One of the main factors driving the distribution of information in the discourse is information status; more specifically, whether information is new or old has been shown to affect where in the utterance information appears, and there is a widely recognized tendency amongst languages to place old information before new (Arnold et al. 2013 offers a review of these findings). Although English is considered to be a relatively fixed word order language, non-canonical constructions such as passives, inversions and clefts offer alternative ways to organize information in an utterance. Prince (1981) noted that these various constructions in English seem to strongly disfavor the appearance of old information in sentence-initial position, in some sort of “syntactic conspiracy”. One example of such conspiracy can be found in the English Existential (e.g., *There’s a typo in this abstract*), where new information is placed in a post-verbal position. Indeed, the Existential is only felicitous when it introduces information that is new to the hearer (Prince, 1992), leading researchers such as Breivik (1981) to propose that the Existential has become a “fixed pragmatic formula” with the purpose of alerting the listener to the fact that new information will be uttered. In a visual-world eye-tracking study, we investigated if hearers do generate predictions about the status of upcoming information during real-time language processing (see also Kaiser & Trueswell 2004 on Finnish). Can hearers anticipate that new information will be mentioned as soon as they encounter the [*there + be*] construction, even before they have heard the following noun?

Thirty-three monolingual English speakers participated in our visual-world eye tracking experiment. They heard sentences that were either Existentials or control items (see Figure 1) while viewing images depicting the sentences (see Figure 2). On targets, the first sentence introduced two out of the three pictured characters (e.g., nurse and doctor). The second sentence was either an Existential (ex.1 in Figure 1) or a control canonical sentence initiated by a temporal expression (ex.2 in Figure 1). Crucially, we also included fillers depicting images with differing numbers of characters, and not all of them were always mentioned in the auditory stimuli. The main role of the fillers was to avoid any biases regarding the ratio of pictures mentioned/pictures depicted. We predicted that, if listeners do take the Existential to be an indicator of newness, they should shift their attention (eye gaze) to the only unmentioned character (in the example, the patient) even before they had enough phonological input to start processing the noun phrase (“a sad patient”). On the other hand, the control condition poses no constraints on the information status of following information, thus we do not expect hearers to exhibit the same tendencies on those trials.

During a 400ms time window that started at the onset of the second sentence and ended before the postposed NP onset, the eye-tracking data shows participants are significantly more likely to look at the unmentioned entity in the Existential condition than in the Control (p<0.05, see figure 3). This indicates that participants were reliably able to predict the status of upcoming information when listening to the Existential. Overall, these findings suggest that the English Existential offers a strong enough cue to allow listeners to generate expectations about the status of upcoming structure.
Figure 1. Example of Target and Control Sentence Items

Figure 2. Example of Picture Item

Figure 3. Proportion of trials with looks to new entity over time (M Control=7.19 and M Target=16.65)

Figure 1.

(1) A nurse was discussing new procedures with the doctor. There was a sad patient with a broken leg in the reception area, waiting for her turn. [target]

(2) A nurse was discussing new procedures with the doctor. That day a sad patient with a broken leg was in the reception area, waiting for her turn. [control]

Figure 2. Figure 3.

References


