

Holmberg's Generalization: Blocking or push up
Hans Broekhuis
Leiden University Center for Linguistics, The Netherlands

Holmberg's Generalization states that Scandinavian object shift cannot cross the main verb, or, under Holmberg's (1999) formulation, any phonetically realized VP-internal material (i.e. arguments). This correctly predicts that object shift may not apply in, e.g., embedded clauses in Danish: the contrast between (1a) and (1b), taken from Vikner (2006), shows that Danish V-to-I applies in main clauses only, so that the main verb occupies a VP-internal position in the embedded clause in (1b) and object shift would violate Holmberg's Generalization.

- (1) a. Hvorfor læste Peter <den> aldrig [VP_V<*den>].
 why read Peter it never
 b. Jeg spurgte why Peter <*den> aldrig [VP læste <den>].
 I asked why Peter it never read it

Generally, this is considered the end of the story, but it is not since Holmberg's Generalization could in principle be satisfied in two ways in Danish embedded clauses: either the verb blocks object shift, as in (1b), or object shift pushes the verb up into the empty I position. The latter option would lead to a hypothetical language in which V-to-I applies in embedded clauses when the object is a weak pronoun, as in (2b), but not when it is a full DP, as in (2a).

- (2) a. Jeg spurgte hvorfor Peter aldrig [VP læsteden her bog].
 I asked why Peter never read this book
 b. *Jeg spurgte hvorfor Peter læsteden aldrig [VP_V/DP].
 I asked why Peter read it never

Since the ungrammatical Danish example in (2b) satisfies Holmberg's Generalization, we must answer the question why it is excluded. Apparently Danish prefers the 'blocking' strategy in (1b) to the 'push up' strategy in (2b). We could hypothesize that this is due to the fact that application of the blocking strategy is universally preferred to the push up strategy for reasons of economy, e.g., because the push up strategy would involve application of an otherwise forced movement. It is easy to show on the basis of the Icelandic data in (3) and (4), however, that this hypothesis cannot be maintained. The examples in (3a-b) first show that object shift of lexical DPs is 'optional' in Icelandic, the choice between (3a) and (3b) being dependent on the information structure of the clause: in (3a) the DP is part of the focus ('new' information) of the clause, whereas in (3b) it is part of the presupposition of the clause. Example (3c) shows that pronoun shift is obligatory.

- (3) a. Jón las ekki þessa bók. (þessa bók) (focus)
 Jón read not this book
 b. Jón las þessa bók ekki t_{DP}. (þessa bók) (presupposition)
 Jón read this book not
 c. Jón las <hana> ekki <*hana>.
 Jón read it not

Now consider the double object constructions in (4). When the indirect object *Mariu* is part of the presupposition of the clause, the judgments on the examples in (4) are the ones expected on the basis of observations in (3): both the indirect object and the pronominal object will undergo object shift, as in (4c). When the indirect object is part of the focus of the clause, the observations in (3) gives rise to the expectation that the direct object will move across the indirect object, as in (4d), but we know that this is blocked by Holmberg's Generalization. Holmberg's Generalization can now be satisfied in either of two ways: either the indirect object blocks shift of the pronoun, as in (4a), or the pronoun pushes the indirect object up into its shifted position, as in (4c). The judgments on the data in (4) show that the push up strategy is preferred in Icelandic, which proves that both the blocking and the push up strategy are in principle available.

- (4) a. *Pétursýndi oft Mariu hana.
 Pétur showed often Mariu it
 b. *Pétur sýndi Mariu oft hana.
 Pétur sýndi Mariu hana oft t_i.
 c. Pétur sýndi Mariu hana oft t_i.
 d. *Pétur sýndi hana oft Mariu t_i.

The Danish examples in (2) and (3) show that a descriptively adequate description of the restrictions on object shift cannot be based on postulating conditions on object shift alone, but must also take the restrictions on V-to-I into consideration: it must formally account for the fact that applying V-to-I in Danish embedded clauses comes at a greater expense than not applying object shift of the pronominal object. This paper aims at providing such a description within the so-called *derivation-and-evaluation* framework, in which some version of the computational system C_{HL} from Chomsky's (2000/2001) *minimalist inquiry* framework is taken to function as a language-invariant generator which produces a (finite) candidates set, from which the optimal candidate is selected in an optimality theoretic manner. The main ingredients of my proposal are given in (5).

- (5) a. Holmberg's Generalization will be derived by assuming that Scandinavian object shift is subject to order preservation constraints/conditions; cf. e.g. Williams 2002, Müller 2000/2001 and Fox and Pesetsky 2005.
 b. A slightly adapted version of the analysis of object shift in Broekhuis (2000), which is able to straightforwardly account for the fact that Icelandic prefers the push up strategy over the blocking strategy in the examples in the Icelandic examples in (4).
 c. A new and maximally simple theory of V-to-I, which straightforwardly accounts for the core facts in the Germanic languages, including the variation that we find.
 d. A proposal on how the theories in (5b) and (5c) interact.

References

Broekhuis, Hans. 2000. Against feature strength: the case of Scandinavian object shift. *Natural Language and Linguistic Theory* 18:673-721.
Chomsky, Noam. 2000. Minimalist inquiries: the framework. In *Step by step. Essays on minimalist syntax in honor of Howard Lasnik*, eds. Roger Martin, David Michaels and Juan Uriagereka, 89-155. Cambridge (Mass.), MIT Press.
Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale. A life in Language*, ed. Michael Kenstowicz, 1-52. Cambridge (Mass.), MIT Press.
Fox, Danny, and David Pesetsky. 2005. Cyclic Linearization of Syntactic Structure. *Theoretical Linguistics* 31:1-45.
Holmberg, Anders. 1999. Remarks on Holmberg's generalization. *Studia Linguistica* 53:1-39.
Müller, Gereon. 2000. Shape conservation and remnant movement. In *Proceedings of NELS 30*, eds. A. Hirotani, N. Hall Coetzee and J.-Y. Kim, 525-539. Amherst (Mass.), GLSA.
Müller, Gereon. 2001. Order preservation, parallel movement, and the emergence of the unmarked. In *Optimality-theoretic syntax*, eds. Géraldine Legendre, Jane Grimshaw and Sten Vikner, 113-142. Cambridge (Mass.)/London, MIT Press/MITWPL.
Vikner, Sten. 2006. Object Shift. In *The Blackwell companion to Syntax*, eds. Martin Everaert and Henk Van Riemsdijk. Oxford, Blackwell.
Williams, Edwin. 2002. *Representation theory*. Cambridge, Mass.: MIT Press.