Lexical & lexical integrity

- Lexical integrity principle: basic version simply ensures syntax is blind to morphology:

  Morphologically complete words are leaves of the c-structure tree and each leaf corresponds to one and only one c-structure node. (Bresnan 2001:99)

- However, a stronger version is often assumed, such that there is a one-to-one mapping between ‘words’ and phrase-structure tree terminal nodes, what Ackerman et al. call the Principle of Unary Expression (PUE):

  In syntax, a lexe is uniformly expressed as a single morphologically integrated and syntactically atomic word form. (Ackerman et al. 2014:326)

Lexical Functional Grammar (LFG)

- Constraint-based lexicalist theory.
- Declarative, not transformational sentences must simultaneously satisfy constraints at multiple levels of representation.
- Separates superficial syntactic information (linear order, constituency) from more abstract, functional information.
- The former is represented as a phrase-structure tree, called a c-structure.
- The latter is represented as an attribute-value matrix called an f-structure.
- They are connected by a function, φ.

- Either way, MWEs pose a challenge to the spirit of lexicalism: information about a single expression ⟨lexeme/listeme/…⟩ is spread across multiple lexical items.

Lexical ambiguity

Problems

Formal

- What about non-decomposable idioms?
  - Idiomatic mirroring (Lichte & Kallmeyer 2016)?
  - Arbitrary choice for host of meaning.
  - Proliferation of homophones.
  - Instead of having to expand the lexicon by as many entries as there are MWEs, we have to expand it by as many entries as there are words in MWEs.

Empirical

- Psycholinguistic findings suggest en bloc insertion rather than word-by-word processing; idiomatic meanings are processed faster and in preference to literal ones (e.g. Swinney & Cutler 1979, Estill & Kemper 1982, etc.).

TAG-LFG

- Proposal: Use a Tree Adjoining Grammar as the c-structure component of LFG.

- MWEs are represented as multiply anchored elementary trees (Abbeillé 1995):
  - They are therefore single lexical items, just like single-word expressions.

Expressive power: TAG is mildly context sensitive, whereas LFG c-structure is context free. But f-structure and functional uncertainty push LFG as a whole outside the mildly context-sensitive space (Berwick 1982), so there is no increase in complexity to the whole system.

TAG-LFG graphs:

- As many meaning constructors (Dalrymple 1999; Asudeh 2012) as there are decomposable elements.
- Decomposable idioms can be stored in a single place, but still retain their ability to be internally modified, and their syntactic flexibility gets the usual TAG treatment.