

The Diachronic Development of Dative Subjects in Icelandic

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This paper contributes to the on-going discussion on whether dative subjects are a Proto Indo-European inheritance or not. There are two competing narratives, one which follows a standard Object-to-Subject Hypothesis (Butt and Deo 2013, cf. Haspelmath 2001) and one which takes dative subjects to be a common Proto Indo-European heritage (see, e.g. Barðdal et al. 2012). Butt and Deo (2013) and Deo (2003) show that dative subjects were innovated gradually in the history of Indo-Aryan, with the change affecting verb classes and verbs individually and at different stages of the language. Additionally, they also suggest that topicalization plays a role.

While dative subjects are found in earliest attested stages of Icelandic, these only go back to the 12th century, the time in which dative subjects began to be innovated in Indo-Aryan (with no evidence for them found in the previous centuries). If dative subjects in Icelandic arose gradually over time, as they did in Indo-Aryan, then one would expect to find dative subjects varying at least with respect to verb class.

In this paper, we present a corpus linguistic study of dative subjects in Icelandic based on the Icelandic Parsed Historical Corpus (IcePaHC; see Wallenberg et al. 2011). As part of the study, we identify factors conditioning the appearance of dative subjects in the history of Icelandic and show that the data can be explained via realignments in the mapping from argument structure to grammatical relations that are predicted to be possible within Kibort’s revised Mapping Theory Kibort 2007.

The IcePaHC consists of a total of 60 texts from the 12th to the 21st century. The corpus is syntactically annotated in the Penn Treebank style (Marcus et al. 1993). We additionally annotated the corpus with information about the verb class of the individual verbs that were encountered. Here, we based ourselves on Levin’s classification for English (Levin 1993) as well as previous literature on verb classes in Icelandic (Barðdal et al. 2012). We also analyzed the corpus with respect to the interaction found between dative case, voice (active, passive, middle) and word order (topicalization). In accordance with the literature on Icelandic (e.g. Haugen 1984), we divided our data into the time stages shown in Table 1.

voice	until 1350	until 1550	until 1750	until 1900	until 2008	all
active	70.25%	74.57%	53.85%	61.86%	64.17%	65.56%
passive	15.96%	14.80%	23.66%	18.60%	13.50%	16.94%
middle	13.79%	10.63%	22.50%	19.53%	22.32%	13.61%

Table 1: Diachronic distribution of dative subject predicates according to voice

Table 1 displays the diachronic distribution of dative subjects according to voice. In all time stages, dative subjects appear most often having an active morphology. Interestingly, while less passives with dative subjects seem to be formed, middle forms are gaining in use over the whole time span. The deviating percentages in the third time stage (until 1750) can be attributed to a genre effect in that the corpus includes few sagas and more other types of texts in the 1500–1600s (see Butt et al. 2014).

The occurrence of dative subjects with middle forms most likely reflects the non-agentive character of the highest argument in these constructions and the increasing percentages in the last stage may be caused by a general so-called dative substitution in the 19th century in Icelandic (see Barðdal 2011).

In accordance with Barðdal and Eythórssón (2009), we also found that dative subjects appear most often with psych predicates in active sentences (mean=47%) and also with middle verbs (mean=27.73%). Dative subjects in passive constructions are mainly found with verbs of communication (mean=16.50%) and change of possession (mean=12.01%). However, we could not identify any particular diachronically stable patterns for other verb classes. This goes contra Barðdal (2011), who categorizes dative subject predicates into happenstance and experience-based predicates, assuming a narrowing of the scope to only experience-based predicates for modern Icelandic.

We furthermore find instances of verbs which are found in earlier stages with a dative subject in the passive, but in later stages in the active form with a dative subject and an additional second argument. An example of this pattern is the change-of-state verb ‘bæta’. As shown in (1), it is found in the passive with a dative subject in the corpus with the meaning *to pay wergild* (*Morkinskinna* 1208). In a more modern text this verb appears in an active construction with a meaning of *to mend* (*Ofurefli* 1908), as shown in (2).

- (1) ...er einum er bætt.
when one.SG.DAT is pay-wergild.SUPINE
‘... when for one wergild is payed’

- (2) Var bætandi við það þúsundum sálna?
was mend.PRES.PART with that.SG.ACC one-thousand.SG.DAT soul.PL.GEN
‘Were one thousand of souls mending with that?’

This type of data provides highly suggestive evidence for the Object-to-Subject hypothesis and can be understood via Kibort’s Mapping Theory. Kibort differentiates between semantic participants and argument positions allowing semantic participants to change order and to be associated with different argument positions after morphosyntactic operations. Furthermore, syntactic argument positions are fixed and argument-to-function mapping relies on the markedness hierarchy of syntactic functions. The linkings in Table 2 illustrate how the data in (1) and (2) can be accounted for via Kibort’s mapping theory.

	theme	exp		theme	exp		exp	x
verb _{old}	<arg ₁	arg ₂ >	verb _{passive}	<(arg ₁)	arg ₂ >	verb _{new}	<arg ₂	(arg ₃)>
	[-o]	[-r]		[-o][+r]	[-r]		[-r]	[+o]
	SUBJ	OBJ		OBL _{theta}	SUBJ		SUBJ	OBJ
	NOM	DAT		af-DAT	DAT		DAT	x

Table 2: Linking Patterns for Dative Subjects

Icelandic is analyzed as a symmetric language, allowing the experiencer role to be assigned to either arg₂ or arg₃. This is in contrast to asymmetric languages like German where the experiencer is assigned to arg₃ and hence dative subjects never arise, not even via passivization of verbs having a nominative subject and a dative object.

In Kibort’s system, passivisation is “the morphosyntactic operation which restricts the first, unergative, argument pre-specified as [-o] by adding to it the [+r] specification” Kibort 2007. Being posited in arg₂, the experiencer is linked to subject under passivization, as shown in the middle linking pattern. In our data set, most predicates stay intransitive in this (passivized) pattern (mean=81.75%). However, some verbs like ‘bæta’ acquire a new object over time, as shown in the rightmost linking pattern in Table 2 (mean=18.25%).

Supporting data for this overall analysis also comes from Maling and Sigurjónsdóttir (2002) who report a syntactic change currently in progress in Icelandic. They present evidence for the analysis of a new construction with passive morphology as syntactically active having a phonologically null impersonal subject.

In conclusion, we present factors accounting for the diachronic distribution of dative subjects in an Icelandic corpus. We suggest that dative subjects are not stable regarding the semantic classes of verbs they appear with and have undergone diachronic change, lending overall support to the Object-to-Subject hypothesis.

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