

A multilingual parallel corpus approach to time sufficiency expressions in Scandinavian and English

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Abstract: Both the Swedish verb *hinna* and the Norwegian verb *rekke* have been shown to encode complex sufficiency meanings involving temporal sufficiency and ability ('have enough time to be able to do sth') (Johansson & Nordrum, 2016, 2021), but differ in that *hinna* always encodes temporal meaning while *rekke* also has spatial meaning. Interestingly, a third Mainland Scandinavian language, Danish, can also encode complex sufficiency meanings, and is similar to Norwegian *rekke* in having both spatial and temporal meanings. In this paper, featuring a short background and a multimodal presentation, we explore the meaning and use of the three Scandinavian verbs, *hinna*, *rekke*, and *nå*, in the multilingual parallel corpus OPUS2 (available through the Sketch Engine Web based interface) using English as the pivot language (see Tiedemann, 2012). In the spirit of Johansson (2007), the English correspondences of the Scandinavian verbs are used to shed light on semantic distinctions that may be difficult to spot in monolingual data. The multimodal presentation discusses the possibility that the three verbs in the Scandinavian languages are on a path towards grammaticalization, but at different stages in the process, a discussion which is related to an observation in the literature that verbs with 'reach' type meanings tend to grammaticalize into modals (see e.g., Bybee et al, 1994).

1. Background

Outside Mats Johansson's door to his university office, there was a sign paying tribute to the magical land of tomorrow. Tomorrow, it said, is a place where all our dreams come true and all our work gets done. Or at least this is how I remember it. Parts of this paper have been in that land of tomorrow for quite some time, and yet it also figures in the past. The bulk of the paper is a multimodal presentation Mats and I gave at the 41st ICAME conference organized from Heidelberg in May 2020, but then there is also this background section, penned after Mats passed away. I have found it difficult to move between these times: a yesterday with that familiar voice and a present that is so silent. The writing has been long in the making.

Long-in-the-making is not unusual for our work together, however. There is a reason why the land of tomorrow hovered outside Mats' door. For all of his sharp intellect and solid wisdom, Mats did not allow linguistics to be all there is, and so work would need to happen piecemeal and not interfere too much with holidays and weekends. Tomorrow really did hold

great promise. As we explored the story of the verbs presented in this paper, Mats would be very clear on when to stop. “This is it, Lene”, he would say. “Now we’re tired. Let’s leave it for a while”. Then he would be back outside my office door the next day, coffee in hand, with a brilliant idea that struck him on his walk to the office. It was the ‘slow professor’ at work. Drawing on a life-time of reading and thinking, he had the true scholar’s ability to place questions in the appropriate theoretical context – a sharp wit searching for logical soundness and theoretical elegance. The more tedious work of polishing those ideas for hours of writing was less his cup of tea, though. The white board was a closer friend. Here, the story of the paper was mapped out and re-drafted and then at last, the paper got written, but only after a few nudges from the co-writer. With that co-writer setting sails, however, the story would soon take shape: When the man got going, writing seemed effortless and easy, ending in disciplinary eloquence.

As will be evident further down, the storyline of the work we did together fits the verbs we explored, a group of so-called sufficiency verbs. Roughly, sufficiency verbs are verbs denoting that a sufficient amount of some category needs to be available for an agent to perform an act, reach a state, etc. An example is English *dare*, which encodes sufficiency of courage (‘have enough courage to be able to do something’). Interestingly, sufficiency verbs seem to be quite rare across languages (Fortuin, 2013), but some languages, notably the Scandinavian languages and the languages spoken around the Baltic Sea, feature quite a few, with Finnish topping the list with at least 45 such verbs (Flint, 1980).

We came to sufficiency meaning via two Swedish verbs without obvious English translation equivalents, namely *hinna* (‘have enough time to be able to do something’) and *orka* (‘have enough physical/mental energy to be able to do something’). We inherited these verbs from a former colleague of Mats in Lund, Bengt Altenberg, who presented some initial work on the verbs at a symposium in Lund in 2014 in celebration of the 20th anniversary of the Nordic Parallel Corpus Project.¹ Already a professor emeritus at the time, Bengt declined the invitation to turn his talk into a paper, but generously handed over his data to us for exploration.

By way of Bengt’s translation correspondences, retrieved from the English-Swedish Parallel corpus (ESPC), sufficiency emerged as a key to the semantic description of *hinna* and *orka*. In fact, *lack* of sufficiency seemed to be a key: so close to home, we thought, and so human: lack of time (*hinna*) and lack of physical/mental energy (*orka*), but, as would

¹ For an overview of the project and the conference, see Nordrum, Oksefjell Ebeling, & Hasselgård (Eds.) (2016).

become obvious, in no way lack of *possibility*. Sufficiency, we agreed, must be a fundamental meaning component in human language. Yet, the component is underexplored, at least for verbs.

And so we stayed with our exploration; slowly, of course – we had lots of other stuff to do – but steadily. Gradually, we moved beyond our two Swedish verbs to explore possible Norwegian and Swedish equivalents. The multimodal presentation available in section two below compares three possible equivalents: Swedish *hinna*, Norwegian *rekke* and Danish *nå* via their English correspondences in parallel corpora. We show that all the three verbs can function as main verbs with spatial meanings and as auxiliaries with time-sufficiency meaning and tentatively suggest that they may be on different stages in a grammaticalization process that can be related to a space-time semantic shift observed in the literature (see e.g., Bybee et al, 1994). These slides and these voices, recorded on a summer's day in 2020 during a brief escape from pandemic restrictions, compose my contribution to this volume in Mats' honor – a last co-authored paper, frozen in time, but in some way pointing forward to a tomorrow of sorts, albeit less magical than before.

2. Work in progress: Time-sufficiency in Scandinavian and English

3. References

- Beck, S. & Rullmann, H. (1999). A flexible approach to exhaustivity in questions. *Natural Language Semantics* 7, 249-298. <https://doi.org/10.1023/A:1008373224343>
- Bybee, J., Perkins, R., & Pagliuca, P. (1994). *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. University of Chicago Press.
- Flint, A. (1980). *Semantic Structure in the Finnish Lexicon: Verbs of Possibility and Sufficiency*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Fortuin, E. (2013). The construction of excess and sufficiency from a crosslinguistic perspective. *Linguistic Typology* 17, 31-88. <https://doi.org/10.1515/lity-2013-0002>
- Johansson, M., & Nordrum, L. (2016). Swedish *hinna* viewed through its English correspondences – *have time* or *be able to*? *Nordic Journal of English Studies*, 15(3), 171-199. <http://doi.org/10.35360/njes.380>

- Johansson, M., & Nordrum, L. (2018). Swedish *orka* viewed through its English correspondences – ability, insufficient strength/energy or insufficient volition? *Bergen Language and Linguistics Studies*, 9(1), 155-172. <https://doi.org/10.15845/bells.v9i1.1524>
- Johansson, M., & Nordrum, L. (2021). Tracing processes in auxiliarization – Time sufficiency verbs in a Norwegian-Swedish-English contrastive perspective. In A. Čermáková, T. Egan, H. Hasselgård & S. Rørvik (Eds.), *Time in languages, languages in time* [SCL 101] (pp. 67-93). Amsterdam: John Benjamins. <https://doi.org/10.1075/scl.101.04joh>
- Johansson, S. (2007). *Seeing through Multilingual Corpora*. Amsterdam/Philadelphia: John Benjamins. <https://doi.org/10.1075/scl.26>
- Nordrum, L., Oksefjell Ebeling, S., & Hasselgård, H. (2016). (Eds.) Languages in contrast 20 years on. *Nordic Journal of English Studies*, 15(3). <http://doi.org/10.35360/njes.381>
- SAOB, *Ordbok över svenska språket*. 1893-. Lund: Svenska Akademien. <https://www.saob.se>
- Tiedemann, J. (2012). Parallel Data, Tools and Interfaces in OPUS. In Proceedings of the 8th International Conference on Language Resources and Evaluation. LREC' 2012, Istanbul, Turkey. http://www.lrec-conf.org/proceedings/lrec2012/pdf/463_Paper.pdf
- van der Auwera, J. & Plungian, V. A. (1998). Modality's semantic map. *Linguistic Typology* 1998(2), 79-124. <https://doi.org/10.1515/lity.1998.2.1.79>

Corpora

- The English-Norwegian Parallel Corpus* (ENPC). (n.d.). <https://www.hf.uio.no/ilos/english/services/omc/enpc/>
- The English-Swedish Parallel Corpus* (ESPC). (n.d.). <https://www.tekstlab.uio.no/cgi-bin/omc/PerITCE.cgi>
- Sketch Engine*. (n.d.). <https://www.sketchengine.eu/>