The Decline of the Accusative Case in Middle Norwegian (1300-1500)

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Introduction

Loss of case is one of the most significant changes that the Norwegian language underwent during the last thousand years. Its decline was gradual – from four functioning cases, through the loss of nominative, genitive, and finally dative marking (though the latter still functions in several dialects). Accusative, which was often expressed with a zero ending, had, so far, not drawn much attention in comparison with the dative and the genitive with their abundance of endings – which is one of the reasons behind it being the focus of this thesis.

More specifically, the subject of it is the decline of the accusative case in Middle Norwegian, in the period between 1300 and 1500, in the area of today's Telemark county. The aim of this thesis is to determine whether such decline can be observed during that time, and if it can, then it what way this change happens and at what speed.

The studied material consists of a corpus of 37 diplomas – letters – available via Diplomatarium Norvegicum, a database of medieval Norwegian documents and charters. The analysis has been conducted within the framework of Construction Grammar, more specifically Diachronic Con-

struction Grammar, which utilizes constructions, defined as pairings of form and meaning, in order study the internal structure of language.

The thesis consists of 7 chapters.

Chapter I introduces the basic terminology and defines case as a grammatical category. It also discusses various theories of case, grammatical relations and semantic roles, and finally defines what constitutes morphological case.

Chapter II portrays case in Old Nordic – the era preceding the Middle Scandinavian period – and explains how the case system influenced various nominal categories.

Chapter III focuses on the history of the Scandinavian languages between the years 1300 and 1500, and the changes that impacted their development – from political, to socioeconomical. It describes the general direction of morphological changes in that period, and lists possible reasons for decline of case in particular.

In chapter IV, the focus is methodology – I describe the reasoning behind the choices made in order to achieve a cohesive corpus, to decide on a geographical area and to narrow down the time period. In addition, I describe in detail the rules and terminology connected to the Construction Grammar framework, and present tools and software used for the analysis.

Chapters V and VI present the results of that analysis. In Chapter V, I report on the general results – which pertain to frequency of occurrence of ditransitive constructions and to agreement patterns. This chapter also contains a recounting of the process of the analysis. Chapter VI is

focused on depicting how the internal structure of the constructions may have affected the results, and on a separate analysis of fixed formulas that begin and end each of the letters. It also includes several additional observation noted during the study.

The final chapter – Chapter VII – summarizes all the observations, and discusses what and how influenced the research process, as well as points towards possible directions of further analysis.

The thesis was written under the direction of professor Dominika Skrzypek from the Scandinavian Studies department at the University of Adam Mickiewicz in Poznań.

CHAPTER I

Case

Case, as defined by Blake (2004, p. 1), is "a system of marking dependent nouns for the type of relationship they bear to their heads". The term itself comes from Latin *casus* – "falling" and seems to have been based on an idea of "falling away from an assumed, standard form" (Blake, 2004). It is also, however, a phenomenon that may be interpreted differently by different linguists – for example, Fillmore (1968) in his *The Case for Case* uses it to refer to dependency relations themselves. For the purpose of this thesis, I will use a definition by Miriam Butt, formulated in her book *Theories of Case* (2006, p. 4), in which she writes that "case is a handy tool for marking semantic relationships between nouns and verbs, or, more generally between dependents and a head."

1.1 Manifestations of Case

Most commonly, languages encode the relationship between dependents and heads in one of two ways – struc-

turally, by using designated positions (as it happens with, for example, English), or with the help of morphological markers – in other words, cases. There do exist, however, exceptions to this rule. One of them is Icelandic, which combines both a fixed word order and a complex system of case markings; another would be Bulgarian, which in turn has no case markings, but still allows for a flexible word order (Butt, 2006).

   Another distinction can be made between dependent marking languages and head marking languages. In the first of these types, the case markings are attached to nouns (i.e. subjects and objects of the clause), as in the following example:

   (1) Latin (Butt, 2006)
   puella   port-am   videt
   girl.f.nom   door-F.Acc see.Pres.3.Sg

   'The girl sees the door.'

In the second type, it is the head that bears the case marking:

   (2) Tzutujil (Dayley, 1985)
    ar   aak'aalaa7 x-Ø-kee-k'aq   aab'aj
   'the boys   comp-3sg-3pl-throw rock'

According to some definitions (for example Blake's), case markings should appear only on nouns which are dependent on a predicational head – and so on arguments of

a verb, and not adjuncts. However, it is not only heads and dependents that can be marked – which is a phenomenon that has not, so far, been solved within modern syntactic theories (Butt, 2006). In some languages, adjuncts (such as adverbs) can actually also be subjected to it – as in this example from German, in which the accusative phrase is an adverbial of duration:

(3) German (Butt, 2006)
 a. *Ich   habe   gearbeitet.*
    I.Nom have.Pres.1.Sg work.PastP

   'I worked.'

 b. *Ich   habe [den ganzen Tag]   gearbeitet.*
    I.Nom   have.Pres.1.Sg the.M.Acc whole. M.Acc day work.PastP

   'I worked the whole day.'

Cases can also be stacked (a phenomenon that is also known as *Suffixaufnahme,* as described in Plank, 1995) which is often seen in Australian languages (but not only – amongst others, it can be also observed in Finnish).

(4) c. Kayardild (Butt, 2006)
    ngada   warra-jarra ngarn-kiring-kina
    1.Sg.Nom go-Pst   beach-All-MAbl

   'I went to the beach.'

In such systems, case markers can also reflect tense, mood, or aspect. In the example above, the noun "beach" bears the markings of both an allative and modal ablative.

1.2 Theories of Case

Modern terminology used to refer to case systems and their components comes to a great extent from the ancient grammars, namely Latin, Ancient Greek and Sanskrit. As mentioned previously, the term "case" originates from Greek; the same can be said for original case names, which were translated to Latin by the Romans. The oldest grammar that is available to us, however, was written around 6th century BCE by Pāṇini. Other prominent linguistic traditions include, for example, Hebrew, Chinese but as mentioned in Butt (2006), it is Latin, Greek, Sanskrit and Arabic that are most relevant to modern theories.

Ancient Greeks recognized 5 cases – *orthe, genike, dotike, aitiatike*, and *kletike* – and three numbers – singular, dual and plural, which, in this system, were often tightly fused with case markings. Originally, their word for "case" – *ptosis* – meant all the words in which a root could appear, without distinguishing between inflected and derived forms. It was only from 3rd century A.D. that the term became reserved for case forms. Cases other than the nominative – *orthe* – were called *plagiai*, so "slanting" or "oblique" (Blake, 2009). The latter term is currently used also for the single non-basic case in two-case systems. (Haspelmath, 2009).

The Latin – Roman – names for cases were coined by Remmius Palaemon, who in the 1st century AC wrote *Ars Grammatica.* In addition to the five original ones, this language recognized also the sixth one – ablative, which term was supposedly assigned to it by Julius Caesar (Blake, 2004).

In both the Roman and Greeks systems, all the case names were connected with their semantic functions. For example, the word "dative" originates from Latin *dare,* 'to give', and its role is to encode the role of a recipient or beneficiary in a given clause. The "vocative", in turn, comes from *vocare* – 'to call, to summon', and is used primarily to address someone. Interestingly, the name "accusative" is actually a result of a mistranslation – the intended meaning of the Greek *aitiatike* was that of affectedness, but since that word could be interpreted in several ways, the Roman grammarian Varro mistakenly decided on "to accuse" (Blake, 2004).

Greek name	Latin name	Semantic Motivation
orthe	nominativus	naming or straight case
genike	genitivus	of the genus, father's case
dotike	dativus	giving/addressing
aitiatike	accusativus	affected (Roman: accused)
kletike	vocativus	calling

Note. Reprinted from Theories of Case, by M. Butt, 2006, New York: Cambridge University Press. Copyright 2006 by Cambridge University Press.

In contrast to the Western tradition, the grammar created by Pāṇini, called *Aṣṭādhyāyī* – 'eight books' – uses numbers to identify cases, with the goal of separating semantics from the morphological function. Sanskrit recognized 8 cases, as seen in the table below, adapted from Butt (2006) (however, as the author notes, the Western names should be considered only a rough guide to understanding the system):

Number	Sanskrit name	Western name
1	*devas*	nominative
2	*devam*	accusative
3	*devena*	instrumental
4	*devāya*	dative
5	*devāt*	ablative
6	*devasya*	genitive
7	*deve*	locative
8	*deva*	vocative

Note. Reprinted from Theories of Case, by M. Butt, 2006, New York: Cambridge University Press. Copyright 2006 by Cambridge University Press.

Despite the separation, Pāṇini did understand that cases are connected with various semantic factors – those are described in the *Kāraka Theory*. Kārakas are "abstract case

relations between nouns or noun phrases and the verb"
(Hock, 1991). According to Blake (2004) " the verb is held
to be the head of the clause and each nominal depend-
ent is assigned to one of six kārakas." The main way of
expressing karākas is the case system, but since the rules
that govern the expression of semantic roles are connected
to other rules governing the general usage of cases, which
can then be countermanded by yet more specific rules, it
is safe to say that there is no simple concurrence between
semantic roles and case markings. In fact, *Aṣṭādhyāyī* con-
sists of over 4000 rules, where the more general ones can
very often be overruled by the more concrete ones, or by
exceptions (Butt, 2006).

Another old linguistic tradition relevant to case the-
ories is the Arabic one. The first thorough analysis of this
language was created by a man named Sıbawaihi in the 8th
century AC. His work was called *Al-Kitab*, and it described
a system in which case is treated on quite different basis
than in the Roman and Greek theories (Blake, 2004).

Arabic recognized three cases: nominative, genitive and
accusative. Nominative and accusative were assigned to
nouns based on the word order, which in Arabic is VSO.
Simultaneously, the cases were a part of a larger theory of
government, which states that governors, such verbs, prepo-
sitions, or nominals, directly control the form of a governed
element. Interestingly, some of the rules that first appear in
Sıbawaihi's grammar became a part of modern theories –
for example, Transformational Grammar (Butt, 2006).

1.3 Grammatical Relations and Semantic Roles

Up until the beginning of the 20th century, syntactic structure was a relatively underdeveloped area of linguistics. One of the first scholars who began looking at it more closely was Zelig Harris, who in 1951 published *Methods in Structural Linguistics.* He was followed by Noam Chomsky with *Syntactic Structures* (1957) – a work which laid the groundwork for much of the modern computational linguistic research, and whose ideas influence linguistic thinking up to this day (Butt, 2006).

One of the theories created on the basis of *Syntactic Structures* was Transformational Grammar, which stated that all possible sentences in a given language can be traced back to a collection of basic structures through a series of transformations. Eventually, the emergence of this idea prompted the formulation of another – namely, the Government Binding theory, or GB.

In between discussions that followed, Charles J. Fillmore published in 1968 a paper called *The Case for Case*, in which he raised on idea that there exists a universal set of abstract semantic roles, especially important to languages such as English, which have almost no case markings at all. Initially, he described a set of six "cases", the number of which was then extended to eight in a revised version of the abovementioned work, published in 1977. He calls these "cases" "deep cases", using this term to refer to "underlying syntactic-semantic relationships", in contrast to "surface

cases" such as for example nominative, genitive, accusative or ergative. He defines them as follows (Fillmore, 1968):

Agentive (A), the case of the typically animate perceived instigator of the action identified by the verb.

Instrumental (I), the case of the inanimate force or object causally involved in the action or state identified by the verb.

Dative (D), the case of the animate being affected by the state or action identified by the verb.

Factitive (F), the case of the object or being resulting from the action or state identified by the verb, or understood as a part of the meaning of the verb.

Locative (L), the case which identifies the location or spatial orientation of the state or action identified by the verb.

Objective (O), the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself; conceivably the concept should be limited to things which are affected by the action or state identified by the verb.33 The term is not to be confused with the notion of direct object, nor with the name of the surface case synonymous with accusative.

Currently, the most common terms for Fillmore's "deep cases" are semantic relations, semantic roles, case roles, thematic roles and theta roles (Blake, 2004).

These roles, however, must be distinguished from what is called grammatical relations, which are "structurally defined relations between words in phrases and clauses" (Payne, 2012). Some of them, such as subject, object, or indirect object, are purely syntactic; others can be semantically homogenous. The main structural features that reflect the grammatical relations in a clause are case markings on nouns, participant reference markings on verbs (such as agreement or concord) and constituent order.

1.4 Morphological Case

The term "morphological case" is understood as "inflectional case form of a nominal" (Malchukov & Spencer, 2009, p. 656), and is used to encode syntactic relations such as the subject, direct object, indirect object, and genitive relations. Cases which can be classified as morphological include: the nominative, the accusative, the ergative, the absolutive, the dative, and the genitive. In contrast, cases that encode semantic relations – as described above – are, among others, the instrumental, the ablative, or the locative (Stump, 2001). Morphological case can be also called, for example, grammatical case (in traditional grammar), structural case (generative grammar) or syntactic case (Malchukov & Spencer, 2009).

The system that is formed by morphological case is a closed one, with dative being the most highly marked case, and nominative the unmarked one (usually – there are systems where, for example, it is the accusative that remains unmarked). In contrast, there is theoretically no lim-

it on the number of semantic cases that can be present in a language. Morphological cases are also paradigmatically organized, and subject to case concordance. As written by Wunderlich & Lakämper (2001, p. 378), "The actual form of nouns, determiners and other elements of DPs may vary with respect to morphological case such as accusative, dative, or instrumental, but ultimately it is the DP as a whole that bears morphological case."

The size of morphological case systems varies. There are languages that have two cases (like Chemuhevi), three (like Semitic), four (like German or Icelandic), five (Latin), or six (Slavonic languages, Turkish). According to Blake (2004, p. 155), the maximum amount is around "a dozen or so", but if one considers all combinations of orientation markers and case markers in some languages (for example Finno-Ugric) as cases proper, then that number can rise to over forty. However, with some exceptions, most systems tend to be built according to a particular order:

(3) nom acc/erg gen dat loc abl/inst others (Blake, 2004, p. 156)

In keeping with this hierarchy, if a language has, for example, a dative case, then it is likely to also have at least one case from each of the categories preceding it.

Genitive is a widespread, adnominal case that is used to mark possessive relations – which is the reason behind it being sometimes called the "possessive case". It is most often expressed through suffixes, though, as always, there are exceptions – for example, in the now extinct Mochica the genitive form of a singular personal pronoun was con-

veyed through vowel alternation. Genitive markers can, simultaneously, embody other categories – most frequently, number (for example in Latin), or definiteness (for example in German). However, a genitive case can also, in some languages, be used in non-possessive constructions – for example, it can code the subject of a relative clause (in Turkish or Japanese), or mark objects of adpositions and spatial adverbials (Lander, 2009).

As mentioned above, dative is the most marked morphological case. In Ancient Greek, it was used to express the indirect object, and was called the "giving case", often connected with verbs such as "to give". Blake (2004, p. 143) considers it a "the main noncore case used to mark complements"; other researchers, however, identify it sometimes as the case of the recipient of ditransitives (Næss, 2009). Dative is also often associated with objects of intended or uncompleted actions, objects which are low on the affectedness scale, or animate (rather than inanimate) objects. It is regarded as a case that is both structural and semantic, as it has also uses which can only be described semantically – for example, it marks experiencers or beneficiaries.

The ablative case is present for example in Latin, Sanskrit, or Turkish. In Latin, it is a result of a merger of three once separate cases: the ablative, locative and the instrumental, and so expresses either source, location or instrument. It is usually governed by a prepositions, such as "out of", "in", or "with". Verbs that take a complement in the ablative case are, among others, "to use" or "to feed on".

The accusative case is used in connection with direct objects and nouns that stand in a predicative relation to the object. Its other functions are expressing destination and extent or duration. It is usually marked, but there do exist languages in which it is the unmarked case (Blake, 2004). By many researchers (after Malchukov & Kittila, 2009, p. 550) it is considered a "syntactic case with encoding of Patient as its semantic core". Usually, overt accusative markings are reserved for animate (or sometimes only human) nouns, while inanimate nouns have a tendency to be unmarked (which is known as Differential Object Marking) (Malchukov & Kittila, 2009).

Besides direct objects, accusative markers can be also attached to other clause elements. In many languages, they are attached to, for example, adverbials of distance or duration; in Arabic, the accusative is found on manner adverbs (such as "seriously"), and in Ge'ez – on nominal predicates. In others, it appears also on infinitives.

Case in Scandinavian Languages

2.1. Scandinavian Language History

Mainland Scandinavian languages: Norwegian, Swedish, and Danish, diverged originally from a single parent language, and to this day are mutually understandable. They belong to a group of Nordic – North Germanic – languages, which includes also the insular Scandinavian languages, Icelandic and Faroese, as well as three languages that belong to non-Germanic varieties – Finnish, Sámi, and Greenlandic (Vikør, 2005).

The common ancestor of the North Germanic languages, both Mainland and Insular, was Old Nordic. It evolved from Proto-Nordic, and was spoken from the 7th to the 15th century. It can be divided into two distinct sub-groups: Old West Nordic (which was comprised of Norwegian and Icelandic varieties, and is also called Old Norse), and Old East

Nordic (which included Swedish, Danish, and Gutnish) (Vikør, 2005).

Dialectal differences between the communities in the Scandinavian Peninsula can be found as early as in the 500 CE, but the historical sources start to describe each of them by its own name from around the 13th-14th century (Berg, 2016). That is also the time when Old Nordic dialects begin to evolve and undergo a number of morphological and phonological changes. That period, extending from around 1350 to 1550, is called Middle Scandinavian (Eliasson, 2005).

2.2 Case system in Old Nordic

The grammatical information in this chapter is mainly based on "The Syntax of Old Norse" by Jan Terje Faarlund (2004), including tables and examples quoted.

The Old Nordic language had four cases: nominative, accusative, dative and genitive. The parts of speech that were subject to inflection for case were nouns, determiners, pronouns and adjectives. The adjectival inflection applied also to definite articles, possessive determiners, quantifiers, interrogative pronouns, and participles. All of them were also inflected for number, with the first and second pronouns having singular, dual and plural, and other categories – singular and plural only. Nouns had one of three genders: feminine, masculine and neuter, and differentiated also between definite and indefinite inflection. Other nominal categories were inflected in agreement with the noun.

Nouns were additionally divided into weak and strong stem classes. Weak nouns were bi- or trisyllabic, and in the singular ended with vowels. Both groups included several declensional classes. Suffixes contained information about gender, case and number, and some were universal to all nouns – for example, dative plural ended always in *-um,* while genitive plural – in *-a.*

2.3 Strong Nouns

2.3.1 Masculine Nouns

There were four different stem classes for the masculine gender: *a, i, u* and *r.* In all of them, the nominative singular had the ending *-r,* and the plural *-r* proceeded by a vowel, while the accusative remained unmarked.

The a-class was the largest, and included many of the most common, monosyllabic nouns, such as *armr* 'arm' or *dagr* 'day'. It also adopted new nouns from other languages, such as *prestr* 'priest'. The dative in this class ended in *-i,* the genitive in *-s,* and the nominative plural in *-ar.*

Signular	Plural
hestr	hestar
hest	hesta
hesti	hestum
hests	hesta

(4) Declension of a masculine strong noun belonging to a-class, hestr – 'horse'

In the i-class, the nominative plural ended in -ir, while the dative had no suffix. The genitive could have one of the two endings: -s or -ar. Common nouns with this declension were for example *gestr,* 'guest', *lydr,* 'people'.

Signular	Plural
gestr	gestir
gest	gesti
gest	gestum
gests	gesta

(5) Declension of a masculine strong noun belonging to u-class, gestr – 'guest'

In the u-class, the singular dativ ended in -*i,* and the genitive in -*ar,* while the nominative plural ended in -*ir.* In the nominative and accusative singular, and the accusative and dative plural, there was an u-umlaut. Common nouns that belonged to this class were *vǫllr* 'field', or *ǫrn 'eagle'.* Nouns without u-umlat were for example *litr* 'colour' or *friðr* 'peace'.

Signular	Plural
vǫllr	vellir
vǫll	vǫllu
velli	vǫllum
vallar	valla

(6) Declension of a masculine strong noun belonging to i-class, vǫllr – 'field'

The last of the masculine strong classes was the r-class, which inflected like the a-class or the u-class in the singular, while having -*r* with i-umlaut in the plural. This class contained words such as *maðr* 'mann', *fótr* 'foot', or *faðir* 'father'.

Signular	Plural
faðir	feðr
fǫður	feðr
feðr	feðrum
fǫður	feðra

(7) Declension of a masculine strong noun belonging to r-class, faðir – 'father'

2.3.2 Feminine Nouns

Feminine strong nouns could belong to three different classes, based on the suffix in the plural nominative and accusative: the a-class, the i-class and the r-class. The ending of the genitive singular was -*ar,* and the ending of nominative and accusative plural was -*r.*

The a-class was divided in two smaller, additional sub-classes: a1 and a2. The difference between them was the suffix of the nominative singular, which in a1 was -*r*, while a2 did not have it.

The a1-class had an -*i* ending in the dative and accusative singular, and a long root syllable with i-umlaut.

Signular	Plural
helgr	helgar
helgi	helgar
helgi	helgum
helgar	helga

(8) Declension of a feminine strong noun belonging to a1-class, helgr – 'holiday'

The a2-class had no endings in the nominative, accusative or dative singular, and had u-umlaut of a in the root. It included also nouns derived with the use of *-ing/ung,* such as *dronning* – 'queen'.

Signular	Plural
mǫn	manar
mǫn	manar
mǫn	mǫnum
manar	mana

(9) Declension of a feminine strong noun belonging to a2-class, mǫn – 'name'

The i-class had no endings for the nominative, accusative, or dative singular, while the nominative and dative plural ended in *-ir.* Examples of words contained by this class include *sótt* 'illness', or *ætt* 'family'. It also included nouns derived by the suffix *-an* (which changed to

-*un* by u-umlaut, except in the genitive and dative plural)
such as *skipun* – 'arrangement'.

Signular	Plural
bœn	bœnir
bœn	bœnir
bœn	bœnum
bœnar	bœna

(10) Declension of a feminine strong noun belonging to a2-class, bœn – 'prayer'

In the r-class, the nominative and accusative plural ended
in -*r,* and there was an i-umlaut of the root vowel, as well as
u-umlaut, with the exception of genitive singular and dative
plural. Some words had also an additional -*r* in the genitive
singular.

Signular	Plural
strǫnd	strendr
strǫnd	strendr
strǫnd	strǫndum
strandar	stranda

(11) Declension of a feminine strong noun belonging to r-class, strǫnd – 'beach'

2.3.3 Neuter Nouns

There was only one strong neuter noun class, characterized by the nominative and the accusative having no endings in singular and plural. The dative singular ended in -*i,* while the genitive singular in -*s.* Many nouns in this class had a stem ending on a semivowel – such as S.N/A *ol* – S.D *ǫlvi* 'ale'. It included many commonly used nouns such as *barn* 'child', or *nafn* 'name', as well as nouns derived with suffixes -*al, -an, -ar, -að, -uð*, like *gaman* 'fun' or *sumar* 'summer'.

Signular	Plural
land	lǫnd
land	lǫnd
landi	lǫndum
lands	landa

(12) Declension of a neuter strong noun, land – 'land'

2.4 Weak nouns

Weak nouns in Old Nordic were bi- or trisyllabic, and in all the cases in the singular ended with a vowel – one for the nominative, and another for all the oblique cases. In the plural, the dative and the genitive had respectively -*um* and -*a* endings.

2.4.1 Masculine nouns

Masculine weak nouns were divided into two classes: the a-class and the r-class.

In the a-class, the nominative singular ended in -*i,* and the oblique cases in -*a,* with the plural following the paradigm of the strong masculine a-class. The weak a-class included words such as *tími* 'time' or *granni* 'neighbour', as well as some titles of foreign origin, like *herra* – 'sir, lord'.

Signular	Plural
tími	tímar
tíma	tíma
tíma	tímum
tíma	tíma

(13) Declension of a weak masculine noun, tími – 'time'

The r-class had the same endings in the singular as the weak a-class, but the plural followed the strong r-class. Most of the nouns in this class are derived like present pariciples, and so end in -*and.*

Signular	Plural
búandi	búendr
búanda	búendr
búanda	búendum
búanda	búenda

(14) Declension of a weak masculine noun, búandi – 'farmer'

2.4.2 Feminine nouns

There were two classes of weak feminine nouns – the u-class and the i-class.

The u-class had nouns ending in -*a* in the nominative, and in -*u* in all the oblique cases in the singular. In the plural, the nominative and the accusative ended in -*ur,* with the dative and the genitive retaining their generalized endings (-*um*, -*a*).

Signular	Plural
saga	sǫgur
sǫgu	sǫgur
sǫgu	sagum
sǫgu	sagna

(15) Declension of a weak feminine noun, saga – 'story'

The weak feminine i-class contained abstract nouns which were not used in the plural, and in the singular ended in all cases in -*i*.

2.4.3 Neuter nouns

Neuter nouns had only one weak class, which ended in -*a* in all cases in the singular, and in -*u* in the nominative and accusative plural. It included few words – among them *auga* 'eye' or *eyra* 'ear'.

2.5 Demonstratives and quantifiers

Demonstratives inflected in agreement with the noun they were connected to, and they inflected for number, case, and gender. The numbers two, three and four, as well as the word *báðir* 'both' had inflections similar to demonstratives, while the numbers between 5 and 20 did not inflect at all.

The distal demonstrative *sá* 'that' had two roots – one beginning in *s*- for the nominative masculine and feminine singular, and one in *þ*- for the remaining forms.

Singular			Plural		
Masculine	*Feminine*	*Neuter*	*Masculine*	*Feminine*	*Neuter*
sá	sú	þat	þeir	þær	þau
þann	þá	þat	þá	þær	þau
þeim	þeiri	því	þeim	þeim	þeim
þess	þeirar	þess	þeira	þeira	þeira

(16) Declension of the demonstrative sá. 'that'

Singular			Plural		
Masculine	*Feminine*	*Neuter*	*Masculine*	*Feminine*	*Neuter*
þessi	þessi	þetta	þessir	þessar	þessi
þenna	þessa	þetta	þessa	þessar	þessi
þessum	þessi	þessu	þessum	þessum	þessum
þessa	þessar	þessa	þessa	þessa	þessa

(17) Declension of the demonstrative þessi. 'this'

2.6 Pronouns

There were three types of pronouns in Old Nordic – the first and second person, which had singular, dual, and plural numbers, and the third person, which had both reflexive and non-reflexive forms. Instead of 3rd person pronouns in the plural and 3rd person neuter singular, the distal demonstratives were used: *þat* (singular neuter), *þeir* (plural masculine), *þœr* (plural feminine), *þau* (plural neuter).

1st person			2nd person		
Singular	*Dual*	*Plural*	*Singular*	*Dual*	*Plural*
ek	vit	vér	þú	it	ér
mik	okkr	oss	þik	ykkr	yðr
mék	okkr	oss	þér	ykkr	yðr
mín	okkar	vár	þín	ykkar	yðar

(18) Declension of 1st and 2nd person pronouns in singular, dual, and plural.

Non-reflexive		Reflexive
Masculine	*Feminine*	-
hann	hon	-
hann	hana	sik
honum	henni	sér
hans	hennar	sín

(19) Declension of 3rd person pronouns, non-reflexive and reflexive.

2.7 Adjectives

The adjectival declensions applied also to quantifiers, participles, determiners and some pronouns. These words inflected for number, gender, and case, in agreement with the noun they were connected to.

There were two declension types: a strong one and a weak one. The strong one was used for the positive and superlative of adjectives, perfect participles, quantifiers, the definite article, and possessive determiners. The weak one was used for the positive of adjectives, comparative, superlative, and for present participles. The way of inflecting an adjective depended on its syntactic and semantic function – the weak declension was used in definite noun phrases (which most often contained the definite article *hinn*), while the strong one in indefinite noun phrases and to form predicates.

2.7.1 Strong adjectival declension

The strong declension had two forms: a -*an* type and -*n* type, depending of the accusative masculine singular.

The -*an* type included monosyllabic adjectives, for example *blindr* 'blind' or *spakr* 'wise', as well as quantifiers *allr* 'all' and *sumr* 'some'.

Masculine	Feminine	Neuter	Masculine	Feminine	Neuter
langr	long	langt	langir	langar	lǫng
langan	langa	langt	langa	langar	lǫng
lǫngum	langri	lǫngu	lǫngum	lǫngum	lǫngum
langa	langrar	langs	langra	langra	langra

(20) Strong declension of the adjective langr – 'long'

The -*n* type contained the bisyllabic adjectives with a stem ending in -*in,* the perfect participle of strong verbs, determiners, and most quantifiers.

Singular			Plural		
Masculine	*Feminine*	*Neuter*	*Masculine*	*Feminine*	*Neuter*
hinn	hin	hit	hinir	hinar	hin
hinn	hina	hit	hina	hinar	hin
hinum	hinni	hinum	hinum	hinum	hinum
hins	hinnar	hins	hinna	hinna	hinna

(21) Declension of the determiner hinn – 'the'

2.7.2 Weak adjectival declension

The weak adjectival declension had two types – one for the positive and superlative of adjective (weak 1), and one for comparative and for present participles (weak 2).

The Weak 1 declension took on the forms of the weak masculine a-class, weak feminine u-class or neuter class, which means that all the oblique cases were the same. In the plural, the dative ended in -*um*, while all the other cases in -*u*.

Masculine	Feminine	Neuter
langi	langa	langa
langa	lǫngu	langa

(22) Weak declension of the adjective langr – 'long'

The Weak 2 declension had -*i* in the feminine singular and in the plural of all genders and cases except the dative.

Masculine	Feminine	Neuter
spakari	spakari	spakara
spakara	spakari	spakara

(23) Weak declension of the comparative of the adjective spakr – 'wise'

The Middle Scandinavian Period

The Middle Scandinavian period is dated differently in many sources; however, most researchers of Swedish, Danish and Norwegian use the term for the years between 1350/1375 and 1500/1525 (Venås, 2005).

In all three countries, this era was characterized by significant language changes which influenced the their whole makeup. The Black Death, which came to Scandinavia first in 1349, wiped out around from 40% of the population – in Denmark and Sweden – to 60-65% – in Norway (Vahtola, 2003). There, it killed so many of the literate members of the society, that, according to Seip (1931), the written language changed dramatically after 1370 – there was nobody left to uphold the old writing habits.

One of the further consequences of the Black Death was an agrarian crisis, which also hit Norway with the highest force. The landowners lost most of their income, and so became peasants themselves – which, combined with the

previous events, meant that Norwegian nobility became almost non-existent, and was steadily replaced by the Danes. In Denmark and Sweden, the numbers of nobility also diminished, but those who remained became richer and increased their distance from the other parts of the society.

Politically, possibly the most important event was the formation of the Kalmar Union in 1397. It brought Norway, Sweden, and Denmark together, under the control of the latter. Although the Union was a result of dynastic connections between the kingdoms, according to Ingesman (2005), it was established also in response to growing German influence in the Baltic Sea region. The Kalmar Union marked also the beginning of the diminishing of Norwegian political influence, which culminated with Norway being declared a part of Denmark in 1536.

The Middle Scandinavian period was also a time of significant Middle Low German influence on all aspects of culture – including language. While the use of Latin impacted syntax and style, an influx of Low German words broadened the vocabulary (Venås, 2005). German traders and the Hanseatic League dominated both foreign and, to a certain degree, domestic trade, especially in Norway after establishing a trading station in Bergen in 1360s.

At the same time, the Scandinavian countries began developing a "nation consciousness", which was manifested for example by the royal administration in Sweden and Denmark through shifting to vernaculars (from Latin) around the 1400s, and through a rising interest in national history (Ingesman, 2005).

3.1 Changes in the morphology of the Scandinavian languages

As mentioned above, the discussed period brought changes to all areas of language. This subchapter will describe the general directions of morphological developments in Swedish, Danish and Norwegian. According to Trosterud, (2001) most of the processes that took place in that time were quite rapid and followed a "pattern that is well known both from dialect shift and from language death today" (p. 153).

Verbs changed in two stages – the first one was the loss of person agreement, and the second one – number agreement. The factors that began this evolution were mostly phonological, and included changes in the segmental phonology and in the stress system (Trosterud, 2001). Many verbs changed also inflectional classes – some strong verbs became weak, and some weak became strong (though the former occurred more often). Some singular and plural forms merged, and gradually, it became more common to use the singular instead of the plural. Some weak verbs completely lost their plural forms in the past tense (Mørck, 2005).

When it comes to the pronominal and nominal morphology, the most visible and central change was the loss of the inflexional case system. The pronouns went from having four cases to a subject and object form – by the 1500s the personal pronouns no longer had a genitive. There occurred also a merger of dual and plural, which happened first in Danish, then in Swedish, and finally, around the 15th century, in Norwegian.

The simplification of the case system concerned mostly the feminine singular and masculine singular and plural forms – syncretism of the nominative and accusative feminine plural, as well as neuter singular and plural already existed, as shown in the previous chapter. In fact, in Old Danish, distinctions between the nominative and the accusative were almost completely gone by the end of the Old Nordic period, so by the beginning of the 14th century. In Swedish, the merger of these two cases was first visible in the definite strong masculine nouns and became steadily more prominent after the 1400s. The definite strong feminine nouns, as well as the indefinite and definite weak nouns, kept the distinction to some degree up to early modern times. Norwegian followed mostly the same pattern – the main difference was the abovementioned break in the writing tradition after 1370s, which caused faster decline of case (Mørck, 2005).

The dative disappeared from spoken Danish completely before 1300s; in Swedish and Norwegian, it faded first in the feminine forms, and then in the masculine and neuter. However, it remained alive in some dialects even up until today – for example, it can be still found in some areas in Hedmark, Trøndelag or Søgn in Norway (Eyþórsson et al., 2012).

According to Mørck (2005, p. 1132), "the most important aspects of the history of the gen. are the generalization of the ending -*s* and the transformation of this ending from an ordinary inflexional formative to a sort of gen. suffix". The -*s* suffix spread first to the rest of the strong masculine forms in the singular, then to the strong feminine singular,

and finally to the weak and plural constructions. This process occurred first in Danish, and it was complete in speech around the year 1350, with writing following later. In Swedish and Norwegian, however, the old genitive forms were still partly present even in the 16th century.

3.2 Reasons for decline of case

Jóhanna Barðdal and Leonid Kulikov (2009) argue that there are four mechanisms that lead to loss of case in languages of the world: phonetic processes, overlapping of syntactic and semantic functions of individual cases, semantic or functional overlapping of whole argument structures and an assortment of analogical developments and paradigmatic levelling. These mechanisms often occur simultaneously and lead at first to case syncretism and then merging of cases.

One of the most common phonetic changes that eventually results in decline of case systems is the erosion of inflection in word-final position (when a given language has case suffixes) or word-initial position (when a given language has case prefixes). An example of this is Arabic, which lost its original system in the post-classical period; another is the loss of Latin case system in the Romance languages, which all currently display either no case markings, or have two cases at most (Romanian).

An overlap between semantic and syntactic functions can be illustrated by the syncretism of three Proto-Indo-European cases – ablative, locative and instrumental,

into the Latin ablative. In this process, it was both phonetic and functional factors that lead to the merger – if the three cases were not semantically similar, the phonetic changes alone would possibly not have brought about the same result (Barðdal & Kulikov, 2009).

When it comes to synonymous argument structure constructions, case markings tend to disappear in two ways: due to consequent merging of the constructions, or because more productive ones attract verbs from less productive constructions, which makes those obsolete. Both of these paths are reflected in development of the Germanic languages, for example in English, or German and Icelandic.

Finally, an example of a loss of case system based on a variety of analogical developments and paradigmatic levelling is the Old French two-case system. The collapse was a result of, among others, distribution of markers making the system too complicated, the expansion of constructions with non-canonical subject marking and existence of a few inflection types which lost their case distinctions by the Old French period (Barðdal & Kulikov, 2009).

When it comes to the Scandinavian languages, two main theories have been put forward as to why the case markings started disappearing. The first one, growing out of the Neogrammarian tradition, cites phonological erosion as the main reason (for example, Indrebø, 1951). The second one says that the more important factor behind the loss of case is the evolution of the morphological system itself (for example Trosterud, 2001; Enger, 2013; Barðdal, 2009; Mørck, 2004), as well as the influence of syntactic changes.

According to Enger (2013), the phonological approach is accepted for many European languages. It is also deeply rooted in linguistic tradition, and, since in Scandinavian languages the relevant phonological and morphological changes occur simultaneously or at least close to each other in time, it is possible to consider both processes as related.

However, this theory does not account for all the developments taking place in the language at that time. For example, "there is no diachronic phonological process of s-deletion in any North Germanic language or dialect" (Enger, 2013, p. 6). The genitive -s, which became the general genitive suffix in the Middle Scandinavian period, was also lost rather quickly afterwards, both in Norwegian and in some North Swedish dialects – without any significant phonological changes in the case system that could influence the process (Enger, 2013).

Another unaccounted for change would be the loss of the dative suffix -i in Norwegian (despite there being no widespread loss of -i in this language), and the behaviour of the analogous dative exponent /e/ in Swedish, when compared with the homonymous verbal exponent. The latter evolves differently, despite the phonological circumstances being very similar – which can lead to a conclusion that this process in not phonologically triggered (Barðdal, 2009).

Further arguments against the phonological approach include, among others, the strengthening of definite forms (Enger, 2013), or the changes in the case system occurring at a different rate in proper nouns in comparison to common nouns (Wetås, 2008).

Barðdal (2009) considers also other factors that might have influenced the loss of case. One of them is the transition from the synthetic to analytic stage of a language, in which morphological structures are replaced with free morphemes – when it comes to the inflectional system, such a change should cause the dative objects to be replaced with prepositional phrases.

Another aspect that might have influenced the evolution of the case system in Scandinavian languages is change of the word order – which became more fixed (since it has been widely observed that the more cases a language has, the freer the word order becomes (Blake, 2004)). The loss of case markings is also accompanied by a significant change in vocabulary – meaning lexical borrowing, which is a result of contact situations, for example with Low German. Yet another hypothesis mentions the emergence of the definite article. It is based on the fact that many languages with a thriving case system do not have such an article, and that it appears at the same time that the case markings disappear (Blake, 2004).

The final factor mentioned by Barðdal (2009) is the replacement of lexical case with structural case, which can result in a disintegration of a morphological case system – which happened, for example, in English or Dutch.

Interestingly, while the abovementioned aspects certainly did influence the Scandinavian languages, most of them cannot be extended to all Nordic languages, such as Icelandic or Faroese, which, despite their similarity to Nor-

wegian, Swedish and Danish, often followed different paths of development (Barðdal, 2009).

3.3 Research on decline of case

The amount of research available on decline of case varies for each Scandinavian language. In Danish, many works on this subject were published in the second half of the 19th and first half of the 20th century (for example Wimmer 1868, Skautrup 1944, Hansen 1956). The interest began to rise again after they year 1990, resulting in publications by scholars such as Eva Skafte Jensen (e. g. 2001, 2002) or Lars Heltoft (e. g. 1995, 2001).

There is no comprehensive work pertaining the development and loss of case in Swedish, and, similarly to Danish, most of the works on Old Swedish inflection were published at the turn of the 19th and 20th centuries, and then after the year 1990 (for example Delsing 1991, Norde 1997, Falk 1997, Skrzypek 2005).

When it comes to the research done on loss of case in Norwegian, the most exhaustive modern work on the subject is "Kasusbortfallet i mellomnorsk: ein komparativ studie av proprialt og appelativisk materiale" ["The Decline of Case in Middle Norwegian: a Comparative Study of Proper and Common Nouns"] – a PhD thesis written by Åse Wetås from the University of Oslo in 2008. The thesis spans almost 400 pages and documents the decline of case between the years 1350-1500, focusing on proper and common nouns, but including also pronouns and adjectives.

Other notable researchers in the field are for example Endre Mørck, who published several articles on the subject – for instance, in "Handbok i norrøn filologi" ["A Handbook of Old Norse Philology"] from 2004, or Ivar Berg, who wrote, among others, an article called "Nokre sider ved det norske kasusbortfallet i seinmellomalderen" ["Some aspects of the decline of case in Norwegian in late Middle Ages"] , which appeared in 2015 in a Norwegian academic journal "Maal og Minne". Decline of case was also discussed by Hans Olav Enger (2004, 2013), or John Ole Askedal (e. g. 2005).

This topic has also been chosen as a focus for a number of master theses – mostly pertaining to dative (such as Ougland, 2015; Blomqvist, 2011; Haugen, 2006).

Methodology

4.1 The corpus

The analysed corpus consists of 37 letters – diplomas – written between the years 1300-1500 in the region of today's Telemark county, which is situated in South-East Norway. Their length varies from half to a full page of standardised text in A4 format. The letters are a part of Diplomatarium Norvegicum – an archive of medieval sources containing documents created before 1570, which is available online under the address https://www.dokpro.uio.no. The archive spans 23 tomes in physical form, and includes over 20.000 letters and other documents.

4.2 Choice of sources

In the Middle Norwegian period, the word "letter" was used to refer both to personal and official documents, but today, the official letters are referred to by scholars as "diplomas".

They are the type of a source that is most often used for research regarding Norwegian history and language in the Middle Ages. They were written mostly in Old Norwegian, Middle Norwegian, or Latin, and are related to nearly every area of life – law, religion, government, administration, trade, as well as everyday affairs (Hødnebø, 1960).

The diplomas can be grouped into different categories based on the place where they were written, the social status of the writer, or the documents' contents. Different scholars differentiate between, for example, *kongebrev, bispebrev, adelsbrev, lagmannsbrev,* etc. (royal letters, letters from bishops, letters from noblemen, legal letters) (Mørck, 2011), or *kjøpebrev, domsbrev, vitnebrev,* etc. (letters regarding purchase or sale of land or goods, letters containing a legal judgement, letters containing witness statements or confirming the witnessing of an event) (Hødnebø, 1960).

The corpus I'm analysing consists of two groups: *hjemmelsbrev* – letters pertaining to purchase or sale of land or goods, as well as to inheritance cases, and *vitnebrev,* since both types use similar vocabulary and phrases. The letters are also all written by a third party, and not by the senders themselves (as noted by Mørck (2011), members of all social groups at that time commonly used the help of writers, usually belonging to the clergy, to write such documents), since those written personally by the senders make use of different forms and phrases. The senders belonged to two social groups: the clergy, or officialdom (such as *lagmenn* – lawspeakers, "legally trained men who interpreted the written and customary laws during assemblies" ('lagmann

– i gammel tid', 2019)). All of these choices were made in order to unify the dataset.

Diplomas are, in almost all cases, dated and tied to a specific place, which is also a factor in why they present a quality material for both linguistic and historical analyses (Hamre, 1972). The earliest dated letter in my corpus comes from 1303 – so from before the Black Death arrived in Norway, and from when the case system was still more or less intact – and the oldest from 1500 by when the situation changed considerably. Such a wide time span allows for a reliable diachronic analysis of changes occurring in the inflectional system.

The original corpus I worked with consisted of 77 letters, most which came from the 15th century – 62 in total, with 17 coming from the 14th century. Since the length of the diplomas varied, with longer ones being noticeably more common in the 1300s, to unify the amount of material coming from each century I chose to consider the total amount of words and their frequency of occurrence. In order to make the selection process randomized, from the letters written between 1401-1450 I chose every second document (12 out of 24), and from the letters written between 1451-1500 every third document (13 out of 38).

The final corpus consisted of 17 letters from the 13th century, which equalled 1 711 words with a total token frequency of occurrence of 4 750, and 20 letters from the 15th century, which equalled 2208 words which occurred 4 725 times in total. The resulting corpus contained 3919 words with a total token frequency of 9 475.

Time period	Number of letters	Number of words	Token frequency
1300-1400	17	1711	4750
1401-1500	20	2208	4725
Total	37	3919	9475

(24) Number of letters, words and their frequency of occurrence in the corpus by time period.

The diplomas in the corpus were written in the region of today's Telemark county. The reasons for this geographic demarcation were twofold. The first group of arguments includes personal reasons – having lived in the area for a while, I'm acquainted with the local dialect. The second group follows the reasoning presented by Wetås (2009), whose study involved West Telemark:

Firstly, it is a remote area. It is not situated along any central traffic artery, and is therefore a region that has proven to be conservative when it comes to exterior linguistic influences (...). Another factor which makes it attractive to use in a study of case loss is that nowadays, the local dialect no longer uses case inflection.

Besides that, the Østlandet – Eastern Norway – was the most important part of the country in the Middle Norwegian period (Mørck, 2011), and so provided a considerable amount of diplomas of various genres. This variety allowed me to assemble a cohesive corpus.

Despite the fact that diplomas were written by people coming from different social classes and for different purposes, it is possible to distinguish repeatable, formal

constructional frames used by most writers. According to Hamre (1972), a diploma usually consists of three parts:

> Protokoll – which includes a call upon God, name of the person writing the letter or the person in whose name the letter is being written, name of the addressee and a greeting.
>
> Text – the body of the letter.
>
> Eskhatokoll – which includes a date and place, and other final clauses.

Naturally, not all the letters include all the elements, as they often vary between genres – for example, letters written by kings or bishops also often include a segment called "sanctio" as part of the eskhatokoll, in which the dignitary confirms an order, a prohibition against something, etc..

Protokoll and eskhatokoll are usually very formal and follow specific patterns depending on the genre of the given diploma. However, as stated by Wetås (2009), these formal elements still follow the same path of morphologic development as the changeable contents of the body of the letters, and should not be seen as stiff and unchanging.

4.3 Construction Grammar

To analyse the data, I will be using a framework of linguistic analysis called Construction Grammar (CxG), and specifically Diachronic Construction Grammar.

The framework developed initially as a part of West-Coast linguistics in the United States, which began with

works of Charles Fillmore and his associates in the 1980s. Currently, there are several different versions of it, including Cognitive Construction Grammar, Sign-Based Construction Grammar, Radical Construction Grammar, Embodied Construction Grammar and Fluid Construction Grammar. The first one to evolve was Berkley Construction grammar, which was usage-based and dealt primarily with language data that wasn't of interested to generative grammarians – such as idioms and other fixed expressions (Barðdal & Gildea, 2015). The framework has also its roots in Cognitive Linguistics – a branch of Cognitive Science focusing on how we "understand, perceive, organize and acquire language", and which "opts for an integrated approach of all aspects of language" (Barðdal, 2001, p. 21). It has been successfully applied in different kinds of linguistic research, for example typology (Croft, 2001) or syntax (Croft, 2000).

According to Barðdal & Gildea (2015), all versions of Construction Grammar share the same basic tenets:

– Constructions are pairings of form and meaning, and as such they are the

basic building blocks of language

– There is uniform representation of grammatical structures, in that all linguistic

units are viewed as form-meaning pairings

– Constructions are organized in taxonomic dichotomies or hierarchies

– The theory is monostratal, with no surface structure – D-structure distinction

– There is no distinction between "core" and "periphery"

As mentioned above, the basic "building block" of CxG is a construction, in which form and meaning are symbolically linked. This pairing, however, cannot always be explained by general language rules, or by its individual components, and so can often be described as idiosyncratic. When a language community agrees on this idiosyncratic form-meaning pairing, it means that is has become a convention of this community. That process is called "conventionalization" (Barðdal, 2001).

Constructions can be both highly general (compositional) and highly specific (noncompositional). An idiom would be an example of the latter type of a construction, as it is not possible to derive the meaning of the whole from the meaning of the individual words (as in: meanings of words *kick* and *the bucket* put together do not have the same meaning as the idiom *kick the bucket*). Other constructions – such as a ditransitive construction, like *I gave him a gift* – are highly general, as in the meaning of the construction is a sum of the individual meanings of its parts (Barðdal, 2001).

Another characteristic used to described constructions is productivity. A fully productive construction, such as the English regular plural, can be applied to new constructs almost universally with no surprises (Jackendoff, 2013).

Yet another one is schematicity. If a construction is schematic, it means that its "slots" are not filled in advance, and

the speaker has a choice of which words to use. Levels of schematicity can be represented as in the following figure from Cruse and Croft (2004):

$$[\textsc{VerbPhrase}]$$
$$|$$
$$[\textsc{Verb Obj}]$$
$$|$$
$$[\textit{kick} \; \textsc{Obj}]$$
$$|$$
$$[\textit{kick} \; [\textit{the bucket}]]$$
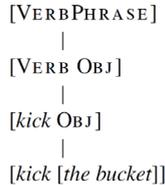
Figure 1. Different levels of schemacity. Reprinted from Cognitive Linguistics,
by W. Croft and D. A. Cruse, 2004, Cambridge: Cambridge University Press.

Scholars working within the Construction Grammar framework have developed several methods of visual annotation of constructions. One of them is to use nested quare brackets, such as in the example below by Elizabeth Close Traugott (2013):
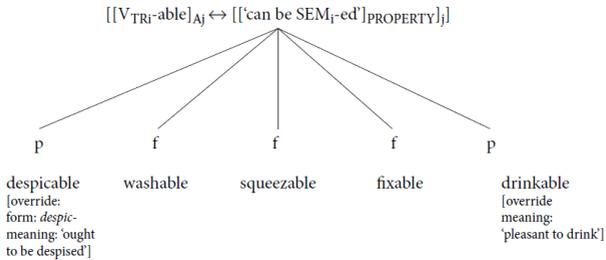
FIGURE 4.1 A schema for some lexical constructions in *-able*

Note. Reprinted from Constructionalization and Constructional Changes,
by E. Close Traugott and G. Trousdale, 2013, Oxford: Oxford University Press.

Another popular approach is to show constructions within boxes:
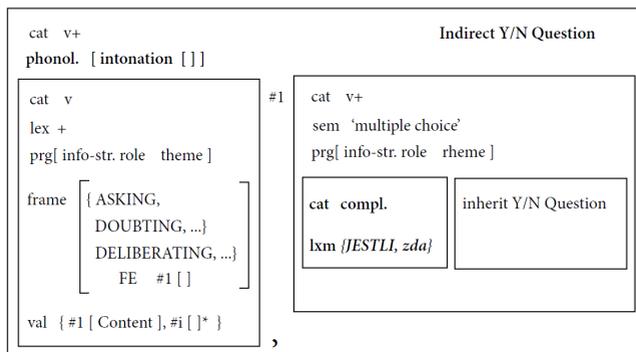
Figure 1. Canonical indirect Y/N question.

Note. Reprinted from Construction Grammar as a tool for diachronic analysis,

by M. Fried, Constructions and Frames, Volume 1, Issue 2, Jan 2009, p. 270

As written by Mirjam Fried (2015), this type of notation is better suited for illustrating grammatical constructions that are more complex, and allows for referencing additional layers of information while keeping them transparently organized. The larger box represents the whole construction, the leftmost inner box – its head, and the right inner box – its dependent.

4.4 Diachronic Construction Grammar

In a diachronic perspective, constructions can undergo changes in meaning (semantics, pragmatics, discourse function), changes in form (morphological, phonological,

syntactic), and changes in mappings between meaning and form. The latter type is known as "reanalysis" (Croft, 2000). On the other hand, when an entirely new construction emerges alongside the old one, it is called "construction-alization" (Barðdal & Gildea, 2015), and when the change affects only individual components of a construction, it is called a "constructional change" (Traugott, 2015).

To capture similarities and differences between constructions, Traugott (2008, s. 148) divided them into several levels of complexity:

a. Constructs – tokens of micro-constructions

Micro-constructions – individual construction-types, e.g., give Obj Obj2

Meso-constructions – sets of similarly-behaving microconstructions

Macro-constructions: high-level schemas, e.g., ditransitives.

All of these constructions must be schematic, productive, and not fully compositional (Langacker, 2005), but it is the construct that is considered a "locus of innovation". Only after these innovations are conventionalized by a significant number of speakers is it possible to talk of emergence of micro-constructions – and so, of change (Traugott, 2008).

Another characteristic of constructions is that they form networks, and are grouped into language-specific structured inventories, called "constructicons", in which we can find both lexical and grammatical constructions. They, in

turn, are structured hierarchically in taxonomies, which allows them to combine or unify (Traugott, 2015).

As described by Barðdal (2001), there are two common approaches to morphological case within the Construction Grammar framework. The first one treats it as part of an argument structure construction – where the meaning is determined on the basis of the verbs used in them. The second one treats case as a construction of its own – a separate form-meaning pairing (for example, a dative subject case or accusative subject case). However, the two views do not exclude each other – after all, constructions can be nested– but instead complement each other, each capturing different aspects of morphological case. In this thesis, I will be taking the first approach, and viewing case as part of a larger construction.

4.5 Tools of analysis

To annotate the gathered material, I used two programmes: CATMA and WeSay.

CATMA (Computer Assisted Text Markup and Analysis) is an online tool created by researchers from the University of Hamburg and Deutsche Forschungsgemeinschaft, available under the address http://catma.de. Its purpose is to aid scholars of various branches of science in annotating, analysing and visualising their data. CATMA allows the user to upload a corpus, develop tagsets, and then mark words and phrases accordingly.

The tagset I created consisted of four categories corresponding to the four cases existing in Middle Norwegian – nominative, accusative, genitive and dative, which in turn contained individual tags for part of speech (nouns, adjectives, pronouns). I used also one extra category containing tags utilized to mark words I was uncertain about at the time (whether it was their meaning or their case), to mark words in oblique case, and to mark loanwords.

Each category received its own colour – the nominative: yellow, the accusative: magenta, the genitive: blue, and the dative: green. Individual tags inside the categories were differentiated by the use of varying hues – for example, a noun in the nominative case was marked with orange, an adjective with dark yellow, a pronoun – with a lighter shade. Loanwords were additionally marked with brown, words in the oblique case in red, and words that were for some reason confusing – in black.

The second programme I used is WeSay, created by SIL International. WeSay is a dictionary-making software, which allows the user not only to create a dictionary for a given language, but also to attach additional information (such as part of speech, examples of usage) and files (such as images) to each entry. Thanks to that feature, I was able to keep track of the analysed words and their inflectional categories and patterns, which allowed me to create an additional, small database of words and information relevant to the project.

Additionally, to conduct some of the statistical calculations on the data, I used the language R and the program

R Studio. This method was used in particular in order to study fixed formulas used in the first and last lines of diplomas – so protokoll and eskhatokoll.

Analysis – general results

In this chapter, I will present the general results of the analysis. Firstly, I will describe the process – starting with choosing a specific set of constructions, and then proceeding with a more in-depth look at concrete constructs, as well as at the statistical code used for analysing the beginning and ending phrases of the diplomas. The next section will show the outcomes of the examination of the entire dataset – firstly regarding ditransitive constructions, and then breakdown of agreement patterns.

5.1 The Process

Based on the data gathered in the corpus and in accordance with the Construction Grammar framework, the analysis was conducted on the following constructions:

[SBJ + VDITR + DIR-OBJACC + INDIR-OBJ]

[SBJ + VTR + DIR-OBJACC]

For each of the constructions, it is possible to identify several constructional levels (based on Traugott, 2008):

1) A. Macroconstruction:

[SBJ + V.ditr + DIR-OBJ.ACC + INDIR-OBJ]

B. Mesoconstructions, where one can distinguish two different constructions based on differing order of objects of a given ditransitive verb:

[SBJ + V.DITR + DIR-OBJ.ACC + INDIR-OBJ]

[SBJ + V.DITR + INDIR-OBJ + DIR-OBJ.ACC]

C. Microconstructions, where the category of a ditransitive verb is filled with a concrete lexeme, for example:

[SBJ + *gefa* + DIR-OBJ.ACC + INDIR-OBJ]

D. Constructs, where each element of the construction is filled with a concrete lexeme, for example (DN I 116 1308):

(5) *þa   gaf   herra   Aslakr   ok ek   Vighi*
   then give.PAST.3SG lord.obl Aslakr.nom and I.nom.1sg Vighi.
   Birni   bref
   nom Birni.dat letter.n.acc

   'Then gave the lord Aslakr and I, Vighi, a letter to Birni'

2) A. Macroconstruction:

[SBJ + V.TR + DIR-OBJ.ACC]

B. Microconstructions, where the category of a transitive verb is filled with a concrete lexeme, for example:

[SBJ + *fá* + DIR-OBJ.ACC]

C. Constructs, where each element of the construction is filled with a concrete lexeme, for example (DN I 341 1354):

(6) *(han)*　　　*tok*　　　　*arfuen*　　　　　　*eftir*
　　(he.NOM.3SG) take.PAST.3SG inheritance.DEF.ACC after
　　Vermundr　a Hœimdalle
　　Vermundr of Heimdalle

　　'He took inheritance [left] after Vermundr of Heimdalle'

After a manual search for words tagged with the colour previously assigned to the accusative case, I identified 128 constructs in total which fit within these frames. This number includes microstructions with 40 verbs (2 ditransitive verbs – with a frequency total frequency of 20 and 38 transitive verbs – with a total frequency of 108), 12 of which appeared more than once: *gefa* ("to give"), *fá* ("to get"), *halda* ("to hold"), *kaupa* ("to buy"), *selja* ("to sell"), *lage* ("to make"), *kalla* ("to name, refer to, call"), *lúka* ("to shut, to pay"), *eiga* ("to own"), *ta* ("to take"), *oppbera* ("to receive"), *láta* ("to put in place, to lose"). Out of these, the verb *gefa* was the most productive, with 14 instances. 70 out of the 133 constructs come from documents written in the 14th century, while 62 come from the 15th century.

　　Apart from the constructional levels described above, I also looked separately at instances where the DIR-OBJ consisted of:

- a modifier and a noun – which was the most productive category, with 35 instances
- a numeral and a noun – with 34 instances
- a bare noun – with 29 instances
- a possessive or demonstrative pronoun and a noun – with 13 instances

All the structures named above describe occurrences where the DIR-OBJ comprises of a simple noun phrase. The constructs where the DIR-OBJ did not fit into one of these categories (22 instances in total) were not analysed as a separate group, but taken into consideration in the overall analysis of the data. They were either more complex (and so, as in the example below from DN II 593 1407, consisted of words belonging to more than 2 lexical categories):

(7) *han   skuldi   eigœ   alt*
    He.3Sg   shall.PAST.3SG   own.INF all.N
    þet þœr var   austœr
    that there be.PAST.3.SG to the east

    'He should have owned all that there was to the east'

Or could be counted as outliers (the example below, from DN II 896 1475, will be discussed in detail in the next chapter):

(8) *ledhe   tha Ærlandh eith   vitnœ*
    lead.PAST.3SG then Ærland a.N.INDF? witness.ACC.SG

    'Ærlandh presented then a witness'

In addition, I also separately analysed the fixed formulas that appear at the beginning and the end of most of the letters. The reason for it was to see if the changes that occur in them can be compared in terms of speed and type with those occurring in constructs found in other, less formal parts of the texts. The formulas typically follow the pattern below:

(9) The beginning sentence (DN I 108 1305):

Ollum	*manum*	*þœim*	*sœm*
All.3PL.DAT	man.PL.DAT	that.3PL.DAT	who

þetta	*bref*	*sia*	*eda h/oe/yra*	*sœndir*
this.N.SG.ACC	letter.SG.ACC	see.INF	or hear.INF	send.PRES.3SG

Vigi	*loghmadr*	*Q. G. ok*	*sina.*
Vigi.NOM	law-maker.NOM	Q.G. and	his.F.SG.ACC

'To all those who this letter see or hear sends Vigi law-maker God's greetings and his own'

(10) The final sentence (DN I 95 1303):

þa	*sœtti*	*œk*	*firir*	*þetta*	*bref*
Then	place.PRES.1SG	I	upon	this.N.SG.ACC	letter.SG.ACC

mit	*insigli*
my.N.SG.ACC	seal.SG.ACC

'Then I place my seal upon this letter'

As can be seen on the examples above, these formulas commonly include the three following words in the accusative case: *thetta* ["this"], *incigli* ["seal"], *bref* ["letter"]. Since the occurences of *bref* remained mostly unchanged within the studied period, I conducted a statistical analysis constrained to *thetta* and *incigli.* The first step was extracting the first and the last three lines from each of the letters in the corpus. This was achieved using the following code in R Studio:

```
TEXT <- vector()
for (f in files) {
x <- readLines(paste(path, sep = ""),
         n = 3)
x <- paste(x, sep="", collapse="\n")
 y <- readLines(f)
 xb <- (tail (y, n=3))
 xb <- paste(xb, sep="", collapse="")
 TEXT <- c(TEXT, x, xb)
}
```

The next step was creating tables for both studied words (*incigli, thetta*), which was done by hand. Each of the tables listed the case ending used in the particular letter for a given word in the following way:

Letter ID	Case Ending
1336.txt	i
1338.txt	e
...	...

The tables were then loaded into R Studio, with the goal of obtaining information about the frequency of occurrence of each of the endings for each of the words. The following code was used in order to achieve this goal:

```
attach(INCIGLI_C)
PERIOD <- vector()
PERIOD[1:7] <- "early"
PERIOD[8:16] <-"middle1"
PERIOD[7:28] <-"middle2"
PERIOD[29:37] <- "late"
Data <- data.frame(INCIGLI_C, PERIOD)
Periods <- table(Ending, PERIOD)
Table <- data.frame(Periods)
write.csv(Table, file="INCIGLI_table.csv", fileEncoding = "UTF-8")
```

The final result was visualised in two tables – one for each of the studied words – showing how often the particular case ending occurred in a particular period of time. This part of the analysis will be discussed in more detailed in Chapter VI.

5.2 The results

The analysis conducted on all the 133 constructs yielded two main results:

- ditransitive constructions noticeably decreased in frequency with time
- agreement for case in accusative phrases began to break down in the 15th century.

5.3 Ditransitive constructions

As mentioned previously, the ditransitive constructions had a token frequency of 20, with type frequency of 2 – the verbs relevant to this construction were *gefa* ("give") and *lúka* ("to shut, to pay"). Admittedly, they constituted a minor part of all the analysed constructs (19%), but significant enough to make it possible to draw conclusions.

According to Johanna Barðdal's article *The Development of Case in Germanic* (2009), one of the hypotheses posed as a possible cause of loss of morphological case is a change from synthetic to analytic stage of a language. This implies that "morphological or synthetic structures are replaced with periphrastic structures" (Barðdal, 2009, p. 3). With regard to case constructions with ditransitive verbs, it suggests that indirect objects should be replaced with a prepositional phrase. Barðdal argues that a result of this change should be also a decrease in frequency of ditransitive constructions, which, while it did not prove to be true for all the

Germanic languages, does seem to describe the tendencies in Middle Norwegian.

Out of the 20 ditransitive constructs in the analysed corpus, 12 come from the first period – so 14th century – and only 8 from the second one. This alone may be taken as a possible confirmation of Barðdal's hypothesis. Another important factor is that when each of the two verbs is considered separately, one can also notice differences in frequency with which they appear as part of the construction:

Verb	1301-1401	1401-1500
gefa	6	7
lúka	6	1
Total	12	8

(25) Frequency of verbs used in ditransitive constructions in the analysed periods.

Verb	1301-1401	1401-1500
gefa	50%	87,5%
lúka	50%	12,5%

(26) Frequency of verbs used in ditransitive constructions in the analysed periods in percentages.

As evidenced by the tables above, the token frequency of the verb *lúka* falls from 50% (6 instances) to 12,5% (1 instance).

In turn, the token frequency of the verb *gefa* noticeably rises – from 50% in 14th century (6 instances) to 87,5% in 15th (7 instances). Admittedly, the disappearance of *lúka* could also have been caused by influence of Low German – at the end of the 15th century, *betale* seems to be used increasingly more often instead of *lúka* in the meaning of "pay".

While this tendency, admittedly, may stem from a limited number of source documents, it may also be taken as an indication that the ditransitive constructions with accusative direct object and dative indirect object not only decrease in frequency with time, but also become realised with different verbs.

5.4 Agreement for case

In Old Norse, all lexical categories were inflected for number, and (except for finite verbs), for case. Aside from that, all nominal categories also inflected for gender in "in agreement with the noun that they specify, modify, refer to, or are predicated of" (Faarlund, 2004, p. 16).

In the 14th century, so the first analysed period, most of the constructs reliably follow the abovementioned rules, as illustrated by the following example (from DN I 398 1368):

(11) *skuldi*   *Biorn*   *opthnemfdr*   *œighœ*
     shall.PAST.3SG Biorn aforementioned.3MSG.NOM own.INF
     fyrsaghda   *jord*
     aforementioned.1FSG.ACC land.SG.ACC

'The aforenamed Biorn should have owned the aforementioned land'

The one notable exception are noun phrases with the word *peningr* – which literally means "money" – when appearing in a fixed formula meaning "first and last payment and all there in between", as shown below:

(12) *Olafr   hafde   loket   honom*
Olafr.nom have.PAST.3SG pay.PRET.N.SG her. SG.DAT
fyrsta   pœning   ok /oe/fsta   ok   alla
first.ACC payment.sg.acc and last.SG.ACC and all.M.PL.ACC
þar   j millum
there in between

'Olaf has paid her the first payment and last and all there in between'

This particular phrase appears in the corpus for the first time in a diploma from the year 1341 (DN I 270 1341) and continues to follow the same pattern until the end of the analysed period. With agreement intact, the phrase should look as follows (or, in case of *pening* being plural, *førsta peninga ok øfsta*):

Olafr hafde loket honom fyrstan pœning ok /oe/fstan ok alla þar j millum

Interestingly, when appearing outside of that formula, phrases with *peningr* seem to follow the regular patterns of agreement (example from DN III 387 1373):

(13) *Þonna hafde*   *vp boret*
    Þonna have.PAST.3SG receive.PRET.N.SG
    adarnemfda   *peningha*
    aforementioned.PL.ACC payment.PL.ACC

    'Þonna has received the aforementioned payment'

With time, the amount of constructs showing agreement for both number, gender and case changes, especially in the second half of the 15th century. The first appearance of a construct (other than the ones including the abovementioned formula) where the agreement for case seems to break down comes from a diploma from the year 1411 (DN I 629 1411):

(14) *jek haver*   *givet*   *Niklœsse Pœdersson*
    I have.pres.1sg give.pret.n.sg Niklæsse Pædersson
    minom   *sven*   *fore sine*
    my.1sg.dat servant.dat for her.sg.acc
    thyœniste   *løn*
    service.f.sg.acc reward.sg.acc

    'I have given Niklæsse Pædersson, my servant, for her service a reward'

This example shows that agreement begins to disappear in more than one place – firstly, there is *minom sven* ("my servant") in dative case, where the possessive pronoun is inflected, but the noun is not – the proper form would be *minom sveini.* Secondly, the phrase *sine thyœniste,* in accusative, should also look differently – if the agreement for case was preserved, the phrase would look as follows: *sina thyœnistu* (the noun *thyœniste* – *þjónusta* in normalised Old Norse – is an oblique noun, and so should end in *-u* in all cases apart from nominative).

From then on, the frequency of such occurrences increases – as can be seen on the data below.

From all the 132 constructs, 79 fulfilled conditions required for agreement to occur – the ones exempt were the constructs where DIR-OBJ consisted of a noun or a pronoun alone, as well as of several outliers. To make the data more detailed, in the table below I divided the two usually considered periods (1301-1400 and 1401-1500) into halves. As can be easily seen, the agreement for case begins to break down visibly in the years 1451-1500, though, as mentioned previously, the first occurrence of such a deviation dates back to the beginning of that century. In fact, most of the instances of constructs showing agreement for number and gender only come from the last decade of the 1400s, more specifically from diplomas coming from the years 1490, 1493, 1496 and 1500. This may mean that at the time this change has become conventionalized enough so that it's consistently repeated by different writers of different documents.

Period	Numbers of constructs showing agreement for case, number and gender	Numbers of constructs showing agreement for number and gender only	Number of all constructs showing agreement in the time period
1301-1350	17	3	20
1351-1400	19	3	22
1401-1450	12	3	15
1451-1500	5	18	22
Total	**53**	**27**	**79**

(27) Frequency of constructs showing agreement for case, number and gender vs for number and gender only.

Period	Numbers of constructs showing agreement for case, number and gender	Numbers of constructs showing agreement for number and gender only
1301-1350	85%	15%
1351-1400	86%	14%
1401-1450	80%	20%
1451-1500	23%	77%
Total	**53**	**27**

(28) Frequency of constructs showing agreement for case, number and gender vs for number and gender only, in percentages.

The breakdown of agreement for case becomes even more apparent when one looks at percentages – in the second half of the 15th century, the amount of constructs that show agreement for all three categories drops to 23% from 80%, while the amount of constructs that show agreement only for number and gender changes in the opposite way.

The further the constructs are placed in time, however, the more often the method of agreement breakdown changes. In the earliest instances showing this change, it is mostly due to the fact that a particular case ending is missing, as in the example 2.1. From around the year 1450, a steadily more common phenomenon is that all the words in a given noun phrase acquire a common ending: -œ, as can be seen below:

(15) *yttermeirœ   vitnœ   leiddœ*
   furthermore witness.SG.ACC lead.PAST.3SG
   fordœ   Ragnild
   forward Ragnild.NOM

   'Furthermore, Ragnild brought forward a witness'

Since this phenomenon can be observed in connection with more than just the accusative case, it may be possible to draw a conclusion that the -œ ending represents a transitional stage between the language having case marking and its complete disappearance.

5.5 Summary

In this chapter, I presented general results of the analysis – starting with a description of the process itself, and then focusing on token and type frequency of ditransitive constructions and showcasing breakdown of agreement patterns by studying the case endings in the noun phrases in DIR-OBJ.

As shown in the tables above, it is possible to observe a change in patterns of occurrence of both of these phenomena between the years 1300 and 1500. The amount of ditransitive constructions decreases with time, and some of the verbs they appeared with noticeably decrease in frequency. A similar development can be noted in case of agreement – from the second half of the 15th century, the percentage of constructs showing agreement for both gender, number and case becomes significantly reduced.

CHAPTER VI

Analysis – detailed results

The following chapter will discuss results of the analysis in further detail. In the first part, I will discuss the differences in the structure of the DIR-OBJ, and their impact on the analysis – which turned out to be considerable. In the second part, I will describe the results of the statistical analysis of fixed formulas contained in the first and last lines of the letters. Finally, in the excursus, I will describe various smaller findings, related to the main subject in varying degrees.

6.1 Structure of DIR-OBJ

As described in the previous chapter, in addition to analysing all the 128 constructs together, I also looked at instances in which the DIR-OBJ was structured in different ways, namely where the noun phrase consisted of:

- an adjective and a noun, for example (from DN I 398 1368):

(16) *skuldi   Biorn   opthnemfdr*
shall.PAST.3SG Bjorn.NOM aforementioned.3MSG.NOM
œighœ   fyrsaghda   jord
own.INF aforementioned.FSG.ACC land.SG.ACC

'The aforementioned Bjorn should have owned the aforementioned land'

- a numeral and a noun, for example (from DN XI 105 1401):

(17) *Soluir Ormarson   seldi   Þoreuildi*
Soluir Ormarson sell.PAST.3FSG Þoreuild.DAT
Þorgeirs/son/ v mar(ka)   bool
Þorgeirsson V mark.PL.GEN land.SG.ACC[1]

'Soluir Ormarson sold to Þoreuild Þorgeirsson five marks of land'

- a bare noun, for example (DN I 116 1308):

(18) *þa   gaf   herra   Aslakr   ok*
then give.PAST.3SG lord.obl Aslakr.nom and
ek   Vighi   Birni   bref
I.nom.1sg Vighi.nom Birni.dat letter.n.acc

'Then gave the lord Aslakr and I, Vighi, a letter to Birni'

---

[1] Literally, *ból* = „reclaimed and cultivated land".

- a pronoun and a noun, for example (DN I 270 1341):

(19) *þæir*   *hafdu*   *lagt*
they.1MPL.NOM   have.3PL.PAST   make.PRET.N.SG
sit   *mal*   *vndir mik*   *Þord*
their.SGN.ACC cause.SG.ACC under me.1SG.ACC Þord.ACC

'They have made their case before me, Þord'

The goal in dividing the DIR-OBJ into these categories was to see if one or more of the lexical categories behaved in a noticeably different fashion – for example, if it retained or lost the case marking more or less quickly than other constructs. As can be seen in the subchapters below, this supposition was confirmed, as some of the groups end up being noticeably more susceptible to change than others – for various reasons.

6.1.2 DIR-OBJ = MOD + NOUN

The category in which the DIR-OBJ consisted of a modifier (an adjective) and a noun was the most productive one, with 35 instances. It was also the category in which the breakdown of agreement for case occurred the earliest, due to the fact that constructs that contained the formula *førsta pening og øfsta* were included as part of the group.

Aside from that formula, however, the breakdown of agreement begins to be visible only after the year 1490 – no

construct included in this category shows agreement for case after that date.

Period	Numbers of constructs showing agreement for case, number and gender	Numbers of constructs showing agreement for number and gender only	Number of all constructs showing agreement in the time period
1301–1350	9	3	12
1351–1400	7	2	9
1401–1450	3	3	6
1451–1500	1	7	8
Total	**19**	**16**	**35**

(29) *Frequency of constructs showing agreement for case, number and gender vs for number and gender only in the DIR-OBJ= ADJ+NOUN category.*

6.1.3 DIR-OBJ = NUM +NOUN

In this category, 34 instances were noted. Most of the phrases belonging to it pertain to the sale of land (26), with several referencing the number of witnesses or a monetary amount (8). The majority, however, use the same pattern: a numeral, expressed either by word or a Roman digit + a unit of value (*marka* "a mark", or *aura* "an ounce") + *ból* ("reclaimed and cultivated land").

Despite the fact that most of the time, the words *mǫrk (*or *eyrir)* and *ból* were written separately, I decided to treat them as a compound form, based on the reasoning given by Åse Wetås (2008). She argues that in the majority of cases, the phrase *markabol* appears in the specific context of *x marka bool iardher* – in which *iardher (jarðar* in normalised Old Norse) is subordinate to *markaból,* and not til *ból* alone. It is also common for the first part of the clause – *marka* – not to agree for number with the quantifier preceding it, which "is a morphological argument behind considering *mǫrk + ból* to be, in such cases, a conventionalized compound form" (Wetås, 2008, p. 198). Additionally, no intervening elements can be found between the two elements in any of the observed instances.

The one element of the phrase that could show agreement is the numeral – however, in this case, the numeral actually agrees for case with the first part of the clause – *marka,* which is in genitive, and so outside of the scope of this thesis. Instances in which the numeral agrees with the second part of the compound form – *ból* – are said to begin appearing in younger texts (which is also an argument behind treating the phrase as a compound), (Wetås, 2008) but no such instance was found in the analysed data. An additional reason for it may possibly also be the fact that in almost half (15) of the constructs included in this category it is the Roman digit that is used in place for a number word – and those, of course, do not inflect for case.

6.1.4 DIR-OBJ = BARE NOUN

The category in which the direct object was expressed by a noun only contained 29 constructs in total. However, these constructs were not taken into consideration when analysing agreement patterns, since they contained no lexical units that could be subject to them.

6.1.5 DIR-OBJ = PRON + NOUN

Out of all the analysed categories, the category where the direct object is expressed by a possessive or demonstrative pronoun and a noun is the least productive, containing only 13 instances, out of which 8 come from the 14th, and 5 from the 15th century. No breakdown of agreement for case has been observed in this category. However, it should be noted that when pronouns appear as a part of a more complex phrase, they follow the same pattern exhibited by the other groups, as can be seen in the example below (from DN IX 442 1500):

(20) *gaaf*   *fordr*   *Wetelith*
give.PAST.3MSG aforementioned.1MSG.NOM Wetelith
thennœ   *tydhnemdhœ*   *jordœ*
this.MSG.ACC aforementioned.1FSG.ACC land.SG.ACC

'Gave the aforementioned Wetelith this aforementioned land'

This phrase, with agreement preserved, should look as follows: *gaaf fordr Wetelith thenna tydnemhda jord.*

6.2 Fixed formulas – protokoll and eskhatokoll

The fixed formulas from the beginning and end of the diplomas, as mentioned in the previous chapter, commonly include two words in the accusative case that, in some way, change their forms: *incigli* ["seal"] and *thetta* ["this"]. In order to see how said form changed, and at what speed, I conducted a statistical analysis using R and R studio. The analysis was based on all the 37 diplomas included in the corpus.

Incigli is a word that appeared in the ending formula, and could be observed with three different endings: *-i, -e,* and *-æ*. As can be seen in the table below, it is possible to see a clear tendency for the *-i* ending to disappear with time, change to *-e* after the year 1400, with the use of *-æ* increasing significantly after the year 1450.

Period	Case Ending	Frequency of occurence
1301–1350	i	100%
	e	0%
	æ	0%
1351–1400	i	89%
	e	11%
	æ	0%

1401–1450	i	42%
	e	58%
	æ	0%
1451–1500	i	0%
	e	66%
	æ	34%

(30) Changes in case ending of the word incigli in four periods of time.

Based on this data it is possible to note that, similarly to the constructions analysed previously, the -œ ending becomes more prevalent in the final period, appearing for the first time in a diploma from the year 1486.

The second word studied was *thetta*, which appeared both in the ending and beginning formula – and so, instead of 37 instances, it was 73 that were analysed (in one of the diplomas the formula appeared at the beginning, but not at the end). In this case, the results were less conclusive. Use of the -*a* ending, which was the most common at the beginning, did decrease with time, but so did the use of -œ, which, surprisingly, appeared even in the earliest period. There seems to be no discernible pattern for the changes in case endings in the case of *thetta*, besides the fact that the -*a* ending decreases in frequency.

Period	Case Ending	Frequency of occurence
1301–1350	a	87,5%
	e	0%
	æ	12,5%
1351–1400	a	66%
	e	0%
	æ	34%
1401–1450	a	70%
	e	17%
	æ	13%
1451–1500	a	55%
	e	11%
	æ	34%

(31) Table 2. Changes in case ending of the word thetta in four periods of time.

Besides the change in case endings, there is another development in the protokoll and eskhatokoll that is worth noting. If the letters were written on behalf of more than one person, both formulas contained a dual pronoun – *yðr* in the beginning and *okkor* in the end, as part of an accusative noun phrase:

(21) (…) *ydr*   *vil*   *ek*
     you.2DU.ACC want.PRES.1SG I.SG.NM
      kunnigt   *gera*   *at* (…)
     known.SG.ACC do.1SG.SJV that

'...you I want to inform, that (...)

(22) *Til sannynda   settom   mit*
    To truth.SG.GEN set.PRES.1SG we.1PL.NOM
    okkor   insigli   firir þetta   bref (...)
    our.2DU.ACC seal.SG.ACC upon this.NSG.ACC letter.SG.ACC

'To confirm this, we place our seal upon this letter'

However, the younger the formula, the less likely it was that a dual pronoun would appear. In case of *yðr,* it becomes replaced with a different verb form:

(23) (...) *kwnnikt   gørande* (...)
        known.SG.ACC make.PRESP.GEN

    '(...) it is being made known (...)'

In case of *okkor,* the dual pronoun was usually replaced by the plural *vår,* as in the following example (from DN III 706 1430):

(24) *Til sanninde her vm sætte*
    To truth.SG.GEN here set.PRES.1SG
    merh   vorh   jnsigle (...)
    we.1PL.NOM our.1PL.ACC seal.SG.ACC

    'To confirm this, we place our seal (...)'

As both pronouns – *yðr* and *okkor* – function solely in oblique forms, this change may either be interpreted as a loss of a dual pronoun category, or as a loss of an accusative dual pronoun form. The reason for the second conclusion is that in both cases the dual pronoun is a direct object of a transitive verb, which otherwise is inflected for the accusative case.

A general conclusion that may be drawn from the analysis of the fixed formulas is that the results seem to confirm the statement made by Wetås (2008) in her dissertation, in which she writes that the formulas follow the same patterns of morphological development as the body of the letters.

6.3 Excursus

Aside from the observations directly connected to decline of the accusative case in the analysed corpus, I also noted two other interesting phenomena.

The first of them is a possible emergence of a neuter article *et*, visible in the two constructs shown below (examples from DN III 998 1496 and DN II 896 1475):

(25) *annet*   *ores*   *bolet*   *erffdhe*
another.N. ounce.SG.GEN land.NSG.DEF inherit.PAST.3FSG
Margitthe Karesdotther effter sin   *ffadher*
Margitthe Karesdotther after her.MSG.ACC father.SG.ACC

'Another ounce of land inherited Margitthe Karesdotther after her father'

(26) *ledhe   tha Ærlandh eith   vitnœ*
     lead.PAST.3SG then Ærlandh a.N.INDF? witness.ACC.SG

     'Ærlandh presented then a witness'

Both *eith* and *annet* could be considered numerals – "one" and "two. However, since the examples are quite young (coming from 1496 and 1475), and without more relevant data for comparison, one may not exclude the possibility that they are, instead, first occurrences of an emerging neuter article.

The second is an instance in which a direct object of the transitive verb *kaupa* "to buy" appeared with a case ending characteristic to the dative case: *-um* (from DN XXI 506 1460).

(26) *fornempder   torkell anundsson hafdhe*
     aforementioned.M.NOM Torkell Anundsson have.PAST.3SG
     køpt   iordhom   med fornempdom
     buy.PRET.M land.DAT? with aforementioned.M.DAT
     ormstein   sighurdsson
     Ormstein Sighurdsson

     'The aforementioned Torkell Anundson has bought land with the aforementioned Ormstein Sighurdsson'

A possible reason for the form of this phrase might be that the meaning of the case ending (*-um*) is no longer completely clear in the writer's mind, but the knowledge that a word

in this position should not be in nominative remains. Since the dative is historically the case that had been best preserved in Norwegian (possibly due to the fact that it had the most marked form in Old Norse out of all the cases) (Faarlund, 1990), it might also be the reason why the writer of the diploma chose to use specifically the dative ending.

Both of these phenomena could be interpreted either as outliers or as first occurrences of a morphological change. Determining whether it's the former or the latter could be an interesting point of further study.

6.4 Summary

In this chapter, I focused on the detailed results of the analysis, primarily on how different structure of DIR-OBJ affected the breakdown of agreement patterns, as well as on conclusions that could be drawn from the analysis of the fixed formulas.

The most productive category was DIR-OBJ = MOD + NOUN, in which, aside from the *førsta pening og øfsta* formula described in the previous chapter, the agreement breakdown comes to the forefront after 1490. It's also the most affected category.

In the NUM + NOUN group, the breakdown of agreement was not observed, possibly due to the fact that the numerals were often expressed by Roman digits, which do not show inflection. Another reason for it may be that most examples belonging to this variety contained the same compound form – *marka + ból,* which seems not be as susceptible to

agreement breakdown, and is unmarked in accusative case by default. The PRON + NOUN group was the least productive, which may be the cause for it not showing agreement breakdown. However, it's worth noting that in more complex phrases the pronouns followed the pattern observed in the MOD + NOUN category.

The analysis of the fixed formulas, focusing on change in case ending two words – *incigli* and *thetta* – showed a visible pattern of the *-œ* ending becoming more prevalent with time in the first case, and no discernible pattern in the second case. Another phenomenon worth noting was the gradual disappearance of dual personal pronouns – *yðr* and *okkor* – which became replaced with an impersonal verb form and a plural pronoun *vár*.

Finally, in the excursus, I described two observations not directly connected to the subject of this thesis. The first one dealt with a possible emergence of a neuter article, and the second of a dative ending *-um* appearing on what should have been an accusative object of a transitive verb.

CHAPTER VII

Conclusions and discussion

In the final chapter, I will summarise all the results that stem from the analysis I conducted on the assembled corpus, and consider them in the context of the Diachronic Construction Grammar framework. I will also discuss the utilized methods and their impact on the work process, as well as point towards possible further directions of research.

7.1 Results – summarized

This work dealt with the decline of the accusative case in Middle Norwegian, focusing on the period between the years 1300 and 1500. The goal of the thesis was to determine whether it is possible to observe signs of the accusative case being lost in between the 14th and 15th centuries, and if yes, then what type of signs can be noted and at what speed these changes occur.

The analysis was conducted on a corpus of 37 diplomas dealing with sale of goods and land, inheritance cases, as well as witness statements – which all include similar vo-

cabulary and fixed formulas. All the documents were writ-
ten in the area of today's Telemark county, and penned by
a third party, not by the senders themselves.

In accordance with the CxG framework, the material
that was specifically studied consisted of two sets of con-
structions, described in detail in Chapter IV:

[SBJ + VDITR + DIR-OBJACC + INDIR-OBJ]
[SBJ + VTR + DIR-OBJACC]

Based on these theoretical boundaries, I extracted 132 con-
structs from the corpus, 24 of which belonged to the first
category (constructs with ditransitive verbs), and 108 – to
the second (constructs with transitive verbs), and analysed
them both separately and as one group. In addition, I also
studied the way that the internal structure of the DIR-OBJ
affected the achieved results, as well as looked separately at
the fixed formulas that began and ended the diplomas. Ad-
ditional observations, not directly connected with the sub-
ject of the thesis but still worth mentioning, were described
in the final part – the excursus.

The first of the general conclusions (described in Chapter
IV) stemmed from the analysis of ditransitive constructions.
The 20 constructs were built with one of two verbs – *gefa* ("to
give") or *lúka* ("to shut, to pay"). It was found that with time,
the overall amount of such constructions decreases, and
the remaining ones become realised increasingly more of-
ten with *gefa* – the other two verbs were used only once each
among the constructs coming from the 15th century.

The second result pertained agreement for case, which, as it was found, began to break down in the second half of 15th century. One notable exception from that rule was the phrase *førsta pening of øfsta* ("first payment and last"), which continued to show breakdown of agreement from the year 1341 (DN I 270 1341) onwards. Aside from that formula, the first appearance of a construct where the agreement for case seems not to occur comes from 1411 (DN I 629 1411). At the end of the 1400s, the amount of constructs that did show agreement for both number, gender and case dropped from 80% and the beginning of that century to 23% at the end. Interestingly, also the method of agreement loss changed with time – while at the beginning it was mostly a missing case ending that signalled the change, from the year 1450 onwards it was steadily more frequent to see that all the words in a given noun phrase acquired a common ending: *-œ*.

When it comes to the detailed analysis of the internal structure of DIR-OBJ, I analysed four different groups – the first one included instances in which the DIR-OBJ consisted of a MOD+NOUN, the second – a NUM+NOUN, third – a bare noun, fourth – a PRON+NOUN.

The most productive and most susceptible to change was the first category, which contained the *førsta pening og øfsta* phrase. Aside from that formula, the breakdown of agreement in this group became most apparent in the second half of the 15th century, specifically after 1490. In the case of NUM+NOUN, this change was not observed – possibly due to the fact that all the most of the constructs in-

cluded the same compound phrase – *marka + ból* – which is not inflected in accusative by default. The numerals were in many cases expressed by Roman digits and not words, and so could not inflect in any way. In turn, the PRON+NOUN category also did not overtly show breakdown of agreement where the DIR-OBJ consisted solely of these two lexical units. However, in more complex phrases, pronouns followed the general pattern.

In the fixed formulas – and so parts of diplomas called protokoll and eskhatokoll – I focused on two words that commonly appeared in the accusative case: *thetta,* "this" and *incigli,* "seal", and conducted a statistical analysis of their changing case endings. In case of the noun, it was possible to discern that the -*œ* ending, similarly to the constructs coming from the body of the letters, became more and more prevalent in the second half of the 15th century. *Thetta* behaved differently – it was not possible to observe any meaningful pattern in the variation of its endings.

A notable change occurred also in the usage of dual personal pronouns in the formulas. While at the beginning of the studied period they appeared commonly in both protokoll and eskhatokoll, by its end they became replaced either with an impersonal verb form (from *ydr vil ek kunnigt gera at...* ["you I want to inform that..."] to *kwnnikt gørande....* ["it is being made known..."]), or a plural pronoun (from *ok-kor* to *vår).*

Additionally, in the excursus I described two smaller phenomena – the first one regarded a possible emergence of a neuter article *et,* the second – usage of a dative case

ending -*um* in place of an accusative case form on a direct object of a transitive verb.

7.2 Comments on the research process

The process of this study had many stages and was influenced by many different factors – two main such factors were the chosen method of annotating the corpus, and the framework chosen for analysis – the Diachronic Construction Grammar.

While the results described above stem from an analysis of 37 letters, the corpus was initially comprised of 77 of them. A further selection was conducted in order to equalize the amount of material coming from each century, but all 77 were initially tagged and described – which made annotation the most time-consuming part of this project, especially since the constructions that were finally used for analysis were decided on afterwards. This meant that annotating the corpus was not constrained to the accusative case, but instead encompassed all four cases – as illustrated by the image below, showing a part of an annotated diploma (DN II 593 1407):
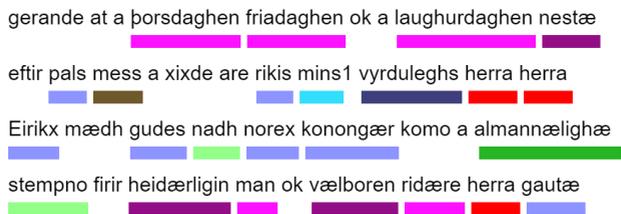
gerande at a þorsdaghen friadaghen ok a laughurdaghen nestæ

eftir pals mess a xixde are rikis mins1 vyrduleghs herra herra

Eirikx mædh gudes nadh norex konongær komo a almannælighæ

stempno firir heidærligin man ok vælboren ridære herra gautæ

A part of a diploma annotated in the CATMA software.

The second significant aspect that strongly influenced the shape and process of this study was the Construction Grammar framework.

The documents available in the Diplomatarium Norvegicum are one of the main sources of knowledge about the state of Norwegian language at the time, and have been analysed with the use of many tools and methods (for example, the work most relevant to the subject of this thesis – *Kasusbortfallet i mellomnorsk* by Åse Wetås – used the Natural Morphology theory[2]). However, they have not yet been studied using Construction Grammar, which, to my knowledge, has not been applied to Norwegian before. Due to that it is possible that the use of this method may lead to different observations and conclusions than those that were a result of earlier studies, and add more layers to our understanding of the decline of case in the history of Scandinavian languages.

7.3 Directions for further research

While this study may be in some ways called innovative due to the chosen framework, it admittedly could also have been conducted in a more orderly fashion. My knowledge about the Old Norse case system and CxG was, at the beginning of the research, limited or, in the second case, non-existent. In consequence, the progress was at times slow, and

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[2] Which is a theory that "seeks to provide a theory of what constitutes a 'natural' or 'unmarked' morphological system, and what laws govern deviations from that natural system" ('Natural Morphology', 2009).

the concept, especially when it comes to what precisely will be subject to analysis, underwent several considerable changes. Due to this being a master thesis, the scope of my research had to be also rather tightly focused and limited by time allotted for my study programme.

One of the consequences of such a tight focus is that this study has been conducted with on a small corpus. A possible direction of further research would be to widen the choices of sources, for example by including letters of different genres, as well as to widen the studied period – seeing as changes in the accusative phrases became most evident at the end of the 15th century, it could be advantageous to look closely also at the 1500s.

A more ambitious direction could be also to consider other regions. Wider studies on the matter of case decline, when it comes to Norwegian, focused mostly on the southern regions of the country (which is relevant also for this thesis). A possible direction for further research would be then to, instead, study the regions situated further to the north, and compare the results with existing ones.

The Construction Grammar framework also offers further possibilities – for example, Johanna Barðdal in her article *Case in Germanic* (2009) lists argument structure constructions common in Germanic languages that are marked by case frames (for example Nom-Acc, Nom-Dat, Acc-Nom etc.). A different look at the subject of case loss could be, for example, to analyse which of these constructions is first, and which the last to disappear.

Summary

This thesis dealt with the decline of the accusative case in Middle Norwegian. It was based on a corpus consisting of diplomas available in Diplomatarium Norvegicum, and asked three main questions: whether such a change can be observed based on the assembled data, and if yes, then it what way and how quickly.

The study was conducted in accordance with the Diachronic Construction Grammar framework, and so the changes were observed on the basis of two sets of constructions, which allowed for extraction of 128 constructs from the corpus. The results of the analysis confirmed that the decline of the accusative begins in the Middle Norwegian period – its first signs were visible in even in the 14th century and became steadily more common with time.

The examination of the first set of constructs allowed to determine that ditransitive constructions decreased in frequency in the 15th century, which can be interpreted as a signal of the language changing form synthetic to analytical stage.

Analysis of the second groups of constructs, which consisted of transitive constructions, made it possible to draw another conclusion – that agreement in noun phrases (which were originally in the accusative case), began to break down within the 15th century, taking on more speed in its second half. Additionally, one could notice that the method of this change also varied – while at the beginning of the 1400s it was more common to notice a missing case marking, by the end of that period more and more phrases acquired a common ending: -œ.

A separate analysis was conducted on the fixed formulas that began and ended each of the documents, and specifically on two words: *thetta,* "this" and *incigli,* "seal" – and changes occurring in their case endings. When it comes to the first one, no meaningful pattern was observed. *Incigli,* however, showed a clear direction of the original ending being replaced with rising frequency with -œ. That and the speed at which these changes occurred confirmed that the formulas, despite being more formal, were also subject to the same developments as the body of the diplomas.

While working on the study, two additional observations were noted – one pertaining to a possible emergence of a neuter pronoun *et,* and another one in which a direct object of a transitive verb appeared with a dative ending (instead of an accusative one). These findings were described in more detail in excursus.

Possible directions of further study could include using a wider corpus with documents of different types and genres, conducting similar research on dialects from different

geographical areas, and further utilizing the CxG framework to analyse different argument structure constructions.

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