

**Plural epistemic indefinites: clusivity and paucity**  
Éric Mathieu and Simone Diana Zamarlik, University of Ottawa

**Context.** It has been noticed that, in certain contexts (e.g., questions, conditionals, negation), bare plurals are interpreted inclusively in a number of languages, i.e., referring to ‘more than one,’ but also to ‘one’ (Krifka, 1989; Farkas and de Swart, 2010; Hoeksema, 1983; Schwarzschild, 1996; Sauerland et al., 2005; Bale et al., 2011; Grimm, 2012; Martí, 2020).

- (1) a. How many children do you have? 1+  
b. If you have children, raise your hand. 1+  
c. I don’t have children. 1+

For instance, (1a) can be answered by ‘three,’ but also by ‘one;’ (1b) is true if parents with two or more children raise their hands, but also if parents with only one child raise their hands; and (1c) is false if I have two or more children, but also if I have only one child.

**Puzzle.** This paper focuses on plural epistemic indefinites (henceforth, EIs); these are indefinite determiners or pronouns that convey information about a speaker’s epistemic state (i.e., they signal a speaker’s lack of knowledge or ignorance about the referents they are associated with), as described by Alonso-Ovalle and Menéndez-Benito (2003, 2010, 2013a). We observe that, in some languages, plural EIs behave differently from regular bare nouns with regard to clusivity. For example, in Spanish and French, plural EIs are interpreted exclusively (note that, under negation, a plural EI is odd or interpretable with wide scope); EIs in Spanish also lose their conventionalized ignorance in plural form (Alonso-Ovalle and Menéndez-Benito, 2011, 2013b).

- (2) a. ¿Has leído algunos libros? ‘Did you read ALGÚN books?’ 2+  
b. Si has leído algunos libros, levanta la mano. ‘If you have read ALGÚN books, raise your hand.’ 2+

Moreover, we observe that in German, plural EIs are interpreted inclusively; it has also been noted independently that EIs in German retain conventionalized ignorance in plural form.

- (3) a. Hast du irgendwelche Bücher? ‘Do you have IRGENDEIN books?’ 1+  
b. Wenn du irgendwelche Bücher hast, heb die Hand. ‘If you have IRGENDEIN books, raise your hand.’ 1+

What is the nature of this parameter? Is it linked to the ignorance parameter?

**Proposal.** We propose that the crosslinguistic interpretive variation exhibited by plural EIs is based on paucity, and argue that, while “plural” EIs in Spanish are paucal determiners, plural EIs in German are not. Plurals are [+additive] and [-atomic], but paucals are neither (Harbour, 2011, 2014). Following Dali and Mathieu (2021) and their two number projection proposal, we put forward the idea that plural EIs in German are generated in Num1, while paucal EIs in Spanish are generated in Num2, a higher number phrase.

Since Spanish *algunos* clearly does not contain atoms, as shown in (2), our proposal as to why EIs in some languages lose conventionalized ignorance in plural form necessarily differs from that of Alonso-Ovalle and Menéndez-Benito (2011, 2013b). On their view, plural EIs in Spanish contain atomic elements in addition to pluralities, giving rise to a contradiction (i.e., while plural noun phrases denote sets containing both atomic and plural individuals, plural morphology in the determiner imposes a proper plural requirement). In contrast, we propose that paucal EIs lose conventionalized ignorance because they generate a competing scalar implicature instead of the implicature triggered by the antisingleton constraint in the singular form.

## References

- Alonso-Ovalle, L. and Menéndez-Benito, P. (2003). Some epistemic indefinites. In Kadowaki, M. and Shigeto, K., editors, *Proceedings of the 33rd Annual Meeting of the North East Linguistic Society (NELS 33)*, pages 1–12, Amherst, MA. Graduate Linguistics Student Association.
- Alonso-Ovalle, L. and Menéndez-Benito, P. (2010). Modal indefinites. *Natural Language Semantics*, 18(1):1–31.
- Alonso-Ovalle, L. and Menéndez-Benito, P. (2011). Domain restrictions, modal implicatures and plurality: Spanish algunos. *Journal of Semantics*, 28(2):211–240.
- Alonso-Ovalle, L. and Menéndez-Benito, P. (2013a). Epistemic indefinites: are we ignorant about ignorance? In Aloni, M., Franke, M., and Roelofsen, F., editors, *Proceedings of the 19th Amsterdam Colloquium*, pages 35–42, Amsterdam. University of Amsterdam.
- Alonso-Ovalle, L. and Menéndez-Benito, P. (2013b). Plural epistemic indefinites. volume 28, pages 17–31. University of Massachusetts, Amherst, MA, Graduate Linguistic Student Association.
- Bale, A., Gagnon, M., and Khanjian, H. (2011). On the relationship between morphological and semantic markedness: The case of plural morphology. *Morphology*, 21:197–221.
- Dali, M. and Mathieu, E. (2021). *A theory of distributed number*. Amsterdam: John Benjamins.
- Farkas, D. and de Swart, H. (2010). The semantics and pragmatics of plurals. *Semantics and pragmatics*, 3:1–54.
- Grimm, S. (2012). Inverse number marking and individuation in Dagaare. In Massam, D., editor, *Count and mass across Languages*, pages 75–98. Oxford: Oxford University Press.
- Harbour, D. (2011). Valence and atomic number. *Linguistic Inquiry*, 42:561–594.
- Harbour, D. (2014). Paucity, abundance, and the theory of number. *Language*, 90:185–229.
- Hoeksema, J. (1983). Plurality and conjunction. In ter Meulen, A., editor, *Studies in Model-Theoretic Semantics*, pages 63–83. Dordrecht: Foris.
- Krifka, M. (1989). Nominal reference, temporal constitution and quantification. In Bartsch, R., van Benthem, J., and van Emde Boas, P., editors, *Semantics and contextual expression*, pages 75–111. Dordrecht: Springer.
- Martí, L. (2020). Inclusive plurals and the theory of number. *Linguistic Inquiry*, 51(1):37–74.
- Sauerland, U., Andersen, J., and Yatsuhiko, K. (2005). The plural is semantically unmarked. In Kepser, S. and Reis, M., editors, *Linguistic evidence: Empirical, theoretical and computational perspectives*, pages 413–433. Berlin: Mouton de Gruyter.
- Schwarzschild, R. (1996). *Pluralities*. Dordrecht: Kluwer.