The role of discourse-level expectations in non-native speakers’ referential choices

Native-language processing is not only fast and incremental, but predictive. Listeners – child and adult – use information from various sources to create expectations about likely continuations (Altmann&Kamide 1999; BorovskyEtAl 2012). Recent work shows age-related individual differences in native speakers’ ability to engage in expectation-based processing (Federmeier 2007). Weakness in using cues like gender-marking to anticipate upcoming nouns were also observed in adult non-native speakers (Lew-Williams&Fernald 2010), spurring the proposal that non-native speakers struggle to actively predict during syntactic processing (KaanEtAl 2010). Here we consider discourse-level expectations: do non-native speakers fully utilize linguistic information known to help native speakers (KehlerEtAl 2008) create expectations about who will be mentioned next in a discourse?

A story-continuation task (adapted from RohdeEtAl 2006) was completed by 34 adult L2 learners of English (17 L1-Japanese, 17 L1-Korean) and 39 native speakers; they wrote continuations following a context sentence that described a transfer-of-possession event (see (1)). A 2x2 design varied verbal aspect (perfective/imperfective) in the context sentence and prompt type in the continuation (pronoun/free). Continuations were coded for (i) intended referent of the subject, i.e., SOURCE (of the context sentence; see (2)), GOAL (3), ambiguous, or other, and (ii) choice of referential expression for the subject (pronoun/name/other) in the free-prompt condition. Previous work shows next-mention expectations of native speakers are modulated by aspect: transfer-of-possession events yield more GOAL-continuations when marked by perfective than imperfective. This effect, observed in English (RohdeEtAl 2006), Japanese (Ueno&Kehler 2010) and Korean (KimEtAl 2013), has been tied to end-state salience: perfectives describe completed events, which are compatible with end-state focus, whereas imperfectives describe ongoing events with no salient end-state. Perfectives thus create expectations for continuations about completed events, and these in turn favor next-mentions of the GOAL-referent. Importantly, an independent truth-value judgment task (adapted from Gabriele2009) verified that L2ers possess the requisite knowledge of grammatical aspect in English (Fig.1).

Biases for next-mention in the story-continuation task (Fig.2) showed an aspect-by-group interaction ($F_{1}(1,70)=4.6$, $p<0.01$): L2ers showed weaker influence of aspect on the proportion of SOURCE/GOAL reference (for both prompt-types) than L1ers, suggesting L2ers made less use of aspect to generate expectations about next-mentions, despite the known effect of this bias in their L1. Moreover, L2ers showed an overall GOAL-bias (main effect of group on %SOURCE; $F_{1}(1,70)=8.0$, $p<.01$), suggesting recency plays a stronger role in L2 than L1 processing (cf. KehlerEtAl 2011, for child L1 processing). Like L1ers, however, L2ers produced more pronouns for SOURCE than GOAL referents (Fig.3; main effect of referent on %Pronoun: $F_{1}(1,35)=77.09$, $p<0.001$; no interactions with group or aspect), indicating effective use of appropriate cues for referential-form choice, once a referent had been decided upon. The difference between L1 and L2 referential processing may thus lie not in these speakers’ differential sensitivity to relevant cues, but in the point at which they make use of them: native speakers use them proactively to create expectations about next mention, while non-native speakers predominantly rely on recency and cues relevant to form, deploying that knowledge only at the point that a referential expression is required.

(word count: 500)
(1) Experimental context sentence: Patrick gave/was giving a towel to Ron. (He) __
(2) SOURCE-continuation for (1), i.e., He = Patrick: He made sure to give him a dry one.
(3) GOAL-continuation for (1), i.e., He = Ron: He took it and said “Thank you.”

References