

A Construction Grammar Approach To German Support Verb Constructions

Re-Thinking Synonymy, Helsinki

Guido F. Halder

Department of Germanic Studies
The University of Texas at Austin
halder@mail.utexas.edu

Overview

1. What are SVCs?
2. Previous Research
3. Frame Semantics & CxG
4. Analysis
5. Conclusions

SVCs Illustrated

- (1) Die Zuschauer geraten in Rage.
'The spectators are getting enraged.'

NP	SV	PP
Die Zuschauer	geraten	in Rage.

the spectators are getting enraged because of
something/someone

SVCs defined

Von Polenz (1963)

- verb is semantically empty
- 'Mehrwert' ("added value")

(2) Full verb: Hans kommt nach Hause.
'John comes home.'

(3) Support verb: Hans kommt zu Fall.
John comes to fall.
'John falls.'

SVCs defined (con't)

Winhart (2002)

- verb and the noun both contribute
semantic structure

(4) Sie schritten zur Abstimmung.
They marched to the vote.
'They began to vote.'

SVCs defined (con't)

Langer (2008)

- computational approach
- SVCs are always semi-idiomatic & semi-compositional

(5) Sie hielt eine Vorlesung.
She held a lecture.
'She gave a lecture.'

SVCs defined (con't)

Full verb usage of 'geraten'

- (6) Der Papst gerät ins Freudenhaus.
'The Pope ends up in the brothel.'

SVC usage of 'geraten'

- (7) Das Haus gerät in Brand. => begin
'The house catches fire.'
- (8) Die Mutter gerät in Angst. => emotion
'The mother gets fearful.'
- (9) Die Expedition gerät in Schwierigkeiten. => situation
'The expedition gets into difficulties.'

Issues with previous accounts

None of these analyses account for the selectional restrictions of the noun in SVCs

(10) Das Kind geriet in Aufregung.
The child got in excitement.
'The child started to be excited.

(11) #Das Kind geriet in Wirbel.
The child got in swirl.
?'The child started to be swirled.

In this presentation I will only focus on SVCs with
'geraten'

Frame Semantics

(Fillmore 1985)

- word meaning only understood against a common background knowledge (i.e. bachelor, land-ground)
- World knowledge aids in understanding words
- Words describe relations in the world
- Frame is evoked by the word

Construction Grammar (CxG)

“Any linguistic pattern is recognized as a construction as long as some aspect of its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency.”

(Goldberg 2006: 5)

Analysis

Using FrameNet

- Online lexical resource for English.

“Documents the range of semantic and syntactic combinatory possibilities – valences - of each word in each of its senses...” (Ruppenhofer et al 2006: 5)

FrameNet: <http://framenet.icsi.berkeley.edu/>

Analysis (con't)

SVCs in FrameNet

-Frame is evoked by the noun, not the verb

(12) Das Haus gerät in Brand.

'The house is starting to burn.'

=> Clearly an act of burning and not of starting.

The 'burning frame' is evoked by the noun and not by the support verb.

Preliminary constructions

A) *unintentional_change_in_location*
construction (prototypical construction)

(13) Der Papst geriet ins Freudenhaus.
'The Pope ended up in the brothel.'

'geriet' used as full verb

Central Sense:

The patient moves unintentionally to a goal/location (caused by an event)

unintentional_location construction

[[NP] geraten.v [(PP)] [PP]]

[[Pt] [V] [(Ag)] [Result-Emotion]]

[[Der Papst] geriet [] [ins Freudenhaus.]]

[[The pope] ended up [] [in the brothel.]]

Preliminary constructions

B) *unintentional_change_in_situation*

(14) Der Poet gerät in Vergessenheit.
'The poet falls into oblivion.'

The patient unintentionally changes situation (caused by an event)

unintentional_situationconstruction

[[NP] geraten.v [(PP)] [PP]]

[[Pt] [V] [(Ag)] [Result-Situation]]

[[Der Poet] geriet [] [in Vergessenheit.]]

[[The poet] falls [] [into oblivion.]]

Preliminary constructions

C) *unintentional_change_in_emotion*

(15) Das kleine Kind gerät in Angst.

‘The small child becomes fearful.’

The patient unintentionally changes emotion (caused by an event)

unintentional_emotion construction

[[NP]	geraten.v	[(PP)]	[PP]]
[[Pt]	[V]	[(Ag)]	[Result-State]]

[[Das kleine Kind]	gerät	[]	[in Angst.]]
[[The small child]	becomes	[]	[fearful.]]

Preliminary constructions

D) `unintentional_begin`

(16) Das Haus gerät in Brand.
'The house starts to burn.'

The patient unintentionally begins x (caused by an event)

unintentional_begin construction

[[NP]	geraten.v	[(PP)]	[PP]]
[[Pt]	[V]	[(Ag)]	[Result-Situation]]
[[Das Haus]	geriet	[]	[in Brand.]]
[[The house]	started	[]	[to burn.]]

Sense Relationships

B) unintentional_situation

C) unintentional_emotion

A) unintentional_location

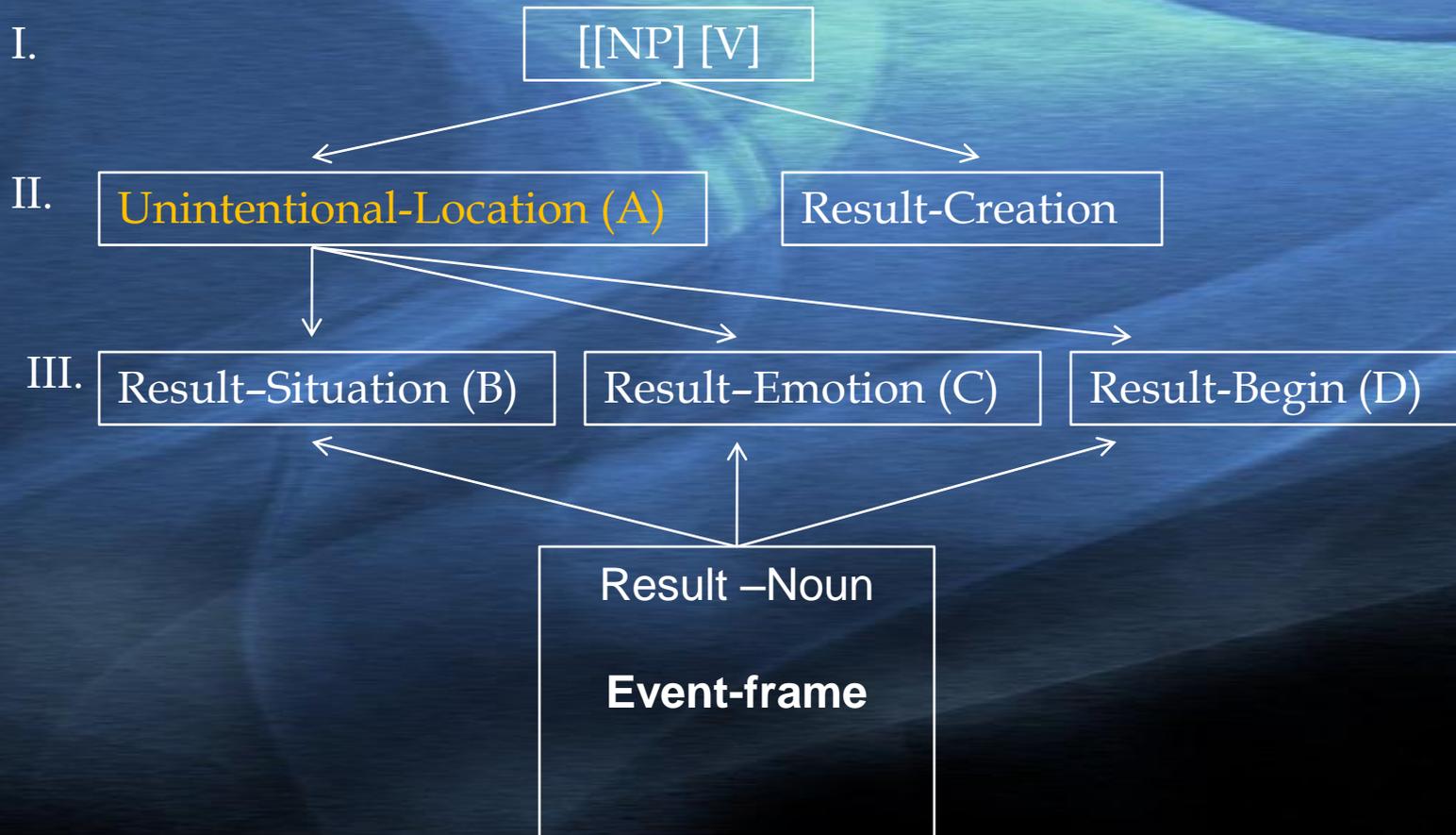
D) unintentional_begin

Ip-link

Ip-link

Ip-link

Construction Abstractions



What is an Event frame?

In essence, it is a rich packet of idiosyncratic semantic information for each sense of a noun

Some information included is:

- the result state (emotion, situation, begin)
- selectional restrictions
- world knowledge
- event participants
- ...

of these only the first two are always necessary

Noun selections in SVCs (imposed by the event frame)

What are the possible noun substitutions?
(using 'in Angst geraten' as example)

- no proper names

- (17) *Bill geriet in Wernerangst.
'*Bill started to Wernerfear.'

but

- (18) Bill geriet in Angst um Werner.
'Bill started to fear for Werner.'

Noun selections in SVCs (imposed by the Event frame) (con't)

- Limited number of nouns indicating relationships (Mother, Father, child)

(19) Katrin geriet in Mutterangst.

'Katherine got fearful about motherhood.'

- Some nouns of wealth (money, success)

(20) Katrin geriet in Geldangst.

'Katherine got afraid of not having money.'

Noun selections in SVCs (imposed by the Event frame) (con't)

- Limited number of nouns of 'existence' (life, soul)

(21) Urs geriet in Lebensangst.

'Urs started to fear for his life.'

- Nouns indicating comparison seem to follow the general usage

(22) Bill geriet in Riesenangst/Scheissangst)

'Bill started to be really really affraid.'

Event-Frame for *Angst* 'fear'

(each Event-Frame is noun specific)

ANGST ('fear')

Emotion

(W)

No proper names

1st Deg Kinship

Some 'wealth'

Some 'existence'

Superlatives

Selectional Restriction Types of SVCs

I) Some SVCs do not allow for any noun substitution (idiomatic)

(23) Das Haus gerät in Brand.

‘The house catches fire.’

(24) *Das Haus gerät in Feuer.

‘The house catches fire.’

Selectional Restriction Types of SVCs

II) Others, like 'in Angst geraten' allow for a limited number of substitutions (more productive/fewer selectional restrictions)

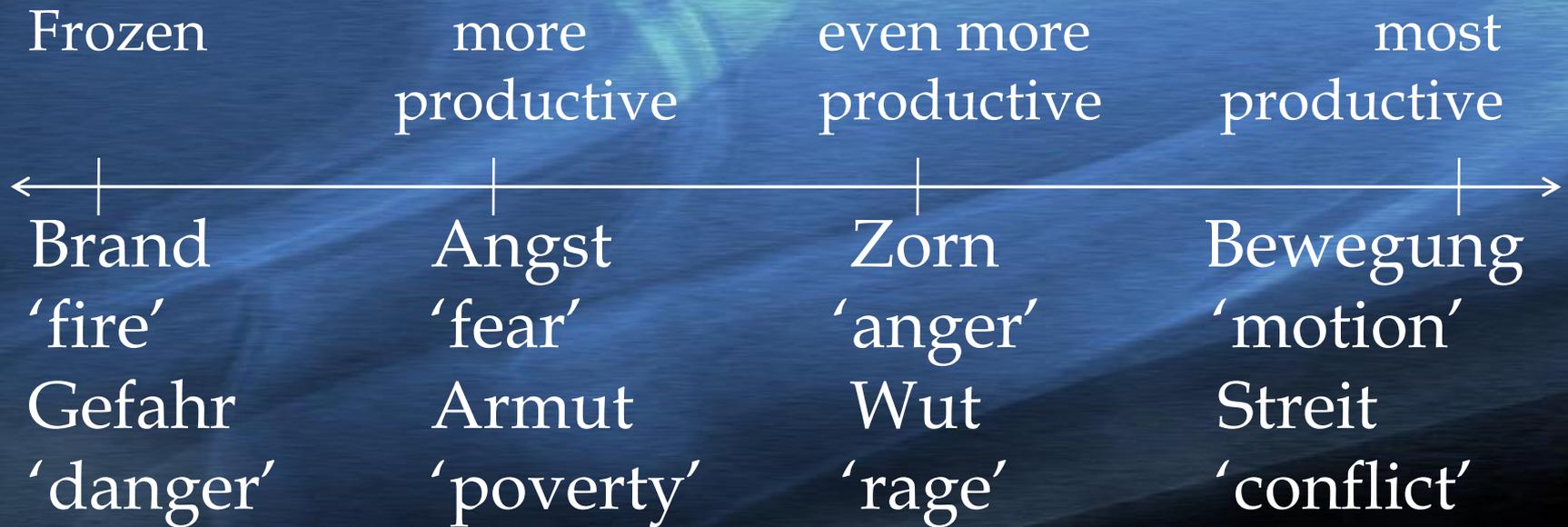
(25) in Angst/Panik/Existenzangst geraten
'get fearful/in panic/into fear of existence'

Selectional Restriction Types of SVCs

III) SVCs indicating motion seem to be even more productive/have even fewer selectional restrictions.

(26) in Betrieb/Schwung/ins Rollen geraten
'start to operate/momentum/rolling

'Productivity Continuum'



Conclusions

- Previous analyses do not account for the selectional restrictions of nouns in SVCs
- CxG approach allows to capture all possible meanings expressed by SVCs with 'geraten', from the fully idiomatic to the non-idiomatic end of the spectrum

Conclusions (con't)

- Each construction extension captures the meaning of the particular sub-meaning
- Constructions include selections restrictions thus allowing or disallowing nouns classified as synonyms, umbrella terms or sub-meanings of the noun occurring in the SVC

References

- Boas, Hans. (2004): *A Constructional Approach to Resultatives*. Stanford: CSLI.
- Fillmore, Charles J. (1985a): Frames and the Semantics of Understanding. in *Quadern di Semantica*. 6: 222-254.
- Goldberg, Adele (2006): *Constructions at Work*. Oxford: Oxford University Press.
- Langer, Stefan (2004): A Formal Specification of Support Verb Constructions. in *Semantik im Lexikon*. Langer, S. and Schnorbusch, D. [Eds.]. Tübingen: Narr: 179-202.
- Ruppenhofer et al (2006): *FrameNet II: The Book*.
[Available online at : <http://framenet.icsi.berkeley.edu/>]
- Von Polenz, Peter (1963): *Funktionsverben im heutigen Deutsch. Sprache in der rationalisierten Welt*. Düsseldorf.
- Winhart, Heike (2002): *Funktionsverbgefüge im Deutschen zur Verbindung von Verben und Nominalisierungen*. Dissertation. Universität Tübingen.

Thank You

halder@mail.utexas.edu