

Embodied construction practice in foreign language teaching

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Traditional Foreign Language Teaching (FLT)

- focus on vocabulary lists
- explanation of grammar rules

Methodology to be rejected

- separation of both aspects (Herbst, forthc.)
- Reflects unauthentic way of learning FL
- Recent research: speaking and learning in larger sequences (chunks, collocations,...)

➤ **Topic of my study**

bis

('up to'/'until')

German preposition: **bis** ('up to')

(1) ***Wir fahren bis Paris***

('We drive up to Paris')



(dreamstime.com)

(2) *Wir fahren **bis an** den See*

(‘We drive **up to** the lake’)



(powerslider.de)

(3) *Das Auto ist **bis in** den See gefahren*

(lit. 'The car is **up into** the sea driven')



(4) *Sie fahren **bis an den See hinunter***
(Lit. 'They drive **up to** the lake **away from the speaker down**')



(rabe-bike.de)

(5) *Sie laufen **bis an den See hinauf***

(Lit. 'They run **up to** the lake **away from the speaker up**')
(Lit. 'They run **up to** the lake **away from the speaker up**')
(Lit. 'They run **up to** the lake **away from the speaker up**')



(alpinforum.com/1234gifs.de)

- Few pictures illustrate **variation in use of ‘bis’**
- **need to focus on larger sequences**
- Even more obvious with **more abstract expressions**, e.g.

(6) *Ich werde dich lieben bis in den Tod* (DWDS Kernkorpus)

(Lit. ‘I will you love up to into death’)

(7) *Er ist verliebt bis über die Ohren* (DWDS Kernkorpus)

(Lit. ‘He is in love/red up to over the ears’).

- Not spatial, but temporal or metaphorical
- Non-compositional phrases
- But entrenched in German

- Constructions with *bis* not available in other languages (e.g. English, French, ...)
- Translation difficulties
- **Challenge for learners!**

➤ **ISSUE: how teach such constructions?**

- Topic of my presentation

Structure of presentation

- 1) Short **historical overview** about learning of sequences
- 2) Show **assets of Construction Grammar model (CxG)** for Foreign Language Teaching (FLT)/Foreign Language Learning (FLL)
- 3) Illustrate
 - C with German *bis*
 - C with German placement and posture Vs
(e.g. *stellen/legen/setzen; stehen/liegen/sitzen*)
- 4) Design interactive activities for FLT based on
‘embodiment’

1. Short historical overview

1.1. Lado (1961): *Pattern Practice*

- in language laboratory, audiolingual method
- reaction to translation approach
- aimed at habit formation with drills of 'language patterns'
- „the significant framework[s] of the sentence”
(Lado und Fries 1967: xv)
- Lexical elements as slot-fillers
E.g. *Do you see the train/ship/car/truck/...?*

Critique:

- “Mechanical” process of habit formation (Ellis 1990: 27)
- Main structures of FL can be practised **without learners knowing what they say!** (Politzer 1961: 19)
- Learners **not able to produce** sentences
- **Non-authentic** language
- No communicative situations

But:

- **Focus on larger structures**
- Inspired language pedagogy

1.2. Further research

- Need to focus on meaningful sequences + communicative situations/goals (Nunan 1991; Widdowson 1992; Savignon 2000)

*fluent and idiomatic control of a language rests to a considerable extent on knowledge of a **body of 'sentence stems'** which are **'institutionalized'** or **'lexicalized'**. A lexicalized sentence stem is a unit of clause length or longer whose grammatical form and lexical content is wholly or largely **fixed**. [...] In the store of familiar collocations there are expressions for a wide range of familiar concepts and speech acts, and the speaker is able to **retrieve these as wholes or as automatic chains** from the long-term memory. (Pawley & Syder 1983: 191-192)*

Wong-Fillmore (1976):

- first study on prefabricated patterns in language acquisition by young Spanish-speaking children
- Conclusion: prefab. patterns play major role in language acquisition

Hausmann (1984):

- vocabulary learning = collocation learning

Nattinger & DeCarrico (1992: 114):

- FLT/FLL in ‘lexical phrases’
- learnt as whole

Wray (2002: 192):

- ‘formulaic language’
- Success in second language is heavily dependent on the ability to learn sequences.

Handwerker (2008), Handwerker & Madlener (2006):

- Need to teach in ‘chunks’



Ellis & Cadierno (2009);

Ellis & Ferreira-Junior (2009a/2009b);

Robinson & Ellis (2008):

- *much of communication makes use of fixed expressions memorized as formulaic chunks* (Ellis & Cadierno 2009: 114).
- ‘constructions’ = conventional form-meaning mappings
- based on Goldberg’s (1995; 2006) model
- abstract Cs have meaning of their own, with open slots

Gonzalez Rey (2013: 7):

- *Learners need to be provided with a stock of prefabricated units in order to improve their communication skills.*

De Knop/Gilquin (2016): *Applied Construction Grammar*

- FLT/FLL can be fostered by insights from Construction Grammar model (CxG)

2. Assets of CxG for FLT/FLL

CxG model (Goldberg 1995; 2006)

- basic units of language = constructions (C)
- C= form-meaning mappings
- different degrees of abstraction
(abstract C/instantiations)
- meaning non-compositional (Goldberg 1995)
C meaning = more than sum of constituents' meaning
- Meaning compositional (Goldberg 2006)
but entrenched

2.1. Exs with German preposition *bis*

(1) *Wir fahren bis Paris*

(‘We drive up to Paris’)

(2) *Wir fahren bis an den See*

(‘We drive up to the lake’)

(3) *Das Auto ist bis in den See gefahren*

(lit. ‘The car is up into the sea driven’)

Spatial meaning:

- expression of stretch + viewpoint
- Prototypical meaning

But also temporal meaning:

(8) *Große Spieler sitzen spät bis in die Nacht* (Cosmas II:I00/DEZ.75273)

(Lit. 'Great players sit late until into the night'))

(9) *In Wien tanzt man gewöhnlich bis zu Ostern, also bis in den April hinein*. (DWDS)

(Lit. 'In Vienna dances one usually until to Easter, i.e. until into the april within'))

➤ Metaphorical extension: 'TIME IS SPACE' (Radden 2003)

Also fictive motion/mental scanning

(10) *Ich werde dich lieben bis in den Tod* (DWDS)

(Lit. 'I will love you until into the death')

(11) *Die Älteren sind motiviert bis unter die Haarspitzen* (Cosmas II:

M02/FEB.10642)

(Lit. 'The elder are motivated up to under the hair ends')

(12) *Er ist konservativ bis in die Knochen*

(Lit. 'He is conservative up to into the bones')

➤ Metaphorical extension (Lakoff/Johnson 1980):

‘ABSTRACT STATE IS LOCATION/MOTION’

➤ Often **bodypart** for ‘limit’ (cf. anthropocentric view)

ASSET 1 of CxG for FLT/FLL:

➤ **Postulate 1 entrenched abstract C**

Cs with *bis*: prototypical meaning of stretch

– Realized with concrete spatial expressions

➤ **If learner knows meaning of abstract C,
s/he can reconstruct meaning of new constructions**

ASSET 2 of CxG for FLT/FLL:

- Temporal + mental expressions are linked to prototype by inheritance links:

metaphor/part of/polysemy/instance of

➤ Cs organized in structured inventory = **CONSTRUCTICON**

2.2. Placement and posture verbs in Cs

Use of Placement (PLV) and Posture (PSV) Vs in German

→challenge for learners

German posture verbs	German placement verbs
<i>stehen</i> ('to stand')	<i>stellen</i> ('to put upright')
<i>sitzen</i> ('to sit')	<i>setzen</i> ('to put in a sitting position')
<i>liegen</i> ('to lie')	<i>legen</i> ('to put in a lying position')
<i>stecken</i> ('to be stuck')	<i>stecken</i> ('to put into st. tight')

(Fagan 1991; Serra-Borneto 1995, 1996; Kutscher & Schultze-Berndt 2007)

Learning difficulties:

- variety of motion/location verbs, no superordinate term in German like English *to put* as PLV.
- correct selection of a PLV (*stellen/setzen/legen*) or PSV (*stehen/sitzen/liegen*)
- obligation to express manner of motion/location in main V, e.g.

(13) *Er stellt den Teller auf den Tisch*

lit. 'He puts (upright) the plate on the table'

(14) *Die Mutter setzt das Baby in den Kinderstuhl*

lit. 'The mother sets the baby in the children chair'

How address these learning difficulties?

➤ Inventory of semantic uses of PSVs + PLVs with examples:

- postural
- locational
- metaphorical

(inspired by De Knop & Perrez 2014, Lemmens 2002, Lemmens & Perrez 2010)

Stehen/Stellen

USE	DESCRIPTION	<i>stehen</i>	<i>stellen</i>
postural	Be/Put on a base	Die Teller stehen auf dem Tisch Lit. 'The plates stand on the table'	Stelle bitte die Teller auf den Tisch Lit. 'Please put (vertically) the plates on the table'
locational	Extend upward from a base	Mit dem Supergel stehen die Haare den ganzen Tag Lit. 'With the supergelly the hair stands the whole day'	/
	Verticality in absence of base	Die Teller stehen schon in der Spülmaschine Lit. 'The plates already stand in the dishwasher'	Stelle bitte die Teller in die Spülmaschine Lit. 'Please put (vertically) the plates into the dishwasher'
metaphorical	Be/Put in a canonical position	Er steht vor einem Dilemma/Problem Lit. 'He stands in front of a dilemma/problem'	Vor eine Verantwortung stellen Vor Gericht stellen Lit. 'to put/place in front of a responsibility' Lit. 'to place/to bring to court/justice'
	Written text	Was steht an der Tafel? Lit. 'What stands on the blackboard?' Ein Komma steht zwischen den beiden Wörtern Lit. 'A comma stands between both words'	/ Er <u>setzt</u> ein Komma zwischen die beiden Sätze Lit. 'He sets a comma between both sentences'

LIEGEN/LEGEN

USE	DESCRIPTION	<i>liegen</i>	<i>legen</i>
postural	Be/Put on one's side/not on the base with horizontal orientation	Wo liegen meine Schuhe? Lit. 'Where do my shoes lie?' Sie lag im Bett und schlief Lit. 'She lay in bed and was sleeping'	Wo hast du meine Schuhe hingelegt? Lit. 'Where did you lay my shoes?' Die Mutter legte das Baby ins Bett Lit. 'The mother laid the baby in the bed' Die Henne legt ein Ei Lit. 'The hen laid an egg'
locational	Location of dimensionless entities	Es liegt viel Salz auf dem Tisch Lit. 'There lies much salt on the table' Der Ball liegt im Sand Lit. 'The ball lies in the sand'	Sie hat viel Salz auf den Tisch gelegt Lit. 'She has laid much salt on the table' Er hat den Ball in den Sand gelegt Lit. 'He has laid the ball into the sand'
	Geotopographical location	Köln liegt am Rhein Lit. 'Cologne lies at the Rhine'	Der Nebel legt sich über die Stadt (REFL) Lit. 'The fog lays itself over the town'
metaphorical	Abstract entities	Die Verantwortung liegt bei dir Lit. 'The responsibility lies with you'	Die Verletzten legten ihre Hoffnung in die Hände der Helfer Lit. 'The wounded laid their hope in the hands of the helpers' Den Fokus/den Akzent/den Schwerpunkt auf etwas legen Lit. 'to lay the focus/the accent/the emphasis on something' Der Streit/die Aufregung legt sich (REFL) Lit. 'The quarrel/The upset lays itself'
	Scale	Der Punkt liegt auf der Gerade Lit. 'The point lies on the line'	Er <u>setzt</u> den Punkt auf die Gerade Lit. 'He sets the point on the line'

SITZEN/SETZEN

USE	DESCRIPTION	sitzen	setzen
postural	Be/Put in a sitting position	<i>Ein Ehepaar sitzt am Tisch</i> Lit. 'The couple sits at the table' <i>Das Baby sitzt auf der Kommode</i> Lit. 'The baby sits on the dresser'	<i>Das Ehepaar setzte sich an den Tisch</i> Lit. 'The couple sat down at the table' <i>Die Mutter setzt das Baby auf die Kommode</i> Lit. 'The mother sets the baby on the dresser'
locational	Location of small animals (+ insects)	<i>Wieviele Vögel sitzen im Baum?</i> Lit. 'How many birds sit in the tree?' <i>Eine Fliege sitzt auf dem Kuchen</i> Lit. 'A fly sits on the cake'	<i>Das Rotkehlchen setzt sich in den Baum</i> Lit. 'The robin sits down in the tree' <i>Die Fliege setzt sich auf den Kuchen</i> Lit. 'The fly sits down on the cake'
	Containment (+ Affiliation)	<i>Er sitzt im Gefängnis</i> Lit. 'He sits in prison' <i>Der Schmerz sitzt in dem Bauch</i> Lit. 'The pain sits in the stomach' <i>Er sitzt im Parlament</i> Lit. 'He sits in parliament' (= is a member of parliament)	<i>Die Polizei setzte den Kriminellen ins Gefängnis</i> Lit. 'The police set the criminal guy in prison' <i>Der Chirurg setzt eine Prothese in die Hüfte</i> Lit. 'The surgeon sets a prosthesis in the hip' /
	Contact	<i>Die Brille sitzt schief auf der Nase</i> Lit. 'The glasses sit crooked on the nose' <i>Das Messer sitzt an der Kehle</i> Lit. 'The knife sits at the throat'	<i>Er setzt die Brille auf die Nase</i> Lit. 'He sets the glasses on the nose' <i>Der Bandit setzte ein Messer an ihre Kehle</i> Lit. 'The bandit set the knife at the throat'
metaphorical	Containment	<i>Er sitzt in der Falle/in den Problemen</i> Lit. 'He sits in the trap/in the problems'	<i>Er hat sein Vertrauen in seine Schwester gesetzt</i> Lit. 'He has set his confidence in his sister'
	Contact	<i>Das Kleid sitzt nicht</i> Lit. 'The skirt does not sit' (= does not fit)	
	Written text	<i>Ein Komma steht zwischen den Wörtern</i> Lit. 'A comma stands between the words'	<i>Der Lehrer setzte ein Komma zwischen die Wörter</i> Lit. 'The teacher set a comma between the words' <i>Einen Diskussionspunkt auf die Tagesordnung</i>

Further learning challenges with PSVs and PLVs:

Used in larger sequences

- Specification of morpho-syntactic cases
- in fixed collocations ('Funktionsverbgefüge', Eisenberg 2006 or van Pottelberge 2001), e.g.
 - *in Verbindung setzen*
lit. 'to set into contact' = 'to get in touch'
 - *in den Vordergrund stellen*
lit. 'to put into the foreground'
= 'to place special emphasis on'

➤ Posture and Placement Vs used in specific Cs:

Cs semantically and syntactically related

➤ **PLVs** in caused motion constructions

Sem.	CAUSE-MOVE	<cause	theme	goal >
	↓	↓	↓	↓
Synt.	VERB	SUBJECT	OBJECT	OBLIQUE
	<i>stellte</i>	<i>die Tochter</i>	<i>die Teller</i>	<i>in die Spülmaschine</i>

(Goldberg 1995 and 2006)

(15) *Die kleine Tochter stellte die Teller in die Spülmaschine.*

Lit. 'The young daughter put upright the plates into the dishwasher'.

➤ PSVs in intransitive motion constructions

Sem.	LOCATION	< theme	goal >
	↓	↓	↓
Synt.	VERB	SUBJECT	OBJECT
	<i>liegt</i>	<i>das Kind</i>	<i>im Bett</i>
	'lies'	'the child'	'in the bed'

(16) *Das Kind liegt im Bett*

Lit. 'The child lies in the bed'

➤ Caused motion C + intransitive C are **linked to each other at semantic and syntactic level**

➤ Semantic level:

– Intransitive motion C expresses **result** of action expressed by Caused motion C, e.g.

(17) *Die Mutter legt das Baby ins Bett* (CMC)

Lit. 'The mother lays the baby into the bed'

(18) *Das Baby liegt im Bett* (INTR C)

Lit. 'The baby lies in the bed'

– Goldberg (1995, 2006): **part-of-relation**

Syntactic level:

- Motivation for morpho-syntactic cases in Cs
 - accusative in caused motion Cs*
 - dative in intransitive Cs*
- Favorite prepositions in Cs (Schönefeld 2006)

Test with Italian learners of German

(De Knop & Mollica 2016)

■ AIM

- Compare traditional teaching method with semantic cognitive linguistic and constructionist method
- More efficient to describe + teach both V types in Cs ?

■ PARTICIPANTS

- 2 Groups of Italian master-I students at University of Milano, learning German
- N = 20 students per group



■ TEST DESIGN

- Cloze test, fill in a verb
- 30 sentences, 7 distractors
- Pretest & posttest: same amount but different sentences

Ex.

Setzen Sie das fehlende Verb ein.

	Satz	fehlendes Verb
1	Seitdem er klein ist, ... er in Berlin.	
2	Kannst du bitte die Teller in die Spülmaschine ...	
3	Ich habe großen Hunger, wann kann ich etwas ...?	
4	Kannst du ohne Brille lesen, was an der Tafel geschrieben	
5	Er ... vor einem Problem.	
6	Die Verletzten ... ihre Hoffnung in die Hände der Helfer.	
7	Er wollte ein neues Auto ..., hatte aber kein Geld.	
8	Seitdem sie arbeitslos ist, ... sie in Schwierigkeiten.	
9	Der Arzt fragte: Wo ... der Schmerz?	
10	Ich habe so viel zu tun und ... unter Druck.	

- **PRETEST:**

- done 1 week before the lessons
- « out of the blue »

- **TEACHING METHODOLOGY CONTROL GROUP:**

- traditional lesson by Fabio M. (45 min)
- Differences in orientation with PSVs and PLVs
- Case-marking

■ TEACHING METHODOLOGY TEST GROUP:

- Lesson by Sabine DK (45 min)
- Starting point: both Cs (caused motion + intransitive motion) + realisation with Vs
- Enriched with inventory of exs from tables with semantic uses of PSVs + PLVs: postural, locational, metaphorical

■ RESULTS

Control group + Test group compared:

	Pretest CG	Posttest CG	Pretest TG	Posttest TG
Correct answers	34 %	60 %	23 %	62 %

- Similar results with posttests CG & TG;
- But TG not so good results for pretest => great progress!
- Progress confirmed by Chi-square test: $p = .004$, **very significant**

Asset 3 of CxG for FLT/FLL:

Integrative approach

- Learn sequences with the matching lexemes(= PLVs/PSVs)
(cf. Ellis & Ferreira 2009a and 2009b)
 - Describe PLVs & PSVs in parallel
 - in caused motion Cs: Placement V
 - in intransitive motion Cs: Posture V
 - Additional info about morpho-syntactic cases + prepositions
 - Several Cs at the same time (organized in a constructicon)
- **time-saving, more efficient**

3. Teaching Methodology: Constructions + Embodiment

Observation:

- Having learnt constructional templates of L2
= no guarantee for ability to produce Cs +
instantiations in communicative way!
- Cognitive Linguistics: conceptual categories + expressions
are result of **embodied processes** (Lakoff 1987).
- *[C]onstructions are the fundamental units of language acquisition
and reflect the most direct embodiment of learners' communicative
intentions* (Ellis & Cadierno 2009: 111).
- Surprisingly: CL-insights about embodiment not much
exploited in FLT/FLL.

3.1. Evidence for embodiment

▪ in neurolinguistics

Feldman/Narayanan (2004: 389): ... *all understanding involves **simulating or enacting the appropriate embodied experience**. When asked to grasp, we enact it. When hearing or reading about grasping, we simulate grasping or watching someone grasp.*

Lakoff & Johnson (1999: 22): ...*human concepts are not just reflections of an external reality, but ... they are crucially **shaped by our bodies and brains, especially by our sensorimotor system**.*

Rathunde (2009: 71): *Embodiment suggests that it is **through our bodily perceptions, movements, emotions, and feelings** that meaning becomes possible.*

Lakoff/Johnson (1999: 36):

- We orient our bodies with respect to containers (rooms, beds, buildings,...) (cf. PSVs+PLVs)
- Mvt in terms of source-path-goal schema

Problem in FLL:

- when learning L2, you have L1-categorization in mind and have not made the experience of embodiment with L2-concepts as a child!
- FLT should be grounded in embodiment to make up for the missing link between foreign concepts and language in childhood.

3.2. Few (tentative) studies in language pedagogy:

- James Asher (1982) ‘total physical response’: interactive activities, motion in class-room
- Lapaire (2013), Lapaire & Etcheto (2010): English grammar + dance.
- Küppers et al. (2011): ‘Inszenierungen im FSU’, staging in FLT

3.3. Construction practice

3.3.1. Constructions with *bis*

A. Interactive practice with own body

- Start with spatial Cs and ask learners to perform what they hear (Even 2011)

(19) *Peter geht bis an die Tür und öffnet sie mit dem Schlüssel*

Lit. 'Peter goes up to the door and opens it with the key'

(20) *Maria streckt sich bis an die Tischecke*

Lit. 'Maria stretches herself up to the table corner'

B. Work with pictures/images for bodyparts:

Ex. (21) *Das Wasser steht dem Mann bis ...*

Lit. 'The water stands to the man up to ...'



(faz.net)

(22) *Das Wasser steht dem Mann bis ...*



(zoonar.de)

(23) *Das Wasser steht dem Hund/der Frau bis ...*



(24) *Das Wasser steht dem Mann bis ...*

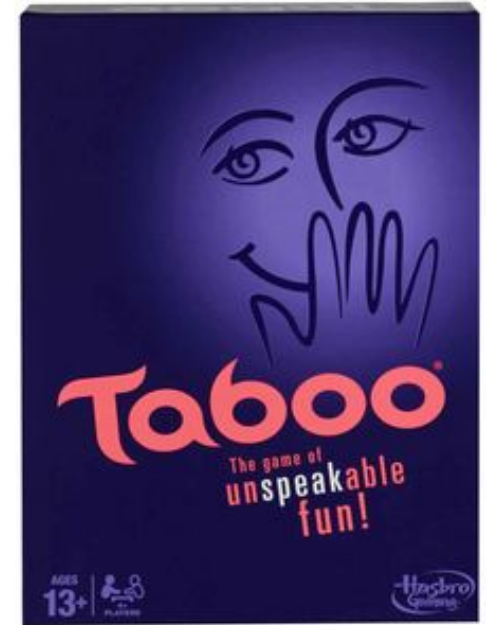


(zoonar.de)

3.3.2. Constructions with PSVs/PLVs

C. Interactive exercises with games

- Inspired by games like 'Taboo' (1989).
- Teacher brings some objects which can be moved or pictures representing « scenarios/ lifelike situations» (Di Pietro 1987: 3)



- One student should perform a scene without words, the other students have to guess what is represented
- Students become “full participants in human discourse” (Di Pietro 1997: 3) and use their body to represent scenes.

D. Use of puppets/Playmobil-figures



- Teacher/Learners use puppets/Playmobil-figures to represent caused motion situations which have to be guessed by other students (Legutke & Vogts 2011)
- Importance of correct selection of V + case + prep!

4. Conclusions

- Teaching in Cs + embodiment is promising.
- Proposed methodology should be tested (some empirical studies, e.g. for learning of PLVs and PSVs)
- Report on some success with constructions for expression of abstract motion (De Knop 2015):
 - (25) *ein Wort in eine andere Sprache übersetzen*
Lit. 'a word into another language translate'
 - (26) *Er beißt in den saftigen Apfel*
Lit. 'He bites into the juicy apple'

- Talk only described a small sample of basic Cs
- Future perspective:
develop list of main relevant Cs in each language
(cf. also Framenet for different languages:
FrameNet Brasil (Torrent et al.);
Gfol for German (Boas et al.);
Swedish constructicon (Loenheim et al.))

Thank you!

