Cognitive approaches to L2 pedagogy: challenges and shortcomings of empirical testing

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Keywords: Spanish, assessment, L2 pedagogy, testing, cognitive grammar

Applying Cognitive Linguistics-inspired principles to the teaching of L2 grammar considerably enhances student comprehension and access to the representational world afforded by the target linguistic system (Llopis-García 2016, Alonso-Aparicio & Llopis-García 2019). A cognitive curriculum design for the explicit teaching of grammar provides learners with operative principles in the L2 that will enable them to control their performance without the sheer memorization of random lists. Experience in the classroom tells us that an approach of this nature is pedagogically more effective than a classical-prescriptive instruction, which often limits itself to offering the student a set of pre-established rules and arbitrary exceptions.

The aim of this paper is to contribute to the understanding of the potential of a cognitive-based grammatical instruction, but also and especially to the shortcomings and challenges afforded by current and traditional assessment design.

To this end, we will discuss the results of three classroom quasi-experimental studies and their assessment tests with A2 level (CERF standards) students at the university level in their learning of the aspectual contrast in Spanish / L2 (preterit vs. imperfect). A cognitive instruction group (which included the perspective of an embodied prototype within a mental space) was compared with a classic-prescriptive instruction (which associates each verb tense with a set of temporal markers) and a control group. Through a pretest / posttest design, the first study took up three instruction sessions (75 min each), and the assessment was comprised of a grammaticality judgment task and a gap-filling task. The results favored the cognitive-pedagogical instruction, but only in the production tasks. The second study created a replication and extension of the first. This time, four sessions were used for instruction, and learning was measured by two pedagogical translation tasks. Unlike the first study, the results do not reveal significant differences between the experimental groups in the posttest. The results of these two studies can be discussed within the framework of the Theory of Acquisition of Skills (Anderson and Lebiere 1998, Thompson 2018), which considers systematic practice as a key element in the development of knowledge. We posit, if learning were measured at an earlier stage of acquisition, would there be significant differences between the experimental groups? A third replication study was designed to answer this question. The degree of understanding (versus mastery in the use) of the target forms after one single session was measured. The results of the third study reveal an equal performance of both instruction groups, without statistical differences.

Our conclusions point to shortcomings in the design of assessment tests, which traditionally use fill-in-the-blank tasks (well-known to L2 students) that are in line with traditional instruction and no doubt favor it. This affords the cognitive group the merit of performing *at least* as well as the traditional one after having received a completely different pedagogical approach. We will propose alternative testing tasks that explicitly factor in a cognitive-based didactic approach and we will suggest new avenues for assessment design in future research.

References

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