

The Evolutionary Trajectory of the Icelandic New Passive

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Summary We examine the diachronics of a new passive construction in Icelandic [1] and use Yang's model of language learning and change [2] to explain its rapid rise.

Linguistic Background Icelandic has a canonical passive ($C_{an}P$) construction (1a) but has witnessed the emergence of a functionally equivalent new passive ($N_{ew}P$) in the recent past 50 years [1]. As shown in (1b), "the boy" bears accusative/object case and remains structurally in the object position with syntactic properties associated with objects [1]. Analogous constructions of $N_{ew}P$ can be found in Ukrainian [3].

- (1) a. Strákurinn var laminn. (Canonical Passive = $C_{an}P$)
boy.the_{subject} was beaten_{passive}
- b. Það var lamið strákurinn (New Passive = $N_{ew}P$)
there_{expletive} was beaten_{passive} boy.the_{object}

Modeling Change This diachronic change can be viewed as the competition between $C_{an}P$ and $N_{ew}P$ [2, 4]. The rise of $N_{ew}P$ is facilitated by the preponderance of data ambiguous between the $C_{an}P$ and $N_{ew}P$, notably non-canonically case-marked subjects of the passive-DAT, GEN, syncretic DAT/ACC, also syncretic NOM/ACC. The model of language change in [2] allows us to predict the directionality of change of competing grammatical variants. The key is to estimate the proportion — dubbed *advantage* in [2] — of contexts under which the syntactic realization of $N_{ew}P$ is incompatible with the $C_{an}P$ grammar and vice versa. We estimate these values from the IcePaHC corpus [5], focusing on the data which are an advantage to only one of the two grammars. We annotated 4538 passives for word order and subject definiteness. The advantage of $N_{ew}P$ is determined by the frequency of *definite-Theme-initial* where the Theme is neutral in interpretation (thus would appear in object position if generated by the $N_{ew}P$ grammar). The advantage of $C_{an}P$ is determined by the frequency of *XP auxiliary indefinite-Theme* (the Theme must be low in $N_{ew}P$). These values are respectively 0.5 and 0.05.

Note that the model [2] is not one of actuation, but accounts for the (predictable) consequences of actuation. The actuation itself is a consequence of the changed syntax of definite subjects in 20th century Icelandic. The mathematical properties of the model suggest that if the advantage of $N_{ew}P$ is greater than that of $C_{an}P$ ($0.5 > 0.05$), its rise to complete acceptance is inevitable. Furthermore, the advantage values allow us to predict the expected number of generations for $N_{ew}P$ to rise to a certain level of usage. According to the most recent survey [6], 60% of 14-15 years fully accept $N_{ew}P$. This proves to be approximately 2 generations, which is consistent with the emergence of $N_{ew}P$ in the 1950s. We predict that the change will be complete in four generations such that approximately in the years 2025-2050, acquisition of $C_{an}P$ will decline sharply.

References

- [1] Maling, J. & Sigurjónsdóttir, S. (2002). *Journal of Comparative Germanic Linguistics* 5, 97-142.
- [2] Yang, C. (2002). *Knowledge and learning in natural language*. Oxford University Press.

- [3] Sobin, N. (1985). *Linguistic Inquiry*, 16, 649-662.
- [4] Kroch, A. (1989). *Language Variation and Change*, 1, 199-244.
- [5] Wallenberg, J., Ingason, A., Sigurðsson, E. & Rögnvaldsson, E. (2011). Icelandic Parsed Historical Corpus (IcePaHC). (http://www.linguist.is/icelandic_treebank)
- [6] Thráinsson, H. et al. (2010). Variation in Icelandic syntax. Ms. University of Iceland.