlund 2004, 23). This is the case with for example the ON *gegnum* and the OE *geond*, both prepositions meaning 'through'. Faarlund (2004, 23) also argues that in ON, the genitive in NPs can be seen as structural because "it is assigned automatically to structural positions within the NP regardless of semantic role or function", e.g. whether the genitive is possessive, descriptive, partitive or argumental as in Examples E a-d with examples from the *Gunnlaugs saga ormstungu*, the *Heimskringla*, and the *Old Norwegian Homily Book*.

E	a.	Poss	<i>þingstǫð</i> assembly- place 'the assembly- _J	<i>þeira</i> their place of the	<i>borgfirðinga</i> Borgfirdings _{GEN} people from Borg	(Gunnl 3.5 in Faarlund 2004, 59) gfjord'
	b.	Desc	<i>tveggja daga</i> two days 'food for two d	GEN food	(Hkr III.	449.15 in Faarlund 2004, 61)
	c.	Part	<i>hinn nezti</i> the lowest _D 'the lowest par	<i>hlutr</i> EF part _N t of the tree		(Hkr I.93.12 in Faarlund 2004, 61)
	d.	Arg	<i>ferð Óláf.</i> journey Olaf 'Olaf's journey	GEN from		(Hkr I.433.1 in Faarlund 2004, 62)

However, while these different types of genitives do have different functions, they have in common that they describe a sense of ownership or belonging within the NP, which still has to do with semantics. Furthermore, because they work at the NP level and not at the sentence level, it seems like it might be a different type of structural than the other two, even if we do decide to call it structural. It seems safe to say that overall, dative and genitive are mostly non-structural, and accusative is mostly structural like nominative is. In extension of this, the oblique case we have on the pronouns today in PDE and PDD is also structural like the accusative used to be in that it is assigned to

everything that is not a subject. At the same time, nominative is of course still a structural case that can only be assigned to the subject.

3.2 Distinctiveness

language works

Allen (2002, 69) assumes that 'the genitive was particularly resistant to loss because it was a particularly distinctive form.' That a case is distinct means that it can be kept apart from the other cases, though there are degrees of distinctiveness. A different word is more easily distinguishable than a different ending, but they can both be called distinct. In other words, the easier it is to mistake a case form for another case phonologically speaking, the less distinct it is. Although there may be syncretism with other numbers or genders, there should be instances without syncretism with the other case forms. As we saw in Example A, the determiner *bam* and the adjective *halum* can only be dative, although we cannot tell by their inflection if they are singular or plural in number. That makes the dative distinct from the other cases. On the noun, however, there is syncretism between the dative singular and the nominative and accusative plural. If this was true for all nouns, and for both the singular and plural dative, we would not be able to say that the dative was distinct from the other cases. However, in OE of course, there are plenty of nouns that do have separate endings such as the noun *stan* in Table 2 above. Similarly, a case ending will also be more distinct from others depending on the sounds it contains. It is not due to the sound itself but rather depends on how different it is from other sounds. Although L1 learners (children) learn to differentiate between all sounds of a language, it is easier to hear the difference between for example a nasal and a fricative such as [m] and [s] than between to nasals such as [m] and [n]. There are of course many factors that can affect articulation, but we can expect L1 learners to hear the different words in enough contexts that it should not be important here.

In relation to the distinctiveness hypothesis, several things happened in both English and Danish that made the oblique cases less distinct, for example, word-final syllables weakening and eventually eroding. For English as well as for Danish, more and more syncretism occurred between the different case forms. It should be noted that the fact that more syncretism happened meant that the system became eroded but not that the category of case disappeared. However, the less phonological distinction there was between different cases, the less likely it was for L1 learners to interpret it as a feature of case as a category.

4. The hypotheses in light of the development of the nouns and personal pronouns

In this section, I will discuss the two hypotheses in relation to the developments in both English and Danish. More specifically, I will focus on both nouns and personal pronouns respectively.

4.1 The nouns

First, I will be looking at the structural vs. non-structural hypothesis in relation to the nouns. For English, the nominative endings on nouns were lost early on and merged with the accusative endings. Then the dative -e ending took over from the accusative where this was still separate from the

nominative, and eventually, this dative -e ending was also lost. Finally, the genitive developed into a clitic, and the nouns no longer had any case endings. For Danish, the accusative forms took over from many of the dative forms. However, the accusative was quickly lost on the nouns, and once the nominative lost its *r*-endings, it became identical with the accusative. The remaining dative -e endings were slowly lost, and the genitive developed into a clitic.

In terms of the hypothesis of structural vs. non-structural case, ideally the two non-structural cases, dative and genitive, should have disappeared first. What we see is that the nominative endings are lost relatively early, so that nominative case is difficult to separate from the accusative, which also loses its endings. This gives us a situation where the nouns can either be unmarked in nominative and accusative or marked for dative or genitive, the two non-structural cases. The longest surviving case is genitive.

Although the step-by-step developments for the nouns do not follow the hypothesis directly, it is only one category of a language. The hypothesis suggests that the non-structural cases are more susceptible to loss than the structural ones, but not necessarily that they must always disappear first. There may have been other factors at play as well. The argument is for example that it is difficult to replace nominative and accusative other than with word order, and we do know that word order was becoming increasingly fixed at the time when case was lost in both languages (Jørgensen 2002, 222; Biberauer and Walkden 2015, 6). It could also have something to do with the fact that losing case on nouns in general did not mean that case in a nominal phrase could not be identified, as there would often be many other markers.

Another problem for the hypothesis arises when we look at for example Icelandic in relation to the dative substitution where accusative subjects alternate with dative rather than nominative as would otherwise be expected for subjects, as well as some instances being observed in which dative subjects take over from nominative (Barðdal 2009, 132). Another problem in extension of this is that dative as a lexical case should not be productive, but '37% of transitive verbs borrowed into Icelandic assign dative case to their objects' (134). Thus, in Icelandic the situation is not that the structural cases are taking over for non-structural ones, counter to expectation.

The answer to what we see in Icelandic, however, may be that there are other factors countering this development. For example, a study by Friðriksson (2011) found that even today Icelandic is a highly stable language, and that an important reason for this is the negative attitudes towards change found among Icelandic speakers, reinforced by a (formally unofficial) language policy characterised by purism. Much could be said about Icelandic, but I will not go into detail here. Suffice it to say that there is reason to believe that Icelandic does not pose a problem for this hypothesis.

Let us move on to the distinctiveness hypothesis. We see that the dative and accusative merge before the genitive is lost. As for the nouns, this happened relatively early in both English and Danish. To consider this development, we might compare genitive and dative inflections at this time. However, the dative was not lost until ME, although in Danish, it already began disappearing in ON. For this reason, we should compare EME and ON nouns if we want to say something about the level of distinction of inflection in the period right before the case was lost. For ON, there are many different

types of noun inflection depending on gender as well as whether the noun is strong or weak. For EME, the gender distinction has disappeared, but the strong/weak distinction still exists. Since the strong nouns have more distinct inflection for the dative and genitive, let us compare the paradigms of a few of the strong nouns repeated in Table 10 for convenience.

	EME		ON	
	Masc.	Masc.	Neut.	Fem.
	ston	hestr	land	bæn
	'stone'	'horse'	'land, country'	'prayer'
Nom sg.	ston	hestr	land	bœn
Acc	ston	hest	land	bœn
Dat	ston(e)	hesti	landi	bœn
Gen	stones	hests	lands	bœnar
Nom pl.	stones	hestar	lọnd	bœnir
Acc	stones	hesta	lọnd	bœnir
Dat	stonen, -es	hestum	lọndum	bœnum
Gen	stone(s)	hesta	landa	bœna

Table 10: Inflection of the Early Middle English nouns *ston* and the Old Norse nouns *hestr*, *land* and *bæn* (Lass 1992, 109; Faarlund 2004, 24; 29–30)

We can see that the genitive has a slightly larger number of distinctive endings than the dative, which is sometimes syncretic with a few of the other cases. For ME this is particularly in the singular, where only the genitive is really marked because the dative -e had become optional as schwa-deletion was becoming more common, and eventually this dative ending disappeared as well (Lass 1992, 109). For ON however, the two cases are almost equally distinct, except for the feminine nouns where the dative singular is syncretic with nominative and accusative singular. While the hypothesis seems to make sense for EME, one would suppose that if the theory of distinctiveness were to be true, there would be a larger difference in ON as well.

If we look at the endings of the strong nouns in EMD as in Table 11, we see that the dative has distinct endings in the plural, although some of the $-\emptyset$ endings overlap with the nominative and accusative endings.

	Masc.	Fem.	Neut.
Nom sg.	-Ø	-Ø	-Ø
Acc	-Ø	-Ø	-Ø
Dat	- <i>i/-</i> Ø	-Ø/-и	- <i>i</i>
Gen	-s/-a	- <i>a</i>	- <i>S</i>
Nom pl.	-a/-(V)r	-a/-(V)r	-Ø
Acc	-a/-(V)r	-a/-(V)r	-Ø
Dat	-um	-um	-um
Gen	-a	-a	- <i>a</i>

Table 11: EMD case endings on strong masculine, feminine and neuter nouns (Petersen 2019, 146)

However, the plural endings *-um* would be easier to distinguish from the other case endings since most of them are vowels, apart from the masculine and neuter singular genitive ending *-s*. As for the genitive, it is also syncretic with two of the nominative/accusative plural forms. As a result, the picture is not entirely clear. It is made even more unclear by the fact that in EMD, the case system is so close to disappearing that it was possible to replace the vowel endings with *-æ*, or replace the oblique endings with a nominative/accusative form (Petersen 2019, 148). In other words, this also does not provide us with a clear answer.

4.2 The personal pronouns

language works

Let us look at the personal pronouns. In ON, the case forms of the pronouns were reduced in number, following the general tendency of erosion creating more syncretism. By LMD however, the accusative and dative forms of the pronouns had merged, and the pronouns were the only nominal category left to distinguish between nominative and oblique case. In terms of the structural vs. non-structural case hypothesis, it is interesting that the pronouns took much longer than the nouns to lose their non-structural cases, especially in Danish. We would have otherwise expected case to be lost at the same time across the categories of a language. This does not directly contradict the hypothesis as the development itself happens in accordance with expectations, i.e. the non-structural cases are lost. However, it shows that the difference between structural and non-structural case cannot be the only explanation since the pronouns should then also have lost their case in the same way and at the same time as other nominal categories.

While it is always difficult to say why something did not happen, the fact that the pronouns did not lose their case could have something to do with the fact that the pronouns have always had suppletive conjugation. This makes them highly distinct from each other compared to if they had endings like the nouns, which probably would have made them more vulnerable to erosion and the like. The dative-accusative distinction survived a little longer on pronouns than on nouns, and it could be argued that distinctiveness played a role in how this happened and how cases survive in general.

If we compare the ON personal pronouns in Table 7 and the MD ones in Table 9, we may notice that the dual pronouns have been lost, but of the remaining forms we do not notice any more syncretism between the forms. However, there was a high level of syncretism in the dual and plural 1st and 2nd persons, 3rd person singular neuter, and across the 3rd person plural pronouns. As for English, if we compare the OE personal pronouns in Table 3 with the ME ones in Table 5, we see that in OE the personal pronouns were richly inflected, although there was syncretism between dative and accusative in the 1st and 2nd person as well as some syncretism in the 3rd person. There is also a replacement of $h\bar{e}o$ with s(c)he and of $h\bar{i}(e)$ with *they*, both new additions to the pronoun system. As with the Danish pronouns, the simplification of the English personal pronoun system did not include an increase in syncretism.

Looking at the personal pronouns in terms of the distinctiveness hypothesis, we can compare the situation in English and Danish. Considering the high level of syncretism of the personal pronouns of dative and accusative in OE, it makes sense that in ME, the two cases have merged into an oblique. This results in the ME pronouns, where nominative, oblique and genitive are all very different from

each other. For Danish, a similar development takes place. In ON, the accusative and dative pronouns were largely syncretic, even more so than in English because they were also syncretic in the 3rd person. However, they do not merge until the end of MD, which is later than we might otherwise have expected. Of course, there could have been other factors working against the loss of the case system.

One of these factors could be the suggestion by Hansen (1956, 190–91), who gives a very straightforward explanation: the system lasts because it has proven to be practical. He argues that there has been a greater need to be able to distinguish between nominative and oblique with the pronouns than with the nouns because pronouns are encoded with relative information whereas nouns are encoded with constant well-definable information. If we for example refer to a man by saying *the man*, we all know what we are referring to, but if we refer to a man with the pronoun *him*, we need more context to know what is being referred to. In extension, being practical could also be related to frequency of use, and the more we use something, the less likely it is to disappear from our language, even if it is irregular. As we saw, the structural vs. non-structural hypothesis can be questioned when considering the pronouns, because they lost their case much later than for example the nouns. However, we do end up with a distinction between nominative and oblique, two structural cases. The reason the loss of case was delayed could be because the effects were countered by this simple principle of usefulness and practicality, or by their distinctiveness.

5. Conclusion

The impoverishment of case in English and Danish has taken place gradually over several hundred years, and today only a nominative-oblique distinction is left on the personal pronouns in both languages. In this paper, the parallel developments of case impoverishment in the two languages have been laid out, and two different hypotheses have been discussed: structural vs. non-structural case and distinctiveness. I have argued that while phonological distinctiveness may be a factor in how cases survive, the hypothesis relating to structural and non-structural cases is more likely to be true. The non-structural cases which in Danish and English were dative and genitive (in Proto-Germanic also instrumental and vocative) are overall more susceptible to loss as they are more easily replaced, e.g. by adpositions. Furthermore, in relation to the pronouns, which is the only category for which case is retained in both languages, we see that the remaining cases are nominative and oblique, which are both structural. Although the idea of phonological distinctiveness could be possible in relation to the possessive – 's in PDD and PDE, this does not necessarily pose a problem for the other hypotheses since this clitic developed separately from the genitive case itself as also discussed.

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