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Irregular verb morphology in Austrian learners of English on A2-level

English irregular verb morphology constitutes a rather pertinacious problem both in the area of linguistics and language acquisition. In linguistics, English irregular verbs have often been assumed to be cognitively represented as idiosyncratic, rote-learned items in the mental lexicon (Chomsky & Halle 1968). In language acquisition, irregular verbs are dreaded by learners because of their seemingly erratic and thus error-prone patterns. Such views, however, disregard both the internal morphological patterns within this semi-regular word class and the repeatedly attested ability of speakers and learners to generalise productively from existing patterns to novel, unknown forms (Clahsen 1999). These observations have sparked the so-called “past-tense-debate” (Pinker 1999, Tomasello 1995, Pinker & Ullman 2002), which has brought forward a number of theories and models to account for these phenomena. Most of the empirical evidence, however, relates to speakers’ L1, and only tentatively have models and methodologies been adapted for learner language studies (Bilal 2010, Chernigovskaya & Gor 2000, Flege, Yeni-Komshian & Liu 1999, Godfroid & Uggem 2013, Gor & Cook 2010, Pliatsikas & Marinis 2013, Strobach & Schönplflug 2011). German-English L2 verb morphology has been examined with regard to adult speakers (CEFR C1) in two studies so far (Plag 2000, Wagner 2010), but data from younger or adolescent learners are missing.

The purpose of this study was to test in how far two hypotheses put forward in the literature can account for fresh L2 data on the CEFR A2 level. Hypothesis one claims that the internal organisation of irregular verb morphology is governed by an analogy-driven universal pattern associator (Eddington 2004, Pinker 1997). Hypothesis two states that irregular verb morphology follows a so-called universal apophonic path (Ségéral & Scheer 1998). In the present study, around 250 Austrian lower secondary pupils went through two paper-and-pencil experiments, eliciting past-tense and participle inflections to given nonce words, whose constituents varied systematically in terms of their prototypicality for non-default inflection. Pupils’ responses were analysed using generalised linear mixed models as well as classification algorithms. Preliminary results suggest that their responses are far from being random. It is obvious that learners build novel irregular forms based on morphological analogies, governed by something like a pattern associator; they do not, it seems, follow predictions made by the apophonic path, though. In that way our data confirm earlier findings from both L1 and L2 studies. The way the nonce constituents interact with the type of inflection and vowel change, however, differs from previous studies and would need further investigation.

Possible educational implications of these results apply to the way verb morphology should be presented in standard school text books. If universal and analogy driven pattern associators or apophonic constraints turned out to be active even in an early L2 mental lexicon, contrastive explorations (Ellis 2006) as well as frequency based materials and activities (Bybee 2001) would be called for.

- Bybee, J. (2001): *Phonology and Language Use. Cambridge Studies in Linguistics 94*. Cambridge: Cambridge University Press.
- Chernigovskaya T., K. Gor (2000): "The complexity of paradigm and input frequencies in native and second language verbal processing: evidence from Russian. In: *Language and Language Behavior* 3, 2, 20-37.
- Chomsky, N., M. Halle (1968): *The Sound Pattern of English*. New York: Harper and Row.
- Clahsen, H. (1999): "Lexical entries and rules of language: A multidisciplinary study of German inflection". In: *Behavioral and Brain Sciences* 22, 991-1060.
- Eddington, D (2004): "Issues in modelling language processing analogically". In: *Lingua* 114, 7, 849-871.
- Ellis, N. C. (2006): "Selective attention and transfer phenomena in L2 acquisition: Contingency, cue competition, salience, interference, overshadowing, blocking, and perceptual learning". In: *Applied Linguistics* 27, 2, 164-194.
- Flege, J. E., G. H. Yeni-Komshian, S. Liu (1999): "Age constraints on second-language acquisition". In: *Journal of Memory and Language*, 41, 78-104.
- Godfroid, Aline, Maren S. Uggem (2013): "Attention to irregular verbs by beginning learners of German. An Eye-Movement Study." *Studies in Second Language Acquisition*, 35, 2, pp. 291-322.
- Gor, Kira, Svetlana Cook (2010): "Nonnative Processing of Verbal Morphology: In Search of Regularity." *Language Learning*, 60,1, pp. 88-126.
- Kirkici, Bilal (2010): Distinct mechanisms in the processing of English past tense morphology. A view from L2 processing. In: Martin Pütz, Laura Sicola (eds.): *Cognitive Processing in Second Language Acquisition*. Amsterdam, Philadelphia, John Benjamins, pp. 67-84.
- Pinker, S. & M. Ullman (2002): "The past and future of the past tense." *Trends in Cognitive Sciences* 6, 11, pp. 456-463.
- Pinker, S. (1997): "Words and rules in the human brain". In: *Nature* 387, 547-548
- Pinker, S. (1999): *Words and rules. The ingredients of language*. London: Phoenix.
- Plag, I. (2000): "Irregular past tense formation in English interlanguage". In: I. Plag, K. P. Schneider (eds.): *Language Use, Language Acquisition, and Language History. (Mostly) Empirical Studies in Honour of Rüdiger Zimmermann*. Trier: Wissenschaftlicher Verlag, 134-149.
- Pliatsikas, Christos, Theodoros Marinis (2013): "Processing of regular and irregular past tense morphology in highly proficient second language learners of English: A self-paced reading study". *Applied Psycholinguistics*, 5, pp. 943-970.
- Ségéral, P., T. Scheer (1998): "A generalized theory of ablaut: The case of modern German strong verbs". In: R. Fabri, A. Ortman, T. Parodi (eds.): *Models of Inflection*. Tübingen: Niemeyer, 28-59.
- Strobach, Tilo, Ute Schönplüg (2011): Can a connectionist model explain the processing of regularly and irregularly inflected words in German as L1 and L2?" *International Journal of Bilingualism*, 15, 4, pp. 446-465.
- Tomasello, M. (1995): "Language is not an instinct". In: *Cognitive Development* 10, 131-156.
- Wagner, Thomas (2010): *Interlanguage Morphology. Irregular Verbs in the Mental Lexicon of German-English Interlanguage Speakers*. Tübingen: Narr-Francke-Attempo-Verlag.