On the prosody of French ambiguous multiple negative statements:
Supplementary materials

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1 Participant exclusion protocol

We needed to ensure that participants understood the task, and that the contexts were generally successful in guiding participant interpretation. All participants performed effectively at ceiling for the fillers and single-negative controls (Figure S1A–same as Figure 3 in the text). For the critical items (DN & NC), responses to the verification questions were coded as being $+/-$ contextually congruent, as well as $+/-$ NC interpretation. For example, a contextually congruent DN response in the DN condition would be +congruent, –NC, and a contextually incongruent NC response to the same item would be –congruent, +NC, as a contextually incongruent response to a DN item would imply that the participant accessed an NC interpretation of the sentence. For the DN & NC conditions, participants overall gave contextually congruent responses in 79.9% of trials. The influence of context was slightly higher in the NC condition (mean = 87.05%, t = 10.439, df = 27, p = 5.608e-11) than in the DN one (mean = 72.77%, t = 4.0083, df = 27, p = 0.0004329), but was significantly above chance in both cases. Participants were more likely to give contextually congruent responses for an NC item than a DN one (t = 2.1328, df = 45.298, p = 0.03839). This NC preference also appeared in an overall slight preference toward +NC responses ((+congruent) responses to NC items + (–congruent) responses to DN items) overall (mean NC = 57.14%, mean DN = 42.86%, t = 2.6212, df = 54, p = 0.01136, Figure 2B). For a more in-depth discussion of the contextual influence results and the effect of context on interpretation, see Dprez & Yeaton (2018).

Once we established that the contexts were overall successful in guiding interpretation, we wanted to include in our prosodic analysis only those participants who were susceptible of having a prosodic distinction between the two meanings, i.e.: the participants who readily accessed both interpretations. This was implemented by excluding from further analysis those participants who provided contextually incongruent responses to more than half of the items in either or both of the critical DN and NC conditions (n = 8). Once these participants were excluded, the productions of 20 participants (16F) remained included in the acoustic analysis. Participants overall NC (NC congruent + DN incongruent) and DN (DN congruent + NC incongruent) responses are shown in Figure S2, with a single vertical bar representing each participant. The vertical black lines delineate the participants included in the acoustic analysis (between the black lines) from those excluded.
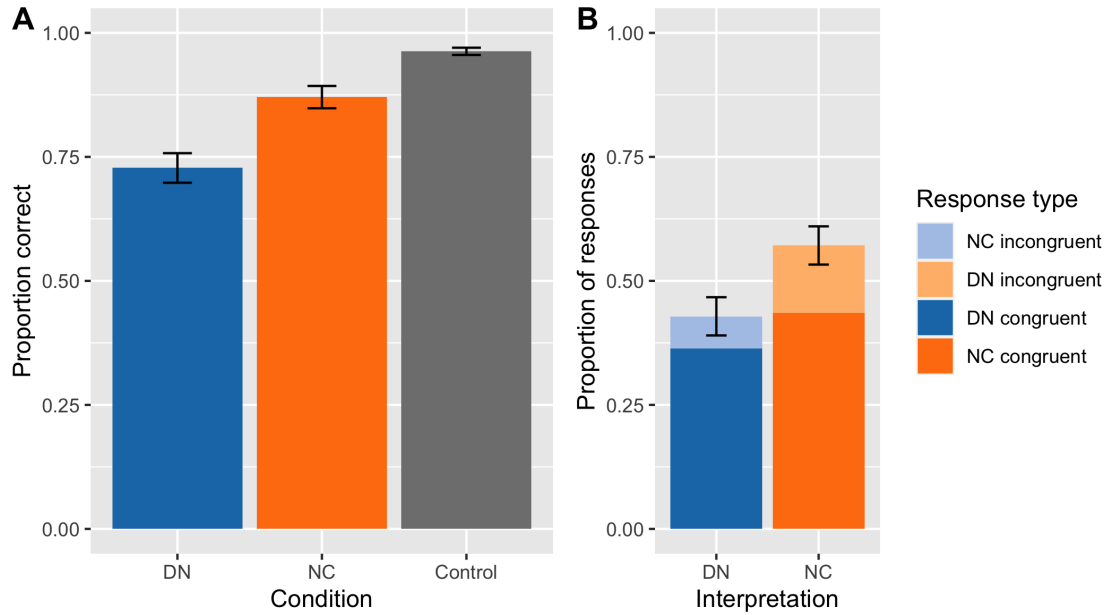
2   Additional figures

Figure S1: A (same as Figure 3 in the text): Percent context-matching responses by condition. Error bars represent 95% confidence interval. Participants performed at ceiling for the single negative controls and filler items. Overall context was very successful at guiding participant interpretation in the ambiguous DN and NC conditions, with contextually congruent responses significantly above chance in both conditions. B: Overall proportion of NC (NC congruent + DN incongruent) and DN (DN congruent + NC incongruent) responses to verification questions. There was an overall slight preference toward NC responses. Error bars represent 95% confidence interval.
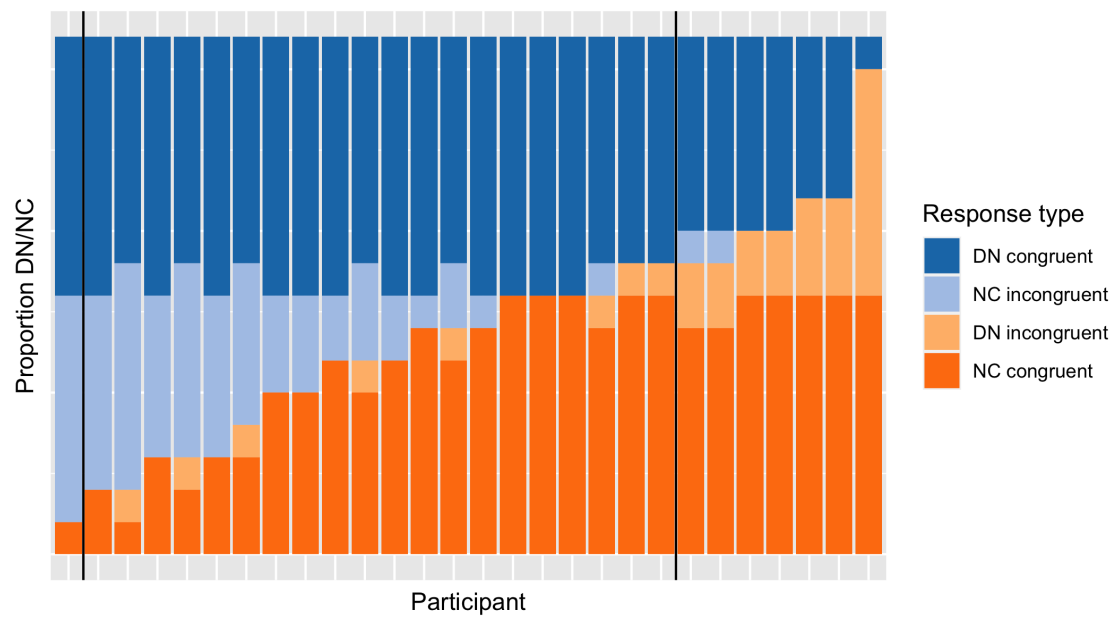
Figure S2: Overall DN and NC responses by participant. Participants (one vertical bar per participant) overall NC (NC congruent + DN incongruent) and DN (DN congruent + NC incongruent). The vertical black lines delineate the participants included in the acoustic analysis (between the black lines) from those excluded.
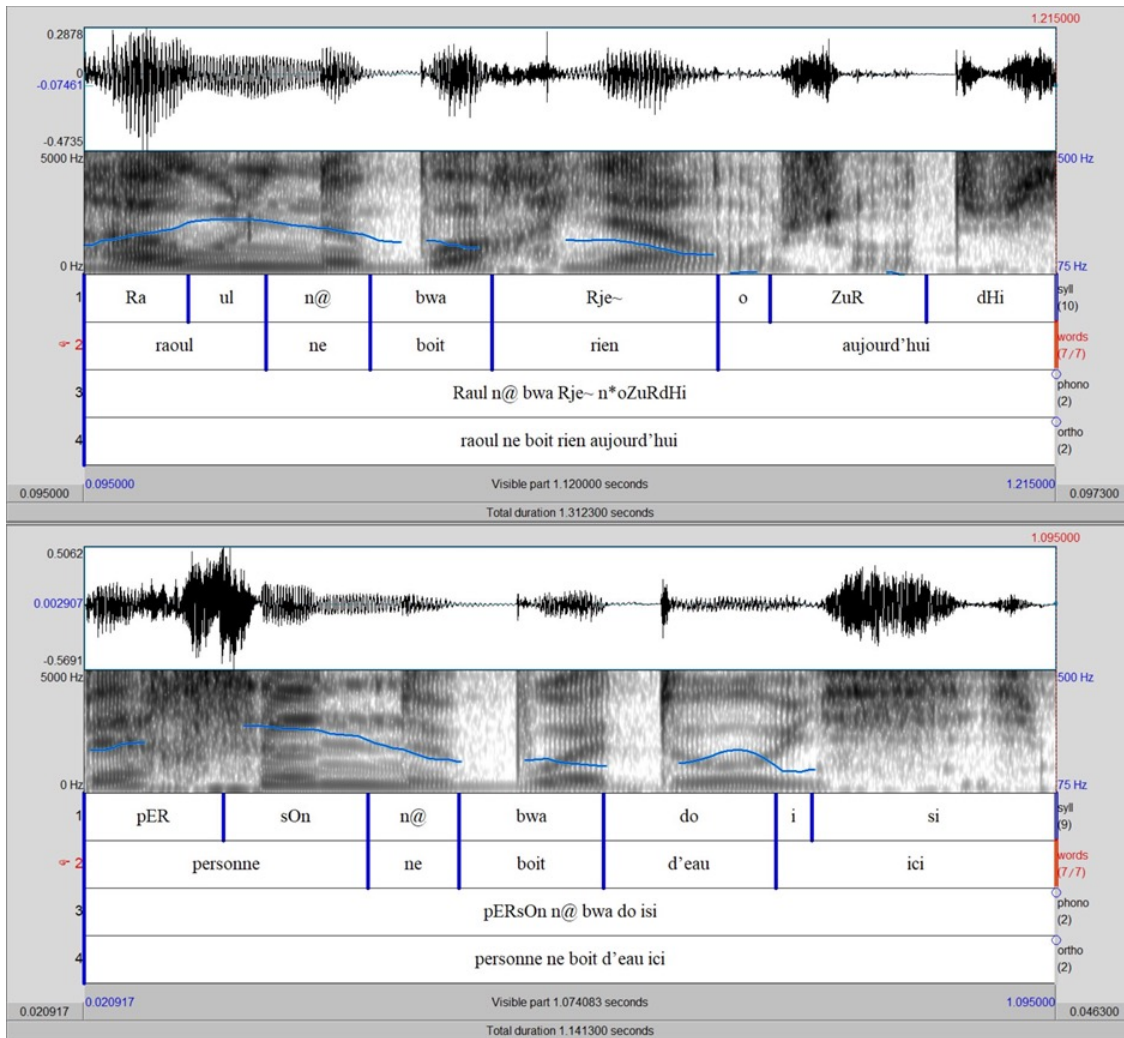
Figure S3: Praat images of representative NegOb (top) and NegSub (bottom) productions by the same speaker. Note the blue curve plotted over the spectrogram indicating F0.
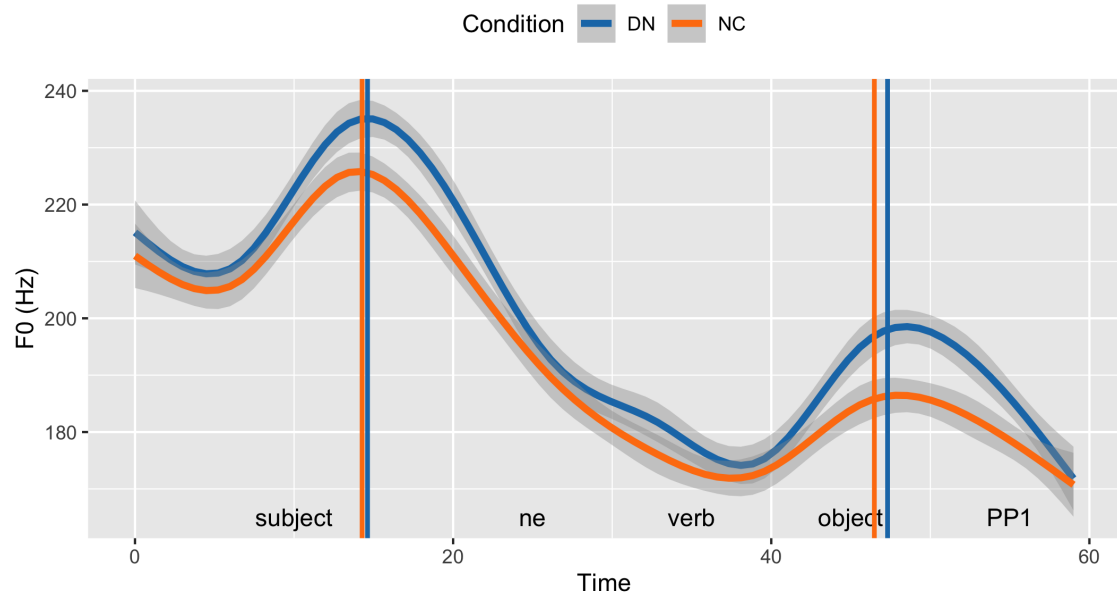
Figure S4: F0 contours for the DN and NC conditions. Point at which peak is reached for the two NCIs is shown by the vertical lines. These are not different for the second syllable of the subject NCI, but are different for the object NCI, with NC peaking before DN.