

Chapter 7

The semantic reorganisation of case paradigms and word order paradigms in the history of Danish

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This article is a study of the relation between the paradigmatic organisation of case and the paradigmatic organisation of word order in late Middle Danish (1300–1500) and in Modern Danish. A content analysis of these paradigms shows a typological difference, even if the older pronominal case system looks exactly like the modern system. Middle Danish preserves inactive (impersonal, traditionally) constructions with an inactive argument 1, and at this stage, the dimensions of case, position, argument hierarchy and subjecthood (still) combine freely. The case system is still indexical. The alignment of subjecthood, status as argument 1, position and nominative case with symbolic meaning is a development of post-Reformation Danish.

1 Introduction

It is no surprise that a morphological category like case should be organised in paradigms, since this usage of “paradigm” has been current since antiquity. It may come as more of a surprise that a syntagmatic aspect of language like word order can have paradigmatic organisation; yet, this refers to contrasts of meaning between word order patterns and is therefore not a new idea either, but rather a neglected aspect of language. What I will try to add, is the possibility of co-organisation between morphological content and alternating constructional



organisation. Case meaning can interact with constructional hierarchic organisation of arguments, forming what could be called second-order paradigms (or hyperparadigms), see Christensen (2007), Nørgård-Sørensen et al. (2011), and Juul Nielsen (2016).

After Sections 1.1 and 1.2, I present in Section 2 the system of Middle Danish inactive constructions in some detail, including important differences from the parallel West Norse (Old Icelandic) system. Section 3 deals with the paradigmatic organisation of case in its interplay with transitive and inactive. The function of case is to point to the governing verb and thus to determine the semantic role value of the arguments. Section 4 documents that topology (word order) is not included in these constructional paradigms, since there are no positions reserved for subjects and objects. This is very different from the system of present-day Danish, with specific positions for subjects and objects (see Section 5) and a case system that has lost its coding of semantic roles.

Some readers may find it easier to skip initially Sections 2.2–2.5 and go directly to the overview in Section 2.6 and then on to Section 3, to return later to the details of the data in Section 2.

1.1 Inactive constructions

A central problem in the analysis of case morphology in constructional contexts lies in its function in so-called impersonal constructions, in my terminology inactive¹ constructions, as in (1–2).²

- (1) om thek wærkær i howæth oc i thinninge, Tha tac thæn
um thik_{A1} værk-er i hoveth ok i thinninge, tha tak thæn
if 2SG.OBL ache-PRS.SG in head and in temples, then take the
'If your head and temples are aching, then take the ...' (AM 187, 3, 3–4)
- (2) Hwy angher tik ey nw, at thu haffwer illde giorth
hvi angrer thik_{A1} æj nu [at thu haver ille giorth]_{A2}
why repent 2SG.OBL not now that you have wrong done
'Why do you not repent now that you have done wrong?' (ML 57, 16–58, 1)

Example (1) has a one-place predicate *thik* 'thee', in the oblique case, manifesting the semantic role Inactive. Since this role is basic to this constructional paradigm, I name the Inactive argument A1, the primary argument.

¹*Inactive construction* bears resemblance to the contrast between active features and inactive features in so-called active languages, cf. Lehmann 1989, 1993. When the *active voice* is meant, I will be explicit about this and simply write "active voice".

²Line two is rendered in the normalised orthography of the collections of the Old Danish Dictionary, see Section 6.

Argument hierarchy reflects basic semantic choices. The Inactive role applied to the A1 of this construction excludes agentive meaning, as also emphasised by Faarlund (2001, 2004) for Old Icelandic. Agentive meaning is characteristic of transitivity, and neither (1) nor (2) can convey agentive meaning.

Examples (1–2) show a difference in valence within inactive constructions. Example (2) is a two-place predicate; the A1 is again *thik*, likewise in the oblique case, manifesting a variant of the inactive role, what other case grammarians have called the Experiencer role. Here, the A2 is an embedded clause: *at thu haver ille gjorth*, denoting the content of the mental impact on the referent of the A1. Halliday (1994) speaks of this semantic role as the Phenomenon role. The term A2 reflects an extension of the construction, possible with certain verbs.

The paradigmatic organisation of inactive constructions will be laid out in Section 3, esp. Section 3.3. I will not go into details here, since a clear exposition will call for a comparison with especially transitivity and other organisation principles. But it must be pointed out now that argument hierarchy reflects the semantic valence of predicates, and this differs from the level of sentence members and thus from the grammatical functions subject and direct object. In principle, the subject function can apply to either A1s or A2s, and similarly, direct objects to either A1s or A2s. Again, this means that one should not just assume that one of these levels can reduce to one of the other levels, for instance of subjects to A1s. On the contrary, a claim that these levels are or have been aligned must be the outcome of the application of empirical criteria and cannot be taken for granted *a priori*.

The A1s of (1) and (2) have the oblique form, and this is of course a case of what other traditions call oblique subjects (among many others Allen 1995, Barðdal & Eyþórsson 2003, 2018, Eyþórsson & Barðdal 2005, Kiparsky 1997). The analysis of oblique case subjecthood has been advocated for many older Indo-European languages by esp. Jóhanna Barðdal and Þórhallur Eyþórsson. I shall not in this context discuss their views in detail, nor will I refer to the sometimes-polemic discussions between different positions. Barðdal and Eyþórsson have a specific definition of subject as a starting point, namely the identification of subject and A1. As they see it, the A1 is the subject, or rather, the universal definition of a subject is taken to be the status as an argument 1.

One potential subject definition that we have used as a working definition since Eyþórsson & Barðdal (2005), is to view the first argument of the argument structure as being the syntactic subject.³ (Barðdal & Eyþórsson 2018: 263)

³The following quotation will illustrate their view: “The reason that we have proposed such a subject definition is that when generalizing across the subject tests, we have found that it is

A discussion of their subject criteria and of similar approaches (e.g. Sigurðsson 1989) and the way they are operationalised⁴ must be the topic of another article (Heltoft 2021b).

In the hierarchical-linear configurations of generative grammar, such reductional notions of a subject will always come out as a Specifier of something, normally generated as a Vp-specifier, next upgraded to I-Spec, or for V2-languages, all the way to C-Spec. This presupposition, that the subject holds the upmost position, inherently linear and hierarchical at the same time, is shared also by linguists (esp. Kiparsky 1997) who try to combine and reconcile syntax and morphological case by ascribing syntactic features to the arguments and case features to morphology, and thereafter, working out unification procedures for the respective feature clusters. Kiparsky refers to Cynthia Allen for the insight that Old English had IP available as a category since “it had dative subjects, in the sense that oblique experiencers were structurally parallel with nominative subjects”, interpreting this as “at least a *prima facie* indication of Spec-IP positioning” (Kiparsky 1997: 12). Behind this, we also find the identification of subject and A1, meaning that A1 is the hierarchically upmost argument. Instead of this assumption, as mentioned in Section 1.1, I hold that argument hierarchy should be seen as organised by valence; see further Section 2.

Of course, the sign-oriented approach adopted here determines part of what is possible. Sign-oriented grammars such as Croft (2001), Traugott & Trousdale (2013) or Danish Functional Grammar (Engberg-Pedersen et al. 1996) must respect the sign limits delineated by the expression side and must therefore seek for models that do not presuppose reduction attempts of Inactive A1s to underlying subjects across the sign boundaries.

I will return to the importance of linearity in Section 4, but the road to there will go via an analysis of the structure and function of simple traditional case paradigms like the ones behind examples (1) and (2), consisting of oppositions of number, deixis and a case distinction of just two: nominative and oblique.⁵

Apart from orthography and sound change, and a few later shortenings (of *hanum* to *ham*, *ither* to *jer*), the expression system of Table 1 is exactly the same as that of the modern language. The 3P.SG/PL forms are attested in the Jutish Law (of 1241, oldest manuscript from 1284), and this has led to the traditional

always the first argument of the argument structure that is targeted by the subject tests. In that sense, our approach is bottom-up; we have arrived at a subject definition on the basis of the subject tests, a definition which can then be applied independently of the individual tests.” (Barðdal & Eyþórsson 2018: 263–264)

⁴The only separate treatment of Danish known to me is a brief article by Hrafnbjargarson (2003), using the criteria of Sigurðsson (1989).

⁵The genitive is only used in possessive constructions and is therefore not part of this paradigm.

Table 1: Pronominal case in 14th century western Middle Danish

	1P.SG	2P.SG	3P.SG		1P.PL	2P.PL	3P.PL
NOM.	<i>jæk/jak</i> 'I'	<i>thu</i> 'thou'	<i>han</i> 'he'	<i>hun</i> 'she'	<i>vi</i> 'we'	<i>i</i> 'you'	<i>the</i> 'they'
OBL.	<i>mik</i> 'me'	<i>thik</i> 'thee'	<i>hanum</i> 'him'	<i>hænne</i> 'her'	<i>os</i> 'us'	<i>ither</i> 'you'	<i>thæm</i> 'them'

assumption that Middle Western Danish⁶ had already introduced roughly the modern pronominal case system (e.g. Karker 1991: 129, Karker 1993: 198). As we shall see, however, when properly analysed at the level of content, the Western Middle Danish two-case pronominal system turns out to be typologically different from the modern system. Some generative grammarians (Sigurðsson 2006, 2012b,a, Parrott 2012) use the term 'case impoverished' for such modern Germanic languages that have reduced their case inventory to pronouns and there to a minimum of two cases, and insofar as they speak of case as an expression system, this term might apply to Middle Danish as well. However, what matters is not quantity, but the quality of the content organised in such minimal case paradigms. I will claim that a content analysis of the Middle Danish case paradigm will show that it is clearly typologically different from the modern Danish case paradigm, and secondly, that this analysis demands a thorough analysis of the way Middle Danish case paradigms are integrated in more complex paradigms interlocking morphology and constructional alternations.

To conduct this analysis, we must take the semiotic function and content of even a reduced case system seriously. We cannot simply assume that case has no meaning potential and relegate it to a status as part of the expression system, or, in the generative terminology, to phonological form.⁷ Nor can we assume that its content is simply the positions defined by an abstract, a priori given syntactic configuration. One part of the exercise will consist in determining the content system of the Middle Danish case paradigm, and contrary to most other present-day approaches, I will not accept any a priori distinction between syntactic and lexical case. Given convincing arguments, the discussion is open to the possible

⁶The written tradition of Middle Danish falls in two main dialects, Western Middle Danish in Jutland and the central islands and the more archaic Eastern Middle Danish (Scanian) in the provinces east of the Sound, in present-day Sweden.

⁷Not all generative grammarians buy the reduction of morphology to PF, of course. Among them especially Kiparsky (1997), but also Sigurðsson (2006, 2012b,a) realises this is a weak point.

conclusion that even a reduced system like the one under scrutiny can manifest a semantic role system, and just that. This is the topic to be investigated in Section 2.

1.2 The word order systems: Why include them?

The word order systems of late Middle Danish and Modern Danish will be investigated and compared, too, as a way to determine whether the oblique A1s share properties with nominative subjects. The model to be used is the so-called *sentence frame model*, a descriptive model with Scandinavian and German roots (Diderichsen 1946, Faarlund 1989, 1990, Faarlund et al. 1997; Heltoft 1992). This positional model does not intertwine syntactic hierarchy and linearity. It presupposes a nonlinear dependency model for syntax but consists of concatenated positions in itself. Some are characteristic or even definitional (Mel'čuk 2014) of their syntactic category, others are open positions for a set of syntactic categories. Such open positions can express a separate content system independently of the categories that may fill them. One relevant example for the present agenda is illocutionary force, or better: *illocutionary frame*, the speech act potential coded in word order; another example is background-focus structure.

In Modern Danish, subjects – in the nominative form, if possible – are confined to a limited number of positions, namely two: the open initial position, the so-called fundamental field of Danish topological tradition (the P1 of Simon C. Dik, see Dik 1997: 408–416), and the third position immediately after the V2 position.

- (3) a. *Han*.(1pos.) *beundrer*.(2pos.) (3pos.empty) *hende*.(post-subject-pos.)
 he-NOM admires Ø her-OBL
 ‘He admires her’
- b. *Hende*.(1pos.) *beundrer*.(2pos.) *han*.(3pos.)
 her-OBL admires he-NOM
 ‘Her he admires’
- c. (1pos.empty) *Beundrer*.(2pos.) *han*.(3pos.) *hende?*.(post-subject-pos.)
 Ø admires he-NOM her-OBL
 ‘Does he admire her?’

The Modern Danish system is clearly an XVSO-system, and in traditional terms, the contrast (3a–3b) vs. (3c) codes declarative function vs. interrogative function. The basic structure of the paradigm can be laid out in terms from Peircean semiotics, namely symbolic and indexical meaning. The main expression contrast is between a filled-in position 1 (see 3a–3b) and its zero opponent

(3c). The symbolic contrast is between constative (pos. 1 filled-in) and interrogative meaning (pos.1 zero), and there is an indexical function to notice as well, namely the position 2 filled by the finite verb.

So in Table 2, position 1 is the locus of the contrast zero vs. X, position 2 the indexical identification of this locus. Position 1 holds the symbolic, illocutionary frame contrast of the paradigm and is thus the locus of the frame of the paradigm; position 2 indicates the locus for this frame and defines the domain of the paradigm.⁸

Table 2: The indexical function of position 2 in Modern Danish word order

1.pos.		2.pos.		3.pos.
X	⇐	V		
Zero	⇐	V		
hende	⇐	beundrer	han	
Zero	⇐	beundrer	han	hende?

Notice that the subject's unique position is position 3, and that this position must be filled in to form the yes-no question (3c). And since the subject in active clauses can in the modern language readily be identified with the argument 1 (A1), the case system and the positional system are clearly related.

There is every reason to ask whether the medieval language had a characteristic, let alone definitional subject position in the way the modern language has it, that is, whether position plays a role for the identification of subjects and objects, and furthermore, of the arguments A1 and A2. Thus, after an analysis of the role of case in the inactive construction, I will suggest in section 4 an analysis of the word order paradigm for late Middle Danish.

2 The inactive construction in late Middle Danish

The inactive construction of late Middle Danish falls in a number of subtypes, of which I shall deal with three. It is a continuation of a common Norse (and Germanic, further back Indo-European) set of constructions that deviate in important ways from transitive constructions. Late Middle Danish differs from Ice-

⁸For the terminology of this paragraph, see Nørgård-Sørensen et al. (2011), Nørgård-Sørensen & Heltoft (2015), Heltoft (2019).

landic as well, but a detailed comparison is not available, so I will restrict myself to dealing with one basic difference, see Section 2.6.

The constructional set comprises 1) verbs that are inherently semantically inactive, that is: their stems will construe with an oblique A1; 2) verbs with transitive stems, needing an inflectional modification, namely the middle voice form, to form an inactive construction, 3) verbs with neutral stems, construing either with a nominative A1 or an oblique A1, that is, verbs with semantically different case constructional potential, but no morphological change of the stem to mark this difference, and 4) a type with no obvious difference between active voice and middle voice. The subtypes have been selected from a list of lemmas (Bom 1954) for the Old Danish Dictionary (not yet completed), and from a next to complete collection of quotations (card copies in electronic form, GldO).

Two basic issues: 1) The inactive system's interplay with the voice system must be clarified. Some stems allow the inactive construction with the middle voice only, see Section 2.2; others allow it with the active voice, see Section 2.3; again, some apparent mergers of voice allow inactive construction both with the active and the middle voice, but at least in some cases, this distinction expresses a semantic contrast between two subtypes of inactive constructions. 2) Like many other older Indo-European languages, Old Scandinavian, including Old and Middle Danish, allows zero arguments, meaning that NPs at all levels can be let out, or better, replaced by zero. This leads to a methodological problem of how to determine whether an argument is a valence-governed actant of a verb stem that has been optionally replaced by zero, or whether it could instead be considered a free syntagmatic extension of the semantic nucleus of the clause (cf. Nielsen & Heltoft to appear); see Section 2.2 and Sections 2.4–2.5 for details.

2.1 Verbs that are inherently semantically inactive

The verbs belonging to this subcategory take an argument 1 (A1) denoting an animate referent that is causally affected, be it by bodily demands, by mental or social impression or by incidents of fate. I call this semantic role *Inactive*, and constructions comprising it *inactive constructions*.

Some are one-place verbs, excluding the possibility of an argument 2 (A2), for instance: *hungre* 'starve', *thyrste* 'thirst', *værke* 'feel pain' (see 4); *lithe* 'do, fare'; *fare ille/væl* 'have a misfortune/have good fortune'.

- (4) then timæ mek hungrudæ tha gauæ i megh at ædæ
 thæn time mik hungrethe tha gave i mik at æte
 the time me.OBL starved then gave 2PL me to eat
 'When I was hungry, then you gave me something to eat' (Luc 69v 8–10)

- (5) Dønær munnæn af thi, at [maghen] ær saar, Tha mat thu
døner munen af thi at maghen ær sar, tha mat thu
stinks the mouth from this that the stomach is sore, then can you
mærkæ athættæ: hanum thyrstær, oc thæn næthræ læbæ thyrcææs
mærke a thætte: ha-num thyrster, ok thæn næthre læpe thyrcæs
pay attention to this: he-OBL thirsts, and the lower lip dries out
‘If the mouth stinks from a wound in the stomach, then you can pay atten-
tion to this (symptom): He is thirsty, and his lower lip is drying out’ (AM
187, 30, 2–4)
- (6) muæ i vidhæ, ath jegh ær karsk, ock megh lidher vell
mughe i vite at jæk ær karsk ok mik lith-er væl
may 2PL know that I am sound and me.OBL do-PRS.SG well
‘I can let you know that I am sound and I am doing well’ (Miss II 389,
Roskilde app. 1510?)
- (7) een stundh for hannum vell ath
en stund for han-um væl at
an hour fare.PRT.ACT he-OBL well along
‘At one time he (a rich king) fared well (i.e. he succeeded)’ (RD II, 249,
3957–3958)

Two-place: *æve* (forms with breaking: *jave*, *jæve*) ‘doubt, be in doubt’; *tvivle*⁹ ‘doubt’, *skilje* ‘disagree’. The A2 of these three verbs must have predicational value, either through clausal form as in (8) or through a predicational noun (8b).

- (8) a. iafuær them um oc skil them um
jav-er thæm um ok skil thæm um
doubt-PRS.ACT they.OBL about and disagree-PRS.3SG they.OBL about
hwat hældær hun ær mæth ællær ey
hvat hælder hun ær mæth æller æj
what either she is with or not
‘If they (appointed good women) doubt and disagree whether she is
with (a child) or not’ (DgL V. 5,3)

⁹ *Tvivle* is a 15th century Low German replacement loan for *æve*. Sources show both inactive and transitive construction and thus, the continuous productivity of the inactive pattern. A handful of later manuscripts have *tvivle* for *æve* in example (7); of these, 4 retain an inactive construction, 3 are transitives, according to the edition’s critical apparatus.

- b. hwaræ sum mæn æuær um sannænd. thær skal logh lethæ
 hware sum mæn æv-er um sannende thær skal logh lethe
 where REL man.PL doubt-SG about truth there must law guide
 hwilt ræt ær
 hwilt ræt ær
 which right is
 ‘Where people are in doubt about truth, there the law must guide
 which is right’ (CCD X, 3v)

Example (8b) is included because it shows a secondary morphological effect of the construction’s semantics. There are hosts of medieval manuscripts of this text, the prologue of the Jutish Law, but not a single variant of this reading showing a plural form *æv-e* to agree with *mæn* ‘men’. The inactive construction does not allow concord between A1 and verbal number, only transitive constructions with a nominative A1 allow this, and even though nouns no longer inflect for the nominative vs. oblique distinction, the concord rules are still maintained¹⁰, banning concord with inactive constructions.

2.2 Middle voice inactive verbs

Some verbs need a middle voice form in order to construe inactively. The verb *te* is from *te-a*, Icelandic *tjá*, and its active voice forms are transitive only (9), the *s*-form has a clearly passive variant (10).

- (9) Ok ther thu hanum thitt wredhe anledhe, Tha ær thet
 ok te-r thu han-um thit vrethe andlete tha ær thæt
 and show-PRS.ACT.SG 2SG he-OBL POSS.2SG angry face then is it
 ey taknemælight, hwat got thu gør hanum
 æj taknemlikt hvat got thu gør han-um
 not evident what good you do he-OBL
 ‘And if you show him your angry face, then it is not evident what good
 you are doing to him’ (Sydr 161, 18–19)

¹⁰Bjerrum (1949: 166) writes: In “impersonal constructions” into which it is impossible to interpolate any subject (...) the verb is invariably in the singular, e.g. *skil børn with mothær* (51⁵) *si mater et pueri discordant ...*”, that is: ‘if the children disagree with their mother’

- (10) *oc ænglæ fōræ foræ hanum korss tegn, ath thet skal theræ*
ok engle fōre fore hanum kors tekn, at thæt skal thære
 and angles carry in front of him cross sign, that it will there
thees foræ al mankøn.
te-s fore al mankyn
 show-PASS for all mankind
 ‘And angels will carry the sign of the cross in front of him, so that it be
 there shown to all mankind’ (Luc 69r 7–10)

The middle form in East Norse *-s* (West Norse *-sk/-st*) has four semantic variants (Dyvik 1980; Heltoft 2006), of which the passive is but one. The middle voice functional varieties are the reflexive function, the reciprocal function, and the detransitive function. The reflexive and the reciprocal functions are transitive variants, so the relevant function for the discussion of the inactive construction is the latter, detransitive one¹¹. Examples are (11–13):

- (11) *Tees thic thet, thic wel liger, tha ladh*
te_a-s thik_{A1a} [thæt, [thik_{A1b} væl liker_b—A2b]]_{A2a}, tha lat
 show-MIDDLE 2SG.OBL that.NOM 2SG.OBL well likes, then let
sighe messe de trinitate (...)
sighje misse de trinitate
 say the masses of Trinity
 ‘If you behold that which pleases you, then let say the masses of Trinity’
 (Bønneb III, 122, 17)

In (11), both verbs are inactive. The verb form *tes* governs the arguments subscribed with an *a*, the verb *liker* those with a subscribed *b*. In both cases, the A2 is an embedded clause. In (12) and (13), the A2’s cannot be read as agents and hence they are not transitive, but inactive.

- (12) *Meg thee-s twæne honde folck*
Mik_{A1} te-s [tvænne hande folk]_{A2}
 1SG.OBL appear-PRS.MIDDLE two kinds of people
 ‘I see two kinds of people before me’ (JBB kap.7, b5v)

¹¹The reflexive function is demonstrated in (i) *Gudh alsommæctigste teedes henne* ‘the almighty God showed himself for her’ (Bønneb II, 133, 15); the reciprocal function in (ii) *the tordæ æy tees fōrræ æn the brudæ kostæ oc skyuldæ tøm met* (Luc 76v 7–10) ‘they (Adam and Eve) dared not show themselves to each other until they had broken off twigs to hide themselves with’.

- (13) ogh ther thedhes them stiærnen i geen, efter ad hun
 ok thær te-th-es thæm_{A1} stiarne-n_{A2} igen, æfter at hun
 and there appear-PRT-MIDDLE 3PL.OBL star-DEF again, after that she
 borthe war
 borte var
 gone was
 ‘And there the star appeared to them again, after it had been gone’ (Vejl
 Pilgr 220, 12)

In (14) and (15), I address the problem of zero arguments. In Old and Middle Scandinavian, NPs at all levels can be replaced by zero, and as premises for assuming a zero, I posit either conceptual necessity or linguistically well-defined ellipsis, and (14) will show conceptual necessity. In (14), the A1 is represented by zero, since it is referentially unspecified. The A2 is specified: ‘then some sign (A2) would appear (to whoever might be the perceiver, A1)’, a conceptually necessary A1 referent, in the present case generic and therefore also textually omissible.

- (14) vare han saan at saken, tha tedess e noget
 var-e han san at saken, tha te-th-es e noket
 be-SUBJ he guilty as charged then appear-PRT-MIDDLE always some
 taken i hans andlade, (...) æn vare han vsan, tha
 tekn_{A2} i hans andlete, (...) æn vare han usan, tha
 sign in his face (...) but be-SUBJ he not guilty then
 tediss icke.
 te-th-es ække_{A2}
 appear-PRT-MIDDLE nothing
 ‘If he should be guilty as charged, then some sign would appear in his face
 (...) but should he be not guilty, then nothing would show’ (HellKv 8, 1)

Apart from the omissibility of A1 (a zero argument, again of the verb *tethes*), example (15) is included to document the existence of actantless predicates (here: *ræghne* ‘rain’) in Middle Danish, in the sense that they have *zero valence*, that is: no actant at all. This proves that Middle Danish, like so many other old Indo-European languages, does not have categorical NP-VP structure as a necessary structural principle. The context is: ... *that from Adam’s time and until the day of Noah* ...

- (15) Tha regnedhe aldrih, Ok teddes ekki regn bwæ pa
 Tha ræghnethe aldrih, ok te-th-es ække ræghnbughe_{A2} pa
 then rained never, and appear-PRT-MIDDLE not rainbow in

hemmelen

hemelen

the sky

‘then it never rained, and no rainbow appeared in the sky’ (Sydr 51, 11–12)

I have interpreted (14) and (15) according to the classical rules of zero arguments in Old Scandinavian; see Heltoft (2012) and Faarlund (2004). Theoretically, they could be seen as bridging examples allowing also the modern intransitive reading with a subject A1. In both cases, they would show subjects in a position later than the third structural position, cf. Section 4.2.

2.3 Neutral stems

Some stems are neutral with respect to the transitive-inactive contrast, examples being: *thrængje* ‘put a strain on, bother’ • ‘need, be in jeopardy’; *varthe* ‘be responsible for, guard’ • ‘concern, be somebody’s task or obligation’. Such verbs allow inactive construction with the active voice, and the opposition between transitive and inactive is manifested by the syntagmatic argument hierarchy only. Notice that (16a–16b) are transitive constructions, so the A1s are subjects, the oblique case arguments are A2s and direct objects.

- (16) a. Mæn vndher haffde swa trængth hannum, at han wisthe
 Men under_{A1} havthe sva thrængth han-um_{A2} at han viste
 but miracle had such overwhelmed he-OBL that he knew
 ey, hwat han skulle sighæ.
 æj hvat han skulle sighje
 not what he should say
 ‘But the miracle had overwhelmed him so that he knew not what to say’ (ML 152, 19–153, 2)
- b. Nar ikten trængher tegh tha strygh tegh wel om
 nar ikten_{A1} trængher thik_{A2} tha strygh thik væl um
 when the gout bothers 2SG.OBL then smear yourself well around
 medh salffuen
 mæth salven
 with the balm
 ‘When the gout bothers you, then smear yourself well with the balm’
 (Lægeb Thott 47, 30)

- c. oc skal han bevi[se] them ydermer vinskap om them
 ok skal han bevisē thæm ythermer vinskap um thæm_{A1}
 and must he show them more friendship, if 3PL.OBL
 thrænger eller vetherthorvæ
 thrænger æller vitherthurv-e
 are in distress or need-PRS.PL
 ‘And he must show more friendship to them, if they are in distress or
 they need this’ (3/8 1442 Varberg)

In (16c), however, the oblique case argument *thæm* is the A1 (the A2 is probably zero = *ythermer vinskap* ‘more friendship’).¹²

The verb *varthe* is transitive in (17). It has number agreement between the nominative subject and the finite verb, and the A2 in in the accusative, as in unmarked transitive patterns. Example (17c), however, is an inactive construction on the basis of the same verb stem in the active voice.¹³ The use of the cataphoric nominative pronoun *thæt* is not obligatory, it is not a formal subject marker, and this construction therefore consists of an A1 in the oblique case, and a predicational A2 (*at the hava æj vin*). The A1 has inactive semantic role meaning (in this case as the Obligated in a relation of duty or relevance coming from the outside).

- (17) <the owner of a pond may bar his fellow-villagers’ access to the pond>

- a. utæn the warthæ han æm wæl sum han.
 uten the_{A1} varth-e han_{A2} æm væl sum han
 unless they.NOM.PL guard-PL it.ACC just as well as he.
 ‘Unless they guard it just as well as he’ (DgL V 192, 3)¹⁴

¹²The verb *vitherthurve* ‘be in need of something’ and its simplex *thurve* ‘need’ are not inactive verbs, and the GldO has no examples. The conjunction between *thrænger* and *vitherthurve* does not prove anything about subject status for the A1, since oblique A1s cannot agree with verbal number. *Vitherthurve* can easily be read as a zero-argument transitive: (they) are in need (of this) (i.e. friendship). There is nothing in Old Scandinavian like Modern English or Modern Danish gapping rules.

¹³Similarly in Old Icelandic, with an accusative A1: (*at segja þér þat*) *er þik* (acc) *varðar* ‘to tell you what concerns you’.

¹⁴In the Scanian Law, the transitive interpretation of the verb *vartha* governs a dative object: *Eld-e (D) sin-um (D) scal man vartha* (CCD III 93r) ‘a man must safeguard (or ‘be responsible for’) his fire’. The West Danish example could either match the Old Icelandic situation where *varða* in the sense of ‘guard, watch’ governs the accusative, or it could be an instance of the general loss of verbal government of the dative case. I retain ACC here, since the form indicates that this source preserves the accusative (*han*) vs. dative (*hanum*). There are no examples known to me of inactive constructions in Western Middle Danish that preserve a distinction between the accusative and the dative.

- b. Hwat waardher thet miik eller tik, at the
 hvat varthar thæt_{A2} [mik æller thik]_{A1} [at the
 what concerns it.NOM me.OBL or 2SG.OBL that they.NOM.PL
 hawa ey wiin, (...)
 hav-a æj vin]_{A2}
 have-PL not wine, (...)
 ‘How does it concern me or you that they have no wine’
- c. Thet wordhar them som os hawa budhit, oc ey os,
 thæt_{A2} varthar thæm_{A1} sum os hava buthit ok æj os_{A1}
 it-NOM concerns 3PL.OBL REL us.OBL have asked and not us.OBL
 thet at the hawa ey wiin.
 [thæt at the hava æj vin.]_{A2}
 this that they have not wine
 ‘It concerns those who have invited us, and not us, that they have no
 wine’ (Post 46, 9–13)

A fourth example of a neutral stem would be the verb *skilje*, meaning (transitive) ‘divide’, (reflexive) ‘part, divorce’ and (inactive) ‘disagree’. The inactive function is exemplified in (8).

2.4 An apparent voice merger

Some inactive verbs construe inactively as such irrespective of voice, that is, both the active voice and the middle voice can be used. I will discuss the verb *thækje* ‘learn, find reasonable’ • ‘like, please’, which allows an A2 of either type: non-predicational or predicational. In the active voice, the inactive construction of *thækje* means that ‘somebody knows or learns something’, or that ‘somebody finds something reasonable’, as in (18–19).

- (18) vthæn standæ moth høymot oc bældæ met mywgdom,
 uten stande mot høghmot ok bælde mæth mjukdom
 but stand against haughtiness and arrogance with meekness
 tho uær men hanum tekker thet at han vorthær
 tho-at-hvarem han-um_{A1} thækk-er thæt_{A2} [at han varther
 even if he-OBL learn-3PRS.SG that that he becomes
 forsmoth ther aff fore værdæn.
 forsmath thær af fore værden.]_{A2}
 despised there from for the world.

‘But he must resist haughtiness and arrogance with meekness, even if he
 learns he is despised for this by the world’ (Luc 65r 14–17)

- (19) æn ther forudhen ma man delæ hannom fore hærwirke sagh,
 æn thær foruthen ma man dele hanum fore hærwirke sak
 even there in addition may one charge him for armed robbery
 oc æn ydermere vm hannom thecker
 ok æn ythermere um han-um_{A1} thækker
 and even more if he-OBL seems reasonable
 ‘And in addition to this, one may charge him with armed robbery, and
 even more if he finds this reasonable’ (Thord Degn text 2, 122, 20)

The middle form of this verb is *thækkjes* ‘to please, to satisfy’, in religious texts a most frequently discussed relation to God and Jesus, and therefore one of the best documentations of the distribution of case forms, including word order.

- (20) Oc æy thes mynne gøre the ther æffter alt thet them thækkes
 ok æj thæs minne gøre the thær æfter alt thæt thæm_{A1} thækk-es ___{A2}
 and nevertheless do they thereafter all that they.OBL please-MIDDLE
 ‘And nevertheless they do thereafter [after the Holy Communion] anything
 they please.’ (Fragm 107, 15–16)

Examples (21–22) have 2SG nominative A2s.

- (21) i gardagh thæckthes thu mik mæsth
 i gardagh thæk-t-es thu_{A2} mik_{A1} mæst
 yesterday please-PRT-MIDDLE.3SG 2SG.NOM 1SG.OBL most
 ‘Yesterday I loved you the most.’ (ML 424, 21)
- (22) hwn leffdhæ fulkommelighæ i ræthfærdughet, oc ther fore
 hun livde fulkommelike i rætfærthughet ok thær fore
 she.NOM lived completely in righteousness and therefore
 thæktes hwn gudh
 thæk-t-es hun_{A2} guth_{A1}
 please-PRT-MIDDLE.3SG she-NOM God
 ‘She (Anna) lived completely in righteousness, and therefore she pleased
 God.’ (Bønneb III, 61, 8–10)

Notice that (21–22) cannot have the transitive reading ‘do something to please’. They mean ‘A1 finds pleasure in A2’.

In the case of *thækkje* there was a clear semantic difference between the lexical meanings realised, in the active and the middle voices, respectively. In all probability, some instances of genuine mergers are also found. In addition to example (7), there is also the following version of a poetic formula:

Clearly, (25) documents the distribution of case with this type of inactives in the archaic Scanian dialect, but what is hard to document in Danish is not the use of explicit datives for the A1 of inactive constructions, it is the accusative. The earlier, presumably Common Norse system was preserved in Old Icelandic (and to a large extent even in Modern Icelandic), and here the A1s can appear in the accusative. I shall compare the situation with two verbs, in Section 2.5.1. the verb OIcel. *reka*, Middle Danish *vreke*, *vrake*; in Section 2.5.2. the verb OIcel. *bresta*, Middle Danish *briste*.

2.5.1 A difference from Old Icelandic

Old Icelandic has the inactive construction type (26) (cf. Sigurðsson 1989, 2006):

- (26) bát-a-na rak til lands
 boat-ACC.PL-ACC.PL.M drift.PRT.SG ashore
 ‘The boats drifted ashore.’

The archive of the Dictionary of Old Danish lists as comparable verb forms transitive *vreke* ‘drive out, expel’ • ‘open a lawsuit’, from *wrekan (Ablaut type 5), and a parallel (mainly East Danish) form *vrake*, corresponding to Germanic *wra-kan, but possibly a relatively recent remodeling to Ablaut type 6.¹⁶ The intransitive meaning ‘drift’ and the inactive construction is not found in the data in the active voice but has apparently been replaced by a mediopassive intransitive. Such intransitives as (27a–27b) can have nominative subjects.

- (27) a. oc han skal castæ af sit timbær (...) oc thet
 ok han skal kaste af sit timber (...) ok thæt
 and he must throw off his timber (...) and this-NOM/OBL
 wrax in til lands
 vrak-s in til lands
 drift-PRS.MIDDLE ashore
 ‘And he must throw overboard his timber or other valuables, and this drifts ashore.’ (DgL V 352, 4)
- b. um wrac af haf wræcs in til landz
 um vrak af hav vræk-s in til lands
 about wreckage from sea drift-PRS.MIDDLE ashore
 ‘About wreckage that drifts ashore from the sea.’ (DgL V 349, 8)

¹⁶East Norse preserves Germanic *w- in front of r-, compare Old Danish *vrēth* ‘angry’ to Old Icelandic *reiðr* ‘angry’. There is even a -jan-formation *vrekje* ‘expel’, from *wrak-jan, to be disregarded here.

True, the pronominal form *thæt* does not distinguish the nominative from the accusative but judging from Old Icelandic this distinction is clear-cut. Example (28a) is the inactive construction, while (28b) is a reflexive construction with a nominative subject.

- (28) a. <hann> skilr svá við hana at hana rek-r
 (he) departs in such a way from her that she.ACC drift-PRS.ACT
 dauð-a eptir ánni
 dead-ACC.F along the river
 ‘He gets rid of her in such a way that she drifts dead down along the river.’ (*HeiðrR* 53¹⁵, Normalised by author)
- b. segir þat osynniu ath hon rekiz j
 segir þat ósynju at hon rek-i-z í
 (he) calls it unwise that she.NOM go around-PRS.SUBJ-MIDDLE in
 suo dyrum klæðum
 svá dýrum klæðum
 such costly garments
 ‘He says it is unwise for her to walk around in such costly garments.’
 (ClarB 19³⁰)

The correct strategy here is to postulate only inactive constructions where inevitable. The data are scarce, but it seems likely that this type of inactive construction has been replaced in Danish, in this case by an intransitive middle form.

2.5.2 The verb *briste/bresta*

The polysemous verb *briste* ‘burst, split’ • ‘fail’ • ‘miss, lack, be short of’ (Old Icelandic *bresta*) is yet another illustration of the way the Danish construction has been reshaped. In the sense of ‘lack, miss’, *bresta* is documented with an accusative A1 *mik* (the dative is *mér*):

- (29) eigi brest-r mik áræði
 not lack-PRS.3SG 1SG.ACC courage
 ‘I do not lack fighting spirit.’ (ONP 750 *Vatnsdæla* saga)

Even in the most archaic Danish data, I have found nothing similar with any type of NP, so the accusative type has been merged with the dative type, as typical of almost all other occurrences, as in (30):

- (30) *førstæ them brøster wobn i strid tha holdæ the met
 fyrste thæm brist-er vapn i strith tha halde the mæth
 first them.OBL lack-PRS.SG weapon in combat then hold they with
 æn hand oc slaa met then annen
 en hand ok sla mæth thæn annen
 one hand and punch with the other
 ‘As soon as they lack a weapon in combat, they grip (the enemy) with one
 hand and punch with the other one.’ (Luc 60r 21–23)*

This means we can ask whether constructions with the other senses of *briste* should also be analysed as inactive constructions. Consider (31) (sense ‘burst’) and (32) (sense ‘fail’):

- (31) *Æn cumær thet swa at hin ær akær at hanum bristær tømæ.
 en kumer thæt sva at hin ær aker at han-um brister tømæ
 but comes it so that he who drives that he-OBL bursts rein
 ællær hin er rithær at hanum bristær tyghlæthær. oc wagn
 æller hin ær rither at han-um brister tyghlæther. ok vagn
 or he who rides that he-OBL burst-PRS.SG bridle and cart
 løpær ællær hæst rænnær mæth hanum. oc man får thæræ døth
 løper æller hæst rænner mæth hanum ok man far thære døth
 runs or horse runs with him and man becomes there death
 af. tha ...
 af. tha ...
 from, then ...
 ‘But if it happens that he who drives that the rein bursts for him, or he who
 rides that the bridle should split for him, and the cart or horse run with
 him and (this) man meets his death from this, then ...’ (DgL V 202, 9)*

Where the sense of ‘burst, split’ is concerned, there is no conceptual necessity that an oblique actant should be part of the valence schema. We can have *tyghlæther brister* ‘the bridle splits’ and *bughe brast* ‘the bow burst’, Old Norwegian *Jorðin oll brestr oc rifnar* (ONP 2: 750) ‘the whole earth is bursting and quaking’, without implying an extra Afficiary¹⁷ actant. The Norwegian example has a nominative subject and documents that the verb is intransitive in this sense. An Afficiary actant may of course be added, but then freely, as a free oblique argument with the Afficiary Role as the A2, in the present case the Maleficiary

¹⁷The terms Afficiary and Maleficiary are from Zúñiga (2011).

variant. In (32), the meaning of *briste* is ‘fail, not succeed’, clearly implying an argument ascribing the notion of a Maleficiary to its referent.

- (32) en brister hannum takk. eth skotæ. tha gøme bondæ sialf
 æn brist-er han-um tak æth skote tha gøme bonde sialf
 but fail-PRS.3SG he-OBL guarantee or proof then guard landowner self
 sin thiuf
 sin thjuv
 REFL thief
 ‘But if guarantee or proof fail him (a suspected thief), then the landowner
 may himself alone take his thief into custody.’ (JL CCD X, C 37, 45r)

On the basis of this line of argument, I group the types (24) and (30) together with (32) as synchronically belonging to the inactive constructions. The A1 is in the oblique case, and neither subordinate sense is compatible with any notion of agenthood where the semantic roles are concerned. What we obtain, is a new variant of the A1 Inactive role, namely the Afficiary role, in addition to the Experient role. Notice that in transitive constructions, Afficiary meaning can only be ascribed to A3s, since the dative with verbs like *thakke* ‘thank’, *skathe* ‘do harm to’, *møte* ‘meet’, *varthe* ‘be responsible for’ has been lost in Middle Western Danish.

2.6 Case roles of the inactive constructional system

In this survey of inactive Middle Danish predicates, the categorisation below seems to cover most of the occurrences. No Agentive meanings are coded, and the Inactive semantic roles apply to animate referents that could in a different constructional context very well carry Agentive meaning. The inactive role differs from the patient role in that the latter applies freely to animate referents and inanimate referents alike, the former only to potential agents.

1. Unspecified inactive one-place verbs, for instance: *hungre* ‘starve’, *lithe* ‘go, pass’ (of time and fate), *thyrste* ‘thirst, be thirsty’, *værkje* ‘feel pain, be in agony’.
2. Three subtypes of two-place verbs, each displaying a bound variant (a variety) of the Inactive role, depending on the type of relation denoted.
 - a) A1 (Experient), A2 (External factor), such as: *angre* ‘repent’, *drøme* ‘dream’, *hope(s)* ‘hope’, *minnes* ‘remember’, *sjunes* ‘seem’, *tes* ‘appear’, *thryte* ‘regret’, *thækkje(s)* ‘know, learn’, ‘please’.

- b) A1 (Afficiary), A2 (External factor), such as: *briste* ‘fail’, *rækkje* ‘be enough, suffice’, *vanskes* ‘lack’, *vante* ‘lack’.
- c) A1 (Obliged), A2 (External factor), such as: *byrje* ‘ought’, *høre* ‘ought’, *sta/stande* ‘befit’, *varthe* ‘be responsible for, have as one’s duty’.

3 The paradigmatic organisation of pronomial case in Western Middle Danish

So far the analysis has shown that we cannot know the actual content of the case forms without checking their valence bearer, i.e. the verb stem governing them. Actants in the oblique case are polysemous as far as the content of the case form is concerned. Case forms with one-place verbs are simple, since a nominative actant will be checked against an intransitive verb and the abstract, open semantic role (the classical, general function of the nominative) will be selected, for instance, *the gape* ‘they gape, open their mouths wide’ has the nominative *the*, and since both agentive and non-agentive readings are possible, the stem *gap-* confirms that this nominative must be read in the open, unmarked sense. In *mik thyrster* ‘I am thirsty’ the oblique form *mik* will point to the stem *thyrst-* to acquire the inactive role reading, excluding the patient reading. In the case of two-place stems, let alone the polysemous ones like *thrængje*, *varthe* and *skilje*, the argument hierarchy helps to determine which variety (bound variant) of the case meaning is the relevant one, and it is therefore part of the paradigmatic organisation. Case meaning and constructional meaning must both be included in the paradigmatic analysis. Say that the semantic roles relevant for transitive constructions are Unmarked role (very often Agent), calling for the nominative case, and Patient, calling for the oblique case. This pair of roles will not apply as case meanings for the arguments of the inactive constructions such as *hanum thækker thæt* ‘he learns this’, cf. (18). The oblique form *hanum* must manifest an A1 and hence this case form must denote the inactive role, an animate referent, with two-place predicates, influenced by some external factor, for instance: a phenomenon perceived, a norm to be complied with, or some state-of-affairs related to what is in one’s interest or need. Notice again: It is excluded from any meaning of agenthood or intentional action.

The form *thæt* ‘that/it’ denotes the external factor leading to the state of satisfaction on behalf of A1’s referent, that is, it is a nominative A2 with a very specific meaning. Syntagmatic hierarchy and case oppositions go together, and such combinations of morphological contrasts and syntagmatic systems were called connecting paradigms by Nørgård-Sørensen et al. (2011), since they consist of both morphologically determined meaning potential and constructional

determination of the choice between options given by the polysemous case system. Thus, the structurally determined meaning of the members of the case paradigm is the result of an intersection between morphology and construction, and case meaning has both a morphological expression system and a syntagmatic, constructional one.

To see this in uncomplicated practice, take the German dative case form. This will receive different semantic interpretations from different predicates. In (33–35), a well-known type of example, case meaning differs along with argument hierarchy.

- (33) *Mir* (dative A1) ist kalt.
Me.DAT (dative A1) is cold.
'I am cold'.
- (34) Sie hat *mir* (dative A2) gedankt.
She has me.DAT (dative A2) thanked.
'She thanked me'.
- (35) Wer hat *mir* (dative A3) das Hemd schenken wollen?
Who has me.DAT (dative A3) the shirt give as a present want?
'Who wanted to give me this shirt?'

Schematically, cf. Table 3.¹⁸ The present analysis of Middle Danish can be represented as Table 4.

Table 3: Hierarchy of German dative

Case	Hierarchy		
	A1	A2	A3
Dative	Inactive	Patient/Comitative	Afficiary

The status of the nominative A1 as unmarked is of course fully compatible with the expectation that the majority of lexically, not grammatically, determined roles will be Agents, but the nominative in transitive constructions does not insist on this.

¹⁸It is not important to discuss here whether the dative A2 means Afficiary or Patient, or whether dative verbs like *begegnen*, *begleiten* and *folgen* take a Comitative A2.

Table 4: Case paradigm and argument hierarchy in Middle Western Danish

Case	Hierarchy	
	A1	A2
Nominative	Unmarked	External Factor
Oblique	Inactive	Patient

3.1 The indexicality of case

The semiotic function of pointing between signs is well-known from C.S. Peirce’s semiotics as a subtype of the indexical function. This notion has been applied especially to morphology by Andersen (1980) and Anttila (1975), with a clear indication that it will apply to syntactic and topological issues as well.

When indexical, case forms point to their governing predicate as the locus where their exact semantic function is determined. The predicate determines the relevant argument status and the relevant variety of semantic role. With the oblique form, the choice is between Inactive and Patient; with the nominative, it is between Unmarked role (very often lexically filled in as Agent) and External factor (Experiencer, Afficiary or Obligated). Thus, the nominative of the two-place inactive construction points to an inactive verb and receives A2 status, with a very specialised semantic role meaning potential.

In conclusion, indexical case means the case form depends for its actualised meaning on its predicate. Importantly, indexical case structure is but one typological organisation of case. To some extent, Old Indo-European languages have symbolic case structure¹⁹, and as we shall see, Modern Danish has in fact abolished indexical case to replace it by a simple symbolic opposition, see Section 5.

3.2 Subjects and objects

Up to this point, I have by and large avoided the issue of grammatical relations in the sense of subjects and objects. The argument hierarchy is laid out as pro-

¹⁹Where symbolic case is concerned, the case form alone bears case meaning. A well-known remnant of simple symbolic case in Latin is found in *cave canem* ‘beware of the dog’ vs. *cave cani* ‘take care of the dog’. The case opposition specifies the meaning potential of the verb stem *cave-*, in itself neutral to this opposition. Case is normally indexical in Latin. In *signa ... detracta lucis* ‘emblems carried out from the groves’ (Tacitus Germ. 140, 3), the case ending *-is* indicates the stem *detract-* from where the ablative sense of the case ending is determined.

jections of valence structure, and a priori assumptions of a connection between A1 and subject, A2 and direct object has been deliberately shunned.

Mel'čuk (2014) suggests a set of universal syntactic criteria for (*not* features of) the universality of subjects, applied by me in Heltoft (2021a,b). To the criteria of Keenan (1976), he adds a distinction between definitional criteria (necessary for a given language) and characterising criteria (frequent, but not necessary). Very briefly, his definitional criteria are laid out in 1–7. The *subject candidate* (SC) must be checked against the following parameters:

1. Is SC an immediate actant of the main verb? (it must be)
2. Is SC omissible or not?
3. Does SC hold a particular linear position?
4. Morphological impact on the main verb (personal-numeral agreement)
5. The main verb's morphological impact on SC (Does the main verb govern SC's case marking?)
6. The main verb's inflection affecting morphological links to the SC (refers to voice, antipassive construction)
7. SC's pronominalisation if this affects morphological links between the MV and SC.

On the basis of Section 2, we can now determine the subject criteria relevant for Middle Danish and compare them to the criteria relevant for Modern Danish.

Criterion 1 applies to all instances of A1 and A2, both in transitive and in inactive constructions²⁰, and where criterion 2 is concerned, all arguments are omissible. Thus, neither of these parameters are relevant for Middle Danish.

It must be an open empirical question whether the subject candidates hold a particular linear position, and I will deal with this in Section 4. To reveal the conclusion already here, Middle Danish does not have a subject position, whereas the modern language certainly has developed one, cf. Section 1.2. This means that we are referred to morphological criteria, namely to numeral concord and to case rection (government). In transitive constructions, the A1 must be in the nominative case; inactive constructions, by contrast, take the A2 in the nominative. As

²⁰I omit here a discussion about the status of Predicative complements as Main Predicates; see Heltoft (2017), in general Hansen & Heltoft (2011).

a general principle, nominative DPs agree with the finite verb in number,²¹ cf. Section 2.1. These criteria point to the nominative DPs as the subjects of Western Middle Danish. Parameter 7 is relevant as far as it determines the application range of nominative government. Voice cannot count as a defining feature, since inactive constructions do not have an active vs. passive voice contrast.

3.3 A constructional typology: Case, grammatical relations and argument structure

The outcome of the analysis is that the overall distribution of case defines the subject in Middle Danish, whereas the argument status is responsible for the ascription of semantic role variety within the case system. There is no traditional term for a grammatical relation corresponding to the A1 inactive, since the idea of a direct object is intimately connected with the transitive pattern. We can illustrate the two types in Table 5.

Table 5: Transitive and inactive constructional typology

(a) Transitive structure		(b) Inactive structure	
A1	A2	A1	A2
S (nominative)	—	inactive (oblique)	—
S (nominative)	DO (oblique)	inactive (oblique)	S (nominative)

To add to the relevance of the distinction between arguments and grammatical relations, I include two further possible interaction types between morphology, grammatical relations and argument structure, namely the constructional option found in both English and Modern Mainland Scandinavian, somewhat confusingly named “ergative” by Halliday (1968, 1994). Hansen & Heltoft (2011) call this pattern the incausative pattern, and Danish verbs construing in this way are: *brænde* ‘burn’, *dreje* ‘turn’, *standse* ‘stop’, *vælte* ‘turn over’, *øge* ‘increase’, etc., the translations immediately offering English parallels.

- (36) a. De brændte
 They.NOM burned
 ‘They burned.’
 b. Hun brændte dem
 She.NOM burned them.OBL
 ‘She burned them.’

²¹Some details omitted, especially about the singular substituting for the plural, never vice versa.

The incausative structure is shown in Table 6. It is a combination of ergative argument structure with transitive grammatical relations and transitive case morphology. The modern case morphology involved is different from that of Middle Danish, see below Section 5.2, in that it no longer marks semantic role. It is an example of ergative argument articulation in combination with what looks like transitive morphology. To make this point stand out, I add classical ergative structure, as represented by Greenlandic in Table 7, examples (37–38).

Table 6: Incausative-causative structure

A1	A2
S (nominative)	—
DO (oblique)	S (nominative)

Table 7: Ergative constructional typology

A1	A2
S (absolutive/nominative)	—
O (absolutive/nominative)	S (relative)

Greenlandic has always number and person concord between subject and finite verb, and in transitive clauses even between direct object and finite verb. In transitive clauses, the intransitive concord is maintained and yet another layer of concord is added. In elementary Greenlandic:

- (37) a. piniarto-q piniar-poq
 sealer-ABS.3SG hunt-INDIC [3SG(SUBJ)]
 ‘The sealer is/was hunting.’
 b. piniartu-t piniar-put
 sealer-ABS.3PL hunt-INDIC [3PL(SUBJ)]
 ‘The sealers are/were hunting.’
- (38) a. puisi siku-mi sinip-poq
 seal-ABS.3SG ice-LOC.SG sleep-INDIC [3SG(SUBJ)]
 ‘The seal is/was asleep on the ice.’
 b. piniartu-p puisi pisar-aa
 sealer-REL.3SG seal-ABS.3SG catch-INDIC [3SG(SUBJ).3SG(OBJ)]
 ‘The sealer catches/caught the seal.’
 c. piniartu-p puisi-t pisar-ai
 sealer-REL.3SG seal-ABS.3PL catch-INDIC [3SG(SUBJ).3PL(OBJ)]
 ‘The sealer catches/caught the seals.’
 d. piniartu-t puisi-t pisar-aat
 sealer-REL.3PL seal-ABS.3PL catch-INDIC [3PL(SUBJ).3PL(OBJ)]
 ‘The sealers catch/caught the seals.’

3.4 Summary

Summarising Section 3, the main point is that inactive constructions cannot be reduced to transitive constructions, and the semantic role ascription to their A1s cannot be reduced to that of transitive subjects. The polysemy of the members of the case category is resolved by indexical pointing to the predicate as the valence bearer. In Section 5, we shall see that this system was replaced by a symbolic, non-valence governed case system, mirroring at first syntactic relations alone, later also phoric distinctions.

4 Inactive constructions and the topology of Middle Danish

In this section, we return to Melčuk's criterion 3 (Mel'čuk 2014) and the question whether Middle Danish subjects can be positionally identified. One point here is Melčuk's distinction between definitional criteria, which are necessary for a given empirical language, and characterising criteria, for instance prototypically relevant features, and thus also standard identifications of subject positions as the position held in unmarked clauses (the more marked positions then being transformationally derived). What we are asking, then, along with Melčuk, is whether some positional criterion is unique for the Middle Danish subject. For instance, Modern French subject topology is unique, in that this language has a position reserved for subjects, and furthermore, an obligatory one.

I shall add the question whether Middle Danish had a particular linear position for subjects, and next, whether subjects contribute to the content side of the word order paradigm for Middle Danish. We have already seen in Section 1.2 that Modern Danish certainly has a semantically coded subject position.

I have claimed elsewhere (Heltoft 2003, 2011, Nørgård-Sørensen & Heltoft 2015) that word order can be paradigmatically organised. Just like with morphological paradigms, we must distinguish between the *frame* of word order paradigms: the semantic content zone coded in the paradigm, and the *domain* of a paradigm: the syntagmatic context where the paradigmatic contrast applies. For the old Scandinavian languages, the semantic frame of word order was not argument status, nor syntactic relations, but information structure.

4.1 The iconic focus pattern of Middle Danish

Initially, all Old Scandinavian languages are verb second, but in relation to the non-finite verbs, they retain the possibility of OV-order, or more generally, XV-

order, X being all types of NPs, predicatives and adverbials. The finite and the non-finite verb define three topological zones, a prefield preceding the finite verb, a middle field between the verbs and a postfield, following the non-finite verb. I illustrate this through examples of transitive constructions, namely (39) showing pronominal object + V, (40) showing full NP object + V and (41), pronominal object + full NP subject + V. In (42), I add an example of V + negation + subject + V, in which the object holds the initial position.

- (39) Herræ ... , giff thætte barn toll, at iach motte ok henne see
Herre ... , giv thætte barn thol, at jak matte ok hænne se
Lord ... , give this child endurance that I could also her see
ændæ sith lif i fulkomen troo, som iech soa myn førmer dotter.
ænde sit liv i fulkomen tro sum jæk sa min førmer dotter.
end REFL life in perfect faith as I saw my former daughter.
'Lord ..., give this child endurance so that I could see her, too, ending her
life in perfect faith, like I saw my now late daughter.' (HellKv 85, 23–25)
- (40) viste thu huilc myn hug ær, thu hafde tesse ord icke melth
viste thu hvilc min hugh ær, thu havthe thæsse orth ække mælt
knew 2SG what my mind is, 2SG had these words not uttered
'If you knew what I have in mind, you would not have uttered these words.'
(HellKv. 76, 22–23)
- (41) thæræ ma han hwærkin kunung nøthæ til oc ængin landz ræt
thære ma han hværken kunung nøthe til oc ængen lands ræt
there may he.ACC neither king coerce to and no land's law
'To do this neither the king nor any law of the land may coerce him.' (DgL
V 75, 6–8)
- (42) Thænnæ steen ma æi eld skathæ
Thænne sten ma æj eld skathe
this gem can not fire harm
'Not even fire can harm this gem.' (Harpestreng 191,13–14)

These examples document two points: 1) Focus operators such as *ække* 'not', *æj* 'not', *ok* 'also' and *hverken* 'neither' define information structural subzones, a background zone preceding the operator and a focus zone following it. 2) There is no specific subject position, and like objects, a subject can be in focus position. If there is no operator, the system predicts that an object or adverbial will precede a focused subject. The relevant portions of text can be laid out topologically as in Table 8.

Table 8: Information structure and word order in Middle Danish

Prefield	V	Middle field			V	Postfield
	V	Background	Operator	Focus	V	
jak	matte		ok	<i>hænne</i>	se	ænde sit liv
thu	havthe	<i>thæsse orth</i> _{A2}	ække		mælt	
thære	ma	<i>han</i> _{A2}	hværken	<i>kunung</i> _{A1}	nøthe	til ...
thænne sten _{A2}	ma		æj	<i>eld</i> _{A1}	skathe	

In Peircean terms, the finite and the nonfinite verb indicate the middle field, the zone for word order to manifest symbolic information structural meaning, the opposition of *background* versus *focus*. In analogy with morphological paradigms, a given member cannot manifest both meanings; however, this symbolic paradigmatic contrast must be mapped onto a linear sequence, and this iconic sequence (Heltoft 2019, 2003) is then indicated again by the position of focus operators. The indexical function of verbs and focus operators define the domain of the paradigm.

$$\begin{aligned}
 V &\Rightarrow [\text{Middle field}] \Leftarrow V \\
 V &\Rightarrow [\text{Background positions} \Leftarrow \text{Operator} \Rightarrow \text{Focus position}] \Leftarrow V
 \end{aligned}$$

Figure 1: Topological analysis of inactive clauses

Notice that there is no coded subject position. Subjects can occur anywhere in a clause, depending on the textual organisation. Again, what is structurally possible – not what is frequent – defines what is grammaticalised. No doubt, subjects in the 3rd position, immediately after the finite verb, have an overwhelmingly high frequency, but this fact can in all probability be derived from the fact that the A1s of the transitive system are very often lexically coded as Agents. At any rate, there is obviously no interlock between A1, 3rd position and subject, so the Middle Danish subject is clearly not topologically coded.

4.2 Inactive clauses follow the general pattern

In this subsection, I consider a number of examples illustrating the positional range of A1s and A2s. Since the domain of the paradigm is the middle field, special attention will be given to examples where both A1 and A2 are in this field. Example (43) documents that A1 can hold the third position, A2 holding the open initial position; and vice versa, (18), partly repeated here as (44), documents initial A1 and 3rd positional A2.

- (43) hon thæktis honum migit væl
 hun_{A2} thæk-t-es hon-um_{A1} miket væl
 she.NOM please-PRT-MIDDLE he-OBL very much
 ‘She pleased him very much.’ (SjT 53, 17)
- (44) han-um_{A1} thækk-er thæt_{A2} [at han varther forsmath thær af
 he-OBL learn-3PRS.SG that that he becomes despised there from
 fore værden.]_{A2}
 for the world
 ‘He learns he is despised for this by the world.’
- (45) documents A2 preceding A1 in the middle field, (21–22) likewise, see above.
 For A1 preceding A2 in this context, see (13).
- (45) a. ... ganghe vthen kiortell, giærne wille iek giffwe tik myn enesthe
 ... go without tunic, gladly would I give you my only
 kiortell.
 tunic.
 ‘... to be without a tunic. I would be glad to give you my only tunic.’
- b. Nw sømmer thet mik icke oc jek kan ey fanghe noghet
 Nu søm-er thæt_{A2} mik_{A1} ække ok jæk kan æj fange noket
 now befit-PRS.SG it.NOM me.OBL not and I cannot get any
 andhet klædhe
 annet klæthe.
 other garment.
 ‘Now this (anaphor = ‘wearing no tunic’) does not befit me and I cannot get any other garment.’ (ML 407, 7–10)
- (46) Theth ær æy megheth ath wel omgonges meth sakhmodugh ok gode
 Thæt ær æj miket at væl umganges mæth saktmodugh ok gothe
 it is not much to well get along with meek and good
 meniske; natrulige tha tækkes theth alle
 mænneske; naturlike tha thækk-es thæt_{A2} alle_{A1}
 human beings; in a natural way then please-PRS.SG.MIDDLE this all
 ‘Getting along well with meek and good human beings is not much;... in a natural way, this is what all people like.’ (Kempis 58, 14)
- (47) hvat varthar thæt_{A2} [mik æller thik]_{A1} [at the hav-a
 what concerns it.NOM me.OBL or 2SG.OBL that they.NOM.PL have-PL

æj vin]_{A2} thæt_{A2} varthar thæm_{A1} sum os hava buthit ok æj
 not wine it.NOM concerns 3PL.OBL REL us.OBL have asked and not
 os [at the hava æj vin.]_{A2}
 us.OBL [that they have not wine]

‘How does it concern me or you that they have no wine? It concerns those who have invited us, and not us, that they have no wine.’

- (48) Teckes ether naadhe, att theres egett budth
 thækk-es [ither nathe]_{A1} [at theres eghet buth*
 please-PRS.SG.MIDDLE POSS.2PL grace that their own messenger
 skall føræ breffwet fræm tiill thee Lubskæ, thaa staar
 skal føre brevet frem til the lybske]_{A2} tha star
 should bring the letter forward to the people of Lübeck, then is
 thet i ether naades hendher; tæckes ether naade ickæ thet,
 thæt i ither nathes hænder; thækkes [ither nathe]_{A1} ække thæt_{A2}
 that in Your Grace’s hands; pleases your grace not this,
 tha haffwe wii ...
 tha have vi ...
 then have we ...

‘If it pleases Your Grace that their own messenger should bring the letter forward to the people of Lübeck, then this is in Your Grace’s hands; if Your Grace is not satisfied with this, then we have (...)’ (29/2 1512 (Halmstad; AarsberGeh VI, Till. 13)) [*The Swedes’ own royal courier, whether he should be granted transfer through Denmark.]

A template including these examples is Table 9. Examples (21) and (45) have both arguments in background position, the focus being on the adverb *mæst* ‘most’ in (21) and on the verb *sømer* ‘is decent’ in (45); examples (22), (46), and (47) have their A1s in focus position, but (48), by contrast, has the A2 in focus position.

The logic behind this does not include argument hierarchy or grammatical relations, but the middle field contains a purely topological grammaticalised system, consisting of focus and non-focus (background) positions, indexically identifiable through the position of the focus operators, esp. negation. Examples (45) and (48) both contain the pronoun *thæt* ‘that’, in (45) in background position, in (48) in focus position. The paradigm’s coded contrast is between background and focus, since a linguistic element cannot have both of these information structural values at a time. In this type of paradigm, the contrast is mapped onto the syntagmatic axis, that is: onto word order, see further Heltoft (2019). The system

works without any assumptions of grammaticalised connections between topology (word order) on one hand and case morphology, argument hierarchy and subject-object articulation on the other. One could say this type of topological system is neutral with respect to transitivity and inactivity.

For a final argument, notice that in example (2), included in Table 9, the constituent in focus position is the deictic adverbial *nu* ‘now’. The examples have mainly been of objects and subjects, but this position is also open to adverbials, should they be intended as the focused constituent.

Table 9: The topological frame for Middle Danish

Prefield	V	Middle field			Postfield
1.Pos	V	Background	Focus Op.	Focus	
hvi	angrer	thik _{A1}	æj	nu	[at... (2)
Nu	sømer	thæt _{A2} mik _{A1}	ække		(45)
	thækkes	ether nathe _{A1}	ække	thæt _{A2}	(48)
Hvat	varther	thæt _{A2}		[mik æller tik] _{A1}	at... (47)
Thæt _{A2}	varthar			thæm _{A1} sum (...)	(47)
(thæt _{A2}	varthar)		æj	os _{A1}	(47)
hun _{A2 nom}	thæktes	honum _{A1 obl}		miket væl	(43)
i gardagh	thæktes	thu _{A2 nom} mik _{A1 obl}		mæst	(21)
thær fore	thæktes	hun _{A2 nom}		gudh _{A1}	(22)
tha	thækkes	thæt _{A2}		alle _{A1}	(46)
	tethes		ække	ræghnbughe _{A2} ...	(14)
tha	tethes		e	noket tekn _{A2}	(15)

I have added examples (14–15), in order to add to the number of subject A2s definitely not in the 3rd position.

5 Categorical clause structure and the loss of indexical case

During the period app. 1400–1750 the inactive construction was reinterpreted as transitive constructions, including a shift in case marking aligning the relationship between arguments, grammatical relations and case selection. This actualisation process must be the topic of another study, and I will just give two examples by the same author, the lutheran bishop Palladius:

- (49) derfor bør i at haffue denne sted och kirke kierist
 derfor bør i at have denne sted og kirke kjærest
 therefore ought.PRS.SG 2PL.NOM to hold this place and church dearest
 offuer alle andre steder i verden
 over alle andre steder i verden
 beyond all other places in the world
 ‘Therefore, you ought to hold this place and church dearer than anywhere
 else in this world.’ (Palladius 38, 18–19)

In the very same text, we find the older construction in a sentence otherwise identical:

- (50) derfor bør eder att haffue denne sted kierist
 derfor bør eder at have denne sted kjærest
 therefore ought.PRS.SG 2PL.OBL to love this place the most
 ‘Therefore, you ought to love this place the most.’ (Palladius 39, 14)

The use of the nominative as the marker of the subject-predicate was abolished during the 16th century. For the details of the distribution of case in this post-medieval period, see especially Jensen (2017, 2018), with supplementary overviews and details in Heltoft (2019) and Jørgensen (2000).

5.1 Modern subject topology

Returning to Melčuk’s subject criteria, the difference between the medieval system and the modern one is striking. The modern language has a subject definable along parameters 1–3, and no longer by morphological binding by the finite verb. The subject is the only obligatory DP-constituent, in the sense that its positions must be filled in, if not by a referential DP, then by a formal marker (*det* ‘it’ or a deictic marker *der* ‘there’ or *her* ‘here’), to facilitate the illocutionary system. A feature not mentioned by Melčuk is the interdependence (*catataxis*, in Hjelmslevian terms, *exocentrism* in Bloomfield’s) between finite verb and subject, a relational type and criterion normally disregarded in modern grammatical theories and schools. In contrast to the predicate valence system of the medieval language, these relations are solely between grammatical categories, thus defining clausal structure as subject vs. predicate (in the wider sense), so-called categorical sense structure, the presumedly universal DP-VP dichotomy. This structure is again mirrored in the modern sentence frame, in which the middle field has lost its positions for objects and valence bound PPs. These go into the postfield, mirroring

the VP, subject positions illustrated by (51–53), a next to translation of (42). The focus operator *selv* is inserted to match better the meaning of (42), but it may well be let out.

- (51) Denne ædelsten kan *selv* ild jo ikke skade (subject in 3rd pos.)
 This gem can even fire PART not harm
 ‘This gem even fire – for sure – cannot harm.’
- (52) *Denne ædelsten kan jo ikke selv ild skade (no focus position)
- (53) Selv ild kan jo ikke skade denne ædelsten (subject in initial pos.)

The topological frame of Modern Danish (Diderichsen 1946, Heltoft 1992) mirrors categorical clause structure, in that the middle field contains the definitional subject position and the postfield the non-finite verb and the rest of the valence bound constituents.

Table 10: The topological frame for Modern Danish

Prefield	V	Middle field			V	Postfield
1.pos	V	Subject	S-advb.	Focus Op.	V	IO DO ...
Denne ædelsten	kan	selv ild	jo	ikke	skade	
Selv ild	kan		jo	ikke	skade	denne ædelsten

The modern word order paradigm and the role of the subject in this paradigm was mentioned in Section 1.2. Given the present preconditions of the analysis, the Middle Danish has nothing similar, and there is no cogent reason to assume any underlying categorical structure.

5.2 From indexical case to symbolic case

In symbolic case systems, case forms are self-dependent in the sense that their meaning can be identified on the basis of the case sign itself. When the indexical case system was lost with the inactive constructional alternation to transitivity, the nominative form (still only in the same handful of pronouns as before, see Table 2), lost its polysemy and could no longer carry semantic role meaning. It was left with the sole content of manifesting the subject function, in the sense of the

argument that the VP is predicated about, the categorial subject. The Modern Danish nominative case has the content ‘subject’ in all contexts²². Indexical case systems call for reference to the governing verb and the constructional level of argument hierarchy in order to resolve the polysemy of the case forms and identify the referents. The paradigmatic Table 11 shows modern case meaning, see Heltoft (2021b) for more detail.

Table 11: Danish symbolic case paradigm in categorial sentence structure

Expression	Nominative	Oblique
Content	Subject (marked)	Non-subject (unmarked)

Notice that where the medieval transitive pattern had an unmarked nominative in relation to the relevant zones of semantic roles, the shift of content function leads to the reverse relation of a marked subject meaning in contrast to the non-subject function of the oblique case. In modern times, from app. 1900 forwards, the meaning of the nominative specialises even more, so that except for some formal registers, the nominative now means ‘anaphoric subject’ (Hansen 1967). The oblique form is used in subjects with all kinds of restrictive modifiers contributing to the identifiability of the subject referent, such as (54–55).

- (54) ham der er pusher
he.OBL there is a pusher
‘The guy there is a pusher.’
- (55) hende Marie er sød, ikke?
she.OBL Marie er sød, ikke
‘This Marie is sweet, isn’t she?’

Thus, within the frame of the symbolic case paradigm the nominative has again specialised, the oblique form ‘bleached’, see Table 12.

²²‘All contexts’ refer to all uses as 1st rank constituents as heads. I take examples such as the following to be 2nd rank constituents : Ham (obl) og Peter kommer forbi i dag ‘him and Peter will pop by today’; det er svært for mor og jeg (nom) (lit. ‘this is difficult for mummy and I’).

Table 12: Danish symbolic case paradigm adding phoricity to its content

Expression	Nominative	Oblique
Content	Anaphoric subjects	Non-anaphoric subjects All non-subjects

5.3 Positions indicate roles and arguments

In the modern language, arguments and grammatical relations have been aligned, so that all A1s are subjects and all A2s are direct objects. The indexicality of the case category in relation to the predicate is gone, the general rule being that all A1s are subjects and prototypical subjects – whatever the predicate’s semantics – are in the nominative. The topological system has changed from a more open and free information structural system to a case-like system with specific positions for the subject, the direct object (and in fact, for the indirect object as well). In this system, the subject position indicates the predicate as the category and stem determining the A1 and its meaning, the direct object position indicates the A2, and the indirect object position the A3,²³ with its more specific semantic role (Recipient).

The dimensions of linear position, case meaning and syntactic hierarchy have been aligned as definitional criteria for the identification of subject and A1 in the modern language.

6 Conclusion

Middle Danish with its very reduced case system still retains the indexical character of Germanic case. In spite of the case system’s simple morphological expression side, its content side is very complex. Both cases, nominative and oblique, differ in meaning, depending on their constructional context: inactive and transitive constructions, and these constructions and their case differences are distinguished indexically. The predicate’s stem must be checked in order to identify the relevant contextual variety (bound variant) of the case forms.

Grammatical relations (subjects and objects) were not aligned in Middle Danish (or in the Norse languages in general). The core actant A1 is the subject of

²³For a detailed analysis of the shift from symbolic to indexical function in the topology of the indirect object, see Nielsen & Heltoft (to appear).

transitive and intransitive constructions, but the object of inactive constructions, one-place or two-place. Both types are found with an additional A2, the oblique direct object of transitives, but a nominative subject in the inactive construction. Case assigns semantic roles according to the semantics of the predicate and the constructional pattern.

When the inactive construction was finally lost during the 18th century, the case paradigm also lost semantic roles as its content frame. In present-day Danish, the case system has turned symbolic, in that they code directly the relevant grammatical roles and argument status. Now, the nominative case in itself marks its status as subject and A1, the oblique form – now the unmarked form – has roughly the content non-subject and non-A1.

Topology (word order) has taken over the indexical function the case system had, but in a simpler version with no systematic polysemy. Positions, not case forms, point to the predicate stem.

Acknowledgements

This work is also a part of the project *The Middle Danish language in the light of a modern theory of grammaticalisation*, grant DFF-7013-00045 from The Danish Council for Independent Research.

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