

WG1: Idiom Licensing in Non-restrictive Relative Clauses (NRCs)

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Introduction

Commonplace observations about syntactically flexible idioms (SFIs)

- An SFI can be split across a main clause and a restrictive relative clause (RRC):
(1) The **strings** _[RRC] that I **pulled** for you] will get you that job.
- An SFI *cannot* be split across a main clause and a *non*-restrictive relative clause (NRC):
(2) *The **strings**, _[NRC] which I hereby promise I will **pull** for you], will get you that job.

Note that (2) is well-formed under a *literal* reading, in which case it has a 'totality' interpretation (I promise to pull *all* the aforementioned strings), and the NRC has an independent illocutionary force (it is a promise). These properties guarantee that it is a genuine NRC (rather than a parenthetical RRC, for example).

Standard explanation for the above observations

Assumption 1. The parts of an SFI have to be adjacent at some level of the *syntactic* derivation.

Assumption 2. RRCs and NRCs differ syntactically:

- RRCs are syntactically integrated. → The adjacency requirement of an SFI can be met at some level of the derivation.
- NRCs are syntactically *unintegrated*. → The adjacency requirement of an SFIs *cannot* be met (see, e.g. Fabb 1990, Espinal 1991). Hence (2) is disallowed.

However, examples like (3) are a challenge to accounts of this sort:

- (3) The **strings** that were **pulled** for you before, _[NRC] which I hereby promise I will **pull** for you again], will get you that job.

The second instance of **pull** is not adjacent to an instance of **strings** at any syntactic level, so (3) should be as bad as (2), but it is fully acceptable.

Our Goal

To provide an alternative account of these facts based on the account of SFIs in Bargmann (2014), which rejects **Assumption 1**, and an account of NRCs like that in Arnold (2007), which treats NRCs as syntactically integrated (rejecting **Assumption 2**). The semantic architecture is a version of Discourse Representation Theory (DRT, e.g. Kamp & Reyle 1993).

A Semantic Account of SFIs (*pull strings*)

Bargmann (2014) analyses SFIs as syntactically regular and semantically compositional. The SFI *pull strings*, for example, is taken to be composed of two separate word-level lexical entries: idiomatic *pull* and idiomatic *strings*.

These entries are subject to specific co-occurrence constraints at the Semantic Representation (SEM), where each lexical entry has a unique SEM-value, on the basis of which it can be clearly identified. The lexical entries of idiomatic *pull* and idiomatic *strings* look as follows:

A. Idiomatic *pull*: SYN = [_V *pull*]. SEM = *Pull_i*. Constraint: Idiomatic *pull* is licensed iff, after resolving anaphoric dependencies, the second argument of *Pull_i* is also an argument of idiomatic *strings*, i.e. *Strings_i*.

B. Idiomatic *strings*: SYN = [_N *strings*]. SEM = *Strings_i*. Constraint: Idiomatic *strings* is licensed iff, after resolving anaphoric dependencies, the argument of *Strings_i* is also the second argument of idiomatic *pull*, i.e. *Pull_i*.

Neither lexical entry refers to the syntax (SYN) of the other, and they combine according to standard syntactic rules. However, both entries contain a constraint on the semantic representation of the sentence containing them. These constraints ensure that when one part of the idiom is present in a well-formed discourse, then so is the other.

NB: The constraints are slightly simplified: What idiomatic *pull* requires is not the plural form of a particular lexeme, but a semantic predicate over a plurality. Plural morphology provides this, but so do expressions like *a string or two* and *string after string*, see Bargmann (2015).

A Syntactically-integrated Account of NRCs

Arnold (2007), in common with others such as Potts (2005), analyses NRCs as fully integrated syntactically (just like RRCs). Semantically, they are analysed as independent clauses, with wide scope.

Combining Bargmann (2014) with Arnold (2007): RRCs

We assume that semantic composition normally involves two features:

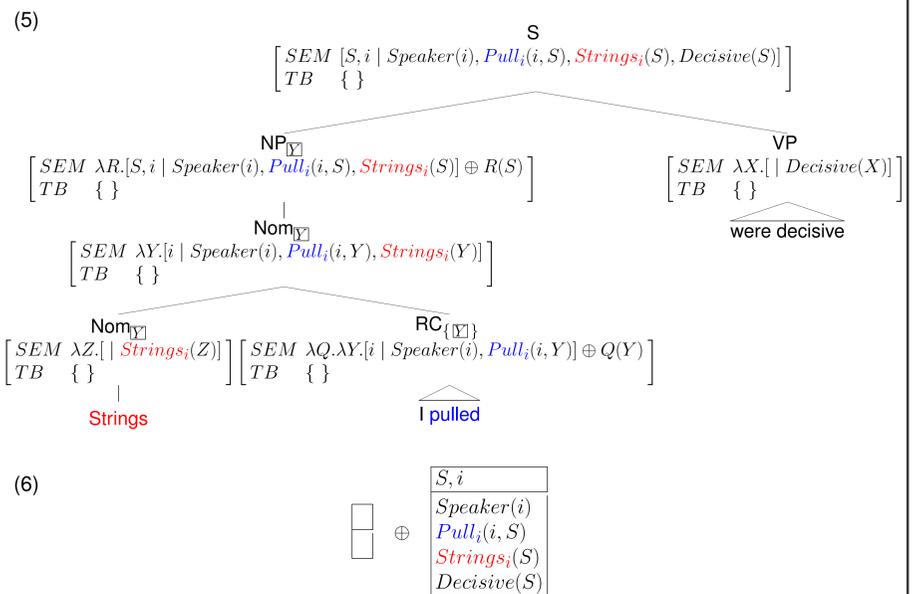
- SEM (Semantic Representation) — the SEM of a mother is normally derived from the SEMs of the syntactic daughters by function application in the usual way.
- TB ('Top Box') — the TB of a mother is the disjoint union of the TBs of the daughters.

Discourse update (integrating the semantics of a main clause with the preceding discourse) involves combining the SEM of the clause and each element of the clause's TB with the preceding discourse — so that elements of TB are treated as independent clauses. Formally, the TB feature can be thought of as a way of implementing the intuition behind Potts' idea of a Conventional Implicature dimension.

This provides an analysis of (4), which is a simplification of (1), as in (5). Semantic composition is entirely routine, the value of the TB feature is the empty set everywhere. Notice that when the content of (5) is integrated into the preceding discourse as in (6), the conditions on the idiom *pull strings* are met (here, for simplicity, we assume the preceding discourse is empty).

SFI with RRC

- (4) **Strings** (that) I **pulled** were decisive.



Combining Bargmann (2014) with Arnold (2007): NRCs

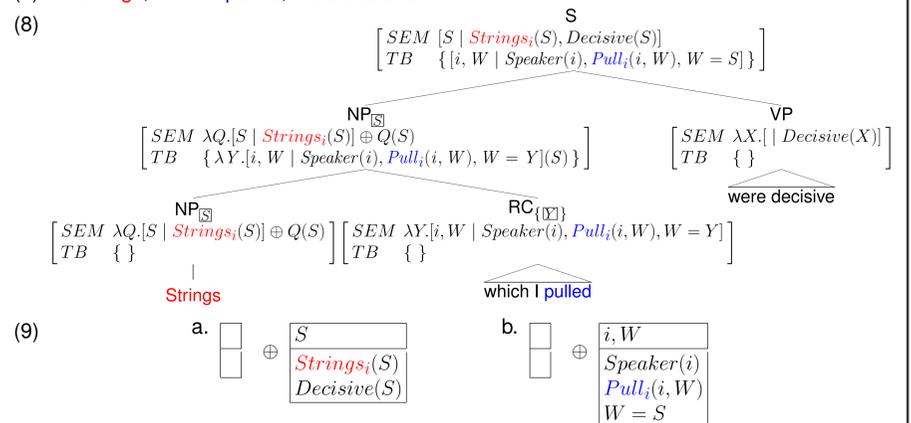
Treating NRCs as independent clauses requires a modification to the process of semantic composition. The SEM of the NRC daughter is not composed with that of the head NP. Instead, the SEM of the head NP becomes the SEM of the mother, and the SEM of the NRC becomes an element of the mother's TB value (more precisely, the SEM of the NRC applied to the index of the NP becomes an element of the mother's TB).

The representation of (7), a simplification of (2), is given in (8). In contrast to (5), the NRC is adjoined to NP, rather than Nom, and the relative pronoun is treated as a normal pronoun in that it introduces a novel discourse referent. The crucial difference is that the content of the NRC is contributed as an element of TB, rather than SEM, and percolated to the top.

The effect of this is that when discourse update occurs, as in (9), the NRC content and the main clause content are treated independently, either as in (9a) or (9b) — depending on whether we first update the TB content, or the SEM content. In neither case are the conditions on idiomatic *pull strings* met.

SFI with NRC

- (7) ***Strings**, which I **pulled**, were decisive.

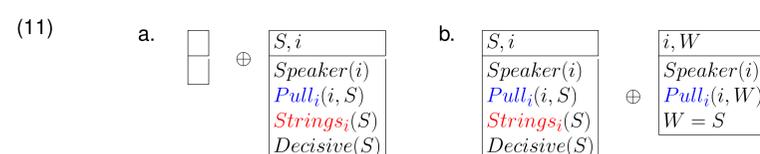


Handling the Problem Case in (3)

Now consider (10), which is a simplification of the problematic case in (3):

- (10) The **strings** that I **pulled**, which I will always **pull**, were decisive.

This has a derivation where the constraints on idiomatic interpretation can be met — if the discourse is updated with the main clause content first, as in (11a), then the occurrence of *Pull_i* in the NRC is licensed when the discourse is updated further, as in (11b).



Notice that this would also be what happens with an example involving normal anaphora:

- (12) The **strings** that I **pulled** were decisive. I will always **pull** them.