

A large, semi-transparent graphic of a stylized human head profile, facing right. The head is composed of soft, flowing lines in shades of light blue and white, suggesting hair and facial features.

Systematic semantic differences between object-experiencer LVCs and corresponding simplex verbs in German

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Object-experiencer light verb constructions and corresponding simplex verbs

- In this talk we will explore the systematic differences in usage and meaning between light verb constructions (LVCs) with experiencer objects (1 a), and corresponding simplex verbs (SVs) (1 b):

- (1) a. *Der österreichische Saxophonist Benny Horatschek alias Mr. Soulsax **versetzt** das Publikum **in Begeisterung**.*

'The Austrian saxophonist Benny Horatschek alias Mr. Soulsax fills the audience with enthusiasm.' (A07/OKT.0855)

- b. *Andere Fahrzeuge wiederum **begeistern** Technik-Interessierte und sportliche Lenker mit dem, was sie ausserhalb der Fahrgastzelle zu bieten haben.*

'Then again, other vehicles delight people interested in technology and racy drivers with the features they offer outside the passenger cabin.' (A97/JUN.07770)

Structure of the talk

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 2. Methodology
 3. Results
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 - 3.2 Semantic motivations for quantitative tendencies
 - 3.3 Potential problems and biases
 4. Conclusion
- Acknowledgments
- References

1. Introduction

Object-Experiencer LVCs and SVs

- In German, there are object-experiencer predicates both in the shape of SVs and LVCs:
ängstigen (‘frighten’) (SV)
in Angst bringen (literally ‘bring into fear’) (LVC)
in Angst versetzen (lit. ‘transfer into fear’) (LVC)
- The *in ... versetzen* pattern works with numerous nouns denoting emotions, many of which are derived from object-experiencer SVs (van Pottelberge 200: 259).
- Object-experiencer verbs such as *frighten*, *annoy* or *amaze* have been discussed extensively during the last decades, since Belletti & Rizzi (1988).

1. Introduction

Object-Experiencer LVCs and SVs

- German object-experiencer verbs have recently been investigated with respect to their aspectual properties, agentivity, word order, and valency-reducing operations (Hirsch 2018; Temme 2018; Temme & Verhoeven 2016; Verhoeven 2017; Wiskandt 2021; *inter alia*)
- No consensus on how far LVCs and their corresponding simplex verbs are used as synonyms (e.g. Glatz 2006, Polenz 2008, Harm 2020).
- We argue that there is a systematic difference which is visible in the argument selection of the predicates in corpus data.

1. Introduction

Light verb constructions

- A prototypical Light verb construction (LVC) – in German ‘Funktionsverbgefüge’ – consists of a light (desemanticized) verbal head and a phrasal element for instance a nominal phrase (2a) or a prepositional phrase (2b), which together form a single complex predicate.

(2) a. *Peter gibt Maria einen Kuss.*

‘Peter gives Maria a kiss.’

b. *Die Hausaufgaben bringen Jana zur Verzweiflung.*

‘The homework drives Jana to despair..’ (lit. brings Jana to desperation)

→ The main predicational content is provided by the phrasal element but not by the verb.

1. Introduction

Heavy vs. light verb

(3) a. *Dann engagierte sich eine Lindener Bürgerstiftung dafür, das Gebäude zu versetzen*

– *und so steht der Küchengartenpavillon seit 1914 draußen auf dem Lindener Berg.*

‘Then, the Linden civic foundation was committed to transferring the building and this is why the kitchen garden pavillon is placed outside on the Linden hill since 1914. (HAZ07/AUG.01029)

→ heavy use of *versetzen*: spatial transfer

b. *Die Karikatur versetzte Park und ihre Anhänger in hellen Zorn.*

‘The caricature agered Park and his supporters.’ (SOL12/DEZ.02028)

→ light use of *versetzen*: contributes a causative component to the LVC’s event structure

1. Introduction

Aim of the talk

- We carve out differences in meaning and usage between the LVCs and the corresponding SV on the basis of corpus data. We do not lay claim to an exhaustive study but focus on a limited number of aspects, which especially become visible in the argument selection of predicates.
- **Research question:** What kind of systematic semantic difference is there between the usage of object-experiencer simplex verbs and corresponding LVCs?

2. Methodology

Corpus

- selection of ten pairs of *in ... versetzen* object-experiencer LVCs and corresponding SVs

- For the corpus study we searched the German reference corpus *DeReKo* (Leibniz-Institut, 2021) by using the search engine COSMAS II (Leibniz-Institut, 2020).

- All hits were randomized and analyzed manually.

2. Methodology

Annotation parameters

- We analyzed the syntactic and semantic type of the arguments of the predicates and the voice construction, and categorized the non-experiencer arguments and the experiencer object on the following parameters:
 - Non-Experiencer argument: Animacy; Eventivity; Semantic type; Syntactic type;
 - Experiencer argument: Animacy; Individuality; Syntactic type
 - Voice

2.Methodology

Annotation parameters for the semantic type of Non-Experiencer

- We distinguish the following values:

animate – concrete – abstract – event – state

- “animate” → all arguments that refer to an animate and sentient being, i.e. humans and animals.
- “concrete” → all arguments that can be spatially located and perceived by any bodily sense, but are not animate.
- “abstract” → all arguments that are not animate or concrete, and neither eventualities.

2. Methodology

Criteria for eventualities: events and states

- Eventuality-denoting nouns (events and states) accept temporal (e.g. gestern ‘yesterday’) and aspectual modifiers (e.g. andauernd ‘continuous’) (Fábregas & Marín, 2012; Fleischhauer & Neisani, 2020).

(4) a. *die gestrige Ausstellung*
the yesterday’s exhibition
'yesterday's exhibition'

b. #*die gestrige Werkstatt*
the yesterday’s garage
'yesterday's garage'

2. Methodology

Criteria for eventualities: events and states

- Unlike even nouns, state nouns cannot be the subject predicates like ‘take place’, which require dynamic entities (Fabregas & Marin 2012: 43). A similar test is assumed by Maienborn for verbs (2004: 285).

(5) a. *Die Veranstaltung fand gestern statt.*

‘The organization took place yesterday’.

b. #*Die Anwesenheit der Gäste fand gestern statt.*

‘The absence of the guests took place yesterday.’

2. Methodology

What kind of data did we exclude - and why?

- Data where the PP was not a complement of the verb *versetzen*
- Data where the semantic properties of the non-Experiencer Argument could not be identified due to the lack of context
- Data where a participle form of the verb/LVC (especially of the SV) was used as a modifier
- Data with duplicate entries
- Incomplete Data

2. Methodology

How much data did we take into the analysis, after excluding non-analyzable data following the criteria above?

- In total, 1983 annotated corpus hits have been taken into the analysis.

2. Methodology

1. Identifier (pattern: xxxyy0000, where xxx = code for stem, yy = code for shape/LVC pattern, 0000 = consecutive number)
2. Stem (angst; aufreg; begeister; empör; entsetz; entzück; erstaun; schreck; stress; zorn)
3. Shape (simplex; LVC)
4. NE_Animacy (human; animate; inanimate)
5. NE_Eventivity (eventive; non-eventive)
6. NE_Semantic_Type (animate, concrete, abstract, event, state)[NW1]
7. NE_Syntactic_Type (NP; pronoun; infinitive; sentence; no)
8. E_Animacy (human; animate; inanimate)
9. E_Individuality (individual; collective; generic)[NW2]
10. E_Syntactic_Type (NP; pronoun; no)
11. Voice (active; passive-ev; passive-st; reflexive; intransitive)

3. Results

- What do the data tell us?
- Quantitative observations → Semantic motivations → Problems
- Assumption: Semantics motivate syntax

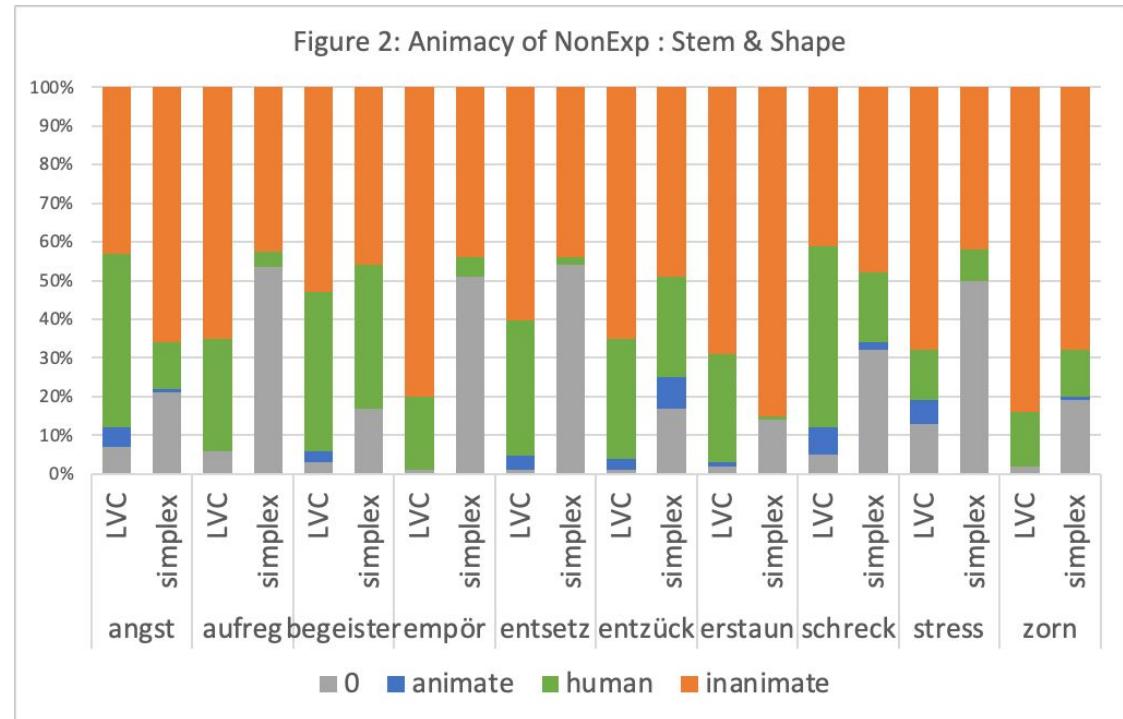
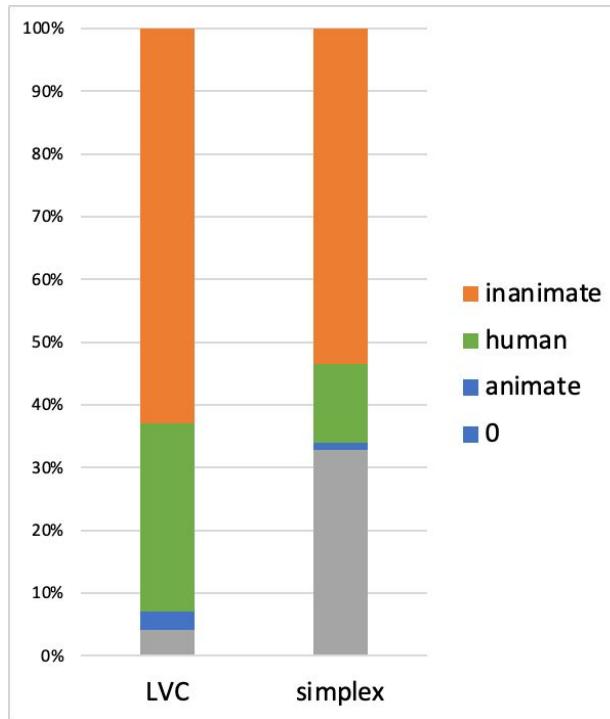
3.1. Quantitative observations

Basics

- elementary, descriptive quantitative analysis
- possible correlations between semantic features of the arguments and the syntax of the predicate
- no one-to-one correspondences

3.1. Quantitative observations

Animacy of the Non-Experiencer argument



3.1. Quantitative observations

Eventivity of the Non-Experiencer argument

Figure 3: Eventivity of NonExp : LVC vs. Simplex

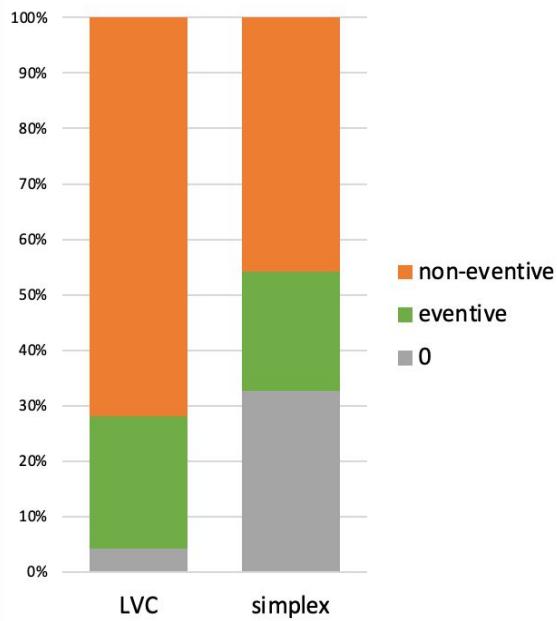
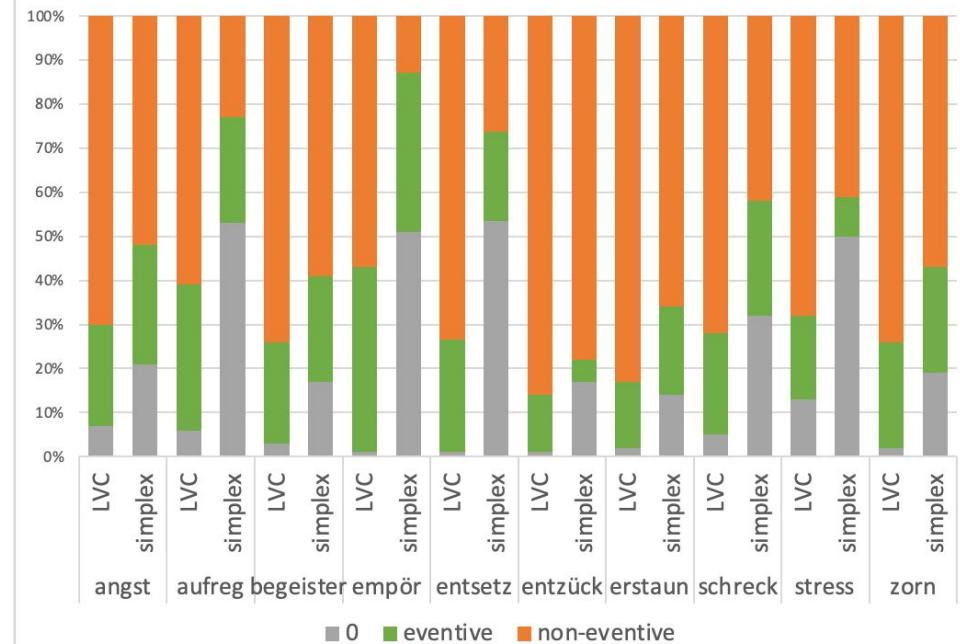


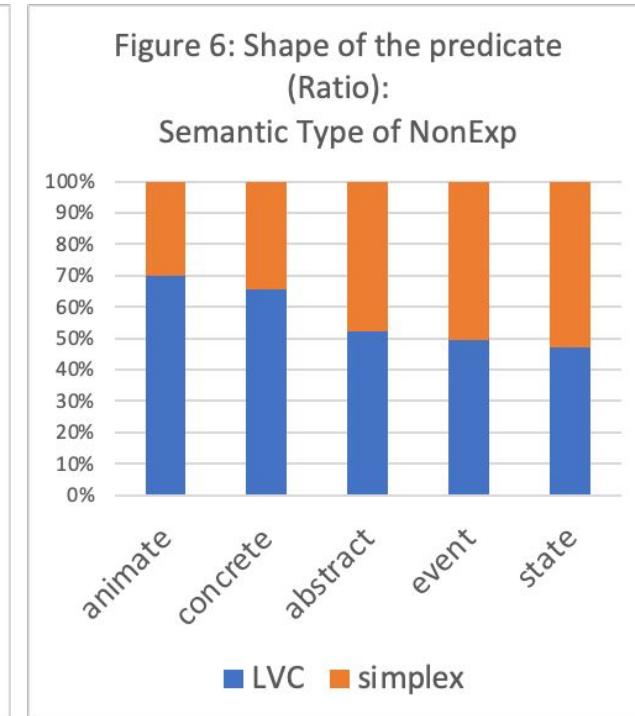
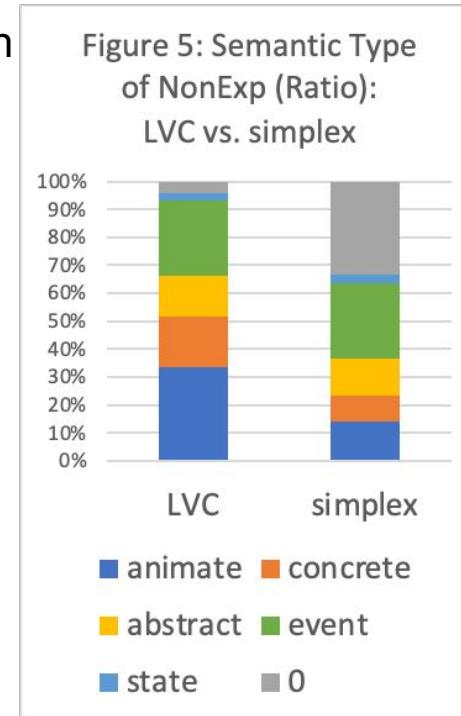
Figure 4: Eventivity of NonExp : Stem & Shape



3.1. Quantitative observations

Semantic Type of the Non-Experiencer argument

- integrated parameter based on animacy, eventivity, and finer distinctions
- values
 - animate
 - concrete
 - abstract
 - event
 - state
- differences between LVC and simplex



3.1. Quantitative observations

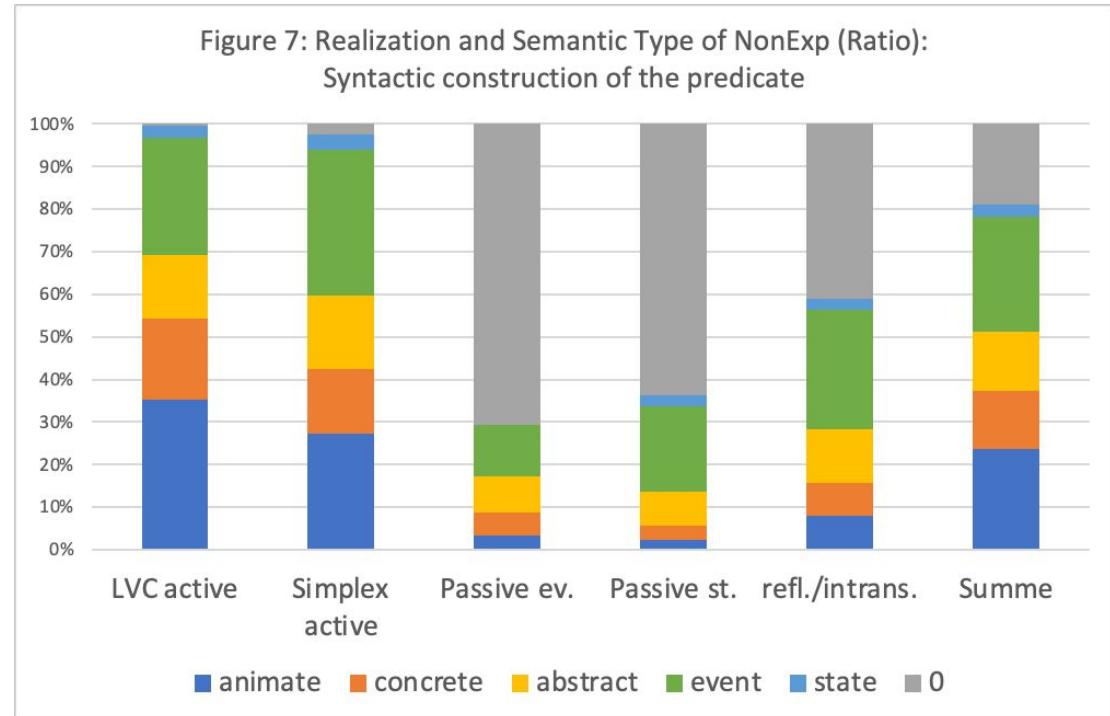
Syntactic construction: Interaction of Shape and Voice

- “Shape” and “Voice” joined in the parameter “Syntactic construction”
 - both parameters address syntactic form of the predicate
 - hardly separable from each other
- Values
 - LVC active - Simplex active - passive-eventive - passive-stative - reflexive/intransitive
- LVCs and simplex only distinguished in the active voice
 - non-active voices very rare with LVCs
 - behave like non-active simplex forms

3.1. Quantitative observations

Semantic Type of Non-Exp influences Syntactic Construction

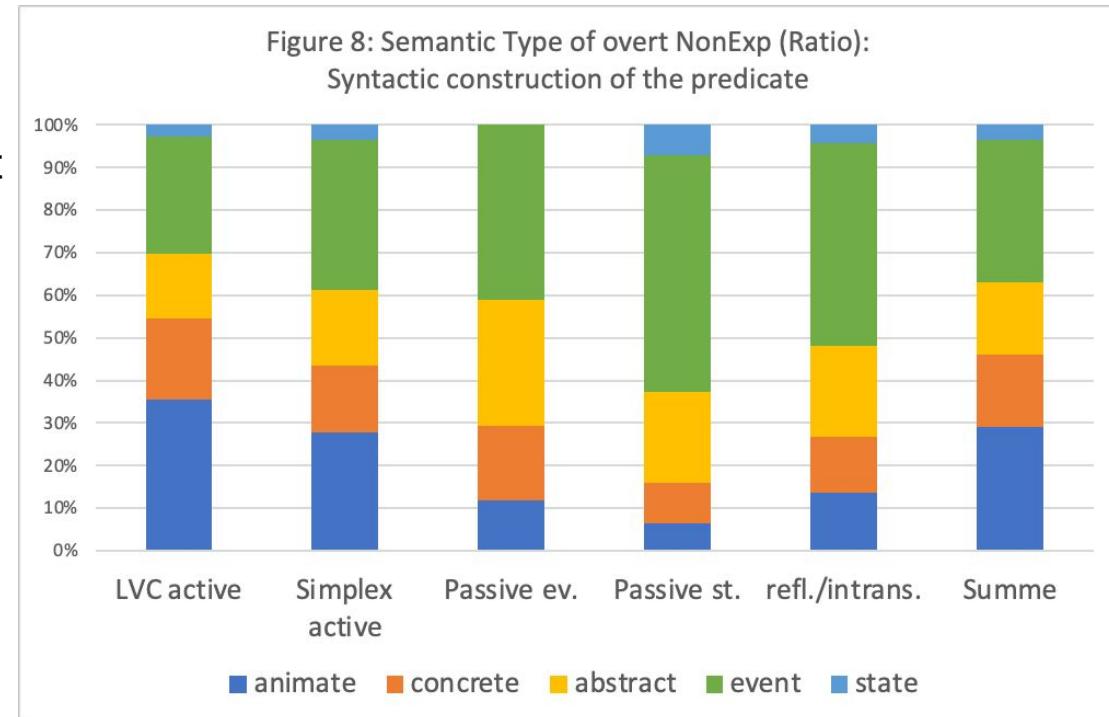
- no overt Non-Exp with non-active voices
- impression: less animates, more events with non-active voices
- Simplex_active in between
- need for vision without the 0 cases



3.1. Quantitative observations

Semantic Type of Non-Exp influences Syntactic Construction

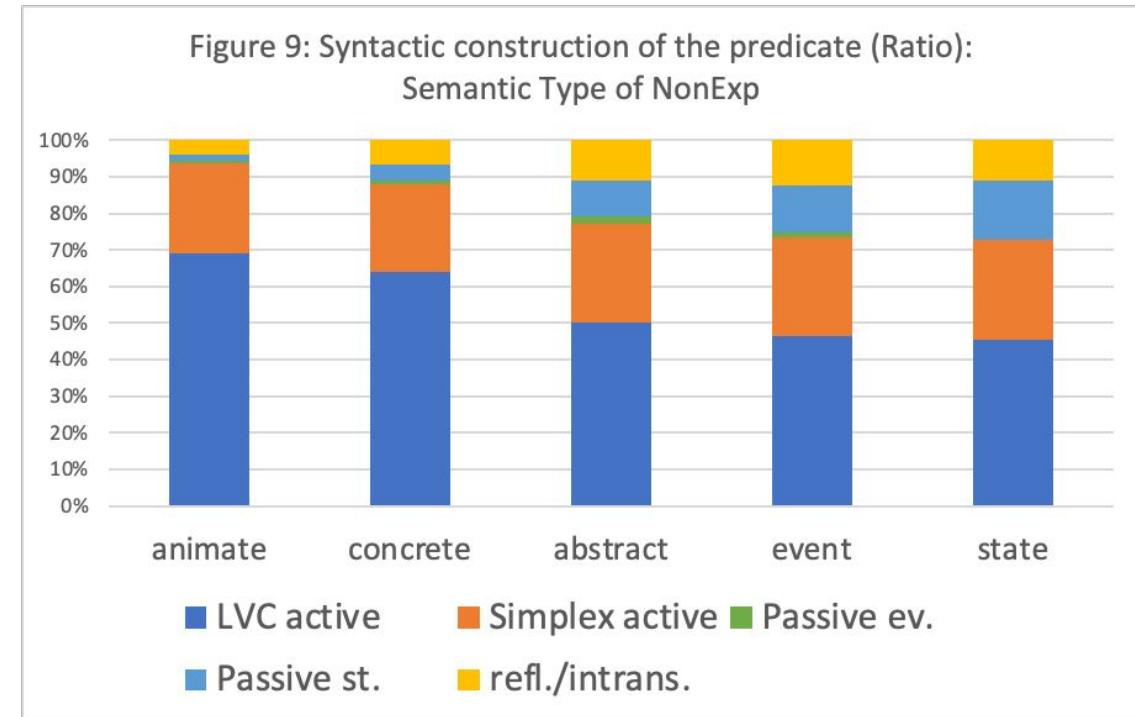
- “animate” most frequent with LVC_active, less with Simplex_active, least with non-active
- “concrete” decreases slightly with decreasing transitivity – “abstract” increases slightly
- “event” least frequent with LVC_active, most with passive-stative



3.1. Quantitative observations

Semantic Type of Non-Exp influences Syntactic Construction

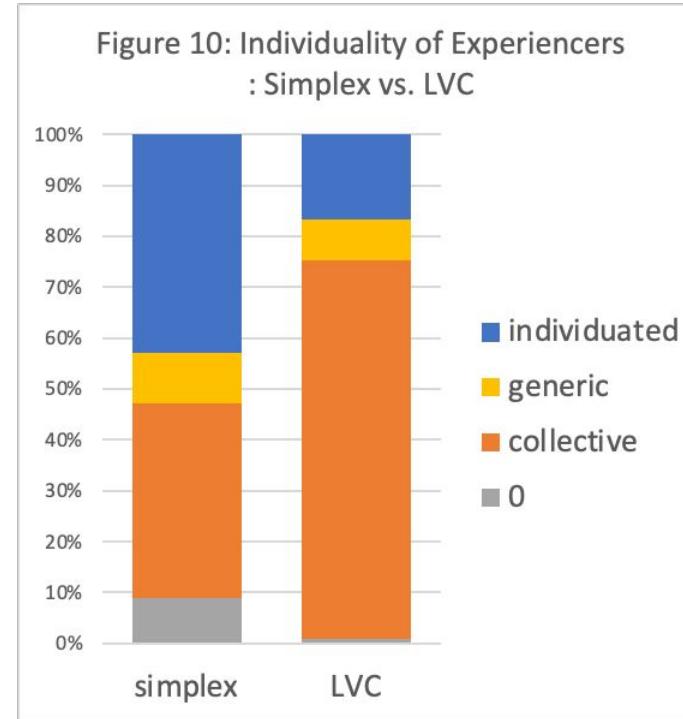
- Probability of LVC_active decreases from animate to state
- Probability of Passive-stative and refl./intrans. increases
- scale from “animate” to “state” semantically motivated



3.1. Quantitative observations

Individual, collective and generic Experiencers

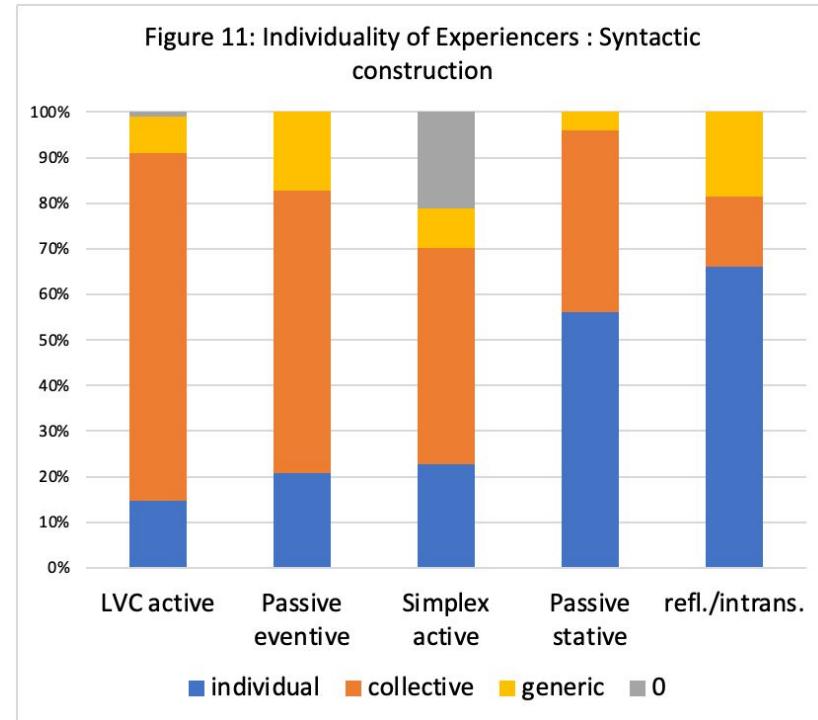
- individual experiencers more frequent with simplex verbs
- collective experiencers more frequent with LVCs
- generic experiencers marginally more frequent with simplex verbs
- unrealized experiencers with simplex verbs



3.1. Quantitative observations

Individual, collective and generic Experiencers

- scale from LVC_active to non-active constructions
 - ratio of individual experiencers increases
 - ratio of collective experiencers decreases
- appearance of generic experiencers correlates not to syntactic construction, but to stem



3.1. Quantitative observations

Patterns that do not predict

- some annotation parameters show heterogeneous behaviour, but still do not tell us anything
- Animacy of the Experiencer
- Syntactic type of Experiencer and Non-Experiencer argument
 - exception: unrealized experiencer → simplex & non-active voice

3.1. Quantitative observations

Summary

- correlations between semantic types of arguments and syntactic construction
- no clear-cut distinctions
- tendencies that need further interpretation

3.2. Semantic motivations

Semantic motivations for quantitative tendencies

- Why are the data the way they are?
- How can we explain the correlation between argument semantics and syntactic construction?
- Aim: Explanation based on semantic differences between simplex verbs and LVCs
- An attempt at a motivation...

3.2. Semantic motivations

Human Non-Experiencer arguments

- impression: human non-experiencer arguments (especially those that act) rather appear with the LVC → Agentivity?
- Reminder
 - eventive non-experiencer arguments prefer the simplex verb
 - concrete and especially animate non-experiencer arguments prefer the LVC
- tendency supports a hypothesis about the default semantic role of the non-experiencer argument
 - Non-Exp of simplex verb → stimulus/correlate
 - Non-Exp of LVC → causer

3.2. Semantic motivations

Split stimuli

- instrument PPs (“split stimuli”, cf. e.g. Hirsch 2018, Temme 2018; Talk by Poppek, Masloch & Kiss tomorrow!) as supporting evidence: more frequent with LVCs than with simplex verbs
- stimulus specified in PP → non-experiencer argument as causer

(12) *[...] jener Mitarbeiter also, die Sie [...] allwöchentlich **mit ihrem treffsicheren Urteil** in Erstaunen und Entzücken versetzen...*

,the staff that astonishes and delights you **with their unerring judgement** every week'
(NUZ05/DEZ.02905)

(13) *Mit samtweicher Stimme [...] glänzte Verena Krause und versetzte die Zuhörer in Entzücken.*
'With her velvety voice, Verena Krause was brilliant and delighted the audience.'
(RHZ98/OKT.03892)

3.2. Semantic motivations

Non-culminating causation (cf. Fritz-Huechante et al. 2020)

- simplex OE verbs with agentive NonExp arguments allow a non-culminating reading
 - LVC implies culmination → option for disambiguation
- (14) a. *Der Clown erschreckte die Kinder immer wieder, aber die waren nicht besonders schreckhaft und ließen sich nicht erschrecken.*
,The clown scared the children again and again, but they weren't easy to scare and didn't really let him scare them.'
- b. *Der Clown versetzte die Kinder in Schrecken, # aber sie ließen sich nicht erschrecken.*
- (15) a. *Meine kleine Schwester ärgert mich den ganzen Tag, aber ich lasse mich einfach nicht ärgern und bleibe ganz entspannt.*
My little sister is annoying me all day, but I simply don't get annoyed and stay relaxed.'
- b. *Meine kleine Schwester versetzt mich in Ärger, # aber ich bleibe ganz entspannt.*

3.2. Semantic motivations

LVC as a culmination marker

- The LVC as a follow-up to the simplex verb makes the culmination of an emotion explicit:

- (16) a. *Meine Familie regt mich schon den ganzen Tag auf, aber meine Mutter hat mich jetzt endgültig in Aufregung ersetzt.*
,My family has been upsetting me for the whole day, but now my mother made me completely upset.'
- b. ?? *Meine Familie versetzt mich schon den ganzen Tag in Aufregung, aber meine Mutter hat mich jetzt endgültig aufgeregt.*
Intended: - see a. -
- (17) a. **# Der Zauberkünstler erstaunte die Zuschauer.**
Intended: ,The magician astonished the audience.'
- b. **Der Zauberkünstler versetzte die Zuschauer in Erstaunen.**
,The magician astonished the audience.'

3.2. Semantic motivations

Markedness

- LVC as “causative marking” - really a marked value?
- distribution of semantic types of arguments of simplex verbs in the active voice ≈ overall distribution → unmarked value?
- “LVC active”, “passive-eventive”, “passive-stative”, “reflexive/intransitive” → marked values?
- Check against criteria by Croft (2003, 91ss)
 - structural coding
 - inflectional potential
 - distributional potential

3.2. Semantic motivations

Individuality of the Experiencer

- individual experiencers prefer Simplex, collective experiencers prefer LVC
- no evidence for causative marking hypothesis
- entailment of LVC about change of emotional state explains the pattern

- (18) a. *Der Sänger begeistert mich gerade.*
'The singer is amazing **me** right now.'
- b. *Der Sänger begeistert gerade das Publikum.*
'The singer is amazing the **audience** (or: acting to amaze the audience) right now.'
- c. *Der Sänger versetzt gerade das Publikum in Begeisterung.*
'The singer is amazing the **audience** right now.'

- no evidence, but neither contradiction - possible secondary effect

3.2. Semantic motivations

Meaning of the *in ... versetzen* pattern

- previous literature (e.g. Harm 2020, von Polenz 1987, Fleischer 1997) has claimed causative meaning component of *versetzen*
- previous study (Wiskandt & Turus 2022) hints at that
- evidence in puzzling semantic domain → advancement in knowledge about light verb *versetzen*

3.2. Semantic motivations

Summary

- choice of the LVC as overt causative marking
- no black-white distinction – instead of probabilistic nature
- shows the benefit of using corpus data for answering theoretical questions about seemingly binary parameters
- some stem-specific (i.e. Simplex-LVC-pair-specific) factors that influence the choice of shape (cannot be addressed now)

3.3. Problems & Biases

Apparent problems with annotation and analysis

- annotation: parameters that we did not annotate
- explanatory power: the parameters do not explain everything
- description of systematic difference in meaning: we provided evidence for differences, not a complete analysis of the difference

3.3. Problems & Biases

Potential biases in the data

- Corpus consisting of newspaper data: more reports about emotions of collectives?
- *in Angst und Schrecken versetzen* ‘transfer into fear and horror’

4. Conclusion

What did we achieve?

- contribution to the discussion about the nature of German LVC-SV pairs
 - set of differences in usage and meaning of LVC vs. SV
 - argumentation for classification of the choice of the LVC as overt causative marking
- advancement of the knowledge on argument selection of object-experiencer predicates
- highlighting the importance of empirical studies for answering theoretical question

4. Conclusion

What are we not satisfied with?

- Open Questions & Problems
- ToDos for Follow-Up Studies
 - more fine-grained annotation
 - extension of database and parameters
 - modelling
 - deepening the semantic analysis

Acknowledgments

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Thank you for your attention!