A smurf-based analysis of placeholder expressions

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Outline

Placeholder expressions

- *Placeholder expressions* (PHE):

  (1) English: whatsit, whatchamacallit, thingamajig,
       what's-her/his/their-name you-know-WHO,

- Characterization (Cheung, 2015):
  - substitute a *target* expression
  - target: can be phrase, word, syllable
  - pragmatics: speaker cannot utter target for *pragmatic reasons*

Smurfing

- *The Smurfs*: Belgian comics series by Peyo, since 1958, originally in French, translated into 25+ languages
- Smurfs speak "their own language, Smurf."

(2) a. What a disaster!
       It makes you want to smurf (= tear) your hair out! (en)

   b. Welch eine Kataschlumpfe (= Katastrophe 'catastrophe')! Es ist zum Schlümpferaufen (= Haare 'hair')! (de)

   c. Quel désastre! C'est à s'arracher les schtroumpfs!(fr)
   The Hungry Smurfs. p. 7

Smurf as a placeholder expression

- *smurf* replaces another expression (target)
- pragmatic reasons to use *smurf* instead of target
- analysis of smurfing as step towards an analysis of placeholder expressions in general.
- frequency:
smurfing (French, Spanish)	8.5%, 8.9%	(Bollig, 2016, 51, 75)
placeholder expression	0.5%	(Podlesskaya, 2010, 12)
- Here: Smurfing in German

Overview

1 Introduction

2 Previous approaches to placeholder expressions

3 Properties of smurfing

4 HPSG modelling

5 Conclusion

Enfield (2003)

- Target: vague, general truth-conditional meaning
- Pragmatics: special conversational restrictions, speaker-hearer attitudes
- Captures differences: *what's-her-name* vs. *you-know-WHAT*

(3) *you-know-WHAT* (Enfield, 2003, 107)
  - Target: something
  - Pragmatic reason:
    I don't want to say the word for this thing now
  - Recoverability:
    ▶ I don't say it now because I know I don't have to
    ▶ By saying *you-know-WHAT* I think you'll know what I'm thinking of.

⇒ Pragmatic reason and recoverability: Can be modelled as *use-conditions* Gutzmann (2013), i.e. *conventional implicatures* with speaker attitudes.

Problem: Enfield's Target

- placeholders not always exchangeable with general items.
- occur in positions with high lexical restrictions (collocations, idiom parts)

(4) zeigen, wo <u>Barthel</u>/ #jemand/ #etwas den Most holt
show where ??/ someone/ something the cider gets
'show s.o. what's going on'

(5) [sie] waren so motiviert, uns zu zeigen, wo Dingsbums
they were so motivated to.us to show where PHE
(= Barthel) den Most holt, daß…
?? the cider gets that

'they were to motivated to show us what's going on that …' (www)

⇒ Placeholders can refer to *concrete expressions*!

Placeholders as metalinguistic demonstratives

- Cheung (2015)
- Placeholder is pronoun referring to any linguistic expression
- placeholder combines syntactically with an operator **SHIFT**
- **SHIFT**: maps linguistic expression to its meaning.
- Solves problem of highly specific targets

Problems

- Targets without denotation: syllable

  (6) Ao-shenme-de shi xianren Faguo zongtong.
      Ho-llan-de   be current France president
       'Ao-something-de is the current President of France.'
       (Cheung, 2015, 301)
  - a. $[[shenme]] = lang$
  - b. $[[\textbf{SHIFT}(lang)]] =?$

- Licensing of the **SHIFT** operator?

Placeholder expressions: summary

- Target can be specific, even meaningless.
- Different placeholders can have different pragmatic reasons.
- Recoverability required

General properties

- Chatzopoulos (2008): literal vs. "semantically unspecified" use:

  (7) a. Gargamel: Smurf-prints! (footprints left by Smurfs) (Chatzopoulos, 2008)

  b. Are you making smurf (= fun) of me? (*The Fake Smurf*, 4)

  ▸ literal: refers to small blue creatures
  ▸ semantically unspecified: can take various meanings or remain empty

- Two *smurf* lexemes
- *smurfing*: use of "semantically unspecified" *smurf*
- "semantically unspecified" *smurf* is placeholder expression
- Dörner (2012): 536 smurfings from 6 German Smurf stories

Pragmatic Reason

- Chatzopoulos (2008): smurfing is a strong marker of Smurf identity.
- smurfing only used by Smurfs; non-Smurfs only use literal *smurf*
- Smurfing is presented as a defining criterion of the Smurfs.
⇒ Smurfing is an in-group marker; Smurfs are depicted as a special sociolinguistic group.

(8)   A speaker is marked as Smurf and signals their Smurf-ness.

Recoverability of smurfing

- Chatzopoulos (2008): OT constraint
  SMURF: "smurf all lexical morphemes."
- Outranked by recoverability constraint
  → smurfing only in recoverable contexts.
- Factors facilitating recoverability of smurfing:
    - phonological similarity:

        (9) smurfday (= birthday)

    - multiword expressions
      ("proverbs, idioms and phrases with some degree of fossilization")
    - pragmatically rich context
- Just like for *you-know-WHAT* (Enfield, 2003, 107):

    (10) I don't say the target expression because I know I don't have
          to. By using *smurf* I think you'll know what I am thinking of.

Phonology of smurfing

- Chatzopoulos (2008): English *-smurf-* can replace one syllable, conserving overall metrical properties of the target.
- Smurfing of individual (underlying) syllables in German as well:

(11) a. Ka.ta.schlumpf.e (= Ka.ta.stroph.e 'catastrophe')
          → Ka.ta.schlum.pfe

      b. schlumpf.est.ier.en (= pro.test.ier.en 'protest')
          → schlum.pfes.tie.ren

But: second type of smurfing

- different inflectional paradigm

    (12) Hast du ver-schlumpf-t (= ver-stand-en)?
          have you DER-smurf-pcp (= DER-stand-pcp 'understood')
          'Do you understand?'

    (13) *Hast du ver-schlumpf-en (= ver-stand-en)?

- derivational affix not present in the target

    (14) Eine schlumpf-ig-e (= gut-e) Idee!
          a   smurf-DER-f.sg good-f.sg idea
          'a good idea'

⇒ Smurfing of a morphological unit!

Size of smurfing

- only a root:

    (15) Hast du ver-schlumpf-t   (= ver-stand-en)?
          have you DER-smurf-AFF.pcp (= DER-stand-pcp 'understood')

          'Do you understand?'

- a root plus a derivational affix:

    (16) Um das Nützliche mit dem Angenehmen zu schlumpf-en
          to the useful   with the pleasant   to smurf-inf
          (= ver-bind-en),   …
          (= DER-bind-inf 'connect')
          'to mix business with pleasure, …'

- a compound:

    (17) Herzlichen Glück-schlumpf/ Schlumpf (= Glück-wunsch)!
          hearly   luck-smurf/   smurf!   (= luck-wish)
          'Congratulations!'

- Any morphological unit, excluding inflection, can be smurfed.

Syntactic transparency of smurfing

The smurfed expression vs. target:

- inherited:
  - part of speech
  - N: gender; V: auxiliary selection
  - in general: argument selection

  (18) Für wen schlumpf-st (= hält-st) du dich?
        for who smurf-2.sg (= hold-2.sg) you yourself

        'How do you speak to me? Who do you think you are?'

- not inherited: inflection class

  (19) a. halt-en 'hold' – hält-st 'hold-2.sg'
        b. Für wen *schlümpf-st du dich?

Phonological vs. morphological smurfing

p-smurfing	m-smurfing
replaces single underlying syllable	replaces (simple or complex) morphological unit
depends on syllable structure	depends on morphological structure
form constant *schlumpf*	form determined by paradigm *schlumpf/schlümpf*
Kata.schlumpf.e (= Katastrophe) catastrophe	Schlümpf-e (= Haar-e) smurf.pl-pl (hair-pl)

P- and m-placeholding

p-/m-distinction applies to other placeholders:

- Cheung (2015): Chinese *shenme*: *Ao-shenme-de* 'Hollande' (p-placeholding)

- German:

  (20) m-placeholding: (target is compound)
        Herzlichen Dings (= Glück-wunsch)!
        heartly   PHE   luck-wish   'Congratulations!'

  (21) p-placeholding: (target is syllable)
        soll   an irgendeinen support eine analy…dingens datei
        must.1.sg to some   support an   analy-PHE   file
        (= Analyse-Datei) senden.
          analysis-file   send
        'I must send an analysis file to some support.'

Summary: Properties of smurfing

- single inflectional word *Schlumpf* 'smurf' with Umlaut.
- literal and placeholder use
- placeholder use has use condition of "Smurf-ness" and recoverability constraint
- p-smurfing: replaces syllables
- m-smurfing: replaces morphological units
- same as for placeholder expressions!

HPSG modelling: Overview

- morphology: Bonami & Boyé (2006)
- applied to compounds: Desmets & Villoing (2009)
- transparent heads: Pollard & Sag (1994), Levine (2010)
- lexeme(s) for *Schlumpf* 'smurf'
- Smurfing is use of *Schlumpf* 'smurf' in already existing placeholder constructions.

Lexemes

- Bonami & Boyé (2006): lexeme with stems value for inflection
- lexical-identifier (lid) value – not a head-feature!!

$$
\begin{bmatrix}
\text{stems} & \begin{bmatrix} \text{slot1} \; \textit{schlumpf} \\ \text{slot2} \; \textit{schlümpf} \end{bmatrix} \\
\text{s|loc} & \begin{bmatrix}
\text{cat} & \begin{bmatrix} \text{hd} \; \textit{noun} \\ \text{lid} \; \textit{schlumpf-lid} \end{bmatrix} \\
\text{cont|index} & \begin{bmatrix} \text{num} \; \textit{sg} \\ \text{per} \; \textit{3rd} \\ \text{gen} \; \textit{masc} \end{bmatrix}
\end{bmatrix}
\end{bmatrix}
$$
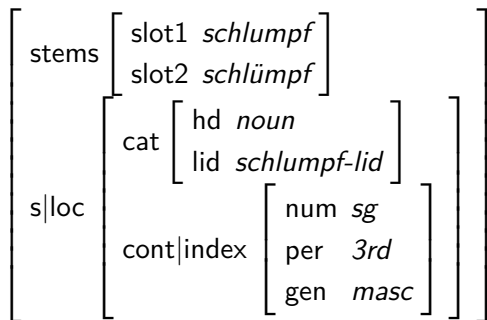
One *smurf*-lexemes, two lexical identifiers

- Sort hierarchy for the *schlumpf* lexical identifiers (lid):

  schlumpf-lid

  schlumpf-lit　　*schlumpf-phe*
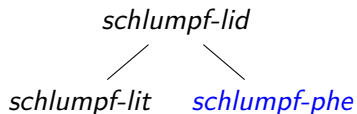
- literal *schlumpf*: refers to a smurf

$$\left[\text{s|l|cat|lid } \textit{schlumpf-lit} \right] \Rightarrow$$

$$\left[\text{s|l|cont} \begin{bmatrix} \text{index } \boxed{1} \\ \text{restr} \left\{ \begin{bmatrix} \textit{smurf-rel} \\ \text{inst } \boxed{1} \end{bmatrix} \right\} \end{bmatrix} \right]$$

Placeholder lexemes

- Placeholder lexemes:

$$phe\text{-}lid$$

dings-phe   *dingsbums-phe*   *schlumpf-phe*   …
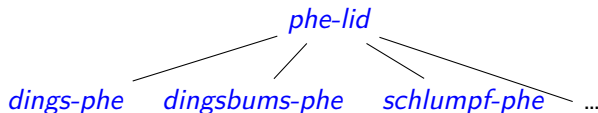
- Pragmatics: Smurf-specific use condition (**Smurf-UC**):
  A speaker is marked as Smurf and signals their Smurf-ness.

- Recoverability constraint (**Recov**)

- placeholder use:
  $\left[\ \text{s|l|cat|lid } \textit{schlumpf-phe}\ \right] \Rightarrow$

  $$\left[\ \text{s|l|ctxt|backgrd }\left\{\ \textbf{Smurf-UC},\ \textbf{Recov}\ \right\}\ \right]$$
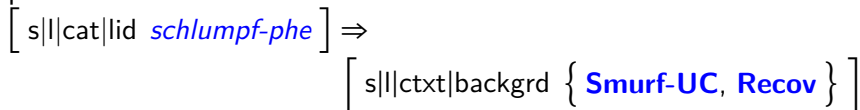
- no further special restrictions on *schlumpf-phe*

Placehoder compounds

- Desmets & Villoing (2009) extend Bonami & Boyé (2006) to compounding
- Compound: complex lexeme with lexemes on its M-DTRS list:

$$\begin{bmatrix} \textit{compound-lxm} \\ \text{m-dtrs } \left\langle \textit{lexeme, lexeme} \right\rangle \end{bmatrix}$$

- Placeholder compounds:

```
          compound-lxm

   ...      phe-cmpd      ...

 p-phe-cmpd     m-phe-cmpd
```
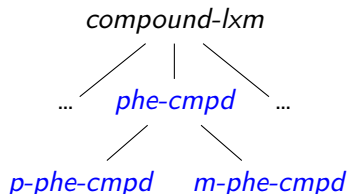
Placeholder compounds

- combination of a target lexeme and a placeholder lexeme
- lid-value inherited from target ([1])
- some use-conditional information inherited from placeholder ([2])
- head-information inherited from the target ([3])

$$
\textit{phe-compd} \Rightarrow
\begin{bmatrix}
\text{s|l} &
\begin{bmatrix}
\text{cat} &
\begin{bmatrix}
\text{head} & \boxed{3} \\
\text{lid} & \boxed{1}
\end{bmatrix} \\
\text{ctxt } \Sigma \cup \boxed{2}
\end{bmatrix} \\[2em]
\text{m-dtrs} \left\langle
\begin{bmatrix}
\text{s|l} &
\begin{bmatrix}
\text{cat} &
\begin{bmatrix}
\text{head} & \boxed{3} \text{ } \textit{major-pos} \\
\text{lid} & \boxed{1} \neg \textit{ phe-lxm}
\end{bmatrix}
\end{bmatrix}
\end{bmatrix}
\right\rangle \\[2em]
\oplus \left\langle
\begin{bmatrix}
\text{s|l} &
\begin{bmatrix}
\text{cat|lid} & \textit{phe-lxm} \\
\text{ctxt} & \boxed{2}
\end{bmatrix}
\end{bmatrix}
\right\rangle
\end{bmatrix}
$$

Phonological placeholder compound

- Placeholder is the morphological non-head
- It only contributes use-conditional meaning and phonology.
- Everything else is inherited from the target.
- Placeholder must be simple, target can be simple or complex.

phon-phe-compd $\Rightarrow$

$$
\begin{bmatrix}
\text{stems} & \textbf{phe-phon}(\boxed{7},\boxed{6}) \\[2ex]
\text{s|l} & \begin{bmatrix}
\text{cat} & \boxed{4} \begin{bmatrix} \text{lid} & \neg phe \end{bmatrix} \\
\text{cont} & \boxed{5} \\
\text{ctxt} & \Sigma \cup \boxed{2}
\end{bmatrix} \\[5ex]
\text{m-dtrs} & \left\langle
\begin{bmatrix}
simple\text{-}lexeme \\
\text{stems|slot1} \ \boxed{7} \\
\text{s|l|cat} \begin{bmatrix} \text{lid} & phe \end{bmatrix} \\
\text{ctxt} \ \boxed{2}
\end{bmatrix}
,
\begin{bmatrix}
\text{stems} \ \boxed{6} \\
\text{s|l} \begin{bmatrix} \text{cat} & \boxed{4} \\ \text{cont} & \boxed{5} \end{bmatrix}
\end{bmatrix}
\right\rangle
\end{bmatrix}
$$

Kataschlumpfe (= Katastrophe 'catastrophe')

$$\begin{bmatrix} \textit{inflected-word} \\ \text{phon} \ \langle \ \textit{Kataschlumpfe} \ \rangle \end{bmatrix}$$

$$\begin{bmatrix} \textit{phon-phe-cmpd} \\ \text{stems} \ \boxed{9} \begin{bmatrix} \text{stem1} \ \boxed{8} \ \textit{Kataschlumpfe} \\ \text{stem2} \ \boxed{8} \end{bmatrix} \\ \text{cat} \quad \boxed{4} \\ \text{cont} \quad \boxed{5} \\ \text{ctx} \quad \boxed{2} \end{bmatrix}$$

where $\boxed{9}$ = **phe-phon**($\boxed{7}$,$\boxed{6}$)

$$\begin{bmatrix} \text{stems} \ \begin{bmatrix} \text{stem1} \ \boxed{7} \ \textit{schlumpf} \end{bmatrix} \\ \text{ctx} \quad \boxed{2} \ \big\{ \ \textbf{Smurf-UC}, \ \textbf{Recov} \ \big\} \end{bmatrix} \qquad \begin{bmatrix} \text{stems} \ \boxed{6} \begin{bmatrix} \text{stem1} \ \textit{Katastrophe} \end{bmatrix} \\ \text{cat} \quad \boxed{4} \\ \text{cont} \quad \boxed{5} \end{bmatrix}$$
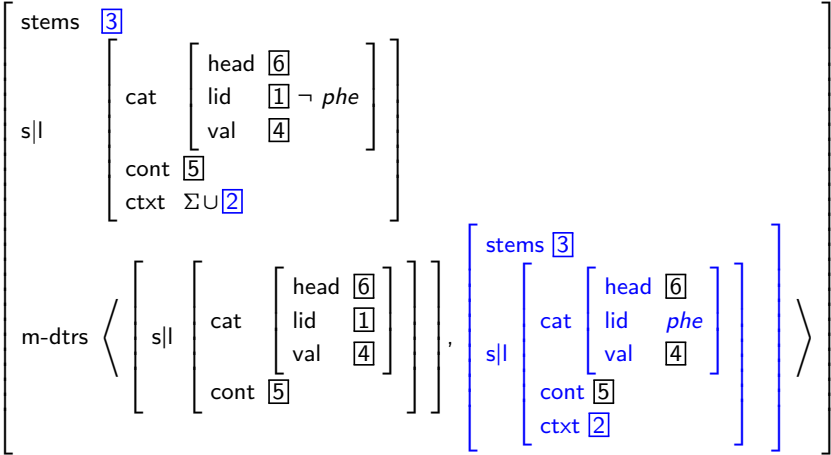
Morphological placeholder compound

- Placeholder is morphological head, determines inflection
- shares HEAD, VAL, and CONT with target.
- simple or complex (*schlumpf-ig*); target is simple or complex

$morph\text{-}phe\text{-}cmpd \Rightarrow$

$$
\begin{bmatrix}
\text{stems} & \boxed{3} \\[4pt]
\text{s|l} &
\begin{bmatrix}
\text{cat} &
\begin{bmatrix}
\text{head} & \boxed{6} \\
\text{lid} & \boxed{1} \neg \; phe \\
\text{val} & \boxed{4}
\end{bmatrix} \\[10pt]
\text{cont} & \boxed{5} \\
\text{ctxt} & \Sigma \cup \boxed{2}
\end{bmatrix} \\[20pt]
\text{m-dtrs} \; \Big\langle \;
\begin{bmatrix}
\text{s|l} &
\begin{bmatrix}
\text{cat} &
\begin{bmatrix}
\text{head} & \boxed{6} \\
\text{lid} & \boxed{1} \\
\text{val} & \boxed{4}
\end{bmatrix} \\[8pt]
\text{cont} & \boxed{5}
\end{bmatrix}
\end{bmatrix}
, \;
\begin{bmatrix}
\text{stems} & \boxed{3} \\[4pt]
\text{s|l} &
\begin{bmatrix}
\text{cat} &
\begin{bmatrix}
\text{head} & \boxed{6} \\
\text{lid} & phe \\
\text{val} & \boxed{4}
\end{bmatrix} \\[8pt]
\text{cont} & \boxed{5} \\
\text{ctxt} & \boxed{2}
\end{bmatrix}
\end{bmatrix}
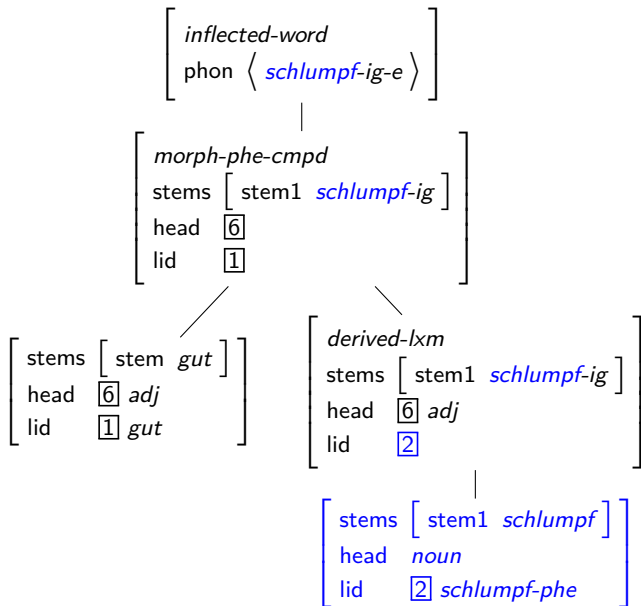\; \Big\rangle
\end{bmatrix}
$$

PoS-changing derivation

- German: default derivational affixes for PoS-switching/conversion: *-ig* (N→A)
- no change in LID value: collocations are LID co-selection

    (22) strong tea/?car → strength of the tea/?car
          power of the car/?tea → powerful car/?tea

*eine **schlumpf**-ig-e (= gut-e) Idee* 'a smurfy (= good) idea'

$$
\begin{bmatrix}
\text{inflected-word} \\
\text{phon } \left\langle \text{ schlumpf-ig-e } \right\rangle
\end{bmatrix}
$$

|

$$
\begin{bmatrix}
\text{morph-phe-cmpd} \\
\text{stems } \begin{bmatrix} \text{stem1 } \text{schlumpf-ig} \end{bmatrix} \\
\text{head } \quad \boxed{6} \\
\text{lid } \qquad \boxed{1}
\end{bmatrix}
$$

$$
\begin{bmatrix}
\text{stems } \begin{bmatrix} \text{stem } \text{gut} \end{bmatrix} \\
\text{head } \quad \boxed{6} \text{ adj} \\
\text{lid } \qquad \boxed{1} \text{ gut}
\end{bmatrix}
\qquad
\begin{bmatrix}
\text{derived-lxm} \\
\text{stems } \begin{bmatrix} \text{stem1 } \text{schlumpf-ig} \end{bmatrix} \\
\text{head } \quad \boxed{6} \text{ adj} \\
\text{lid } \qquad \boxed{2}
\end{bmatrix}
$$

|

$$
\begin{bmatrix}
\text{stems } \begin{bmatrix} \text{stem1 } \text{schlumpf} \end{bmatrix} \\
\text{head } \quad \text{noun} \\
\text{lid } \qquad \boxed{2} \text{ schlumpf-phe}
\end{bmatrix}
$$

Exclude free use of placeholders?

- Parallel to Cheung (2015): placeholder lexeme $\approx$ shenme placeholder compound $\approx$ **SHIFT**.
- Placeholders must occur inside placeholder compounds.
- Constraint: no word can have a *phe* LID-value

(23) $word \Rightarrow \neg \left[\text{s|l|cat|lid } phe\text{-}lid \right]$

Conclusion

- "Semantically unspecified" *smurf* is a placeholder expression.
- special: pragmatic condition (marker of Smurf-ness)
  else: standard placeholder combination
- Smurf comics: rich database for investigating placeholders
- basic analytical technique: (semi-)transparent combinations (Pollard & Sag, 1994; Levine, 2010)
- Enfield (2003): use-conditional semantics adopted; but specific target
- Cheung (2015): placeholders as replacing lexemes adopted; but p-/m-placeholding solves technical problem
- Chatzopoulos (2008): insights on smurfing adopted; but only looks at p-smurfing

Further research

- investigation of smurfing in other languages (p- and m-smurfing)
- application of the theory to classical placeholder expressions
- extension to other phenomena of subtractive morphology
- other types of placeholder compounds?
- distinction between different placeholders:

  (24) Smurf1: Auweija, der Dings (= Krakakass) …, der …
                 oh dear the PHE (= howlibird)   the

         Smurf2: Der … der Krakakass!
               the   the howlibird

  Smurfing cannot be used if the speaker lacks a word, i.e., more like
  you-know-WHAT than *whatchammacallit*.

- Analysis of placeholders with internal structure: *what's-her/his-name*

Vielen Dank fürs Schlumpfen!

Thank you for smurfing!

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