

1 Compressing learner language [Recurso electrónico] : an information-theoretic measure of complexity in SLA production data / Katharina Ehret, Benedikt Szmrecsanyi

Este artículo se encuentra disponible en su edición electrónica. Su acceso electrónico es a través del enlace de 'Acceso al documento'.

References: p. 42-44

We present a proof-of-concept study that sketches the use of compression algorithms to assess Kolmogorov complexity, which is a text-based, quantitative, holistic, and global measure of structural surface redundancy. Kolmogorov complexity has been used to explore cross-linguistic complexity variation in linguistic typology research, but we are the first to apply it to naturalistic second language acquisition (SLA) data. We specifically investigate the relationship between the complexity of second language (L2) English essays and the amount of instruction the essay writers have received. Analysis shows that increased L2 instructional exposure predicts increased overall complexity and increased morphological complexity, but decreased syntactic complexity (defined here as less rigid word order). While the relationship between L2 instructional exposure and complexity is robust across a number of first language (L1) backgrounds, L1 background does predict overall complexity levels.

Second language research. -- 2019 (January), v. 35, n. 1, p. 23-45

1. Complexity 2. Compression 3. Information theory 4. Kolmogorov 5. Learner corpus 6. Proficiency 7. Writing

2

The development of morphological complexity [Recurso electrónico] : a cross-linguistic study of L2 French and English / Bastien De Clercq, and Alex Housen

Este artículo se encuentra disponible en su edición electrónica. Su acceso electrónico es a través del enlace de 'Acceso al documento'.

References: p. 94-97

Studies in second language acquisition (SLA) increasingly rely on measures of linguistic complexity to assess second language (L2) proficiency and development. While an important number of studies have risen to the call of studying a broader range of complexity related constructs (Bulté and Housen, 2012; Norris and Ortega, 2009), few have examined morphological complexity, instead focusing on syntax and lexis. The use of morphology measures is especially warranted in light of complexity trade-offs believed to occur both in language development – when growth in one linguistic domain (e.g. syntax) is temporarily prioritized over growth in another (e.g. morphology) – as well as crosslinguistically, in the form of balancing effects between different domains of the linguistic system. From both a cross-linguistic and developmental perspective, then, the current emphasis in SLA research on measures of syntactic complexity does not comprehensively gauge overall (grammatical) complexity in learner data. This study focuses on the development of morphological complexity using three previously proposed measures based on the notion of morphological diversity, with special attention to the verbal inflectional system (Horst and Collins, 2006; Malvern et al., 2004; Pallotti, 2015). Not only does the verbal system pose significant challenges to language learners, it is also the locus of important differences between inflectionally richer languages, like French, and inflectionally poorer languages, like English. The study investigates cross-linguistic differences in the development of morphological complexity and the effectiveness of the three morphological complexity measures as indicators of proficiency. The analyses were carried out on a multilingual corpus of 100 L2 French and 100 L2 English oral narratives, representing four different proficiency levels in both languages. Results indicate a more continuous increase of morphological complexity in L2 French than in L2 English and underline the importance of morphology as an essential component of a multidimensional view of linguistic complexity in SLA.

Second language research. -- 2019 (January), v. 35, n. 1, p. 71-97

1. Complexity 2. Cross-linguistic 3. Diversity 4. L2 English 5. L2 French 6. Morphology 7. Speaking

3**Morphological complexity in written L2 texts [Recurso electrónico] / Vaclav Brezina, Gabriele Pallotti**

Este artículo se encuentra disponible en su edición electrónica. Su acceso electrónico es a través del enlace de 'Acceso al documento'.

References: p. 117-119

Morphological complexity (MC) is a relatively new construct in second language acquisition (SLA). After critically discussing existing approaches to calculating MC in first- and second-language acquisition research, this article presents a new operationalization of the construct, the Morphological Complexity Index (MCI). The MCI is applied in two case studies based on argumentative written texts produced by native and non-native speakers of Italian and English. Study 1 shows that morphological complexity varies between native and non-native speakers of Italian, and that it is significantly lower in learners with lower proficiency levels. The MCI is strongly correlated to proficiency, measured with a C-test, and also shows significant correlations with other measures of linguistic complexity, such as lexical diversity and sentence length. Quite a different picture emerges from Study 2, on advanced English learners. Here, morphological complexity remains constant across natives and non-natives, and is not significantly correlated to other text complexity measures. These results point to the fact that morphological complexity in texts is a function of speakers' proficiency and the specific language under investigation; for some linguistic systems with a relatively simple inflectional morphology, such as English, learners will soon reach a threshold level after which inflectional diversity remains constant.

Second language research. -- 2019 (January), v. 35, n. 1, p. 99-119

1. Computational linguistics 2. Interlanguage morphology 3. L2 academic writing 4. Linguistic complexity 5. Morphological complexity

4**Multiple approaches to complexity in second language research [Recurso electrónico] / Alex Housen ... [et al.]**

Este artículo se encuentra disponible en su edición electrónica. Su acceso electrónico es a través del enlace de 'Acceso al documento'.

References: p. 16-21

In the past decades, there has been a surge in interest in the study of language complexity in second language (L2) research. In this article we provide an overview of current theoretical and methodological practices in L2 complexity research, while simultaneously framing these within the broader scientific interest into the notion of complexity. In addition to focusing on the role of complexity in L2 research, we trace how language complexity has figured in formal theoretical and typological linguistics. It is argued that L2 complexity research has often adopted a reductionist approach to the construct, both in terms of its definition and its operationalization. As such, previous L2 research has often confused related but conceptually distinct and operationally separable notions, such as relative and absolute complexity, and it has overemphasized syntactic and lexical forms of complexity at the expense of complexity related to morphology or linguistic interface phenomena. We then discuss a collection of five empirical studies which react to several of these issues by highlighting hitherto underexplored forms of complexity, adopting an explicitly cross-linguistic perspective or by proposing novel forms of L2 complexity measurement.

Second language research. -- 2019 (January), v. 35, n. 1, p. 3-21

1. Complexity measurement 2. Cross-linguistic approaches 3. Linguistic complexity

5

The phraseological dimension in interlanguage complexity research [Recurso electrónico] / Magali Paquot

Este artículo se encuentra disponible en su edición electrónica. Su acceso electrónico es a través del enlace de 'Acceso al documento'.

References: p. 142-144

This article reports on the first results of a large-scale research programme that aims to define and circumscribe the construct of phraseological complexity and to theoretically and empirically demonstrate its relevance for second language theory. Within this broad agenda, the study has two main objectives. First, it investigates to what extent measures of phraseological complexity can be used to describe second language (L2) performance at different proficiency levels. Second, it compares measures of phraseological complexity with traditional measures of syntactic and lexical complexity. Variety and sophistication are postulated to be the first two dimensions of phraseological complexity, which is approached via relational co-occurrences, i.e. co-occurring words that appear in a specific structural or syntactic relation (e.g. adjective + noun, adverbial modifier + verb, verb + direct object). Phraseological diversity is operationalized as root type–token ratio computed for each syntactic relation. Two methods are tested to approach phraseological sophistication. First, sophisticated word combinations are defined as academic collocations that appear in the Academic Collocation List (Ackermann and Chen, 2013). Second, it is approximated with the average pointwise mutual information score as this measure has been shown to bring out word combinations made up of closely associated medium to low-frequency (i.e. advanced or sophisticated) words. The study reveals that unlike traditional measures of syntactic and lexical complexity, measures of phraseological sophistication can be used to describe L2 performance at the B2, C1 and C2 levels of the Common European Framework of References for Languages (CEFR), thus suggesting that essential aspects of language development from upper-intermediate to very advanced proficiency level may be situated in the phraseological dimension.

Second language research. -- 2019 (January), v. 35, n. 1, p. 121-145

1. CEFR 2. Collocations 3. Learner corpus 4. Phraseology 5. Writing assessment

6

The role of morphological complexity in predicting the learnability of an additional language [Recurso electrónico] :The case of La (additional language) Dutch / Frans van der Slik, Roeland van Hout, Job Schepens

Este artículo se encuentra disponible en su edición electrónica. Su acceso electrónico es a través del enlace de 'Acceso al documento'.

References: p. 65-68

Applied linguistics may benefit from a morphological complexity measure to get a better grip on language learning problems and to better understand what kind of typological differences between languages are more important than others in facilitating or impeding adult learning of an additional language. Using speaking proficiency scores of 9,000 adult learners of Dutch as an additional language, we reproduced the findings of the Schepens et al. (2013a) study, using a reduced morphological complexity measure. We wanted to define a reduced measure to reveal which morphological features constitute the really important learning problems. Adult language learners whose first language (L1) has a less complex morphological feature configuration than Dutch turned out to have more learning difficulties in acquiring Dutch the less complex their L1 is in relation to Dutch. The reduced measure contains eight features only. In addition, we found cognitive aging effects that corroborate the construct validity of the morphological measure we used. Generally, adult language learners' speaking skills in Dutch improve when residing longer in the host country. However, this conclusion is only warranted when their L1 morphological complexity is at least comparable to Dutch morphological complexity. If the morphological complexity of their L1 is lower as compared to Dutch, the effect of length of residence may even reverse and have a negative impact on speaking skills in Dutch. It was observed that the negative effect of age of arrival is mitigated when adult language learners have a command of a second language (L2) with higher morphological complexity. We give morphological information for five additional target languages: Afrikaans, Chinese, English, German, and Spanish.

Second language research. -- 2019 (January), v. 35, n. 1, p. 47-70

1. Age of arrival 2. Cognitive aging 3. Cross-classified multilevel models 4. Length of residence 5. Morphological complexity 6. Second language acquisition