

## The anti-duality inference: Implications for cross-linguistic variation and L2 acquisition

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On the assumption that pragmatic reasoning contributes to the interpretation of plural nominals (Spector 2007; Sauerland 2008; Mayr 2015) we predict cross-linguistic variation in the interpretation of plural morphology. Languages like French associate plural with an *at-least-two* meaning as a result of pragmatic enrichment with an anti-singularity inference. In contrast, languages that morphologically differentiate among singular, dual and plural number, the morphological plural is predicted to correspond to an *at-least-three* meaning (Dvořák & Sauerland 2006). **In this study** we consider a hypothesis that the meaning of the plural may be subject to *negative transfer* in the context of L2 acquisition with the speaker's L1 being a dual-featuring language and L2 - not. The phenomenon reflects a (temporary) deficit in the acquisition of L2 (Paradis & Genesee 1996; Serratrice et.al 2009). **Method:** 82 native speakers of Lebanese Arabic (LA, a dual featuring language) learning French (11 female; M=27.63) were tested. Using the LSBQ comprehensive questionnaire (Luk & Bialystok 2013), they were assigned to intermediate or advanced proficiency groups. The experiment included a self-paced sentence-picture verification task using a 3-valued scale. Materials consisted of 30 items manipulating the number of objects on the picture (2 or 3) and relevant nominal morphology in the sentence (dual or plural), resulting in four conditions 'dual.2', 'dual.3', 'plural.2', 'plural.3'. Participants received half of the stimuli in LA, the other half in French, all in pseudo-randomized order without duplication. 'Plural.2' and 'plural.3' were the conditions of interest; 'dual.2' and 'dual.3' were controls. **Predictions:** i) Participants' responses in LA to the target conditions will reflect sensitivity to the anti-duality inference by giving lower scores to condition "plural.2" than to "plural.3"; ii) under the negative transfer hypothesis, we predicted no difference between L1 and L2 responses to "plural.2" in at least the intermediate L2group. **Results:** a) within LA, the odds of giving a high score on the 'plural.2' condition were lower than on the 'plural.3' condition, b) the odds of giving a high score on 'plural.2' were higher in French than in Arabic with advanced French learners; c) predicted odds on the 'plural.2' condition did not differ in LA and French with intermediate French learners; d) predicted odds on 'plural.3' did not differ in both LA and French in either intermediate or advanced French learners; and e) the odds of giving a high score on 'plural.2' are higher in advanced compared to intermediate French learners. The difference in responses between 'plural.3' and 'plural.2' in LA support the predicted *at-least-three* meaning for plural in dual-featuring languages when an anti-duality inference is drawn. Our results provide an argument for negative transfer in L2 in the pragmatic domain. An *at-least-three* interpretation is unavailable in French since there is no trigger for the anti-duality inference. Yet the participants in the intermediate group did not distinguish between the interpretation of French and LA plural morphology, whereas our advanced French learners did.

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