

# Intra-speaker Variation in Subject Case: Icelandic

Iris Nowenstein\*

## 1 Introduction

Dative Substitution (DS) is one of the most researched topics regarding syntactic change in Icelandic (e.g. Svavarsdóttir 1982, Jónsson and Eythórssón 2003, Thráinsson 2013). The change affects verbs with experiencer subjects, the original accusative subject case being substituted by dative:

(1) Mig vantar hnif → Mér vantar hnif  
me (acc.) needs a knife me (dat.) needs a knife

Extensive syntactic surveys have been conducted to document the change, the results indicating that intra-speaker variation is to be found. Despite this, no study had been carried out to document the intra-speaker variation. The aim of the study presented in this paper is to fill a part of this gap and shed light on the nature of the variation. The central question addressed are the following:

- (2) a. Is the distribution of the intra-speaker variation restricted by grammatical factors?
- b. Do the accusative subjects show dative characteristics?
- c. Do all speakers display a similar amount of variation or do they differ?
- d. Do we get instances of intra-speaker variation because of the negative sociolinguistic value of DS or do speakers show variation without any apparent change of social context? If the latter is the case, how can we explain this intra-speaker variation?

To discuss these questions, I present data from an online survey with 280 participants, experimental data from language acquisition and naturalistic data collected both with Google searches and the analysis of blogs. Although data has been collected for four experiencer verbs subject to DS, *langa* (want), *dreyma* (dream), *svíða* (sting) and *klæja* (itch), the focus in this paper will be on the most frequent of them, *langa* (want), as the amount of data available for it is significantly larger than for the other verbs. The focus of the study (Nowenstein 2012) is on pronouns as subjects and the variables of the study concern the subject type. The effect of the first two variables, person and number, has partly been attested. In this study these variables are tested in a more extensive way, adding the second person singular and testing different genders in the third person. Additionally, the possible effect of nominative-accusative syncretism is tested.

I argue that the distribution is restricted by grammatical factors. This seems to be the case for person, number and possibly nominative-accusative syncretism. Accusative is most common with pronouns in the first and second person singular but least common with pronouns in the third person plural. This pattern appears both in the survey and the naturalistic data. The rate of accusative is also lower in the pronouns that have nominative-accusative syncretism. Still, individual speakers are very different and can be roughly divided into three groups displaying either no variation at all, predictable/systematic variation or random variation: Some participants in the survey displayed no variation at all despite being asked to choose between accusative and dative 56 times. Others showed a seemingly random variation, while predictability was found among the bloggers. These groups support different analyses; the predictability suggests that the accusative might be a dative in disguise; the dative being in the underlying structure despite the (learned) accusative forms. On the other hand, the variability might support an acquisition of probabilities like the one proposed by Yang (2002), I will argue that further research on subject case in Icelandic language acquisition could support such an approach.

---

\* I would like to thank Anton Karl Ingason, Einar Freyr Sigurðsson, Höskuldur Þráinsson and Jóhannes Gísli Jónsson for advice and comments on this work. Many thanks also to the audience at PLC 37 and SCL 25 for their useful feedback.

## 2 Defining the values

### 2.1 Dative Substitution and intra-speaker variation

Dative Substitution is one of three types of variation found in Icelandic subject case. Also known as Dative Sickness, it has figured in the prescriptive discussion and been frowned upon in schools for a few decades at least, resulting in a negative sociolinguistic value. As has been mentioned, extensive surveys have been carried out to document it, e.g. Svavarsdóttir 1982, Jónsson and Eythórsson 2003 and Thráinsson 2013. This research has shown, among other things, that few people substitute dative completely, that the rate of DS varies between verbs and that subject case can vary within the same verb. Therefore, the variation is not only found between speakers (inter-speaker variation) but also within the speech of individual speakers (intra-speaker variation), as illustrated below:

- (3) a. Speaker A: Mig vantar skeið en hann vantar gaffal  
me.ACC needs.3SG a.spoon but he.ACC needs.3SG a.fork  
 b. Speaker B: Mér vantar skeið en honum vantar gaffal  
me.DAT needs.3SG a.spoon but he.DAT needs.3SG a.fork  
 c. Speaker C: Mig vantar skeið en honum vantar gaffal  
me.ACC needs.3SG a.spoon but he.DAT needs.3SG a.fork

In this example, there would be inter-speaker variation between speakers A, B and C but intra-speaker variation in the speech of speaker C. In one of the earlier studies, Svavarsdóttir (1982) noted that DS was more common in the third person than the first. In fact, the previous studies that have been mentioned show evidence of a widespread intra-speaker variation.

One of the most extensive surveys took place within the framework of the Variation in Syntax project led by Thráinsson from 2005 to 2008, testing 740 subjects all around Iceland for DS with the use judgment tasks and fill-in exercises. Thráinsson (2013) stresses that the data show considerable evidence for widespread intra-speaker variation in case marking. For the verb *langa*, 34% of the speakers displayed intra-speaker variation in their judgments. As will be shown, this is actually a low figure and might be explained by the fact that the sentences with *langa* were few and only had subjects in the third person. Intra-speaker variation seems to emerge in greater proportions with subjects in different persons. Therefore, to account for intra-speaker variation found in this kind of study, it is necessary to know how the rate of DS varies depending on the subject type.

Thráinsson (2013) suggests that it is promising to seek an account along the lines proposed by Yang (2000, 2004, 2010) to explain the intra-speaker variation that is found in the data he presents. He states that it is not enough to give a performance-oriented account for the variation, as it seems to appear independently from extra-linguistic contextual or situational features. When it comes to minimalist approaches to intra-speaker variation, he does not think that the models proposed by Biberauer and Richards (2006) or Adger and Smith (2010) are adequate to describe the situation found in Icelandic subject case, where the data suggests that the variation is part of the linguistic competence. A model where instances of variability are possible because the variants are equally economical and therefore “the grammar doesn’t mind” (Biberauer and Richards 2006) or one where the variation is the result of underspecified functional categories (Adger and Smith 2010) does not, in Thráinsson’s opinion, account well enough for an intra-speaker variation which clearly is competence-based. In Yang’s work (2004), a model of statistical learning is proposed in which parameter setting is probabilistic instead of being definitely triggered at a specific point. Different grammars therefore coexist in the speaker’s mind and intra-speaker variation is expected. But how do we determine if data supports Yang’s approach or not? Why is the intra-speaker variation found in Icelandic subject case not simply the result of the negative sociolinguistic value of DS? I argue that one way to do this is to document the abovementioned patterns found in the distribution of the variation and then comparing this patterns to the patterns found in language acquisition. If they are consistent, we could argue that the intra-speaker variation found in language acquisition is the result of the probabilities found in the primary linguistic data (PLD). This is one of the reasons for which it is necessary to document the intra-

speaker variation and find out if the distribution is conditioned by grammatical factors.

### 3 Study

The study was designed to test the verbs *langa* ('want'), *vanta* ('lack, need'), *klæja* ('itch') and *svíða* ('sting'). As has been mentioned, the effect of person and number had partly been attested but the aim of this study was to do it in a more extensive way, adding e.g. the second person of the singular to the equation. The effect of nominative-accusative had not been discussed before, but the idea of testing it was the result of introspection and some preliminary interviews conducted while designing the study. It seems that, for some speakers at least, DS is more likely to occur if the subject displays nominative-accusative syncretism. To test these variables, pronominal subjects were chosen. This permitted to rule out a possible effect of pronominal against nominal subjects as well as providing a convenient way of testing the effect of person and number. This was also a convenient way of testing the effect of nominative-accusative syncretism, as both the third person singular and plural have subjects with this syncretism (the masculine in the singular and the feminine and neutral in the plural). The third person neutral of the singular was omitted due to a significant lack of data due to the experiencer semantics of the verbs. In addition, the first and second person of the plural were omitted as they display accusative-dative syncretism. The verbs were always tested in the present indicative and, as has been mentioned, the data are composed of naturalistic data and elicited judgments.

#### 3.1 Naturalistic data

The naturalistic data were collected through the analysis of all Google search results for every possible pronoun combination (both in accusative and dative) with the verbs *langa* and *vanta*. The search results for *klæja* and *svíða* were not numerous enough. All possible combinations for the following pronouns in accusative and dative were tested: *mig/mér* (1p.sing.), *þig/þér* (2p.sing.), *hann/honum* (3p.sing.masc.), *hana/henni* (3p.sing.fem.), *þá/þeim* (3p.plur.masc.), *þær/þeim* (3p.plur.fem.), *þau/þeim* (3p.plur.neut.). This adds up to a total of 53 searches for each verb. All the examples were reviewed and filtered to make sure that the same speaker used both pronouns of the combinations in the data. Additionally 18 blogs were selected and examples of the most common verb, *langa*, collected. The analysis of this data is still in progress. By testing all of these combinations it was possible to see which ones yielded the highest rate of intra-speaker variation.

#### 3.2 Elicited judgments

The survey consisted in filling gaps with either an accusative or dative subject (both could be chosen but this rarely happened). The gaps were always in simple phrases with basic word order. Every pronoun was tested once for each of the following verbs: *langa* ('want'), *vanta* ('lack, need'), *klæja* ('itch') and *svíða* ('sting'). Additionally, there were two types of constructions to test agreement:

- (4) a. Mig/mér + verb + sjálfan/sjálfa or sjálfum/sjálfri  
       me.ACC/me.DAT    self.ACC.MASC./self.ACC.FEM   self.DAT.MASC./self.DAT.FEM  
    b. Okkur + verb + bæði/báðum  
       us.DAT/ACC        both.ACC/both.DAT

These constructions both have an anaphoric element which is expected to show case agreement with the subject. In the first sentence, the participants were asked to choose between accusative and dative for the subject in the first person singular and then choose again between cases for the anaphoric element. In the second sentence there is a subject in the second person plural which displays accusative-dative agreement, so the participants were not asked to choose a case for this subject, only for the agreeing element. It is interesting to test the rate of DS in a sentence like (4b) and compare it to the rest of the results to see if anaphoric elements display a higher rate of DS. Furthermore, if a participant chooses different cases for the subject and the anaphoric element, most likely dative for the latter, this could indicate that the subject shows dative characteristics.

This could be related to an analysis similar to the one proposed by Árnadóttir and Sigurðsson (2013) in their work on dative subjects in Icelandic. Based on Legate's (2008) work on abstract case and morphological case, they suggest that abstract case and morphological case may be distinct when change is in progress, leading speakers to "use the "pre-change" morphological case while showing syntactic signs of the "post-change" abstract Case" (Árnadóttir and Sigurðsson 2013:126).

## 4 Main results

The main results of the study are presented in the sections below. I start with the effect of person and number and then proceed to the nominative-accusative syncretism, the structures with anaphoric elements and the different types of individual speakers before a brief note on variation in language acquisition. The main results can be summarized in the following points: I argue that the distribution is conditioned by grammatical factors. The rate of DS seems to follow a pattern, it is lowest with the first and second person singular and highest with the third person plural. The effect of nominative-accusative syncretism appears within the third person, where DS is more frequent in the pronouns that have nominative-accusative syncretism. In the agreement constructions, dative is chosen more often than accusative for the anaphoric element, making lack of agreement widely accepted with a first person singular accusative subject. As for the individual speakers, they can roughly be divided into three groups, speakers displaying no variation (using accusative for the most part), systematic variation and random variation.

### 4.1 Person and number of the subject

The data show an effect of person and number on the rate of DS. This can be seen in the results of the survey, where DS was most common in the third person plural but least common in the first and second person singular. The difference between the pronouns is statistically significant with all the verbs ( $p < 0.001$ ) and the results for *langa* can be seen in figure 1:

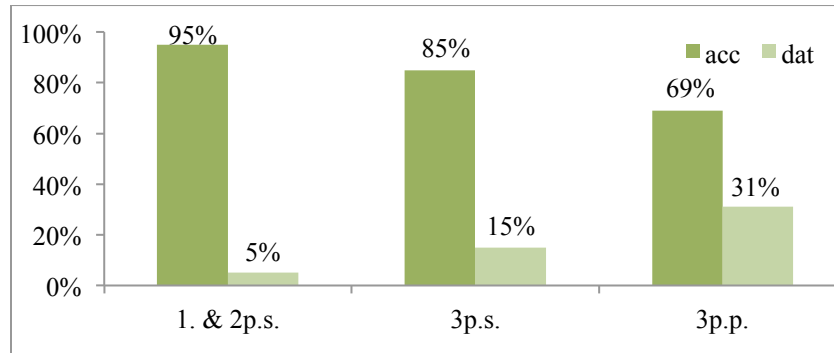


Figure 1: Case chosen with different types of subjects. Results for *langa* in the survey.

In this figure, we can see that regrouping the results for the first and second person singular, third person singular and third person plural gives us a pattern where DS rises in this order. Still, as can be seen below (in figures 4 and 5), the elements in the third person have varying rates of DS, implying that the person and number are not enough to explain the distribution of the variation. The tendency found in figure (1) can still be confirmed with the naturalistic data, no distribution in the pronoun patterns from the Google searches were unexpected considering the person and number effects. Intra-speaker variation was most common between first person singular and third person plural but least common between the first and second person singular, as can be seen in figures 2 and 3 below:

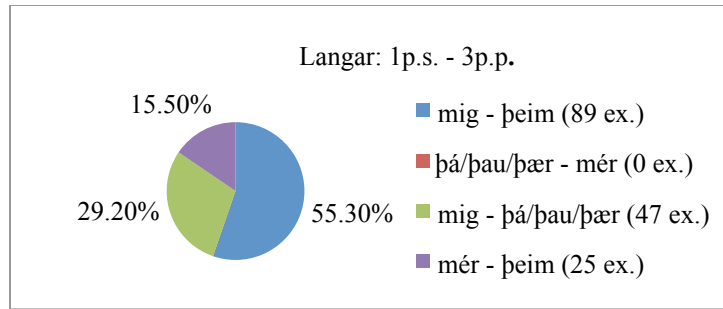


Figure 2: Results for the 1p.s. - 3p.p. paradigm in the *langar* Google searches.

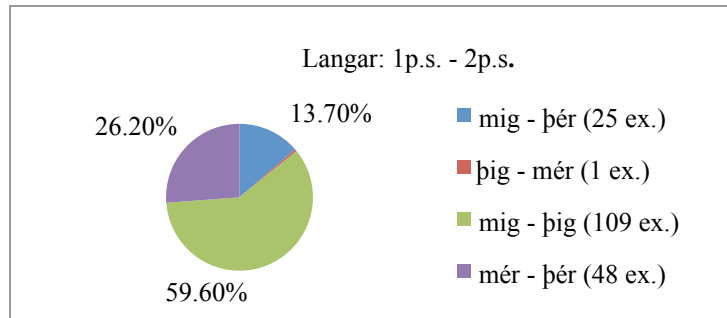


Figure 3: Results for the 1p.s. - 2p.p. paradigm in the *langar* Google searches.

In figure 2 it can be seen that intra-speaker variation (in blue and red) is more common than consistency when it comes to the first person singular with third person plural paradigm. 55,3% of the examples consisted of a first person singular subject in the accusative and a third person plural subject in the dative. There are no examples of the opposite, intra-speaker variation with a dative subject in the first person singular. It is also interesting to note that examples with no variation but accusative subjects are about twice as numerous as the examples with datives subjects. In the paradigm for first person singular and second person singular (figure 3), on the other hand, the rate of examples with no variation is 85,8%, with a vast majority of examples being in the accusative.

#### 4.2 Nominative-accusative syncretism

Within the third person, the pronouns showing nominative-accusative syncretism (singular masculine, plural neutral and plural feminine, marked with an exclamation mark in figures 4 and 5) always had a higher rate of DS than other pronouns in the third person:

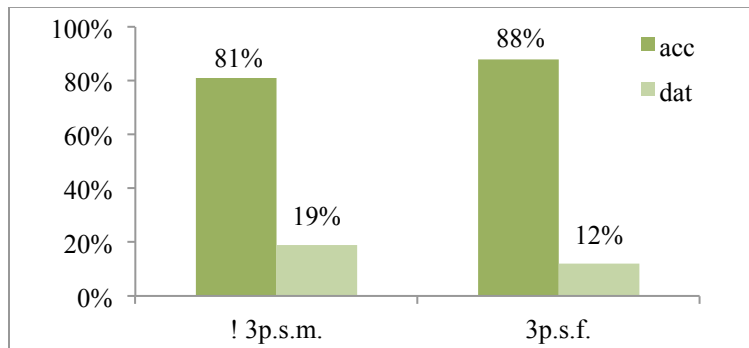


Figure 4: Case chosen with different genders in the third person singular. Results for *langa* in the survey.

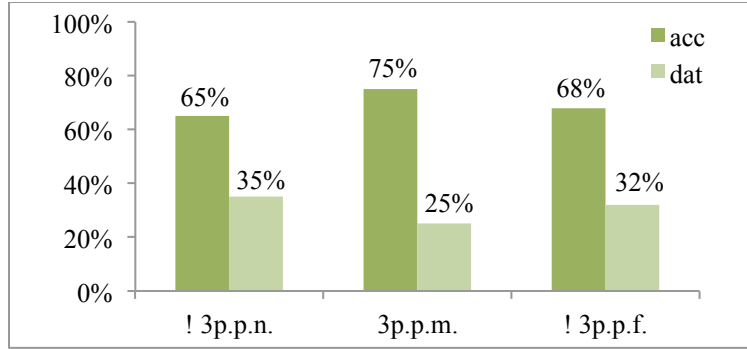


Figure 5: Case chosen with different genders in the third person plural. Results for *langa* in the survey.

The difference is statistically significant both in the singular and plural for *langa* ( $p < 0.05$ ). When it comes to the naturalistic data, the paradigm with the third person plural is flawed as there is syncretism between the different genders in the dative. As for the third person singular, the examples are not numerous enough and the data contradictory, pointing both to the feminine and masculine as being more frequently subject to DS. The possible effect of nominative-accusative syncretism in the distribution of DS is a subject that needs to be investigated much further. If it is real, one can speculate that it might represent a preference for a salient marker of obliqueness, as nominative-dative syncretism does not appear in Icelandic (that is, with a different accusative form). This could then be interpreted as a characteristic of DS.

#### 4.3 Case in disguise

The results for the sentences that tested agreement show a high rate of DS for the anaphoric elements, 57% for *sjálfur* and 65% for *bæði*. In the rest of the results we have looked at for *langa*, DS only has a rate of about 17%, so the difference is important. This also means that the proportion of intra-speaker variation in the first test sentence is high:

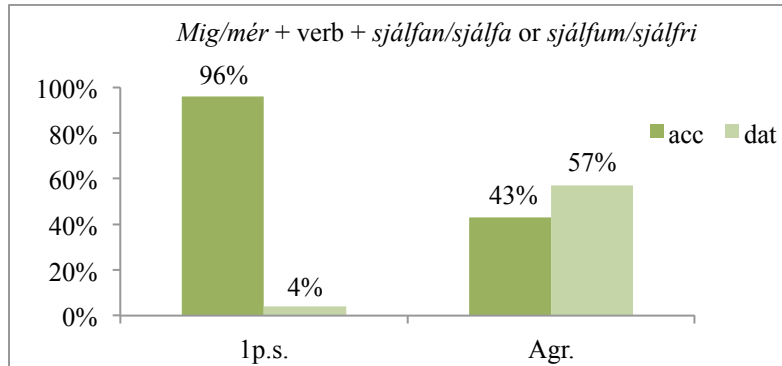


Figure 6: Results for the first agreement construction in the survey with *langa*.

The results for the first construction are in figure 6. All the speakers that chose a dative subject (4%) also chose to have the anaphoric element in dative. As the speakers chose accusative massively for the subject, this means that more than half of the participants chose to have intra-speaker variation within this construction. When it comes to the second construction (results below, in figure 7) the anaphoric element has an even larger DS score, 65%. We cannot talk about intra-speaker variation in this case because of the accusative-dative syncretism in the pronoun *okkur*, but the rate of DS is much higher than in other tested constructions. Here it is also interesting to note that *bæði* displays nominative-accusative syncretism and that this might contribute to the large proportion of DS.

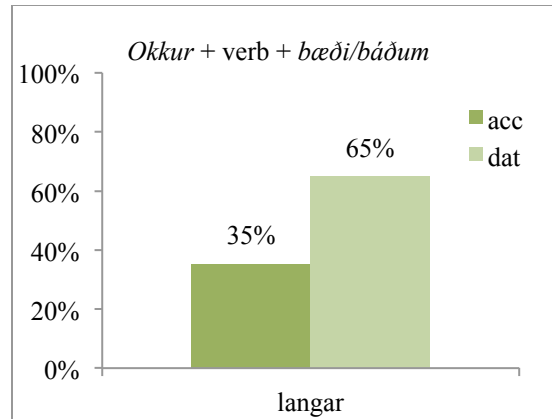


Figure 7: Results for the 1p.s. - 3p.p. paradigm in the *langar* Google searches.

It is very clear that the anaphoric elements display much higher rates of DS than the pronominal subjects, and this should be studied more extensively. This could be used to support the approach of Arnadóttir and Sigurðsson (2013) in which there is a discontinuity between morphological case and abstract case during a period of change. The case of the anaphoric elements would then be interpreted as a syntactic sign of the post-change case.

#### 4.4 Individual speakers: Three groups

Individual speakers differ greatly and can be divided into the following groups: speakers who show no variation, speakers showing systematic variation and speakers showing random variation. The speakers who show no variation choose accusative almost without exception. When we look at the survey results for *langar*, 65 participants of the 276 (23.7%) that were analyzed showed no variation. 63 of them used accusative so only two speakers always chose dative. In the general results of the survey, where the subjects had 52 opportunities to choose dative, there are still speakers showing no variation at all. This can also be found in the blog-data. In this data, there are also examples of what can be called systematic variation. For one blogger, 314 instances of *langar* with a pronoun were collected. The first and second person singular were always in accusative (except once) while all other subjects were in dative.

The largest group of speakers in the survey had variation that was not predictable even though it was in some sense regular. What apparently is completely random variation can still be found in the naturalistic data, with the same speaker using both accusative and dative with an identical subject under the same circumstances, as can be seen in (5) with the verb *vantar*. This example shows three instances of *vantar* from one person, they are written on a discussion board during a period of five minutes, the speaker uses *mig*, the accusative form, once and *mér*, the dative form, twice:

(5) *mig vantar iPhone* [2 min.] *mér vantar svona tæki* [3 min.] *mér vantar síma*  
 me.ACC needs.3SG an.iPhone      me.DAT needs.3SG this machine      me.DAT needs.3SG a.phone

But how much variation do the participants in the survey show? If we return to the results for *langar*, then we have 76.4% of the participants showing some variation in the ten examples where they could use DS. About half of the participants having variation only substituted dative once or twice, most often in the anaphoric elements discussed above. The rest of the speakers were divided quite evenly in their variation, most substituting dative three to seven times out of ten possible. To see if the general results were representative of the intra-speaker variation found in the individual answers, the results for *langa* were all marked as either “regular” or “irregular” considering the effects of person and number and nominative-accusative syncretism. For example, if a speaker chose dative for the third person singular and not for the third person plural, the variation was marked as irregular. Likewise, within the third person, the variation was marked irregular if a speaker chose accusative with a pronoun displaying nominative-accusative syncretism but dative

with one that did not. By sorting out the answers in this manner, it seems that 77% of the speakers displaying variation did so in a “regular” manner considering the effect of person and number and nominative-accusative syncretism.

These different types of speakers point to different analyses. The speakers with a systematic, predictable variation might point towards a performance-oriented analysis in which the variation is the result of the negative sociolinguistic value of DS. The speaker would then have “learned” the most common accusative forms post-acquisition through prescriptive schooling. On the other hand, the speakers with variability would rather point to an analysis with competing grammars (Kroch 1989, 2001). It might be necessary to work with the idea that the nature of the variation is different between individual speakers, particularly in a situation of change where one variant is stigmatized.

#### 4.5 Variation in language acquisition

If we want to understand the nature of the intra-speaker variation in Icelandic subject case, it is imperative to study the variation found in language acquisition in addition to the adult data that has so far been described. This should be done with, among others, the following question in mind: Do children acquire a paradigm of intra-speaker variation comparable to the one found in adult-speech? Previous studies have shown that Icelandic children generalize nominative and dative subjects on verbs with accusative subjects (Sigurðardóttir 2002 and Erlingsdóttir 2010) – but do they ever really acquire the accusative, rather than a paradigm of intra-speaker variation based on probabilities?

To get some idea about the answers to these questions, a pilot study with six first graders was conducted. The study consisted of elicited judgments through play and the verb *langa* was selected for this. The children were asked to help a hedgehog puppet remembering what to say in various situations, as it often got confused because it had lived abroad for a very long time. In this manner, judgments on different subject case (nominative was tested here in addition to the accusative and dative) was obtained. The children used nominative, accusative and dative subjects. Dative was chosen in most cases, then nominative and finally accusative. The nominative and dative were spread through all the pronouns but the accusative only appeared in the first and second person singular. These are exactly the pronouns where adult speakers show the highest proportion of accusative.

## 5 Analysis

In a situation of inconsistent input (or PLD) like the one described here, intra-speaker variation arises and becomes the normal state of affairs. This is in line with ideas from Kroch (1989, 2001) and Yang (2002). Contrary to the work of e.g. Lightfoot (1999) and Hale (2007), some aspects of the grammar seem to remain incompletely specified, or maybe rather overspecified, for a long time. This supports the idea of an acquisition of probabilities (Thráinsson 2013). To account for the variation that has been described here, we could imagine the following model. Children get both accusative and dative from the PLD and the case marking is therefore overspecified. Both accusative and dative are reinforced, but the reinforcement is restricted by person and number. As a result of this, we get a statistical paradigm in which the accusative is significantly strong in the first and second person singular but the dative is reinforced with more power elsewhere.

In the competition, the dative has more ground but the accusative is still not rare enough to be simply explained away as a performance-based phenomenon which is a consequence of the negative sociolinguistic value of DS. That sort of analysis might still apply to some speakers, namely the ones who show systematic predictable variation. Those speakers could be considered as having dative as the abstract case and their variation would be one of performance and not part of their grammar. Because of the restriction in the scope of reinforcement, the accusative subject has a weak syntactic position and therefore displays dative agreement. The weak position of the accusative also comes from the fact that dative could be called the default case for experienter verbs in Icelandic, having a much larger scope of usage. This weaker position could also account for the “need” of a salient oblique marker, as nominative-dative syncretism does not occur.



Based on The Elsewhere Condition Hierarchy (Kiparsky 1973) and Stochastic blocking (Yang 2002), Ingason (2011) proposes a stastical learning model of Icelandic oblique subject case for his Death Rattle hypothesis. During change, he proposes model A. To account for the distribution of the variation presented in this paper, we could imagine model B:

<p>(6) <b>Model A</b>  <b>IF</b> [+experiencer, +phys. discomfort]  <b>THEN</b> apply ACC  (weight <math>\approx 0.30</math>)  <b>ELSE IF</b> [+experiencer]  <b>THEN</b> apply DAT  (weight <math>\approx 1.00</math>)  <b>ELSE</b>  apply <math>R_{\text{default}}</math></p>	<p><b>Model B</b>  <b>IF</b> [+experiencer, +phys. discomfort, +  1./2.p.sing]  <b>THEN</b> apply ACC  (weight <math>\approx 0.80</math>)  <b>ELSE IF</b> [+experiencer, +phys.  discomfort]  <b>THEN</b> apply ACC  (weight <math>\approx 0.30</math>)  <b>ELSE IF</b> [+experiencer]  <b>THEN</b> apply DAT  (weight <math>\approx 1.00</math>)  <b>ELSE</b>  apply <math>R_{\text{default}}</math></p>
---	---

In this manner, we could account for the large proportion of accusative found with the first and second person singular, both in adult speech and language acquisition. Although it is assumed that the variation this model illustrates is part of the grammar itself, this does not mean that sociolinguistic aspects do not contribute to the distribution. Prescriptive grammar in schools, for example, could have an effect in reinforcing the accusative, and particularly in the first and second person singular, with older children and adults modifying their speech to meet the prescriptive standard. This kind of effect would of course appear in the PLD and therefore be acquired by children as shown in model B, in the form of a probability rule.

## 6 Conclusion

The results indicate that the distribution of intra-speaker variation in Icelandic subject case is affected by grammatical factors such as person and number of the subject as well as nominative-accusative syncretism in the inflectional paradigm of the subject. Subjects in the third person plural have the highest rate of DS but subjects in the first and second person singular present the lowest rate. Within the third person, subjects displaying nominative-accusative syncretism have a higher rate of DS. Additionally, accusative subjects may display dative characteristics such as dative agreement in an anaphoric element. It is argued that the variation is part of the grammar and not simply a performance-based phenomenon. The negative sociolinguistic value of DS and its importance in prescriptive grammar still probably is the locus of variation for some speakers, but the variation seems too important and widespread to be excluded from the grammar. This is something that could be confirmed by further research on intra-speaker variation in language acquisition, as preliminary results indicate that children acquire a paradigm of intra-speaker variation consistent with the patterns found in the speech of adults. This would point to an acquisition model based on probabilities.

## References

- Adger, David and Jennifer Smith. 2010. Variation in agreement: A lexical feature-based approach. *Lingua* 120:1109–1134.
- Árnadóttir, Hlíf and Einar Freyr Sigurðsson. 2013. Case in disguise. In: Beatriz Fernández and Ricardo Etxepare eds., *Variation in Datives: A Micro-Comparative Perspective*, 161–188. Oxford University Press, Oxford.

- Biberauer, Theresa and Marc Richards. 2006. True optionality: When the grammar doesn't mind. Cedric Bøeckx (ed.): *Minimalist Essays*, 35–66. Benjamins, Amsterdam.
- Erlingsdóttir, Gyða. 2010. Hún finnst ekki tannkrem gott. Um fallmörkun frumlaga í barnamáli. [She doesn't like toothpaste. On case marking in language acquisition]. BA-thesis. University of Iceland, Reykjavík.
- Hale, Mark. 2007. *Historical Linguistics: Theory and Method*. Blackwell, Oxford.
- Ingason, Anton Karl. 2011. A death rattle hypothesis for minority rules. Poster presented at DIGS. Available on <http://www.linguist.is/skjol/digs2011deathrattle.pdf>.
- Jónsson, Jóhannes Gísli and Þórhallur Eythórsson. 2003. Breytingar á frumlagsfalli í íslensku [Changes in subject case in Icelandic]. *Íslenskt mál og almenn málfræði* 25:7–40.
- Kiparsky, Paul. 1973. 'Elsewhere' in phonology. In *A Festschrift for Morris Halle*, 93–106. Hole, Rinehart & Winston, New York.
- Kroch, Anthony. 1989. Reflexes of grammar in patterns of language change. *Language Variation and Change* 1:199–244.
- Kroch, Anthony. 2001. Syntactic change. In Mark Baltin and Chris Collins, eds. *The Handbook of Contemporary Syntactic Theory*, 699–729. Blackwell, Oxford.
- Labov, William. 1972. *Sociolinguistic Patterns*. University of Pennsylvania Press, Philadelphia.
- Legate, Julie Anne. 2008. Morphological and abstract case. *Linguistic Inquiry* 39:55–101.
- Lightfoot, David. 1999. *The Development of Language*. Blackwell, Oxford.
- Nowenstein, Iris. Mig langar sjálfri til þess: Rannsókn á innri breytileika í fallmörkun frumlaga. [Me wants to myself: A study on inner variation in subject case]. BA-thesis. University of Iceland, Reykjavík.
- Sigurðardóttir, Herdís Þ. 2002. Fall í íslensku: Hvernig læra íslensk börn að nota föll? [Case in Icelandic: How do children learn how to use cases?] MA-thesis. University of Iceland, Reykjavík.
- Svavarsdóttir, Ásta. 1982. „Þágufallssýki“ [“Dative Sickness”]. *Íslenskt mál og almenn málfræði* 4:19–62.
- Thráinsson, Höskuldur. 2013. Ideal speakers and other speakers. The case of dative and other cases. In: Beatriz Fernández and Ricardo Etxepare eds. *Variation in Datives: A Micro-Comparative Perspective*, 161–188. Oxford University Press, Oxford.
- Yang, Charles. 2000. Internal and external forces in language change. *Language Variation and Change* 12:231–250.
- Yang, Charles. 2002. *Knowledge and Learning in Natural Language*. Oxford: Oxford University Press.
- Yang, Charles. 2004. Universal Grammar, statistics or both? *Trends in Cognitive Sciences* 8:451–456.
- Yang, Charles. 2010. Three factors in language variation. *Lingua* 120:1160–1177.

Department of Linguistics  
 University of Iceland  
 Reykjavík, IS  
 ien1@hi.is