

DOUBLE OBJECT SCRAMBLING: SOME INFORMATION STRUCTURAL IMPLICATIONS

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Abstract. *Based on O(ld) E(nglish) and O(ld) Ice(landic) data, this paper argues that Scrambling is an optional movement device that mediates the way discourse roles correlate with constituent order and seeks to pin down the ways the core properties of Scrambling interface with semantic/ discourse/ informational/ prosodic factors. The author of the paper follows Wallenberg 2009 in describing Scrambling as an optional displacement operation that moves internal Arguments and Adjuncts into left-phrasally-adjoined targets in keeping with Conservation of C-Command. If Scrambling is internal adjunction, it is the syntactic status of this movement device which defines its optional character, viz Scrambling is optional in narrow syntax, given that it is not constrained by some feature-checking mechanism. While the present proposal asserts that Scrambling is an optional displacement operation, it stands apart from those optional movement approaches which hold that Scrambling is a semantically-vacuous operation. An optional syntactic operation like Scrambling can interact with general discourse principles, viz the basic claim underlying this analysis is that Scrambling is a semantically and pragmatically effective movement device.*

Keywords: *core properties of Scrambling, Old English, Old Icelandic, semantic/ pragmatic effects, information structural implications*

The current study draws on theoretical assumptions borrowed from sources in the area of the movement approach to Scrambling phenomena (e.g. Roberts 1997 and Haerberli 2002 for OE; Haugan 2001 and Hróarsdóttir 2001 for Old Icelandic; as well as Thráinsson 2001; Richards 2004; Wallenberg 2009). In particular, it assigns Scrambling to the inventory of optional movement operations and assumes that

Scrambling moves internal Arguments and Adjuncts out of their source positions into left-phrasally-adjoined target positions before Spell-Out with the T-head serving as barrier to movement, and that Scrambling is semantically and pragmatically effective. Such an account of Scrambling stands as an alternative to: case-feature-driven analyses, under which movement is triggered by the need for certain constituents to have their case-features checked in some specifier position (e.g. Collins & Thráinsson 1996; Haerberli 1999); the weak version of semantic/ discourse/ informational analyses which assume that Topic and Focus are purely semantic features that can be accessed at the interface (Chomsky 1995 & 2001); the strong version of the above where Topic and Focus are features active in the computation able to attract movement of constituents to dedicated functional projections (Rizzi 1997 & 2006).

Data have been collected from two corpora: The York-Toronto-Helsinki Parsed Corpus of Old English Prose (Taylor, Warner, Pintzuk, Beths 2003) and the corpus of *Íslendinga Sögur* (Kristjánsdóttir, Rögnvaldsson, Ingólfssdóttir, Thorsson 1998).

The application of Scrambling is to be relativized to the type of movable constituents and to the type of landing sites. V_{fin}-IO(Dat)-DO(Acc)-V_{non-fin} constructions formed by trivalent verbs of the give-class, characterized by the Theta grid <Agent, Benefactive/Recipient, Theme> lie in the focus of this paper, whereby the scrambled order is derived through optional movement raising both internal Arguments into phrasally-adjoined positions in the left periphery of vP. The distribution of various referential types of scrambled Arguments has been considered.

The following set of initial assumptions concerning Scrambling and OE and OIce phrase structure lend theoretical support to this study: both OE and OIce have VO order within the VP underlyingly and axiomatically a base-generated SVO order and this base word order correlates with grammatical relations; as regards OE and OIce clause structure, VP is the domain where the thematic properties of clauses are fixed, TP is the domain where the temporal properties of clauses are determined, and CP is the domain where the discourse properties of clauses are specified; Scrambling is an instance of internal adjunction and it obeys Wallenberg's Conservation of C-Command: "Adjunction cannot subtract a c-command relation holding between a head and a non-head." (2009:132).

There is reasonable evidence to suggest that V-IO(Dat)-DO(Acc) corresponds to the unmarked order of internal Arguments and is base-generated in both OE (Koopman 1993) and OIce (Haugan 2001). Since information focus is also the prosodically most prominent part of an otherwise unmarked sentence, and since objects are associated with new information, it is only to be expected that information focus stress occurs in the canonical object position.

The well-acclaimed formal factors that influence the linear sequencing of verbal Arguments in the Old Germanic languages are weight, definiteness, pronominality, and these actually count as general linearization principles. The present analysis invokes semantic and information-structural factors and attempts to determine to what extent the above principles can be affected by such factors (based on Lambrecht 1994; Kemenade & Los 2006; Barðal & Chelliah 2009; Hinterhölzl & Petrova 2009; Meurman-Solin, López-Couso & Los 2012; Nevalainen & Traugott 2012; Bech & Eide 2014; Bowerman & Evans 2014).

One type of Double Object Scrambling in OE constructions with one non-finite verb results in V_{fin}-IO(Dat)-DO(Acc)-V_{non-fin} orders, such as:

1) Wið ðan ðe he scolde gifan heom ðone arce ... (Th 244,42)

'On condition that he should give them the arch-pallium ...'

Forðí ðæt he scolde heom ðone pallium gifan ... (Th 245,11)

'Therefore he should give them the pallium ...'

Hé scolde heom ðone pallium gifan, (Th 247,2)

'He should give them the pallium.'

2) Þá cwæð Albinus him to andsware þæt hé wolde his áxunga ealle gegaderian and him andsware sendan mid heora swutelungean, (IntSigw 14-16)

'Then Albinus answered him that he would gather all his inquiries and send him an answer along with evidence thereof.'

3) ... forþam ðe he nolde him nan feoh behaten ac he forbead þæt man nan þing wið him syllan ne moste. (ASChr 1012)

'... because he would promise them no riches and he forbad that anyone should give anything to them (as ransom).'

- 4) ... we sceolan þam soðfæstan Gode þas lac geoffrian þe us alydde fram deaðe. (ÆHfLBG 258,6)
 ‘... we must offer this sacrifice to the true God who delivered us from death.’
- 5) Eást Engle hæfdon Ælfréde áþas geseald. (ASChr 894,46)
 ‘The East-Angles had given oaths to Alfred.’
- Eást Engle hæfdon Ælfréde foregísla .vi. geseald. (ASChr 894,47)
 ‘The East-Angles had given six hostages to Alfred.’
- 6) We sceolon eallum godes folce samod þa boclicanlare secgan. (CH 153-7)
 ‘We must proclaim the book-lore to all people of God likewise.’
- 7) Nyle se Waldend ængum ánum ealle gesyllan gæstes snyttru. (Cri 683)
 ‘The Almighty Ruler will not give to anyone alone all the wisdom of the spirit.’

1) contains lines from a small passage, wherein the sequence indirect - direct object is found in the post-verbal position: gifan heom ðone arce[-pallium], as well as within the Vfin Vnon-fin brace: scolde heom ðone pallium gifan (x 2). In all instances the indirect object is pronominal - heom and the direct object is definite, rendered by a determiner phrase - ðone arce/ ðone pallium, respectively. The referent of the indirect object is topical and the indirect object pronoun heom is unstressed and unfocussed. The unscrambled clause and the scrambled clauses share the same Argument structure, hence, a certain recurrent stress pattern can be established where focus occurs onto the direct object ðone arce/ ðone pallium to foreground the idiomatic meaning of ‘confer the holy order of a suburbicarian bishop’.

In 2) two clauses are conjoined by the coordinator and, where the former subordinate clause: þæt hé wolde his áxunga ealle gegaderian shows Scrambling of the direct object of a monotransitive verb and Quantifier Floating. An unmarked verb - object order entails focus on the object and his áxunga ealle could well have remained inside the default sentence accent area but instead it occurs in a marked structure and acquires additional accentuation. Within the scrambled structure of the second subordinate clause: him andsware sendan mid heora swutelungean, the finite verb wolde is ellipped and both objects have evacuated from the default focus domain to the effect that the default sentence accent applies to the PP mid heora swutelungean.

In clauses without optional constituents, negative-contrastive focus has the widest scope and it can impact the whole proposition or else it can occur on any clausal constituent. In the former subordinate clause in 3): forþam ðe he nolde him nan feoh behaten, clitic negation (nolde = ne wolde) originates in the head of the negation phrase (NegP) and marks the clause as negative in force, furthermore 3) reveals an instance of multiple negation, expressed by means of an additional negative quantifier nan pre-modifying the direct object feoh. While the referent of the pronominal indirect object him is topical, the negative quantifier nan focuses the direct object feoh which has been scrambled into the Middle field.

Both ex-situ objects in 4), þam soðfæstan Gode and þas lac, are definite and topical which makes them eligible candidates for Scrambling, but in this case at least left dislocation has a last resort character. Had the objects surfaced in their base order, following the main verb geoffrian, the direct object þas lac would have received focus in accordance with the assignment of the default sentence accent. Such in-situ order would have favoured a reading under which the following relative clause: þe us alydde fram deaðe can be interpreted as referring to þas lac. In 4) Scrambling the object which otherwise would have received the default accent is a strategy to preclude an alternative reading and consequently Scrambling of the postverbal material signals that accent by default is not appropriate.

5) illustrates the tendency for definite objects to precede indefinite: the indirect object is rendered by the proper name Ælfréde in both clauses, and the direct object is expressed by the bare nominal áþas in the former clause and by the QP foregísla .vi. in the latter. Giving or exchanging oaths and hostages as mutual assurance became a prerequisite when a peace agreement was to be made in Anglo-Saxon England and numerous passages in the Chronicles point out to that practice: “& þa Scottas him sealdon áþas ...; þæt hie him sealdon gislas ...; & þá salde se here him foregislas & micle áþas ...; & he him áþas swor & gislas sealde ...; & he him hæfde geseald áþas & gislas ...; hæfdon áþas him gesworon ...”, etc. Similar formulae occur in a variety of word order patterns and a clear functional distinction between the scrambled and unscrambled versions cannot be argued for.

6) however, deviates from the above mentioned tendency, as here the QP indirect object *eallum godes folce* surfaces higher than the DP direct object *þa boclicanlare*. Both objects are heavy, so Scrambling them is a tough choice in view of the Heavier Element principle. If base-generated order were preserved the default sentence accent would have applied to *þa boclicanlare* - an unfortunate candidate for a focus expression, given that it refers to topical material. It is known, that Ælfric uses a special array of phrases to establish the performance context for his homilies, marking them as intended for uneducated audience, audience that comprises lay folk and clerics, or monastic audience. Breaking up the VO pattern in 6) can be interpreted as a signal for avoiding a default sentence accent reading to the effect that *eallum godes folce* is marked off as receiving the focal accent.

In 7) all information structurally prominent constituents surface inside the *VfinVnon-fin* brace. Both objects are indefinite, rendered by quantifier phrases - *ængum ánum* and *ealle gæstes snyttru*, respectively. To be quite precise, 7) represents a variety of the *Vfin-IO(Dat)-Vnon-fin-DO(Acc)* pattern, provided that the indirect object QP *ængum ánum* is scrambled along with the head of the QP - *ealle* with the complement part of the direct object - *gæstes snyttru* remaining in situ. One way to handle linguistic data in 7) is to assume a special contrastive interpretation for the constituents attested in the scrambling position.

The analogical pattern of Double Object Scrambling in Old Icelandic (*Vfin-IO(Dat)-DO(Acc)-Vnon-fin*) has given rise to examples, as:

8) *Og ef eg má þér ráð gefa, bóndi minn, þá tel eg það hollast, að ætterni gests þíns sé á einskis manns viti nema okkar tveggja.* (IngArn 3692)
 ‘And if I may give you counsel, my lord, then I reckon that most wholesome, that the kin of your guest might be in the knowledge of no other man but of us two.’

9) “*Sé eg nú*”, sagði Gísli, “*að þú vilt mér ekki lið veita.*” (Gísla 878)
 “‘Now I see that you will not give me help’”, said Gísli.’

10) *En ef hann vill þér eigi grið gefa með því, þá mun eigi hægt að forða þér fyrir honum.* (HalldS 1293)
 ‘But if he will give you no mercy in this case then it will not be easy to save you from him.’

11) *Grettir spurði ef hann vildi honum nokkra ásjá veita.* (Grettla 586)
 ‘Grettir asked if he would grant him some protection.’

12) *Ei mun eg þér hana gifta, mun hún sjálf högum sínum ráða.* (Finnboga 626)
 ‘I will not give her to you (in marriage), she will arrange her own affairs, herself.’

13) *Skal hér engi maður vinna klækisverk og skal Harðbeini grið gefa.* (Laxdæla 1635)

‘No man shall do a mean thing here and Harðbein shall be given mercy.’

14) *Nú skal veita svör þínu máli, að eg vil öllum yður grið gefa skipverjum.*
En um frændsemi þá er þú telur við oss ... (Laxdæla 1564)

‘Now I shall give answers to your request, so that I will give mercy to all of you, shipmen. And regarding that kinship which you plead with us ...’

The tendency for object pronouns to precede noun phrase objects is manifest in examples 8) - 11): the pronominal indirect objects have surfaced higher than the full NP objects but, remarkably, double object Scrambling calls forth a variety of different effects on information packaging. Thus, in the conditional clause in 8), the discourse-anaphoric unfocussed pronoun *þér* occurs in the Middle field along with *ráð* - an indefinite direct object, expressed by a bare nominal. Neither *þér*, nor *ráð* qualify as semantically prominent, so both have been left-dislocated. In the following main clause, an unstressed *það* is used to cataphorically introduce an appositive *að*-clause, which is characterized by Extraposition of part of the conjunct PP - *nema okkar tveggja*, and it is the latter that occupies the information structurally distinguished position due to the above interaction of displacement operations.

In 9) negation applies to the subordinate clause: *að þú vilt mér ekki lið veita*, which comprises only obligatory constituents. In the case of clauses without optional constituents, negative-contrastive focus takes the widest scope and it can either impact the whole proposition, or it can occur on any clausal constituent. An unmarked unscrambled order, cf: *að þú vilt ekki veita mér lið* will favour an

unmarked interpretation, whereby the entire VP is under the scope of negation. Now, it can be the case that in 9) a particular type of scrambled structure is used to mark that negative-contrastive focus occurs on the bare nominal direct object *lið*.

10) reveals a somewhat similar scrambled structure but here the direct object *gríð* is negatively quantified, viz *eigi gríð* surfaces into the scrambling position and receives negative contrastive focus. Unsurprisingly, the unstressed pronoun *þér* makes it up to the Scrambling position in 10), but compare now 13) wherein the definite indirect object *Harðbeini* ends up higher than the bare nominal direct object *gríð*. Staying with the example in 13), it can be assumed that the left dislocation of the indirect object *Harðbeini* is pragmatically marked. The default sentence accent occurs on the verb *gefa* and by this strategy *Harðbeini* is conceived as the topic while a wide focus reading is made available for the VP.

11) contains an indirect question, corresponding to a direct yes/no question. The subordinate *ef*-clause comprises only obligatory constituents, meaning the scope of the question is wide open and can embrace the entire VP, or else contrastive focus may apply to any clausal constituent. In accordance with the assignment of the default sentence accent, focus would have occurred on the indefinite direct object QP *nokkra ásjá*, and it must be an unaccented *nokkra ásjá* that surfaces into the Middle field, following the defocused pronoun *honum*. Scrambling both information structurally neutral postverbal Arguments can be conceived as a strategy to secure contrastive focus on *veita* by placing accent on the verb in the default focus domain.

The pronominal objects *þér* and *hana* surface in the left periphery of *vP* in their base-generated order in 12), and such sequence can be subsumed under Büring 2001's proposal, viz anaphoric and unaccented object pronouns have equal information status and select the more optimal unmarked order. The first clause has the negative adverb *ei* in spec-CP, i.e. the leftmost constituent is negative in force and licenses negative-contrastive focus, whose scope is wide open, i.e. negative-contrast has scope over the entire VP. The auxiliary *mun* raises to C in both clauses and the second clause reveals a scrambled structure not wholly different from the first. It can then be the case that the verb *gífta* is correlated with the verb *ráða*, both verbs being stressed. The scrambling movement of the postverbal material here makes accenting the verbs more natural in keeping with the assignment of the default sentence accent.

In 14) the indefinite direct object *gríð* is scrambled along with part of the indefinite indirect object QP *öllum yður*, as the nominal element *skipverjum* remains in-situ. Context reveals that the king is about to provide answers to two questions, one concerning the ship's crew safe conduct, the other concerning his relation to *Ólafur*. The DP *gríð*, the QP *öllum yður skipverjum* and the prepositional object *um frændsemi* that occupies the Topicalization position in the following clause all represent topical material. The breaking-up of the indirect object can be thought of as a device to ensure that *skipverjum* is placed in the immediate vicinity of *um frændsemi* as well as to ensure semantic contiguity, while still reserving the focal accent for the verb *gefa*.

Interpreting data from OE and OIce corpora, the above analysis has highlighted the following properties of Scrambling:

1. Scrambling in OE and OIce targets XPs (indefinite, covertly and overtly case-marked DPs included).
2. OE and OIce Scrambling modulates the way discourse roles and constituent order correlate by evoking a variety of semantic/ pragmatic effects, viz it can either invoke old, specific, topical, defocalized readings or it can imply non-presupposed, contrastive, focused, accentuated interpretations.
3. Scrambling is a highly functional feature of OE and OIce word order and it is difficult to identify a single feature that can be said to trigger it. One powerful trigger for Scrambling can be identified as a possible inconsistency between the placement of the default sentence accent and the position of the focus expression, viz Scrambling applies either to make sure that accent by default is obtainable or to make explicit that accent by default is undesirable. Much in this vein, the studied type of word order variation can be best described as the end result of a complex interaction between syntactic, information structural and prosodic factors.

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