On the relative order of central sentence adverbs in the Insular Scandinavian languages

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Abstract
This paper discusses the relative order of certain classes of central sentence adverbs in Icelandic and Faroese. The relative order of the logical subject and central sentence adverbs in double subject constructions is also taken under consideration. The questionnaire data shows that the relative orders of adverbs that follow Cinque’s (1999) hierarchy receive more positive judgments than the orders that do not exhibit the predicted patterns in both languages, but the contrasts are not always as striking as one might expect. Examples of three adverbs within the same clause get rather negative judgments in general, but in case such orders are accepted the judgments are also in accordance with Cinque’s (1999) hierarchy. In double subject constructions, however, the sentence adverbs usually must precede the logical subject in Faroese while in Icelandic both orders are fine for most speakers. This is consistent with recent research showing that adverb placement is somewhat less free in Faroese than in Icelandic.

1. Introduction
This paper discusses the relative order of central sentence adverbs in Icelandic and Faroese, specifically the so-called speech act adverbs and evidential adverbs as in (1), and conjunctive adverbs and evaluative adverbs as in (2). The relative order of the logical subject and central sentence adverbs in double subject constructions as in (3) is also taken under consideration (see discussions on such orders in Icelandic in Jónsson 2002).

(1)  a. Jón hevur **satt at siga** tyðiliga gjört eitt mistak.
Jón has honestly obviously made a mistake
(speech act → evidentiality)

b. Jón hevur tyðiliga **satt at siga** gjört eitt mistak.
(evidentiality → speech act)

(2)  a. Hanus var **tó** tibetur sloppin óskaddur.
Hanus had thankfully escaped unharmed
(conjunction → evaluation)

b. Hanus var tibetur **tó** sloppin óskaddur.
(evaluation → conjunction)

(3)  a. Tað hava **tibetur** nógy lisið bókina.
Expl. have fortunately many read the book
(evaluation → log. subject)

b. Tað hava nógy **tibetur** lisið bókina.
(log. subject → evaluation)

‘Many have fortunately read the book’

1 I want to thank Johan Brandtler for useful comments and corrections. I am also indebted to Höskuldur Thráinsson and two anonymous reviewers from Íslenskt mál for their helpful comments on an earlier (Icelandic) version of this paper (Angantýsson 2017).
The aim is on the one hand to show both similarities and differences in this regard between the two related languages and on the other hand to connect the results with academic theories about the relation of adverbs to other words and parts of sentences.

Cinque (1999) proposed a famous theory on the order of adverbs and adverbial phrases in the world’s languages. To simplify, the word “adverb” will be used in this paper, whether it refers to a single adverb or adverbial phrases that form a semantic whole. According to Cinque’s theory, the order of adverbs is determined by meaning and the word order restrictions are described as a specific hierarchy (see chapter 2). The data introduced here, show that the relative orders of central adverbs that are in accordance with Cinque’s hierarchy are considered far better in both languages than the orders that are not in accordance with the hierarchy. In that regard for example, far more Faroese speakers accept (1a) and (2a) than (1b) and (2b) but the contrasts are actually not as striking as one might expect from the theory on hierarchy. In some cases, the restraints on word order seem to be more rigid in Faroese than in Icelandic. This finding is in accordance with previous research that indicate that rules on word order are to some extent firmer in Faroese (see Angantýsson 2018 and references included there).

The layout is as following. Chapter 2 discusses the relevant adverbs and briefly outlines the structural ideas. Chapter 3 outlines and discusses results from questionnaire surveys that the author conducted in Iceland in 2015 and 2017 and in the Faroe Islands in 2016. Chapter 4 contains the conclusion.

2. Theoretical background

(4) a. Different semantic classes of adverbs have a tendency to be placed in different positions in sentences.

b. Syntactic analyses often assume that certain adverbs have a set place in the syntactic structure and the adverbs as such are often used to argue for the placement of other words and parts.

c. The same adverb can carry a different meaning or scope of meaning depending on its syntactic position.
d. The syntactic characteristics of adverbs can be quite different depending on languages and dialects.
e. Opinions vary on the way adverbs interact with other words and phrases and how they integrate into the syntactic structure, that is, if they are adjuncts or placed in the specifier position of particular functional projections.

The examples in (5) show the type of adverbs that will mainly be discussed in this paper:

(5) Speaker-oriented central sentence adverbs
a. Maturinn er í hreinskílini sagt ekki nógu góður.
   The food is honestly not good enough.
b. Þetta er sem betur fer að verða búið.
   This is fortunately almost over.
c. Hann er skiljanlega miður sín.
   He is understandably devastated.
d. Hún er sannarlega vel að sigrinum komin.
   She is certainly deservant of the victory.
e. Jón hefur líklega aldrei lesið Njálu.
   John has probably never read Njála.

Adverbial phrases of this kind naturally follow immediately after the inflected verb (see overview of the classification of adverbs in Icelandic in Thráinsson 2007:37–40). If two or more adverbial phrases of this kind are placed together in a sentence, Cinque’s theory (1999:106) predicts the following relative order:

(6) The hierarchy of central adverbs
a. Speech act adverbs
   frankly, briefly, honestly
b. Evaluative adverbs
   fortunately, understandably, luckily
c. Evidential adverbs
   supposedly, apparently, truly
d. Modal adverbs
   arguably, necessarily, probably

Cinque (1999) does not explicitly mention that a break in the hierarchy will lead to unacceptable sentences but there is no doubt in his presentation of the material that sentences that are not in accordance with the hierarchy are
always considered less acceptable, either being labelled ‘ungrammatical’ (star) or ‘deviant’ (question mark).

Jónsson (2002) discusses the relative order of adverbial phrases like (6) in Icelandic and an additional category that Cinque (1999) does not include:

(7) **Conjunctive adverbs**

*lastly, firstly, consequently*

Jónsson’s conclusion can be summed up by saying that word orders that follow Cinque’s hierarchy (1999) are better than those that do not, but that the contrasts are not as striking as one might expect. As we will see, my conclusions indicate a similar pattern, both in terms of Icelandic and Faroese. Jónsson also claims that conjunctive adverbs like those in (7) can be placed either before or after evidential and evaluative adverbs but my data shows that most speakers are more comfortable with having the conjunctive adverbs precede such adverbs.

There are two major approaches to how adverbs are integrated into clause structure (see an overview in Alexiadou 2004; Delfitto 2006 and Pittner et.al. (ed.) 2015). First, there is the adjunction analysis under which adverbs are assumed to adjoin rather freely to any maximal projection and the result is acceptable as long as the adverb in question can receive proper interpretation (cf. Ernst 2002, 2004, 2007). Second, there is the hierarchical account of adverbs where the assumption is that adverbs occupy fixed positions in the syntactic structure (Alexiadou 1997; Cinque 1999; Cinque 2004).

In addition to the aforementioned variations on word orders, Jónsson (2002) discusses the flexible order of logical subjects and sentence adverbs in double subject construction:

(8) a. Það hafa **sennilega flestir** lesið bókina.

EXPL have probably most read book-the.

b. Það hafa **flestir sennilega** lesið bókina.

EXPL have most probably read book-the.

Jónsson claims that this flexibility is expected under an adjunction analysis of adverbs while under Cinque’s theory one must stipulate a functional structure with multiple subject positions situated among the various adverb-related positions. This discussion will not systematically compare these analyses, but review the data with regard to Cinque’s theories (1999).
3. Data from speakers’ questionnaires

3.1 About the data
The data introduced here is based on 1) an electronic web based questionnaire given to 30 students in the University of Akureyri in 2015, 2) a written questionnaire given to 32 students in Fróðskaparsetur Føroya in 2016 and 3) a written questionnaire given to 37 students in the University of Iceland in 2017. The University of Akureyri questionnaire contained 162 sentence examples that were all in some way connected to varying positions of adverbs. The questionnaire given to students in the University of Iceland contained 24 sentence examples that almost all addressed the relative order of adverbs. The Faroese questionnaire contained 105 sentences, 40 of which concerned differences in the relative order of adverbs. There were three possible responses available to each sentence in every questionnaire (this sample is from the Faroese questionnaire):

(9)  
Ja = Góður setningar. Soleiðis kundi eg væl sagt.  
Good sentence, I could easily say that

? = Ivasamur setningar. Eg kundi mæguliga sagt so.  
Questionable sentence, I might say that

Nei = Ómægulur setningar. Soleiðis kundi eg ikki sagt.  
Unacceptable sentence, I could not say that

In the discussions of possible relative order of adverbs that I know of, linguists have mainly used their own judgements. It can however prove difficult to assess delicate nuances such as these and when academic theories and “interests” are at stake, there is always a chance of partiality in data. Therefore, it is my opinion that it is a safer practice to gather different assessments when the intent is to make assumptions about the quality of certain word orders in individual languages. It is also interesting to see the differences and similarities in these matters in languages as closely related as Icelandic and Faroese.

3.2 Icelandic
As mentioned with regard to (6) before, Cinque’s theory on adverbs (1999) assumes that the first examples in the following sentence pairs are better than the latter. This seems to be a correct assumption in the Icelandic questionnaire (UI):
Table 1 Relative order of two adverbs that convey speech acts, evidentiality and evaluation

<table>
<thead>
<tr>
<th>37 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10) Jón hefur <strong>satt að segja</strong> greinilega gert mistök. Jón has honestly obviously made a mistake.</td>
<td>76%</td>
<td>21%</td>
<td>3%</td>
<td>Speech act → evidentiality</td>
</tr>
<tr>
<td>(11) Jón hefur <strong>greinilega satt að segja</strong> gert mistök. Jón has obviously honestly made a mistake.</td>
<td>3%</td>
<td>32%</td>
<td>65%</td>
<td>evidentiality → speech act</td>
</tr>
<tr>
<td>(12) Jón hefur <strong>satt að segja</strong> skiljanlega engan áhuga. Jón has honestly understandably no interest.</td>
<td>30%</td>
<td>16%</td>
<td>54%</td>
<td>Speech act → evaluation</td>
</tr>
<tr>
<td>(13) Jón hefur <strong>skiljanlega satt að segja</strong> engan áhuga. Jón has understandably honestly no interest.</td>
<td>9%</td>
<td>32%</td>
<td>59%</td>
<td>evaluation → speech act</td>
</tr>
</tbody>
</table>

The difference is most obvious in (10) and (11) where most speakers consider it better to place the speech act adverb before the evidential adverb. It might however seem surprising how badly received the examples (11-13) in Table 1 are. That includes example (12) which has the “right” relative order of adverbs according to Cinque (1999) but the corresponding example with a changed order (13) is considered even worse by the speakers.

There is a considerable difference in the perception of speakers of the relative order of conjunctive adverbs on one hand and evidential and evaluative adverbs on the other hand as visible in Table 2:

Table 2 Relative order of two adverbs that convey conjunction, evaluation and evidentiality.

<table>
<thead>
<tr>
<th>37 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(14) Hann hefur <strong>samt greinilega</strong> megrast. He has however obviously lost weight.</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
<td>conjunction → evidentiality</td>
</tr>
<tr>
<td>(15) Hann hefur <strong>greinilega samt</strong> megrast. He has obviously however lost weight.</td>
<td>8%</td>
<td>22%</td>
<td>70%</td>
<td>evidentiality → conjunction</td>
</tr>
<tr>
<td>(16) Hann hafði <strong>samt sem betur fer</strong> sloppið ómeiddur. He had however fortunately escaped unhurt.</td>
<td>65%</td>
<td>14%</td>
<td>21%</td>
<td>conjunction → evaluation</td>
</tr>
<tr>
<td>(17) Hann hafði <strong>sem betur fer samt</strong> sloppið ómeiddur. He had fortunately however escaped unhurt.</td>
<td>30%</td>
<td>30%</td>
<td>40%</td>
<td>evaluation → conjunction</td>
</tr>
</tbody>
</table>
Jónsson (2002) claims that the relative order of conjunctive adverbs with these types of adverbs is free in Icelandic but these results indicate that speakers are more inclined to place the conjunctive adverb before the others.  

*Table 3* gives examples of different relative orders of three adverbs in the same sentence. Overall, these types of sentences receive negative judgements (UI):

**Table 3** Relative order of three adverbs that convey a speech act, evaluation and evidentiality

<table>
<thead>
<tr>
<th>37 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(18) María hefur <em>satt að segja</em> sem betur fer greinilega lesið bókina.</td>
<td>29%</td>
<td>14%</td>
<td>57%</td>
<td>speech act → evaluation → evidentiality</td>
</tr>
<tr>
<td>María has honestly fortunately obviously read the book.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(19) María hefur <em>satt að segja</em> greinilega sem betur fer lesið bókina.</td>
<td>21%</td>
<td>24%</td>
<td>55%</td>
<td>speech act → evidentiality → evaluation</td>
</tr>
<tr>
<td>María has honestly obviously fortunately read the book.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The difference is minimal here and in no way significant. To facilitate an easier assessment of this type of sentences it would likely help to place the sentences in the context of some kind of discourse, which was not the case in these questionnaires. As a result, the speakers might have found it far-fetched to imagine a situation where it would be considered normal to use so many adverbial phrases within the same sentence. As we will see later in the discussion the results of the Faroese questionnaire were however more decisive in this regard.

*Table 4* shows the relative order of the logical subject on one hand and evaluative, speech act and evidential adverbs on the other, in double subject constructions with a postponed subject. Jónsson (2002) claims that both orders are viable but that it is generally considered better to place a sentence adverb of this kind before the noun phrase. The assessments of the Icelandic speakers indicate that he is right (UA):

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As pointed out by Höskuldur Thráinsson, it would be natural to assume beforehand that the “weight” of adverbial phrases could impact their prime placement within a sentence and it is often said that lighter phrases are placed relatively early in a sentence while heavier once are placed later, which in some cases might have something to do with their semantic qualities. This is something worth pursuing with more research but as it stands this type of impact cannot be detected in the sentences tested.
Table 4 The relative order of a sentence adverb and a logical subject

<table>
<thead>
<tr>
<th>30 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(20) það hafa <strong>satt að segja</strong> margir løsið bókina. EXPL have honestly many read the book.</td>
<td>60%</td>
<td>23%</td>
<td>17%</td>
<td>Speech act adverb → subject</td>
</tr>
<tr>
<td>(21) það hafa <strong>margir satt að segja</strong> løsið bókina. EXPL have many honestly read the book.</td>
<td>43%</td>
<td>20%</td>
<td>37%</td>
<td>subject → speech act adverb</td>
</tr>
<tr>
<td>(22) það hafa <strong>sem betur fer</strong> margir løsið bókina. EXPL have fortunately many read the book.</td>
<td>80%</td>
<td>11%</td>
<td>9%</td>
<td>evaluative adverb → subject</td>
</tr>
<tr>
<td>(23) það hafa <strong>margir sem betur fer</strong> løsið bókina. EXPL have many fortunately read the book.</td>
<td>51%</td>
<td>14%</td>
<td>34%</td>
<td>subject → evaluative adverb</td>
</tr>
<tr>
<td>(24) það hafa <strong>greinilega</strong> margir løsið bókina. EXPL have obviously many read the book.</td>
<td>97%</td>
<td>3%</td>
<td>0</td>
<td>evidential adverb → subject</td>
</tr>
<tr>
<td>(25) það hafa <strong>margir greinilega</strong> løsið bókina. EXPL have many obviously read the book.</td>
<td>54%</td>
<td>6%</td>
<td>40%</td>
<td>subject → evidential adverb</td>
</tr>
</tbody>
</table>

Placing the sentence adverb before the subject is very well received in (22) and (24) but rather less so in (20). Corresponding sentences that place the subject before the sentence adverb (21, 23, 25) are less popular but are in no way deemed impossible. As pointed out by Jónsson (2002:79), the subject can convey a meaning of parts (‘many from a certain group’) or a general mass meaning (‘many overall’) in examples such as those in Table 4 and regardless of word order. If we assume a flexible position of adverbs this is not surprising but according to Cinque’s ideas of structure (1999) we would have to assume varying positions of the subject in examples such as (20) and (21) even though the meaning would be the same (see discussion in Jónsson 2002).

3.3 Faroese

Let us now look at comparable data from Faroese. Table 5 contains sentence pairs where the first example reflects the order expected according to Cinque’s theories (1999):
Table 5 The relative order of two adverbs that convey a speech act, evidentiality and evaluation

<table>
<thead>
<tr>
<th>32 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(26) Jón hevur <strong>satt at siga</strong> <strong>týðiliga</strong> gjört eitt mistak. John has honestly obviously made a mistake.</td>
<td>73%</td>
<td>17%</td>
<td>10%</td>
<td>speech act → evidentiality</td>
</tr>
<tr>
<td>(27) Jón hevur <strong>týðiliga</strong> <strong>satt at siga</strong> gjört eitt mistak. John has obviously honestly made a mistake.</td>
<td>10%</td>
<td>14%</td>
<td>76%</td>
<td>evidentiality → speech act</td>
</tr>
<tr>
<td>(28) Jón hevur <strong>satt at siga</strong> <strong>vel skiljandi</strong> engan áhuga. John has honestly understandably no interest.</td>
<td>42%</td>
<td>34%</td>
<td>24%</td>
<td>speech act → evaluation</td>
</tr>
<tr>
<td>(29) Jón hevur <strong>vel skiljandi</strong> <strong>satt at siga</strong> engan áhuga. John has understandably honestly no interest.</td>
<td>38%</td>
<td>38%</td>
<td>24%</td>
<td>evaluation → speech act</td>
</tr>
</tbody>
</table>

The difference in these sentence pairs is broadly similar to the corresponding examples from the Icelandic questionnaire. Cinque’s order is far better received in the former pairing, but the results are almost the same in the latter and neither variation is received very well actually.

Table 6 shows the relative order of a conjunctive adverb with speech act adverbs and evidential adverbs in Faroese:

Table 6 The relative order of two adverbs that convey conjunction, evaluation and evidentiality

<table>
<thead>
<tr>
<th>32 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(30) Oddrún er <strong>tó</strong> <strong>týðiliga</strong> klænkað. Oddrún has though obviously lost weight.</td>
<td>87%</td>
<td>3%</td>
<td>10%</td>
<td>conjunction → evidentiality</td>
</tr>
<tr>
<td>(31) Oddrún er <strong>týðiliga</strong> <strong>tó</strong> klænkað. Oddrún has obviously though lost weight.</td>
<td>3%</td>
<td>10%</td>
<td>87%</td>
<td>evidentiality → conjunction</td>
</tr>
<tr>
<td>(32) Hanus var <strong>tó</strong> <strong>tibetur</strong> sloppin óskaddur. Hanus was though fortunately escaped unharmed.</td>
<td>78%</td>
<td>11%</td>
<td>11%</td>
<td>conjunction → evaluation</td>
</tr>
<tr>
<td>(33) Hanus var <strong>tibetur</strong> <strong>tó</strong> sloppin óskaddur. Hanus was fortunately though escaped unharmed.</td>
<td>23%</td>
<td>30%</td>
<td>47%</td>
<td>evaluation → conjunction</td>
</tr>
</tbody>
</table>

Much like the Icelandic speakers, the Faroese speakers are far more approving of placing the conjunctive adverb before both the speech act adverb and the evidential adverb. This difference is in fact even more distinct in Faroese.
Table 7 depicts a sentence pair with three central adverb phrases:

Table 7 The relative order of three adverbs that convey a speech act, evaluation and evidentiality

<table>
<thead>
<tr>
<th>32 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(34) Maria hevur <strong>satt at siga</strong> týdiliga lísið bókina. Maria has honestly fortunately obviously read the book.</td>
<td>41%</td>
<td>31%</td>
<td>28%</td>
<td>speech act → evaluation → evidentiality</td>
</tr>
<tr>
<td>(35) Maria hevur <strong>satt at siga</strong> týdiliga tibetur lísið bókina. Maria has honestly obviously fortunately read the book.</td>
<td>3%</td>
<td>3%</td>
<td>94%</td>
<td>speech act → evidentiality → evaluation</td>
</tr>
</tbody>
</table>

We can also see a much more distinct difference in word order variations than in the Icelandic data. While example (34) is refuted by the majority of the Faroese speakers, it is anyway much better received than (35) which is deemed impossible by most.

Finally, Table 8 shows examples of different relative orders of a logical subject on one hand and different kinds of central adverbs on the other:

Table 8 The relative order of a sentence adverb and a logical subject

<table>
<thead>
<tr>
<th>32 speakers</th>
<th>Yes</th>
<th>?</th>
<th>No</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>(36) Tað have <strong>satt at siga</strong> nógy lísið bókina. EXPL have honestly many read the book.</td>
<td>58%</td>
<td>29%</td>
<td>13%</td>
<td>speech act adverb → subject</td>
</tr>
<tr>
<td>(37) Tað have <strong>nógy satt at siga</strong> lísið bókina. EXPL have many honestly read the book.</td>
<td>19%</td>
<td>23%</td>
<td>58%</td>
<td>subject → speech act adverb</td>
</tr>
<tr>
<td>(38) Tað have <strong>tibetur</strong> nógy lísið bókina. EXPL have fortunately many read the book.</td>
<td>65%</td>
<td>16%</td>
<td>19%</td>
<td>evaluative adverb → subject</td>
</tr>
<tr>
<td>(39) Tað have <strong>nógy tibetur</strong> lísið bókina. EXPL have many fortunately read the book.</td>
<td>19%</td>
<td>6%</td>
<td>75%</td>
<td>subject → evaluative adverb</td>
</tr>
<tr>
<td>(40) Tað hevur <strong>helst onkur útlendingur</strong> keypt húsið hjá Eivindi. EXPL has probably some foreigner bought Eivindur's house</td>
<td>71%</td>
<td>16%</td>
<td>13%</td>
<td>evidential adverb → subject</td>
</tr>
<tr>
<td>(41) Tað hevur <strong>onkur útlendingur helst</strong> keypt húsið hjá Eivindi. EXPL has some foreigner probably bought Eivindur's house</td>
<td>10%</td>
<td>6%</td>
<td>84%</td>
<td>subject → evidential adverb</td>
</tr>
</tbody>
</table>

In these examples, the order Adverb-Subject is always better received, just like in the Icelandic questionnaire. The order Subject-Adverb is however usually very poorly received. In this regard, the rules on word order seem to
be more rigid in Faroese than in Icelandic. We should however keep in mind that the sentence examples were randomly set up in this part of the Icelandic questionnaire (UA) while the Faroese questionnaire (and the UI questionnaire) had responding minimal pairs or three sentences of a kind that presented a direct comparison (see discussion about the use of questionnaires in syntax research in Thráinsson et al. 2013).

4. Conclusion

The data presented in this paper show that the relative orders of central sentence adverbs that follow Cinque’s (1999) hierarchy are generally more positively received in the Scandinavian Insular languages than the orders who do not follow the hierarchy. Examples that present three central sentence adverbial phrases are generally rather poorly received in both languages (perhaps due to difficulty in interpretation) but the main pattern seems to follow Cinque’s hierarchy nonetheless. Examples of double subject constructions with a logical subject preceding a sentence adverb are usually far worse received in Faroese than in Icelandic. This indicates that the restraints on word order are more rigid in Faroese than in Icelandic. The difference might however be explained to some extent with regard to the fact that this part of the Icelandic questionnaire had random sentence examples while the Faroese questionnaire had speakers comparing minimal pairs side by side and three sentences of a kind. Further research is thus needed.

REFERENCES


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