Alignment in Syntactic Blending

Elizabeth Coppock

Syntactic blends can be characterized as speech errors "in which the message being communicated is constant but its expression is divergent", as in the words of Garrett (1980). Garrett was referring to examples like the one in (1), for which he lists the two targets listed under (a) and (b):

(1) Ed Borkowski's not letting the pressure on here.

- a. ... not letting the pressure up
- b. ... keeping the pressure on

Examples like these illustrate the fact that "the general principle of competition between planning structures is obviously capable of being thrust into a causal role at many points," in the explanation for speech error phenomena. Crucially, "the problem," as Garrett says, "is to find a suitably constrained range of such claims" (p. 206). The aim of my paper is to do exactly that, using a large corpus of syntactic blends published by Cohen (1987).

The proposal of the paper is grounded in the intuition that a syntactic blend is formed on the basis of correspondences between subparts of plans. For example, in the blend *at some detail*, composed of *in some detail* and *at some length*, it appears that *in* and *at* stand in a correspondence relation such that they compete for a single slot. Uttering *at* therefore precludes uttering *in*. In this sense, *in* and *at* "correspond" or are "aligned", as are *length* and *detail*. I propose a model of syntactic blending consisting of two parts: *alignment* and *selection*. The process of alignment creates a sequence of slots, where each slot corresponds to a lexical item (or perhaps a short sequence of words) from one or both of the sources. Selection chooses exactly one element from each slot.

I will argue further that this alignment is sensitive to syntax, by showing evidence that syntactic constraints are operative in determining the alignment between the two sources. Let us call this the "Syntactic Alignment Hypothesis": *Words in syntactically parallel positions align*. In particular, I will argue that syntactically parallel words align with each other and therefore compete for selection. Take the following example:

- (2) They should lend a little hand.
 - a. They should lend a little help.
 - b. They should give a hand.

Here, *lend* is in a parallel syntactic position to *give*, as the main verb of the sentence, and *hand* and *help* are in parallel syntactic positions as the head noun of the direct object of the main verb.

It can be seen that *lend* and *give* are indeed aligned, as we predict; only one of these two words is realized in the blend, in the corresponding syntactic position in the blend.

In fact, example (2) could be accounted for just without any reference to headedness or constituency, with only a constraint that words of the same part of speech align. Let us call this weaker hypothesis the "Weak Syntactic Alignment Hypothesis": *Words of the same part of speech align*. Although it would ultimately be ideal to identify a role for other aspects of syntax such as constituency, embedding, and headedness, the results presented in my paper support only the weaker hypothesis.

Fay (1982) has already shown that, to a limited extent, syntactic category plays a role in blend structure, in a limited class of blends he calls "substitution" blends, which can be described as the substitution of a word in one target for a word in another. In all of the (unambiguously) substitution blends, the substituted word is always of the same part of speech category of the word it substitutes for. On the other hand, Fay (1982) also argues that syntax does not play a role in determining where the splice will occur in what he calls "splice" blends: blends that can be described as the concatenation of an initial sequence from one target onto a final sequence from another target. To argue that syntax does not play a role in determining the point at which the "splice" occurs, Fay (1982) states that "In only 8 of the 19 cases [of splice blends] did a perfect structural parallel [between the sources] exist" (p. 728). The lack of a perfect structural parallel between the sources merely makes it harder to specify the predictions of a syntactic alignment hypothesis, but this does not provide evidence against such a hypothesis. This conclusion stems from methodological limitations, and way of overcoming them is proposed in the paper.

By aligning the target strings with the output string, as is shown in the paper, it is possible to determine in some cases when a pair of target words shares a slot or not. Combining this with an estimate of syntactic similarity between words obtained from an automatic part-of-speech tagger, words that are syntactically similar are more likely to align with one another than words that are not. This is a "soft" constraint; two identical lexical items are also more likely to align with one another than distinct lexical items. Crucially, this fact is true in all blends, including ones that can only be analyzed as splices.

The existence of syntactic constraints in "splice" blends calls into question the theoretical usefulness of the classification of blends into splice blends and substitution blends. The existence of syntactic and lexical constraints on alignment also supports the alignment/selection model in general, and begins to constrain the range of claims regarding competing plans for production.

References

Bierwisch, M. (1982). Linguistics and language error. In Cutler (1982).

- Cohen, G. L. (1987). Syntactic Blends in English parole. Verlag Peter Lang.
- Cutler, A., editor (1982). *Slips of the Tongue and Language Production*. Walter de Gruyter/Mouton, Amsterdam.

Fay, D. (1982). Substitutions and splices: a study of sentence blends. In Cutler (1982).

Garrett, M. F. (1980). Levels of processing in sentence production. In Butterworth, B. L., editor, *Language production, Volume I: Speech and Talk.* Academic Press, London.