

# WG1: The Syntactic Flexibility of Non-decomposable Idioms

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## Non-decomposable Idioms in English

**Examples:** *kick the bucket* ('die'), *saw logs* ('snore')

**Semantics:** non-decomposable because no internal modification, no determiner variation, no pronominalization

**Syntax:** No Passive:

\* Logs have been sawed.

No Topicalization:

\* (It is) logs she was sawing all night.

\* The bucket hasn't been kicked yet. \* The bucket, she has already kicked.

**Hypothesis:** Syntactic fixedness and non-decomposability are mutually dependent. non-decomposable idiom = phrasal lexical entry, i.e. monolithic bloc

**Problems:**

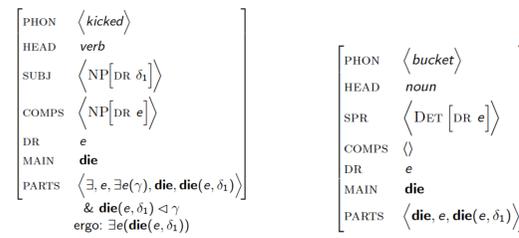
- Syntactic structure as for regular V NP combinations
- Full morphological flexibility of the verb
- Syntactic flexibility: Modifiers possible: *They kicked the proverbial/social bucket.*

**Solution in Kay and Sag (ms.):**

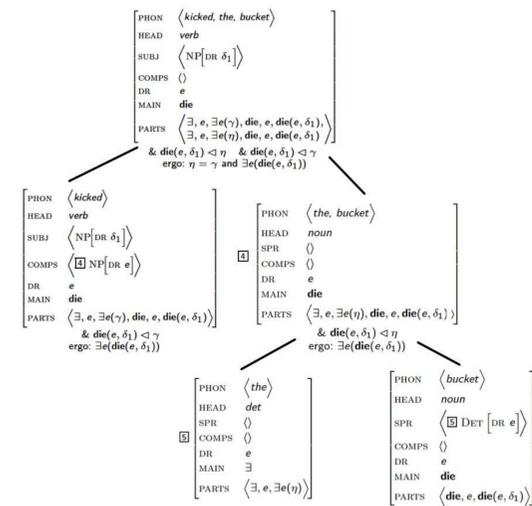
- Lexical encoding of non-decomposable, syntactically regular idioms
- All semantics in the syntactic head, other words are semantically empty
- Ban of syntactic flexibility by special verb-class

## Analysis in HPSG + LRS

- Idiomatic lexical entries



- Regular syntactic combination:



## Non-decomposable Idioms in German

**Examples:** *den Löffel abgeben* (the spoon pass.on, 'die'), *ins Gras beißen* (in.the gras bite, 'snore')

**Semantics:** non-decomposable because no internal modification, no determiner variation, no pronominalization

**Syntax:** Passive:

Hier wurde der Löffel abgegeben. Den Löffel hat Alex abgegeben. Alex gab den Löffel ab.

Here was the spoon passed.on    The spoon has Alex passed.on    Alex passed the spoon on

Topicalization/Fronting:

Verb second

**Observation:** Syntactic fixedness and non-decomposability are **not** mutually dependent. non-decomposable idiom ≠ phrasal lexical entry

## Conditions on Constructions

**German**

- Verb second: obligatory in root clauses, no semantic/pragmatic constraints on the verb
- Fronting: obligatory in root clauses
- Passive: impersonal passive of intransitive verbs, "demoting" the subject:

Gestorben wird immer (Passive)

died is always.

'There is always someone dying.'

⇒ Occurrence of idiom parts of non-decomposable idioms expected.

**English**

- Topicalization: strong referential conditions (no expletives etc)
- Passive: no impersonal passive of intransitive verbs, passive subjects are topics (Kuno & Takami 1994), "promoting" the direct object

⇒ The difference in syntactic flexibility between German and English follows from language-specific constraints on constructions rather than from differences in the encoding of idioms.

## Deriving the Syntactic Properties of Non-decomposable Idioms

- The regular syntactic form and inflection and the possibility of adjectival modification follow from the free syntactic combination of individual words.
- The impossibility of internal modification follows from the index identity between *kick* and *bucket*.
- **English:** Impossibility of passive  
Condition (inspired by Massam 1990): Subjects of passive verbs must not have the same index (DR-value) as the verb.
- **German:** Considered syntactic operations do not impose relevant constraints on the semantic properties of idiom components.

## Consequences for a Theory of Idioms

Linguistic Representation of Idioms:

- Syntactically irregular, non-decomposable idioms like *by and large*:
  - phrasal lexical entry
  - monolithic semantics
- Syntactically regular, non-decomposable idioms like *kick the bucket*:
  - syntactically free combination of word-level lexical entries
  - semantically redundant contribution of some of the words
- Syntactically regular, decomposable idioms like *pull strings*:
  - syntactically free combinations of word-level lexical entries
  - semantically non-redundant contribution of the words

## Background: Lexical Resource Semantics (LRS)

Lexical Resource Semantics (LRS, Richter & Sailer 2004)

- Subkind of underspecified semantics (Reyle 1993, Pinkal 1995, Copestake et al 2005)
- Integrated with a surface-oriented syntax (HPSG, Pollard & Sag 1994)
- Underlying Idea:  
Words and phrases constrain the semantic representation of their utterance by specifying what must occur in the representation and where.
- Redundant Marking:  
Several words can make a partly or wholly identical contribution: negative concord (Richter & Sailer 2006), cognate objects (Sailer 2010).

## Analysis of *kick the bucket* in LRS

- Individual lexical entry for each word
- Special entries for idiomatic *kick* and *bucket*; usual entry for (weak definite) *the*.

word	semantic contributions	index
<i>Alex</i>	<b>alex</b>	<b>alex</b>
<i>kicked</i>	$\exists, e, \exists e(\gamma), \mathbf{die}, \mathbf{die}(e, \delta_1)$	$e$
<i>the</i>	$\exists, e, \exists e(\eta)$	$e$
<i>bucket</i>	$e, \mathbf{die}, \mathbf{die}(e, \delta_1)$	$e$

- Redundancy:  $\gamma = \eta = \mathbf{die}(e, \delta_1)$

## Insights from a Multi-lingual Perspective

- Hypothesis: Analogous encoding of MWEs in various languages, depending on syntactic regularity and semantic decomposability
- Language-specific variation in syntactic flexibility should be linked to language-specific constraints on constructions, such as passive and fronting.
- We expect more findings in languages with more morphology and other word order processes than English.
  - French: Passive possible for non-decomposable idioms (Abeillé 1994, Laporte poster), but probably constraints on passive distinct from those of English and German
  - Estonian: Passive always possible, case-marked aspectual change always possible (Muischnek & Kaalep 2010)

Cross-linguistic variation of syntactic flexibility of MWEs as diagnostics for the semantic/pragmatic properties of constructions.