The Meaning of "Meaningless" Idiom Parts

Manfred Sailer based on joint work with Sascha Bargmann

Goethe University, Frankfurt a.M.

January 20, 2017

Overview

- Introduction
- 2 Problem
 - Motivating meaninglessness
 - Intuitive problems with "meaninglessness"
- Passive
 - German passive
 - English passive
- 4 Fronting
 - Fronting to Vorfeld in German
 - Topicalization in English
- 6 Analysis
- 6 Conclusion

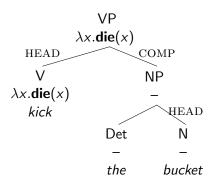
Introduction

- Trend: Lexical analysis of idioms: all idioms that look syntactically "normal" are built regular syntactic processes. (Everaert, 2010; Kay & Sag, ms.; Bargmann & Sailer, 2016; Corver et al., 2016)
- Challenges:
 - Collocational challenge: How can we ensure that the idiom parts co-occur?
 - Compositional challenge: How can be get the idiomatic reading?
 - ▶ Flexibility challenge: How can we capture the varying degrees of flexibility (flexible, decomposable idioms vs. fixed, non-decomposable idioms in Nunberg et al. (1994))

Compositional challenge

For non-decomposable idioms: kick the bucket 'die':

- The highest (lexical) syntactic head of the idiom has all the meaning of the idiom.
- The other words are "meaningless"



4 / 65

Program for today

- Possible ways of interpreting "meaninglessness"
- Different types of "meaningless" items (expletives, inherent reflexives, idiom parts)
- Example constructions (passive, fronting in German and English)
- Illustrate a "meaningful" analysis of "meaningless" elements

Overview

- Introduction
- Problem
 - Motivating meaninglessness
 - Intuitive problems with "meaninglessness"
- Passive
 - German passive
 - English passive
- Fronting
 - Fronting to Vorfeld in German
 - Topicalization in English
- 6 Analysis
- **6** Conclusion

6 / 65

Overview

- Introduction
- Problem
 - Motivating meaninglessness
 - Intuitive problems with "meaninglessness"
- Passive
 - German passive
 - English passive
- Fronting
 - Fronting to Vorfeld in German
 - Topicalization in English
- 6 Analysis
- 6 Conclusion

Idiom analysis: From fully phrasal to as lexical as possible

syntactically irregular	syn. regular	syn. regular
	sem. non-decomposable	sem. decomposable
trip the light fantastic	kick the bucket	spill the beans
kingdom come	saw logs	pull strings

- All idioms are inserted en bloc (Chafe, 1968; Chomsky, 1981)
- Syntactically irregular or fixed idioms are inserted en bloc (Gazdar et al., 1985; Wasow et al., 1983; Nunberg et al., 1994)
- Only syntactically irregular idioms are inserted en bloc (Kay et al., ms.; Bargmann & Sailer, 2016; Corver et al., 2016)

Decomposable vs. non-decomposable

An idiom is decomposable if and only if an idiomatic reading of parts of the idiom is accessible for some semantic operation (Nunberg et al., 1994). For example: *internal modification* (Ernst, 1981)

- spill the beans 'reveal a secret'
 Alex spilled the well-kept beans. (decomposable)
- (2) kick the bucket 'die'/'stop living'/'finish dying' # Alex kicked the fatal/ peaceful/ long/ ... bucket. (non-decomposable)

 $Decomposable \neq paraphrasable \neq transparent$

Arguments in favor of a lexical analysis of non-decomposable idioms

- Ordinary syntactic structure and inflectional morphology inside non-decomposable idioms (Kay et al., ms.)
- Insertion of modifers (Ernst, 1981; Kay et al., ms.)
 - (3) a. They kicked the literal/metaphoric bucket.
 - b. He really kicked the social bucket at the party last night.
- Fronting of idiom parts in Dutch and German (Schenk, 1995; Nunberg et al., 1994)
- Passivization of idiom parts in French and German (Abeillé, 1995; Bargmann & Sailer, 2016)

The more an idiom looks formally like an ordinary, freely generated phrase, the more plausible is a lexical analysis. Depending on the framework, a lexical analysis might even be required syntactically.

Answers to the collocational challenge

- The words *kick*, *bucket*, *spill*, *beans*, . . . are ambiguous between a "free" lexeme and an "idiomatically bound" lexeme.
- Each lexical element has a unique lexeme-identifier among its features, LEXICAL-IDENTIFIER (LID) in Sag (2010), but similar idea already in Krenn & Erbach (1994) and "pseudo- θ -roles".
- A selector can select for the LID value. idiomatic kick: [SUBCAT $\langle NP, NP[LID \ bucket-id] \rangle$]
- How to exclude the free occurrence of idiomatic non-heads?
 - (4) *Alex told me the $\begin{bmatrix} \text{LID } \textit{beans-id} \end{bmatrix}$.
 - ► Their LID values are not compatible with the selection requirement of any other selector (Krenn & Erbach, 1994; Sag, 2010)
 - ► Collocation module requiring co-occurrence with a selector (Sailer, 2004; Soehn, 2006)

Answers to the compositional challenge

- Decomposable idioms: parts make identifiable meaning contributions (Wasow et al., 1983)
- Non-decomposable idioms: The idiomatic meaning is all in the highest lexical selector.
 - ▶ other elements have no meaning (Everaert, 2010; Kay et al., ms.)
 - ▶ other elements contribute an identity function (Lichte & Kallmeyer, 2016)
 - other elements redundantly contribute (parts of) the idiomatic meaning Bargmann & Sailer (2016)
 - doesn't matter, because meaning is assigned to the phase which contains all idiom parts (Corver et al., 2016)?
- Connection to the flexibilty challenge:
 Semantic/pragmatic constraints on syntactic operations forbidding constituents with empty/ identity-denoting/ redundant semantics.

Three theories of meaninglessness

- T1 "meaningless" elements have no semantics
- T2 "meaningless" elements denote an identity function. $[\![\mathbf{Id}\text{-kick}]\!](x) = x$, if $x = [\![\mathbf{kick}\text{-die}]\!]$ and undefined else.
- T3 "meaningless" elements contribute bits of logical form that are also contributed by other elements in the sentence.

	Alex kicked the bucket.	It rained.
T1:	$\exists e(kick\text{-}die(e,alex))$	$\exists e(rain(e))$
	bucket: —	it: —
T2:	$\exists e(Id\text{-}kick(kick\text{-}die)(e)(alex)))$	$\exists e(Id\text{-rain}(rain)(e))$
	bucket: Id-kick	it: Id-rain
T3:	$\exists e(kick\text{-}die(e,alex))$	$\exists e(rain(e))$
	bucket: kick-die , e	it: e

Other "meaningless" elements

- Expletive pronouns
 - (5) a. It was raining.
 - b. We need to hurry it up. (Postal & Pullum, 1988)
 - c. There are typos on the text.
 - d. It is difficult to solve this problem.
- Reflexive pronouns with inherently reflexive predicates ("inherent reflexives")
 - (6) He perjured himself/ *him/ *her/ *∅

Other "meaningless" elements

- Positional elements
 - (7) a. Es/ Gestern war niemand auf der Straße. (DE) it/ yesterday was nobody on the street 'Nobody was on the street (yesterday).'
 - b. Hy het dit nie geweet nie. (Afr.) he has it not known not 'He didn't know it.'
- Argument/case-marking prepositions:
 - (8) We rely on/ *about/ *∅ your support.
- "Dummy" verbs
 - (9) a. Alex is nice.
 - b. Alex does not know the answer.
 - c. Alex tries to answer the question.

Other "meaningless" elements

- Some uses of articles
 - (10) a. Ich mag (die) Maria/ die Sonne. (DE)
 I like the Maria/ the sun
 Definite article with names and unique nouns
 - Alex ist (eine) Vegetarierin. (DE)
 Alex is a vegetarian
 Indefinite article with predicative nouns
- Verbal particle
 - (11) hurry up, look s.th. up, ...

Summary

- Lexical analysis of non-decomposable idioms is well motivated.
- "Meaningless" elements are systematically present in the languages of the world.
- But: they are typically short, functional elements rather than full constituents and open class words.
- Intuitive problems with "meaningless" semantics.
- Look at diagnostic constructions (passive, fronting) to determine what "meaningless" means.

Inherent reflexives have no meaning?

- Same form as "ordinary" reflexives.
- English: very very few inherently reflexive predicates.
- Whenever we use an inherent reflexive pronoun, there is an argument in the same clause with the same ϕ features.

Parts of non-decomposable idioms have no meaning?

(12) kick the bucket

- If the entire idiom has a meaning, why should it come from the verb not the noun?
- bucket list
- How do "extra adjectives" find their semantic argument?
- (13) Domain delimiters
 - a. With that dumb remark at the party last night, I really kicked the social bucket. (Ernst, 1981, 51)

A recent tempest in the publishing teapot had its effect on the bookstores in the area. (Ernst, 1981, 54)

Diagnostic contexts

- Underlying assumption: Syntactic constructions/operations impose syntactic, semantic and/or pragmatic constraints on the elements they contain/apply to and the contexts in which they can be used.
- Apparently similar syntactic constructions/operations in different languages may have different restrictions.
- Hypothesis: Whether or not an idiom can occur in a particular syntactic construction depends on the properties of the idiom and the requirements of the construction. (Nunberg et al., 1994)
- Looking at
 - "meaningless" selected NPs
 - in passive and fronting in German and English

Overview

- Introduction
- 2 Problem
 - Motivating meaninglessness
 - Intuitive problems with "meaninglessness"
- Passive
 - German passive
 - English passive
- Fronting
 - Fronting to Vorfeld in German
 - Topicalization in English
- 6 Analysis
- 6 Conclusion

Passive in German

Passive with transitive and intransitive verbs, special readings with unaccusatives

- (14) a. Die Katze wurde gefüttert. the cat was fed
 - Auf Tagungen wird intensive diskutiert.
 During conferences is intensily discussed 'People discuss intensely during conferences'
 - Hier wird nicht angekommen, sondern nur abgefahren. here is not arrived but only departed (Müller, 2013, 305)

'One doesn't arrive here, but only depart.'

Passive in German

No passive with impersonal verbs

- (15) (Müller, 2013, 295)
 - a. Dem Studenten graut vor der Prüfung. the.DAT student is.terrified of the exam
 - b. *Dem Studenten wird von der Prüfung gegraut. the.DAT student is of the exam terrified

Passive is only possible if there is an active subject.

Expletive active subjects

No passive with verbs requiring expletive subjects

- (16) a. Gestern regnete es heftig. yesterday rained it heavily 'It rained heavily yesterday.'
 - b. *Gestern wurde heftig geregnet. yesterday was heavily rained

...unless there is a causative (Müller, 2002, 131)

- (17) a. Es hat die Stühle nass geregnet.
 it has the chairs wet rained
 'The rain caused the chairs to become wet.'
 - b. Die Stühle wurden nass geregnet. the chairs were wet rained

Expletive active subjects

Problem for empty semantics:

- (18) a. *Gestern wurde geregnet. yesterday was rained
 - b. Die Stühle wurden nass geregnet.the chairs were wet rained'The rain caused the chairs to become wet.'
 - In both cases, the subject is an expletive.
 - If we forbid passivization for verbs with semantically empty subjects, the causative variant cannot be generated.

Inherent reflexives

No passive with inherently reflexive verbs

- (19) a. Dafür schämen wir uns wirklich. for this are ashamed we ourselves really 'We are really ashamed for this.'
 - b. Schäm dich! be.ashamed yourself 'Be ashamed!'
 - c. *Dafür werden wir wirklich geschämt.
 for this are we really been.ashamed

Unexpected if the reflexive has no meaning, as we find passive with intransitive verbs.

Inherent reflexives

A restriction on the active subject, not on the passive subject: Reflexive interpretation of passive only possible with stressed *von* 'by'-phrase.

- (20) a. Alex_i hat sich_i den Fuß amputiert. Alex has herself the foot amputated 'Alex has amputated her own foot.'
 - b. Alex wurde der Fuß amputiert.'Alex's foot was amputated (by someone else).'
 - Alex_i wurde der Fuß von ihr_i selbst amputiert.
 Alex was the foot by her self amputated

Active subjects must be a distinguishable argument of the verb.

Expletive active complements

No particular restriction: When imperative is possible, so is the passive:

- (21) a. Wahrscheinlich bringt Alex/ Rauchen es nicht. probably brings Alex/ smoking it.ACC not 'Alex/Smoking is probably of no use.'
 - b. *?Bring es endlich mal! bring it finally once 'Be useful for once!'
 - c. *Wahrscheinlich wird es nicht gebracht.
 probably is it not brought
- (22) a. Sie hat es ihm ordentlich gezeigt. she has it him properly shown
 - b. Zeig es ihm endlich mal! show it ihm finally once 'Give it to him finally!'
 - c. Endlich wurde es ihm mal so richtig gezeigt! finally was it.NOM him once so really shown

Expletive active complements

Problem for empty semantics If expletives and inherent reflexives are both analyzed as having empty semantics, the difference in passivization cannot be derived.

Idioms passivize just like other VPs.

(23) Bei Gehirntod ist alles vorbei. Dann ist der Löffel abgegeben, es wurde ins Gras gebissen und in die Kiste gehüpft.

'After a brain death, it is all over. Then, one kicked the bucket, bit the dust, "jumped into the box" (www)

Intransitive verb:

(24) ins Gras beißen (non-decomposable) in the gras bit 'bite the dust', 'die'

Tranistive verb:

- (25) a. jm einen.ACC Bären aufbinden (decomposable) so.DAT a bear on.fasten 'pull s.o.'s leg'
 - b. Ich glaube, mir wurde ein Bär aufgebunden.'I think my leg was pulled.'
- (26) a. die Ohren spitzen (transparent, non-decomposable) the ears prick 'listen carefully'
 - Überall im Land werden jetzt die Ohren gespitzt.
 'Everywhere in the country, people start to listen carefully.'
- (27) den Löffel abgeben (non-decomposable) the spoon away.give 'kick the bucket', 'die'

Verbs that do not have a passive, don't have it when used in idioms either (Dobrovol'skij, 2000):

- (28) a. jm einen Korb geben so.DAT a basket give 'turn so. down'
 - b. einen Korb bekommen a basket get
- (29) *Hier werden Zeitungen bekommen.

 here are newspapers gotten
 Intended: 'One can get newspapers here.'
- (30) a. aber mir wurde ein Korb gegeben but me.DAT was a basket given 'but I got turned down' (www)
 - b. *aber es wurde auch ein Korb bekommen
 but it was also a basked gotten
 Intended: 'but some people got turned down'

Problems for empty semantics:

• Difference between idiom parts and inherent reflexives

English passive

- Passive is the promotion of a non-subject.
- I will ignore prepositional passive.
- Kuno & Takami (2004): Passive subjects are topics
- Ward & Birner (2004): Passive subjects are relatively discourse old, i.e., not the discourse-newest element in the clause.

Need to concentrate on the active object!

Expletive active complements

No passive for expletive complements (Postal & Pullum, 1988; Kay et al., ms.)

- (31) a. Even this man is essentially just winging it. (attested)
 - b. *It is just being winged (essentially) by this man.

Expletive active complements

(32) *It was winged.

But: Expletives can appear as passive subjects (Kay et al., ms.)

- (33) a. There was believed to be another worker at the site besides the neighbors who witnessed the incident.
 - b. It was rumored that Great Britain, in apparent violation of the terms of the Clayton-Bulwer treaty, had taken possession of certain islands in the Bay of Honduras.

Problems for empty semantics:

If we forbid semantically empty passive subjects, we cannot derive the data in (33).

Inherent reflexives

No passive for inherently reflexive verbs

- (34) a. They perjured themselves.
 - b. *They were perjured (by themselves).

Problem for empty semantics:

Same as with expletives, as we cannot distinguish between inherent reflexives and expletives.

Passive with idioms

Transitive, decomposable

- (35) a. The beans have been spilled.
 - b. The strings were pulled.

Transitive, non-decomposable

- (36) *The bucket was kicked.
- (37) When you are dead, you don't have to worry about death anymore. . . . The bucket will be kicked.
- (38) saw logs 'snore' (non-decomposable, transparent)
 I excitedly yet partially delusional turned to Alexandria to point out the sun as it set and all I see is eyelids and hear logs being sawed. Come on! I can't say too much because I wasn't far behind as I was catching flies [= sleeping] about a minute later. (www)

Idioms

Problem for empty semantics:

"Meaningless" elements should not appear as subjects at all. However, idiom parts can, if they satisfy the overall discourse restrictions on passive subjects.

Passive with "meaningless" elements

- Germ. passive:
 - Blocking passive for expletive subjects except if resultative.
 - Distinguishability-condition of the active subject not derivable if inherent reflexives are meaningless.
 - If inherent reflexives and idiom parts are meaningless, why can idiom parts passivize?
- Engl. passive: The three types of "meaningless" elements behave differently!

Overview

- Introduction
- 2 Problem
 - Motivating meaninglessness
 - Intuitive problems with "meaninglessness"
- Passive
 - German passive
 - English passive
- Fronting
 - Fronting to Vorfeld in German
 - Topicalization in English
- 6 Analysis
- 6 Conclusion

Vorfeld fronting in German

- Declarative main clauses require a constituent in the pre-V2 field.
- 3 types of Vorfeld-fillers (Frey, 2006):
 - Formal movement: Topic (element otherwise in the first position of the Mittelfeld)
 - Base generation: Positional expletive (Vorfeld-es)
 - ► A-movement: Stressed constituent, contrastive interpretation

Pars-pro-toto fronting

(Fanselow, 2004, 12): Contrastive focus can be on a constituent only parts of which have been fronted:

- (39) Was ist mit dem Buch passiert? What happened to the book?
 - a. [Meiner FREUNdin] habe ich 's geschenkt.
 my.DAT girlfriend have I it given
 'I gave it to my girlfriend as a present.'
 - b. [Meiner FREUNdin geschenkt] hab ich's.

Expletives

(Müller, 1999, 387): Es 'it' as a subject can be in the Vorfeld—expletive or not—, but cannot be stressed (ergo: formal movement).

- (40)a. weil es geregnet hat. because it rained has 'because it rained'
 - b. Es/ *ES hat geregnet. 'It rained'

Object-es cannot be in the Vorfeld—expletive or not.

- (41)a. Gestern haben die Kinder es gelesen. yesterday have the children it read 'The children read it yesterday.'
 - b. *Es/ *ES haben die Kinder gestern gelesen.

Problem for empty semantics:

Parallel behavior of expletive and unstressed non-expletive it unexpected.

Inherent reflexives

Reflexive pronouns can be fronted if stressed. Inherent reflexives cannot be stressed and, thus, not fronted unless inside a PP (Müller, 1999, 387).

- (42) SICH/ [Sich selbst]/ *Sich hat Maria eine Postkarte geschickt.

 Herself has Maria a postcard sent

 'Maria sent a postcard to herself.'
- (43) *Sich hat Peter geschämt.
 himself has Peter been-ashamed
 Intended: 'Peter was ashamed of himself.'

Inherent reflexive

Note that the entire PP is "meaningless"

(44) Duane moves into a hotel room in one of the most disgusting parts of New York.

```
[MIT sich] schleppt der junge Mann einen Korb, ... with himself drags the young man a basket, ... 'The young man drags a basket ...' (www)
```

Pars-pro-toto focus on einen Korb mit sich schleppen 'drag a basket'.

(45) Wir sollten was neues versuchen. 'We should try something new.' [MIT sich] bringt/ [IN sich] birgt das natürlich die Gefahr, with itself brings/ in itself contains this of course the danger dass es nicht klappt. that it not works 'This entails the risk that it doesn't work.'

Idioms

Schenk (1995), Webelhuth & Ackerman (1999), Nunberg et al. (1994): Idiom chunks can be fronted, decomposable or not. Fanselow (2004): Contrastive interretation.

- (46) a. Den Löffel hat er abgegeben. the spoon has he away.given 'He died.' (Trotzke & Zwart, 2014, 138)
 - b. Den Löffel habe er noch nicht abgeben wollen, ...
 the spoon has he yet not away.give want
 'He didn't want to die yet' (IDS corpora)
- (47) Am Hungertuch müssen wir noch nicht nagen. on.the hungercloth must we not yet gnaw 'We are not down on our uppers, yet' (Fanselow, 2004, 22)

Problem for empty semantics: If fronted element is semantically empty, it is difficult to establish the focus.

Topicalization in English

Ward & Birner (1994): Fronted elements in English must be (linked to) discourse-old information. There is no pars-pro-toto fronting.

(48) What happened with the book? *[To my girlfriend] I gave it.

No topicalization of expletives and parts of non-decomposable idioms.

- (49) a. *It, Alex winged.
 - b. *The bucket, Alex kicked.

Inherent reflexives

Reflexive pronouns can only be fronted when used contrastively, which is excluded for inherent reflexives:

- (50) a. *Herself Alex watched in the mirror.
 - b. HerSELF Alex watched in the mirror, not Chris.
- (51) *Herself Alex perjured.

Empty semantics?

Possible constraint: Meaningless elements cannot be fronted.

Ban on fronting unstressed reflexives?

Summary of the discussion

- Three types of potentially "meaningless" elements: expletives, inherent reflexives, parts of non-decomposable idioms.
- General
 - ► Ambiguity: Reflexives as non-empty and empty? Plain expletive vs. cataphoric expletive?
 - ▶ Idioms: How do domain modifiers find their argument?, bucket list
- Germ. passive:
 - Blocking passive for expletive subjects except if resultative.
 - Distinguishability-condition of the active subject not derivable if inherent reflexives are meaningless.
 - ▶ If inherent reflexives and idiom parts are meaningless, why can idiom parts passivize?
- Engl. passive: expletives, inherent reflexives, and idiom parts all behave differently.
- Germ. fronting: Pars-pro-toto focus needs to be connectable to the rest of the focus constituent.
- Engl. fronting: Ban on unstressed reflexive for both ordinary and inherent reflexives.

Overview

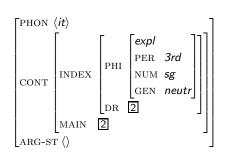
- Introduction
- 2 Problem
 - Motivating meaninglessness
 - Intuitive problems with "meaninglessness"
- Passive
 - German passive
 - English passive
- Fronting
 - Fronting to Vorfeld in German
 - Topicalization in English
- 6 Analysis
- 6 Conclusion

Framework

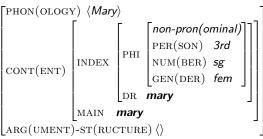
- Head-driven Phrase Structure Grammar (Pollard & Sag, 1994):
 - surface-oriented syntax, monostratal
 - complex feature structures instead of complex syntactic structures
 - constraint-based
- Lexical Resource Semantics (Richter & Sailer, 2004): linguistically motivated version of underspecified semantics (Pinkal, 1996; Egg, 2011)
- Local semantics:
 - parts of the semantic contribution "visible" to a selector
 - semantic selectional restrictions: main semantic predicate
 - argument-identification, binding constraints: index (both ϕ -features and semantic index)

Verb with expletive argument

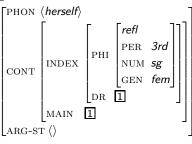
```
\begin{bmatrix} \text{PHON} & \langle \textit{wing} \rangle \\ & \\ \text{CONT} & \begin{bmatrix} \text{INDEX} & \begin{bmatrix} \text{PHI} & \textit{no-phi} \\ \text{DR} & e \end{bmatrix} \\ & \\ \text{MAIN} & \textit{wing-it}(e, \boxed{1}) \end{bmatrix} \\ \text{ARG-ST} & \langle \text{NP}[\text{INDEX} & \boxed{1}], \text{ NP} & \begin{bmatrix} \text{DR} & e \\ \text{MAIN} & e \end{bmatrix} \rangle \end{bmatrix}
```



Inherently reflexive verb



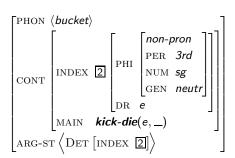
 $\begin{bmatrix} \text{PHON} & \langle \textit{perjured} \rangle \\ \\ \text{CONT} & \begin{bmatrix} \text{INDEX} & \begin{bmatrix} \text{PHI} & \textit{no-phi} \\ \text{DR} & e \end{bmatrix} \\ \\ \text{MAIN} & \textit{perjure}(e, \boxed{1}) \end{bmatrix} \\ \\ \text{ARG-ST} & \langle \text{NP} \begin{bmatrix} \text{IND} & \boxed{2} \end{bmatrix} \begin{bmatrix} \text{DR} & \boxed{1} \end{bmatrix}, \text{NP} \begin{bmatrix} \text{IND} & \boxed{2} \end{bmatrix} \rangle \end{bmatrix}$



Non-decomposable idiom: kick the bucket

$$\begin{bmatrix} \text{PHON} & \langle \textit{kick} \rangle \\ \\ \text{CONT} & \begin{bmatrix} \text{INDEX} & \begin{bmatrix} \text{PHI} & \textit{no-phi} \\ \text{DR} & e \end{bmatrix} \\ \\ \text{MAIN} & \textit{kick-die}(e, \boxed{1}) \end{bmatrix} \\ \\ \text{ARG-ST} & \langle \text{NP}[\text{INDEX} \boxed{1}], \text{ NP} \begin{bmatrix} \text{DR} & e \\ \\ \text{MAIN} & \textit{kick-die}(e, \boxed{1}) \end{bmatrix} \rangle \end{bmatrix}$$

$$\begin{bmatrix} \text{PHON } \langle \textit{the} \rangle \\ \text{CONT } \begin{bmatrix} \text{INDEX } \boxed{2} \end{bmatrix} \\ \text{ARG-ST } \langle \rangle \end{bmatrix}$$



German passive

Distinguishable active subject is demoted:

- (52) Passive Lexical Rule (German):
 - a. Input: $\begin{bmatrix} \text{CONT} \mid \text{INDEX} \mid \text{DR} \ \boxed{1} \\ \text{ARG-ST} \left\langle \text{NP} \left[\text{DR} \ \boxed{A} \right], \ \text{XP} \left[\text{DR} \ \boxed{2} \right], \ \dots \text{XP} \left[\text{DR} \ \boxed{m} \right] \right\rangle \end{bmatrix}$
 - where ${\underline{\mbox{\bf A}}}$ is distinct from all ${\underline{\mbox{\bf 1}}},\ \dots$ ${\underline{\mbox{\bf n}}}$
 - $b. \quad \text{Output:} \begin{bmatrix} \text{cont} \mid \text{index} \mid \text{dr} \ \boxed{1} \\ \text{arg-st} \left\langle \text{XP} \left[\text{dr} \ \boxed{2} \right], \dots \text{XP} \left[\text{dr} \ \boxed{n} \right], \left(\text{PP}[\textit{\textit{von}}, \ \text{dr} \ \boxed{A} \right) \right\rangle \end{bmatrix}$

Resultative

- (53) a. Es regnet. rain(e)
 - b. Es regnet die Stühle nass.cause-become(e', rain(e), wet(s, the-chairs))
- (54) Lexical Rule for resultatives of unergative verbs (à la (Müller, 2002, 241)):
 - a. Input: $\begin{bmatrix} \operatorname{CONT} \begin{bmatrix} \operatorname{INDEX} \mid \operatorname{DR} \ e \\ \operatorname{MAIN} \ \boxed{1} \end{bmatrix} \\ \operatorname{ARG-ST} \left\langle \boxed{2} \right\rangle \end{bmatrix}$
 - b. Output: $\begin{bmatrix} \text{CONT} & \text{INDEX} & \text{I DR } e' \\ \text{MAIN } & \text{cause-become}(e', \boxed{2}, \text{pred}(s, \boxed{3})) \end{bmatrix} \\ \text{ARG-ST} & \sqrt{\boxed{1}}, \text{ NP } \begin{bmatrix} \text{DR } \boxed{3} \end{bmatrix}, \text{ XP} \begin{bmatrix} \text{DR } s \\ \text{MAIN } & \text{pred}(s, \boxed{3}) \end{bmatrix} \end{bmatrix}$

When applied to *rain*, subject has DR-value e, which is distinct from DR values of the output and its other arguments. \Rightarrow Passive rule can apply!

English passive

Acitve subject must be distinguishable and passive subject must be relatively discourse old

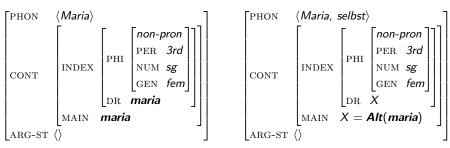
- (55) Passive Lexical Rule (English):
 - $\textbf{a.} \quad \text{Input:} \begin{bmatrix} \text{cont} \mid \text{index} \mid \text{dr} \ \boxed{1} \\ \text{arg-st} \left\langle \text{NP} \left[\text{dr} \ \boxed{A} \right] , \ \text{XP} \left[\text{dr} \ \boxed{2} \right] , \ \dots \text{XP} \left[\text{dr} \ \boxed{n} \right] \right\rangle \end{bmatrix}$

where \square is distinct from all \square , ... \square and \square is not the newest element in the discourse.

 $b. \quad \text{Output:} \begin{bmatrix} \text{cont} \mid \text{index} \mid \text{dr} \ \boxed{1} \\ \text{arg-st} \left\langle \text{XP} \left[\text{dr} \ \boxed{2} \right], \dots \text{XP} \left[\text{dr} \ \boxed{n} \right], \left(\text{PP}[\textit{by}, \ \text{dr} \ \boxed{A}) \right\rangle \end{bmatrix}$

Stressed/ selbst Version of nominals

- Eckardt (2001): selbst is an identity function
- Here: *selbst*: contributes the alternative set of its argument and place its argument in the focus of the sentence.
- (there is more going on: ordering alteratives, ...)



- NP-selbst has a different index than NP.
- Therefore: *selbst*-insertion impossible with inherently reflexive verbs, which require index-identity of the inherent reflexive.

Fronting

German

- pars-pro-toto fronting: idiomatic Vorfeld-constituent carries the meaning of the idiom, so we can detect what needs to be in the focus.
- ullet phonological conditions on \overline{A} -fronting: must be taken care of

English

 Fronted constituent must make a non-redundant semantic contribution, which is not the case for our "meaningless" items.

Summary

- Expletives often share their index with the verb.
 Inherent reflexives share their index with a co-argument.
 Idiom parts share their index and their main semantics with the head of the idiom.
- Restrictions on passive can be modelled.
- Fronted elements: Giving them a semantics allows us to see whether they have "enough" semantics and to which semantic part of the rest of the sentence they need to be connected.

Overview

- Introduction
- Problem
 - Motivating meaninglessness
 - Intuitive problems with "meaninglessness"
- Passive
 - German passive
 - English passive
- Fronting
 - Fronting to Vorfeld in German
 - Topicalization in English
- 6 Analysis
- 6 Conclusion

Conclusion

- Lexicalized analyses of non-decomposable idioms raise questions of the semantics of "meaningless" idiom parts.
- These can be related to other, more grammaticalized, "meaningless" elements.
- Empty semantics runs into empirical problems and/or misses generalizations.
- A redundancy-based analysis is more flexible and seems more adequate.

Extension of the redundancy-based approach

- Argument-marking preposition: standard approach in HPSG (Pollard & Sag, 1994)
- Verbal particles: hurry up, co-referential with the selecting verbs
- Positional expletives (Vorfeld-es): requires a non-generic reading of the event
- Redundant articles:
 - Definite article with proper names (die Maria) and unique nouns (the sun) (Sailer & Am-David, 2016)
 - Definite article within idioms (kick the bucket)

sailer@em.uni-frankfurt.de

Thank you for your attention

Special thanks to Sascha Bargmann!

References

- Abeillé, Anne. 1995. The flexibility of French idioms: A representation with Lexical Tree Adjoining Grammar. In Martin Everaert, Eric-Jan van der Linden, André Schenk & Ron Schreuder (eds.), *Idioms. structural and psychological perspectives*, 15–42. Lawrence Erlbaum Associates, Hillsdale.
- Bargmann, Sascha & Manfred Sailer. 2016. Syntacitic flexibility of non-decomposable idioms. Under review for a volume on *Multiword expressions: Insights from a multi-lingual perspective*.
- Chafe, Wallace. 1968. Idiomaticity as an anomaly in the Chomskyan paradigm. Foundations of Language 4. 109–127.
- Chomsky, Noam. 1981. Lectures on government and binding. Dordrecht: Foris.
- Corver, Norber, Jeroen van Craenenbroeck, Will Harwood, Marko Hladnik, Sterre Leufkens & Tanja Temmerman. 2016. Idioms: Phrasehood and compositionality. Manuscript, Leuven and Utrecht.
- Dobrovol'skij, Dmitrij. 2000. Syntaktische Modifizierbarkeit von Idiomen aus lexikographischer Perspektive. In *Euralex 2000 proceedings*, www.euralex.org/elx_proceedings/Euralex2000/064_Dmitrij%20D0BR0V0LSKIJ_Sy
- Eckardt, Regine. 2001. Reanalysing selbst. Natural Language Semantics 9(4). 371–412 a.c.

- Egg, Markus. 2011. Underspecification. In Claudia Maienborn, Klaus von Heusinger & Paul Portner (eds.), Semantics: An international handbook of natural language meaning, 533–572. Berlin: de Gruyter.
- Ernst, Thomas. 1981. Grist for the linguistic mill: Idioms and 'extra' adjectives. *Journal of Linguistic Research* 1. 51–68.
- Everaert, Martin. 2010. The lexical encoding of idioms. In Malka Rappaport Hovav, Edit Doron & Ivy Sichel (eds.), *Lexical semantics, syntax, and event structure*, 76–97. Oxford: Oxford University Press.
- Fanselow, Gisbert. 2004. Cyclic phonologysyntax-interaction. movement to first position in German. In Shinichiro Ishihara, Michaela Schmitz & Anne Schwarz (eds.), Interdisciplinary studies on information structure (Working Papers of the SFB 632 1), 1–42.
- Frey, Werner. 2006. Contrast and movement to the German prefield. In Valéria Molnár & Susanne Winkler (eds.), *The architecture of focus: Studies in generative grammar,*, vol. 82, 235–264. Berlin and New York: Mouton de Gruyter.
- Gazdar, Gerald, Ewan Klein, Geoffrey Pullum & Ivan Sag. 1985. Generalized phrase structure grammar. Cambridge, Massachusetts: Harvard University Press.
- Kay, Paul & Ivan A. Sag. ms. A lexical theory of phrasal idioms. Available at: www1.icsi.berkeley.edu/~kay/idioms-submitted.pdf.
- Kay, Paul, Ivan A. Sag & Dan Flickinger. ms. A lexical theory of phrasal idioms. Available at: www1.icsi.berkeley.edu/~kay/idiom-pdflatex:11-13-15.pdf.

- Krenn, Brigitte & Gregor Erbach. 1994. Idioms and support verb constructions. In John Nerbonne, Klaus Netter & Carl Pollard (eds.), *German in Head-Driven Phrase Structure Grammar*, 365–396. Stanford: CSLI Publications. Lecture Notes 46.
- Kuno, Susumu & Ken-ichi Takami. 2004. Functional constraints in grammar. on the unergative-unaccusative distinction. Amsterdam, Philadelphia: Benjamins.
- Lichte, Timm & Laura Kallmeyer. 2016. Same syntax, different semantics: A compositional approach to idiomaticity in multi-word expressions. In Christopher Pinon (ed.), *Empirical issues in syntax and semantics*, vol. 11, 111–140. http://www.cssp.cnrs.fr/eiss11/.
- Müller, Stefan. 1999. Deutsche Syntax deklarativ. Head-Driven Phrase Structure Grammar für das Deutsche (Linguistische Arbeiten 394). Tübingen: Max Niemeyer Verlag.
- Müller, Stefan. 2002. Complex predicates: Verbal complexes, resultative constructions, and particle verbs in German (Studies in Constraint-Based Lexicalism 13). Stanford: Center for the Study of Language and Information. http://hpsg.fu-berlin.de/~stefan/Pub/complex.html.
- Müller, Stefan. 2013. *Head-Driven Phrase Structure Grammar. Eine Einfürung.* Tübingen: Stauffenburg 3rd edn.
- Nunberg, Geoffrey, Ivan A. Sag & Thomas Wasow. 1994. Idioms. *Language* 70. 491–538.
- Pinkal, Manfred. 1996. Radical underspecification. In Paul Dekker & Martin Stokhof (eds.), *Proceedings of the tenth Amsterdam Colloquium*, 587 606.

 ILLC/Department of Philosophy, University of Amsterdam.

- Pollard, Carl & Ivan A. Sag. 1994. *Head-driven phrase structure grammar*. Chicago and London: University of Chicago Press.
- Postal, Paul M. & Geoffrey K. Pullum. 1988. Expletive noun phrases in subcategorized positions. *Linguistic Inquiry* 19(4). 635–670.
 Richter, Frank & Manfred Sailer. 2004. Basic concepts of lexical resource semantics. In
- Richter, Frank & Manfred Sailer. 2004. Basic concepts of lexical resource semantics. In Arne Beckmann & Norbert Preining (eds.), *Esslli 2003 course material i*, vol. 5 Collegium Logicum, 87–143. Vienna: Kurt Gödel Society Wien.
- Sag, Ivan A. 2010. Feature geometry and predictions of locality. In Greville Corbett & Anna Kibort (eds.), *Features. perspectives on a key notion in linguistics*, 236–271. Oxford: Oxford University Press.
- Sailer, Manfred. 2004. Distributionsidiosynkrasien: Korpuslinguistische Erfassung und grammatiktheoretische Deutung. In Kathrin Steyer (ed.), *Wortverbindungen mehr oder weniger fest* Institut für Deutsche Sprache, Jahrbuch 2003, 194–221. Berlin and New York: de Gruyter.
- Sailer, Manfred & Assif Am-David. 2016. Definite meaning and definite marking. In Doug Arnold, Miriam Butt, Berthold Crysmann, Tracy Holloway King & Stefan Müller (eds.), Proceedings of the joint 2016 conference on head-driven phrase structure grammar and lexical functional grammar, polish academy of sciences, warsaw, poland, 641–661. Stanford, CA: CSLI Publications.
- http://cslipublications.stanford.edu/HPSG/2016/headlex2016-sailer-am-dav Schenk, André. 1995. The syntactic behavior of idioms. In Martin Everaert, Eric-Jan van der Linden, André Schenk & Ron Schreuder (eds.), *Idioms. structural and psychological perspectives*, 253–271. Lawrence Erlbaum Associates, Hillsdale.

- Soehn, Jan-Philipp. 2006. On idioms parts and their contents. *Linguistik online* Special issue on *Neue theoretische und methodische Ansätze in der Phraseologieforschung*.
- Trotzke, Andreas & Jan-Wouter Zwart. 2014. The complexity of narrow syntax:
 Minimalism, representational economy, and simplest Merge. In Frederick
 J. Newmeyer Newmeyer & Laurel B. Preston Preston (eds.), Measuring grammatical complexity, 128–147. Oxford: Oxford University Press.
- Ward, Gregory & Betty Birner. 1994. A unified account of english fronting constructions. In *Penn working papers in linguistics*, vol. 1, 159–165. University Park: Penn State University Press.
- Ward, Gregory & Betty Birner. 2004. Information structure and non-canonical syntax. In Laurence R. Horn & Gregory Ward (eds.), *The handbook of pragmatics*, 153–174. Malden, Mass.: Blackwell Publishing Ltd.
- Wasow, Thomas, Ivan A. Sag & Geoffrey Nunberg. 1983. Idioms: An interim report. In S. Hattori & K. Inoue (eds.), Proceedings of the xiiith international congress of linguistics, 102–115.
- Webelhuth, Gert & Farrell Ackerman. 1999. A lexical-functional analysis of predicate topicalization in German. *American Journal of Germanic Linguistics & Literatures* 11(1). 1–65.