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Lexicographer's Lacunas
or
How to Deal with Missing Dictionary Forms (On the Example of Czech)

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OUTLINE:

- Introduction
- Lacunas and their types
- Identifying lacunas
- Recommendations for lexicographers
- Summary

Introduction

Lacunas in general

- words with incomplete paradigm

Lacunas in lexicography

- words without a dictionary form

This issue is rather neglected in literature: Wolski 1989, Schnorr 1991, Svensén 2009: 105–106; cf. in Czech lexicography: Čermák 1995, Filipec 1995, Kochová – Opavská 2016

Should the lexicographer reconstruct the *unattested* word form?

Dictionary forms

typically the *singular nominative* for nouns or the *infinitive* for verbs

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- Latin, Greek or Bulgarian: 1st person singular present tense
- Hungarian or Macedonian: 3rd person singular present tense
- classical Arab dictionaries (listing roots instead of whole lexemes)

There will always be lexemes that lack the representative form = **lacunas**

Identifying lacunas and their types

Data

SYN2015 (100M) & SYN v6 (4G)
- 400 nouns
- 400 verbs
- 1000 adjectives

Classification of lacuna types

lacuna type		restricted collocability		incompatibility with RGC	preference for non-RGC	lack of data
		terminology (MWT)	idioms/ non-term. MWE			
POS	nouns	0	++	+	+	+
	adjectives	++	+	+	0	+
	verbs	0	+	0	+	++

Types of lacunas

1. **systemic**: dictionary form cannot exist due to some reason (such as *vdaná* "married [woman]" in masculine) → calculate the expected frequency

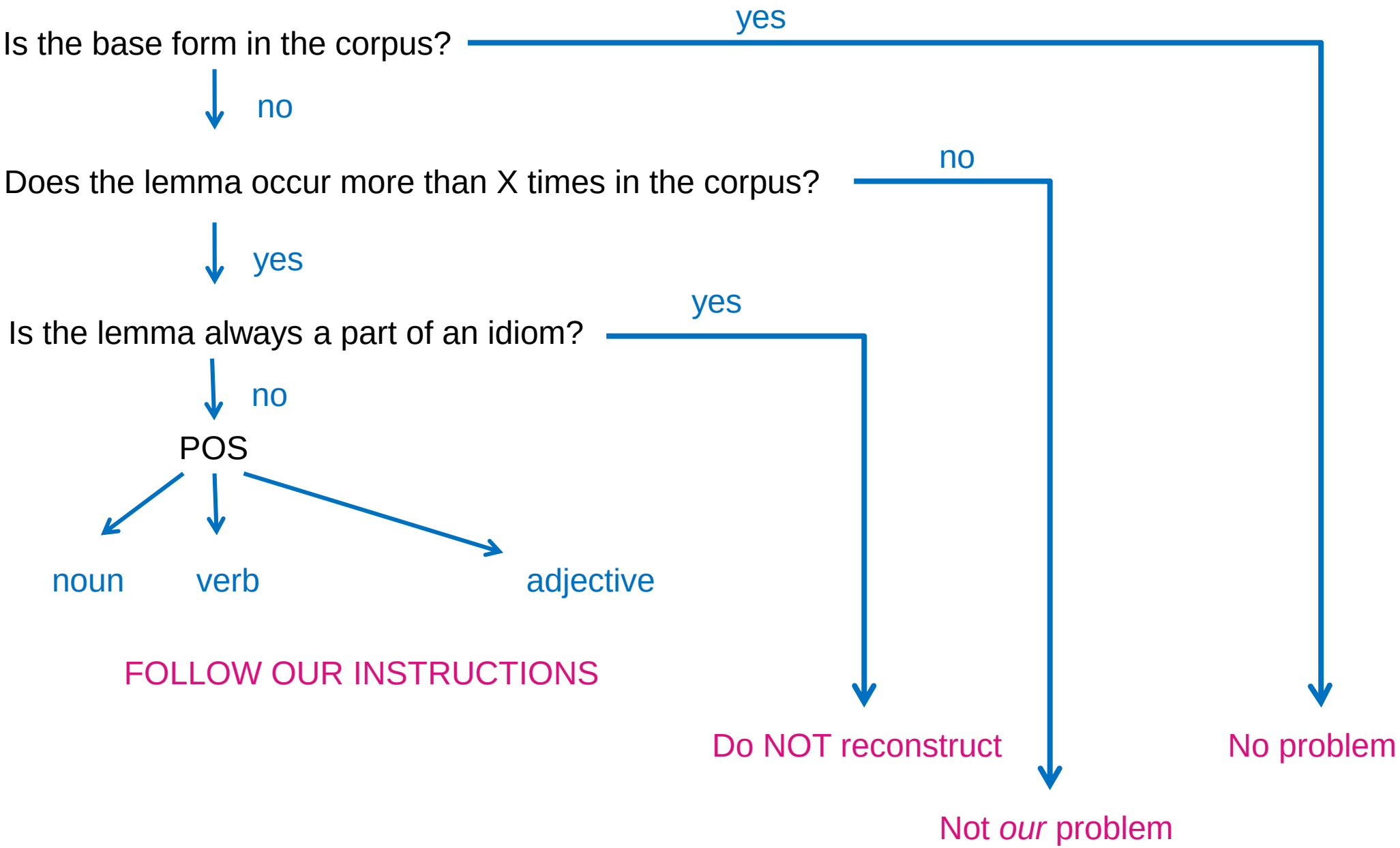
2. as the result of a **lack of data** → verify the lacuna in a larger corpus (SYN v6: 4G)

Expected frequency of dictionary form

$$\mathbb{E}[Fq_{DF}] = p(\mathrm{RGC}) \times Fq(\mathrm{lemma}) = \frac{Fq(\mathrm{RGC})}{Fq(\mathrm{POS})} \times Fq(\mathrm{lemma})$$

Only cases where $E[Fq_{DF}] \geq 3.8$ were considered – lower limit of binomial confidence interval for 3.8 (in 100M corpus) is 1

Recommendations for lexicographers


Is the base form in the corpus?
yes
no
Does the lemma occur more than X times in the corpus?
no
yes
Is the lemma always a part of an idiom?
yes
no
POS
noun
verb
adjective
FOLLOW OUR INSTRUCTIONS
Do NOT reconstruct
Not *our* problem
No problem

Verbs (400)

in most cases, infinitive form attested in a larger corpus

Rare exceptions:
A. semantic preference for past tense:
infrequent iteratives (*ptávat se* “to ask [repeatedly]”, *mluvívat* “to speak [repeatedly]”, *scházívat* “to miss [repeatedly]”)

B. restricted collocability (idioms):
mít vystaráno (“problem solved”), *bejvávalo* (“Those were the days.”)

→ recommendation: reconstruct
with exception of idioms

Adjectives (1000)

supporting POS (noun modifications)
formally very regular; Nsg.m.: *-ý/-í*

A1. limited collocability – multi-word terms:
kyselina hyaluronová (“hyaluronic acid”), *euklidovská geometrie* (“Euclidean geometry”), *lymská borelióza* (“Lyme borreliosis”)

A2. limited collocability – non-term MWE/idioms:
slonová kost (“ivory”), *jáma lvová* (“lion’s den”), *zcuchané vlasy* (“tousled hair”), *ustlaná postel* (“made-up bed”)

Adjectives (cont'd)

B1. semantic incompatibility with masculine
těhotná ("pregnant"), *vdaná* („married [woman]"),
vnadná ("luscious")

B2. semantic incompatibility with singular
nesčetní ("countless")

→ recommendations:

- A1 (terms): reconstruct
- A2 (MWE): headword = MWE
- B: as close as possible to dictionary form

Nouns (400)

restricted collocability + reduced paradigm

A. restricted collocability

- idioms: *pozdě bycha honiti* (“to go chasing ifs”), *být v čudu* (“to be gone”), *jít na kutě* (“hit the hay”), *k nezaplacení* (“priceless”)
- compounds written separately: *na blízko* (“close to”), *do červena* (“reddish”), *z loňska* (“from the last year”); *bez meškání* („without delay“)

Nouns (cont'd)

B. incompatibility with singular – pluralia tantum: *dveře* ("door"), *brýle* ("glasses"), *noviny* ("newspaper")

C. preference for plural forms
(dictionary form can be found in a larger corpus)
ančovička ("anchovy"), *paterče* ("quintuplet"), *cisterciák* ("Cistercian")

→ recommendations:

- A (MWE): headword = MWE

cf. practice in older Czech dictionaries (hypotethical forms as headwords marked by *)

- B: as close as possible to the dictionary form (= Npl)
- C: reconstruct

Summary

lacuna type		restricted collocability		incompatibility with RGC	preference for non-RGC	lack of data
		terminology (MWT)	idioms/ non-term. MWE			
POS	nouns	0	++	+	+	+
	adjectives	++	+	+	0	+
	verbs	0	+	0	+	++

→recommendation:
reconstruct

lacuna type		restricted collocability		incompatibility with RGC	preference for non-RGC	lack of data
		terminology (MWT)	idioms/ non-term. MWE			
POS	nouns	0	++	+	+	+
	adjectives	++	+	+	0	+
	verbs	0	+	0	+	++

→recommendation:

do not reconstruct
and use MWE as headword

lacuna type		restricted collocability		incompatibility with RGC	preference for non-RGC	lack of data
		terminology (MWT)	idioms/ non-term. MWE			
POS	nouns	0	++	+	+	+
	adjectives	++	+	+	0	+
	verbs	0	+	0	+	++

→recommendation:

do not reconstruct
and keep as close as possible to the dictionary form

lacuna type		restricted collocability		incompatibility with RGC	preference for non-RGC	lack of data
		terminology (MWT)	idioms/ non-term. MWE			
POS	nouns	0	++	+	+	+
	adjectives	++	+	+	0	+
	verbs	0	+	0	+	++

→recommendation:

reconstruct
and add a marker/gloss/usage note

lacuna type		restricted collocability		incompatibility with RGC	preference for non-RGC	lack of data
		terminology (MWT)	idioms/ non-term. MWE			
POS	nouns	0	++	+	+	+
	adjectives	++	+	+	0	+
	verbs	0	+	0	+	++

→recommendation:
reconstruct

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Thank you for your attention!

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