

# **An adaptive tutor for explicit instruction of French grammatical gender cues**

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This project constructed a computer tutor for learning the gender of French nouns. We extracted a set of 28 orthographic and semantic cues to grammatical gender from Lexique. Each cue had to assign gender correctly 90% of the time and had to apply to at least 100 forms in Lexique. Because we included cue dominance relations, our cue set achieved higher coverage than that of Lyster (2006). We then constructed a tutor that asked students to judge whether nouns were masculine or feminine. The relevant cues were presented both on training trials and when the student made a mistake. Words were presented in accord with learning utility, much as in Pimsleur (1967). Words in cue sets that produced many errors were presented more frequently than words in cue sets that caused few errors. As students achieved mastery of cues, new cues were presented until they had demonstrated mastery of the complete set.

The intervention lasted for four 15-minute sessions and resulted in a 40% performance gain from pretest to posttest. An additional manipulation tested for the effects of frequent presentation of a “prototype” example, such as “garage” for the “-age -> M” cue. The highly frequent word was extremely well learned, but this learning failed to produce gains in the other examples of that cue. Current work tests the possibility that the overall high level of learning across cues is masking the positive role of prototype-based teaching.

Lyster, R. (2006). Predictability in French gender attribution: A corpus analysis. *French Language Studies*, 16, 69-92.

Pimsleur, P. (1967). A memory schedule. *The Modern Language Journal*, 51(2), 73-75.