Universal Quantifiers and Free Choice in (Some) Uralic Languages
Ágnes Bende-Farkas
RCL-LERN Budapest
agnesbf@gmail.com

This contribution proposes a model for the evolution of universal quantifiers in Uralic languages. It relies on the Quantifier Cycle proposed by Beck (based on English) and expanded by Doron (based on Hebrew). Assuming the same general framework of Beck or Doron, we wish to present, and account, for a different way in which universal quantification has evolved. A salient feature of the Uralic model, viz. the lack of a dedicated Free Choice stage, will be discussed in more detail. The puzzle is that universal quantifiers in Uralic languages could not have evolved from Free Choice indefinites heading relative clauses (one of the chief diachronic sources for the every class, Haspelmath 1995), yet at a later stage these quantifiers (at least in Hungarian and in Udmurt) do show an affinity for Free Choice meanings.

One of the diachronic sources of every type quantifiers are Free Choice expressions, which can be assumed to have evolved from indefinite terms heading relative clauses. (Haspelmath 1995, Beck 2017. On indefinites and relative clauses cf. Aloni or Jayez-Tovena.) Where Uralic languages are concerned, these have lacked (non head-internal or finite) relative clauses (cf. the work of Dékány, among others). In the case of Hungarian the indefinites introducing relatives can be said to be more recent than *mind* 'all' or *minden* 'every'. The puzzle is that in at least two Uralic languages, Udmurt and Hungarian, there is an 'affinity' between FC readings and universal quantifiers. In Udmurt the same expression can be a universal quantifier or a FCI. In Hungarian FC construals of *minden* 'every' have been attested since late Old Hungarian, usually in well-circumscribed contexts. Since FCIs do not seem to have played a role in the emergence of universal quantifiers in these languages, the task is to account for the affinities of a later stage.

The emergence and evolution of universal quantifiers: According to Beck (2017, 2020), the first stage is overt propositional quantification over alternatives introduced by *wh*-indeterminates. The next stage is quantification over individual alternatives; this can be overt — surface quantifiers are usually particles 'merged' with indeterminates. This is also the stage when such particle+indeterminate complexes introduce relative clauses and have FC construals. The third stage is overt quantification over plain individuals. (That is, the first two stages involve a Hamblin semantics of alternatives.)

The evolution of Hebrew *kol* (Doron 2020): Grammaticised from an adjective/adverb meaning 'in full', in Biblical Hebrew *kol* was originally a measure phrase in a covert partitive phrase ('all of'). Under negation or under modals it could acquire a FC construal (during the Biblical stage), and this construal provided the necessary conditions for reinterpretation as a distributive universal quantifier. (For details cf. Doron 2020.)

Uralic languages: The first stage is covert propositional quantification over Hamblin alternatives, contributed by *wh*-indeterminates. *Wh*-indeterminates are attested in present-day Uralic languages, usually with an existential construal (apart from interrogative or relative uses). The Old Hungarian superlative *men-től jobb* lit. 'what-than better', i.e. 'better than everyhing' in (1) is, we claim, a case of covert universal quantification. (In OH the superlative was expressed with a universal quantifier, as in the hypothetical *minden-nél jobb* 'better than everything'.)

(1) Ez ozlopnac fèie **mentọl iob** arańbol vala
     The column-DAT head-POSS.3SG what-ABL good-CMPR gold-ELA was
     'The capital of the column was made of gold of the best (purest) quality' (Vienna C. 122)

The second stage is overt quantification by means of particle + *wh*-indeterminate commplexes. In Hungarian these are *mi-n-d* 'all' and *mi-n-d-en* 'every', built from *mi* 'what', and a complex of suffixes that we take to be operators. We propose that *mind, minden* predate other indeterminate-based expressions such as *vala-mi* 'something' or *akár-mi* 'whatever'. One reason is that *mind-en-* but not *valami* exhibits a head-final pattern.[1] The second stage needs to be subdivided, at least in two ways:

(*i*) Before and after the emergence of *minden* (att. cca 1440, Jókai C.). *Minden* was distributive, unlike *mind*. (*ii*) The transition from Hamblin quantification to quantification over 'plain' individiuals. The latter mode makes inverse scope readings possible:[2] The first attested case of inverse scope will indicate that the transition has taken place. We propose no distinct Free Choice stage. Instead, we take FC construals of *minden* to be an epiphenomenon, or, say, a by-product in the interpretation of some logically fixed structures.

Free Choice construals: In Udmurt, universal quantifiers can have a FC interpretation (*kot'kud* 'each', 'whichever', *kot'kudiz* 'everyone', 'whichever' (from a group)', where *kot'* goes back to Russian *khot'* 'even', 'if', cf. Suihkonen–Solovyev 2013, chapter on Udmurt). Beyond these data little is known about the origin, syntax or semantics of these readings, so, for the time being, the case of Udmurt will be set aside. In Hungarian, the FC construals of *minden* 'every' resemble the Hebrew case: they are sentence-internal, in an environment that contains negation or some (possibly covert) modal. A typical case, attested since OH, is *minden NP nélkül* lit. 'everything NP without', i.e. 'without anything'. Note that *minden* has wide scope over the negation in *nélkül*. We propose that Free Choice construals of *minden* uniformly involve taking scope over negation or over a possibly covert modal. This emphasises domain widening, and a denial of the existence of distinguished individuals s.t. these and not others may be witnesses to the truth of the sentence. We propose that such structures ($\forall > \neg$, $\forall >$ modal go back to earlier cases, warranted by the state of negation at the time, where *minden* had a purely logical role, as in (2-a). In (2-b), with a similar scopal structure, wide scope *minden* involves domain widening, and an ignorance-indifference meaning component similar to epistemic indefinites and FC implicatures (Jayez-Tovena).

(2) a. **menden** titk **nem** lèhètètlèn tenèked
        every   secret not impossible DAT-2SG
        'No secrets are impossible before Thee'
        Lit.: 'Every secret is not impossible before Thee' ($\forall > \neg > \neg > \diamond$) (Vienna C. 136' 15th c.)
     b. Azert **mỳnden** vala ký enghemet megh talaland, megh ọ́ly enghemet
        Since every   VALA who me   PFX find-FUT, PFX kill me
        'For everyone (anyone) who finds me will kill me' Jordánszky C. (16.c.) Gen. 4, p. IIIa
        ($\forall >$ cond-l $>$ modal)

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[1] In OH *valami, akármi* could and did introduce relative clauses. *Minden* didn't, at least not in extant records.
[2] See Kratzer–Shimoyama 2002 on the wider interface implications of quantification over Hamblin alternatives.

'and it shall come to pass, that every one that findeth me shall slay me.' (King James)

REFERENCES

● Aloni, M. 2019: *Indefinites ad Fossils: The Case of Wh-Based Free Choice.* Ms, UvA. ● Bende-Farkas Ágnes 2015: The Landscape of Universal Quantification in Old Hungarian. *Acta Linguistica Hungarica.* **62**(3), 223-261. ● Beck, S. 2017: An Alternative Semantic Cycle for Universal Quantifiers. *Festschrift for Liz Pearce.* 5–14. ● Beck, S. 2020: Indeterminate Pronouns in Old English: A Compositional Semantic Analysis. *The Journal of Comparative Germanic Linguistics.* **23**. 203–269. ● Dékány É.–Tánczos O. *Udmurt and Eastern Khanty Relatives with or without a Left Periphery.* Ms. RIL. ● Belyaev, O.–D. Haug 2020: The Genesis and Typology of Correlatives.*Language* **96**(4). 874–907. ● Doron, E. 2020: From a Collective to a Free Choice Determiner in Biblical Hebrew. Gergel, R. – J. Watkins (eds): *Quantification and Scales of Change.* Language Science Press, Berlin. 1–55. ● Halm, T. 2016: *The Grammar of Free Choice Items in Hungarian.* PhD Thesis, Pázmány Catholic University. ● Haspelmath, M. 1995: Diachronic Sources of *All* and *Every.* E. Bach et al. (eds): *Quantification in Natural Language.* Springer. 363–382. ● Jayez, J. – Tovena, M.L. 2011: The Meaning and (a Bit of) the History of *quelque.* In Jayez–Tovena (eds.): *French Determiners in and across Time.* London College Publications. 111–139. ● Kratzer, A.–Shimoyama, J. 2002: Indeterminate Pronouns: The View from Japanese. Yukio Otsu (ed.): *Proceedings of Third Tokyo Psycholinguistics Conference.* Mituzi Syobo. Tokyo. ● Suihkonen, P.–Solovyev, V. (eds.) 2013: *Typology of Quantification: On Quantifiers and Quantification in Finnish and Languages Spoken in the Central Volga–Kama Region.* Lincom Europa, Munich.