Corrective focus in conversational French
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While focus in English is marked rather consistently by increases in f0, duration and intensity [13], this is not as reliably true for French. Previous work has proposed a number of prosodic markers of focus in French, including an initial f0 rise at the beginning of the focused phrase, overall higher f0 during the focused phrase, reduced f0 range in post-focus material, and longer durations and pauses at the left or right edge(s) [1, 4, 6, 8, 16]. In addition, French is known to use syntactic strategies to convey focus [5]. The literature on focus in French seems to suggest that all of these are possible, and that the specific kind of marking will be expressed in highly variable ways in different utterances. Our previous work on left dislocations [14] showed that this kind of overt prosodic marking, while easy to observe in sentences read in an experimental setting, is minimal in dislocations produced spontaneously. We suspected that the same might be true for focus. The literature on focus in French is vast, but to the best of our knowledge, it is based exclusively on either constructed sentences read in a laboratory, e.g., [2, 11, 12], or strategically selected examples from spoken corpora e.g., [6, 7]. While both of these methods provide useful data, they do not demonstrate what speakers habitually do in conversation. This study aims to answer that question by the systematic examination of a large corpus of spoken Parisian French.

Method. We searched the Nijmegen Corpus of Casual French (NCCF, [15]) as exhaustively as possible for examples of focus. Although different kinds of prosodic focus have been proposed and recorded in lab settings (e.g. cleft, contrastive, parallelism [9]), only corrective focus is well-represented in the NCCF. A thorough search identified just 58 clear examples of corrective focus, of which two were not usable for acoustic analysis because they were whispered. The 56 usable examples were classified into two types: negative, where the speaker simply negated part of a preceding utterance (il est pas mignon ‘he is not cute’, NCCF conversation 27-11-07_2), and substitutive, where the speaker corrected a previous utterance by substituting a different word or phrase (non j’ai vingt-cinq ans ‘no I’m 25 years old’, 14-11-07_1). For each utterance, one or more words were identified as the focus phrase. In the examples above, the phrases pas mignon ‘not cute’ and vingt-cinq ans ‘25 years’ were classified as focused. Acoustic measurements were made in Praat [3] of the entire utterance, the focus phrase, and where applicable, post-focus material. We measured f0 during the focus phrase and post-focus words, if any. We examined the f0 trace to determine if there was an f0 rise on the first syllable of the first content word of the focus phrase. We measured the duration of the focus phrase, and compared it to the duration that would be predicted for it by Gendrot et al.’s database [10], which gives average durations for segments in context, calculated over a large spoken corpus of French. This comparison makes it possible to determine the speech rate of the focus phrase relative to a known standard, which in turn allows us to estimate whether the focus phrase was lengthened. This method of estimating lengthening was used because most of the focus phrases occur in short utterances, so it was not possible to compare speech rate of the focus phrase to other parts of the same utterance.

Results. Initial f0 rise. The f0 traces were examined in Praat to determine if initial high tones were present at the beginning of the focus phrases. These are defined as rises on the first syllable of the first content word. Initial rises were found in 30 of the 56 focus phrases. They were more common in negative corrections than substitutive ones (11 out of 15 negative, 19 out of 41 substitutive), a difference that is marginally significant (p=.05 in Fisher’s exact test). The initial rises tended to fall on the word pas ‘not’, which was initial in most negative corrections.

Higher f0 during focus phrase. There was no significant difference between the mean f0 for the focus phrase and the mean f0 for the entire utterance (t=0.1, ns), nor was there a difference between the maximum f0 in the focus phrase and the utterance as a whole (t=1.53, ns). While the prediction would be that the focus phrase would include the maximum f0 for the entire utterance, this was not always the case. Several notably high f0’s outside the focus phrase were in utterances with a humorous tone, so that the speaker used a fairly expanded pitch range throughout. In other cases, the f0 was not especially high outside the focus phrase, but there was very little variation within the focused material, meaning that the f0 range in the rest of the utterance was comparatively large.
Reduced f0 range during post-focus material. Only 10 of the 56 utterances included words following the focus phrases. The f0 range (maximum - minimum) of these post-focus words was compared to the f0 range of the focus phrases preceding them, and did not differ significantly (p=.6 in a paired t-test).

Lengthened durations during focus phrase. On average, the focus phrases were 20.0 ms longer than the durations predicted for them by [10]. The difference between the actual and predicted durations was not significant in a t-test (t=1.23). The difference was due entirely to the substitutive corrections: they had a mean difference of 28 ms, whereas for the negative corrections the difference between actual and predicted durations was 0 ms. However, the difference between the two types was not significant in a Mann-Whitney test (U=265, ns), used instead of a t-test because of the difference in size of the groups.

**Discussion.** This study is novel in making substantial acoustic measures of utterances with focus in free conversation, where the context for the focusing is shared by speaker and listener. Surprisingly, there is a virtually complete absence of the cues to focus that have been proposed in the literature, with the possible exception of initial rises in negative corrections. This result supports the notion that prosodic marking of structure is attenuated in conversational speech, compared to reading aloud. It suggests that speakers and listeners may rely heavily on shared, top-down knowledge in conversation in order to establish what information is being focused, whereas in reading or more formal speech the speaker is more likely to cue focus through acoustic prosodic means, in the absence of common ground with the listener.

**References**


