

THE INFLUENCE OF POLISH GRAMMATICAL ASPECT ON THE PERCEPTION OF EVENT DURATION

The study presented here was conducted as a part of writing my MA thesis at the Faculty of Letters at the University of Wrocław, Poland.



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INTRODUCTION

The study presented contributes to a line of research on the perception of event duration as influenced by the grammatical aspect. Previous studies on the issue (Flecken & Gerwien, 2013; Flecken, Stutterheim & Caroll, 2014) checked the effect for German, Modern Arabic, and Dutch. In the Dutch experiment they found out that progressive aspect in Dutch extends the duration estimations for short everyday events (e.g. *close the door*), whereas shortens medium and long ones (e.g. *read a book*). The goal was to investigate what would be the effect for Polish language as a member of a different language family (Slavic) that is currently understudied. Results will be discussed in the light of contemporary aspect theories (Klein 1994/1995; Ramchand 2008; Reichenbach 1947; Smith 2013; de Swart 1998).

OBJECTIVE

The purpose was to investigate the impact of grammatical aspect (perfective/imperfective) in Polish on the verbs on the decisions about the event duration.

METHODOLOGY

- 3 pretests to choose suitable research material (familiarity/imageability/duration) - English verbs -> translation to Polish,
- stimuli design: short/medium/long x perf/imperf x SI/PI,
- proper experiment (FindingFive platform - psycholinguistic Likert's scale judgement task) + filler comprehension questions,
- 50 part. (25F/25M), Poles, higher ed., (age range 18-40)

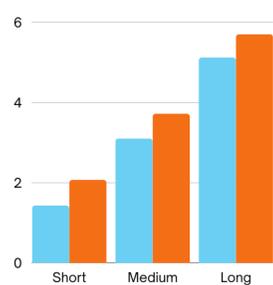
RESULTS

The results showed that there is a significant effect of the grammatical aspect, namely; events represented by Polish verbs in imperfective aspect are perceived by the participants as longer than those in perfective aspect (on all of the levels of inherent duration - short/medium/long).

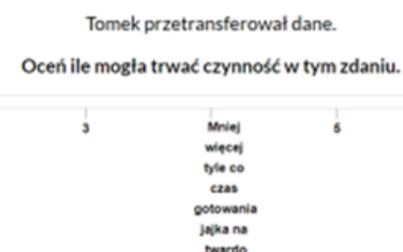


ANALYSIS

- Statistical analysis - R 3.6.1 - GLME (*lmer* function),
- Fixed eff.: as in design,
- Rand. eff.: participant, presented item,
- Maximal approach formula,
- Significant effect of *aspect* and *event duration*,
- Pairwise comparison - all elements in the study,
- Simplified pairwise comparison: effect of aspect -> 0.617 (imperfective verbs considered longer than perfective).



Descriptive Stats for the raw data (blue - ipfv, orange pfv) N=1200



Exemplary sentence from a sequence of three:
Tomek transferred the data.
"Decide how long is the event in the sentence"
1 - much shorter, 4 - same as boiling an egg hard, 7 - much longer

CONCLUSION

Results lead to preliminary conclusions that seem to be compatible with the view, suggesting that there are cross-linguistic differences in the decision making regarding duration of events, based on whether or not a given language has a clear grammatical aspect (morphologically distinct). Further studies are needed in order to understand the connections between grammatical aspect and the perception of time; for example replication of Minor et al. (2020) on Polish and English, or an exact replication of Gerwien & Flecken (2013), using the same stimuli translated to Polish.

Related literature:

- Flecken, M., & Gerwien, J. (2013). Grammatical aspect influences event duration estimations: Evidence from Dutch. In Proceedings of the Annual Meeting of the Cognitive Science Society (Vol. 35, No. 35).
- Flecken, M., Von Stutterheim, C., & Carroll, M. (2014). Grammatical aspect influences motion event perception: Findings from a cross-linguistic non-verbal recognition task. *Language and Cognition*, 6(1), 45-78.
- Klein, W. (1994). *Time in language*. London and New York, NY: Routledge.
- Klein, W. (1995). A time-relational analysis of Russian aspect. In *Language* 71(4) pp. 669-695.
- Ramchand, G. C. (2008). Perfectivity as aspectual definiteness: Time and the event in Russian. *Lingua*, 118(11), 1690-1715.
- Smith, C. S. (2013). The parameter of aspect (Vol. 43). Springer Science & Business Media.
- Reichenbach, H. (1947). *Elements of symbolic logic*.
- De Swart, H. (1998). Aspect shift and coercion. *Natural Language & Linguistic Theory*, 16(2), 347-385.
- Minor, S., Mitrofanova, N., Vos, M., Ramchand, G., (2020). Processing Grammatical Aspect in a Visual World Paradigm: English vs. Russian, Poster presented at AmlaP 2020, Postdam. Available at: <https://prezi.com/view/fHiBMthvzLxVbWYT6I4P/>.

