

How to optimally place your clitics
Czech clitic syntax in a constraint-based model

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Introduction

- (1) *Chytrý krteček si ušil kalhoty.*
clever little.mole REFL.DAT sew.PTCP trousers

‘The clever little mole sewed himself some trousers.’

Central questions:

- How can we best model the second-position (2P) placement of clitics in Czech?
 - Does 2P correspond to a fixed syntactic position?
 - Are there general principles that lead to 2P positioning?
 - What is the influence of prosody and information structure?
- How are Czech clitics best characterised?
 - Are they enclitics?
 - Are clitic auxiliaries verbs?

Why am I interested in these questions?

- There has been a long and intense discussion of 2P phenomena.
- The problems of fixed-position analyses have long been recognised, yet they still prevail. Alternative derivational proposals struggle with the Czech data.
- Czech clitics are often characterised as enclitics, despite clear counterexamples.
- The potential role of information structure has so far been neglected.

Central claims:

- 2P placement can successfully be captured by an OT analysis with conflicting, ranked constraints.
 - The clitics' varying output position results from the interaction of two constraints on their placement.
 - These constraints can partly be traced back to more general grammatical restrictions.
- Czech clitics are unlike full words, but also do not fulfil all criteria for typical clitics.
 - Czech 2P clitics can be prosodically free.
 - Verbal clitics behave unlike other verbs and should therefore be analysed separately.

Itinerary

- 1 Inventory and Ordering of Czech 2P Clitics
- 2 Clitic Placement in Simple Clauses
 - Clitics in 2P and “delayed placement”
 - Clitics in first position and prosodic dependency
 - Background: Optimality Theory
 - Capturing 2P and 3P placement
- 3 Comparing Clitic and Non-Clitic Verbs
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Inventory of Czech 2P clitics: pronouns

	ACC/GEN	DAT
1SG		mi
2SG	tě	ti
3SG.M/N	ho	mu
REFL	se	si

Table: Unambiguously clitic pronouns of Czech

Inventory of Czech 2P clitics: auxiliaries

COP	PASS.AUX	PAST.AUX	COND.AUX	FUT.AUX
jsem (su)	jsem (su)	jsem	bych (bysem)	budu
jsi (seš)	jsi (seš)	jsi	bys (bysi)	budeš
je	je	–	by	bude
jsme	jsme	jsme	bychom (bysme)	budeme
jste	jste	jste	byste	budete
jsou	jsou	–	by	budou

Table: Copula and auxiliary forms of the verb *být* (2P clitics in bold, colloquial forms in brackets)

Relative ordering with the 2nd position

- (2) Clitic template for Czech (cf. Zwicky, 1977, 24):
AUX – REFL – FREE DATIVE – IO – DO

- (3) *Já jsem se ti mu to neodvážila*
I AUX.1SG REFL you.DAT him.DAT it.ACC NEG:dare.PTCP
řici.
say.INF

‘(I’m telling) you, I did not dare say it to him.’

(cf. Veselovská, 1995, 273)

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Placement in second position

Czech 2P clitics follow the first syntactic constituent, which can be of any syntactic type:

- (4) a. *Anna **by** pomohla svému bratrovi.*
Anna COND.3 help.PTCP her.DAT brother.DAT
'Anna would help her brother.'
- b. *Svému bratrovi **by** Anna pomohla.*
her.DAT brother.DAT COND.3 Anna help.PTCP
'Anna would help her brother.'

Placement in second position (cont.)

- c. *Bez váhání by pomohla svému bratřovi.*
Without hesitation COND.3 help.PTCP her.DAT brother.DAT
‘Without hesitation, she would help her brother.’
- d. *Pomohla by svému bratřovi.*
help.PTCP COND.3 her.DAT brother.DAT
‘She would help her brother.’
- e. ... *že by Anna pomohla svému bratřovi.*
COMP COND.3 Anna help.PTCP her.DAT brother.DAT
‘...that Anna would help her brother.’

Placement in second position

Unlike in e. g. BCMS, clitic positioning after the first word typically does not occur in Czech:

- (5) a. *Ten básník mi čte ze své knihy.*
that poet me.DAT read.3SG from his book

‘That poet reads to me from his book.’

- b. **Ten mi básník čte ze své knihy.*
that me.DAT poet read.3SG from his book

(cf. Halpern, 1995, 17)

“Delayed” placement in third position

Clitics can appear in third position when preceded by a complementiser or interrogative and an element which is fronted for information-structural reasons:

(6) a. ... *že* *Petr* *se* *odstěhoval*.
 COMP *Petr* REFL move.PTCP

b. ... *že* *se* *Petr* *odstěhoval*.
 COMP REFL *Petr* move.PTCP

‘...that Petr has moved.’

(cf. Fried, 1994, 159)

“Delayed” placement in third position

- (7) a. *A co EMA **by** na to řekla?*
and what Ema COND.3 to this say.PTCP

‘And what would EMA say to that?’

(cf. Lenertová, 2001, 299)

- b. *A co **by** Ema na to řekla?*
and what COND.3 Ema to this say.PTCP

‘And what would Ema say to that?’

“Delayed” placement in third position

However, a verb apparently cannot intervene between complementiser and clitic:

- (8) *... *že* *nedal* *by* *mu* *to*.
COMP NEG.give.PTCP COND.3 him.DAT it

‘...that he would not give it to him.’

(cf. Veselovská, 1995, 110)

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Colloquial placement in first position

In colloquial language, clitics can sometimes appear initially:

- (9) *Sem ti to už přece řek.*
AUX.1SG you.DAT it already though say.PTCP

‘I already told you that, though.’

(cf. Franks & King, 2000, 114)

Colloquial placement in first position

They may also appear even lower in the clause:

- (10) *Jistě* *namítnete*, *že* *to* *VÁM* *se*
surely object.2PL COMP it you.PL.DAT REFL.ACC
zítra *nestane*.
tomorrow NEG:happen.3SG

‘You will surely object that to YOU, it will not happen tomorrow.’

(cf. Franks, 1998, 38)

...but let us assume for now that this is a different grammar, where the clitics underlie fewer restrictions.

Prosodic dependency of Czech clitics

Yet, this does not mean that in the standard language, we can simply analyse 2P clitics as enclitics:

- (11) *Ten doktor, co mu důvěruješ, se*
that doctor REL him.DAT trust.2SG REFL.ACC
neholí.
NEG:shave.3SG

‘That doctor, whom you trust, doesn’t shave.’

(cf. Toman, 1986, 125)

Prosodic dependency of Czech clitics

Clitics can even be preceded *and* followed by a break:

- (12) a. *Důkazy, které předložila, ho, jak je vidět, nepřesvědčují.*
evidence REL present.PTCP him as is see.INF NEG:convince
'Obviously, the evidence she has presented doesn't convince him.'
- b. **Ho důkazy, které předložila, jak je vidět, nepřesvědčují.*
him evidence REL present.PTCP as is see.INF NEG:convince
- c. *?*Důkazy, které předložila, jak je vidět, ho nepřesvědčují.*
evidence REL present.PTCP as is see.INF him NEG:convince
- d. **Důkazy, které předložila, jak je vidět, nepřesvědčují ho.*
evidence REL present.PTCP as is see.INF NEG:convince him

(cf. Junghanns, 2003, 7)

Prosodic dependency of Czech clitics

It thus seems that Czech clitics do not have a fixed direction of cliticisation. Moreover, they can appear without any host – if 2P does not provide them with one, they will do without.

Anderson (1992): “Prosodic dependence can be found either with or without special placement, and vice versa.”

⇒ The syntactic behaviour of Czech clitics cannot be explained merely with their prosodic properties.

→ This is a severe problem for all analyses that assume an influence of phonology/PF on clitic placement.

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Optimality Theory: Underlying assumptions



- Gen has Freedom of Analysis.
- The descriptive as well as explanatory burden is placed entirely on Eval.
- Candidates created by Gen are evaluated in Eval with respect to violable constraints that are ranked language-specifically.
- “No amount of success on the weaker constraint can compensate for failure on the stronger one” (Prince & Smolensky, 2006, 126).
- The different linguistic levels interact freely.

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Capturing the second position

Based on Anderson (1996), Richardson (1997) proposes the constraints in 13a-b and the ranking in 13c to capture Czech clitic placement:

- (13) a. $\text{NONINITIAL}(\text{Cl}, \text{CP}) = \text{A}$ given clitic must not be initial in CP.
- b. $\text{EDGEMOST}(\text{Cl}, \text{L}, \text{TP}) = \text{A}$ given clitic should be as close to the left edge of TP as possible.
- c. $\text{NONINITIAL}(\text{Cl}, \text{CP}) \gg \text{EDGEMOST}(\text{Cl}, \text{L}, \text{TP})$
(cf. Richardson, 1997, 146-7)

Placement in second position

- (14) *Šárka si koupila knihy.*
Šárka REFL buy.PTCP books
'Šárka bought herself books.'


	NONINI(Cl,CP)	EDGMO(Cl,L,TP)
a. [CP [TP cl DP V DP]]	*!	
 b. [CP [TP DP cl V DP]]		*
c. [CP [TP DP V cl DP]]		**!
d. [CP [TP DP V DP cl]]		**!*

Table: OT tableau illustrating 2P placement with empty CP

Placement in second position

- (15) ... že **si** Šárka koupila knihy.
COMP REFL Šárka buy.PTCP books
‘... that Šárka bought herself books.’


	NONINI(CP)	EDGMO(L,TP)
a. [CP cl Comp [TP DP V]]	*!	*
 b. [CP Comp [TP cl DP V]]		
c. [CP Comp [TP DP cl V]]		*!
d. [CP Comp [TP DP V cl]]		*!*

Table: OT tableau illustrating ideal positioning with filled CP

Placement in second position

- (16) *Koupila si knihy.*
buy.PTCP REFL books

‘She bought herself books.’

	NONINI(Cl,CP)	EDGMO(Cl,L,TP)
a. [CP [TP cl V DP]]	*!	
☞ b. [CP [TP V cl DP]]		*
c. [CP [TP V DP cl]]		**!

Table: OT tableau illustrating clitic placement after an initial verb

Placement in second position

→ Nothing has to move in front of the clitics in order to host them. This is good, because, as we have seen in examples 11 and 12, Czech clitics do not require a host!

⇒ Clitics appear in second position due to conflicting, ranked constraints.

→ But note that this second position is not a fixed position in the syntax!

“Delayed” clitic placement

Why can clitics appear in third position after a topic or focus?

(6) a. ... *že* *Petr* *se* *odstěhoval.*
 COMP Petr REFL move.PTCP

b. ... *že* *se* *Petr odstěhoval.*
 COMP REFL Petr move.PTCP

‘...that Petr has moved.’

(cf. Fried, 1994, 159)

“Delayed” clitic placement

When a topicalised element is present, the clitic can never precede it because the topic position is above TP:


	NI(CP)	EM(L,TP)
a. $[_{CP} \text{Comp} [_{FinP} \mathbf{cl} DP_{Top} [_{TP} V]]]$		*!
 b. $[_{CP} \text{Comp} [_{FinP} DP_{Top} [_{TP} \mathbf{cl} V]]]$		
c. $[_{CP} \text{Comp} [_{FinP} DP_{Top} [_{TP} V \mathbf{cl}]]]$		*!

Table: OT tableau illustrating clitic-third after a topic

→ Again, CP is filled, so the clitic can appear at its ideal position. The topic does not change that.

⇒ Placement is not “delayed”!

Phrasal integrity

Why do Czech clitics not appear even further to the left, after the first *word*? Recall example 5:

- (5) a. *Ten básník mi čte ze své knihy.*
that poet me.DAT read.3SG from his book

‘That poet reads to me from his book.’

- b. **Ten mi básník čte ze své knihy.*
that me.DAT poet read.3SG from his book

(cf. Halpern, 1995, 17)

Phrasal integrity

- (17) INTEGRITY(C) = A member of a category C may not be interrupted by phonological material that is not part of C.
Where: $C \in \text{PCat} \cup \text{GCat}$

(cf. Anderson, 2000, 23)

→ A member of that family is INTEGRITY(XP), which bans the breaking up of non-functional phrases like DPs, PPs etc.

→ It is ranked high in Czech.

Phrasal integrity

In consequence, the initial constituent remains intact in Czech:

	NI (CP)	ITGR (XP)	EM (L,TP)
☞ a. [TP [DP Ten básník] cl]			**
b. [TP [DP Ten cl básník]]		*!	*

Table: OT tableau illustrating placement after the initial DP

Summary: Clitic placement in simple clauses

- 2P clitics appear after the first constituent of their clause.
- They may be third when a focus/topic follows the complementiser/interrogative phrase.
- Clitics are not always en- or proclitic – their placement thus cannot be reduced to prosodic weakness.
- 2P placement can be captured in an OT account, using just two clitic-specific constraints.
- We need no additional assumptions to integrate 3P placement.

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Clitic and non-clitic auxiliaries

COP	PASS.AUX	PAST.AUX	COND.AUX	FUT.AUX
jsem (su)	jsem (su)	jsem	bych (bysem)	budu
jsi (seš)	jsi (seš)	jsi	bys (bysi)	budeš
je	je	–	by	bude
jsme	jsme	jsme	bychom (bysme)	budeme
jste	jste	jste	byste	budete
jsou	jsou	–	by	budou

Table: Copula and auxiliary forms of the verb *být* (2P clitics in bold, colloquial forms in brackets)

Four views on the status of clitic auxiliaries

Fried (1994) assumes that the different clitic and non-clitic present tense forms of *být* ‘to be’ are “clitic and non-clitic uses of the same lexical item”:

(18) Clitic and non-clitic allomorphs according to Fried (1994):

a. $jsem_1$

b. $jsem_2$ $[[\]_\omega _]_\omega$

Four views on the status of clitic auxiliaries

In Junghanns's (2002) view, clitics belong to parts of speech just like non-clitics, but are distinguished from them through a feature [+clitic]:

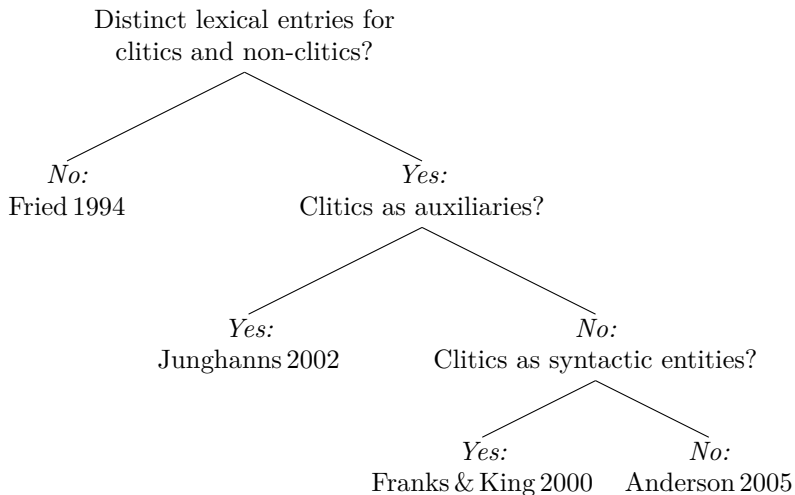
- (19) Clitic and non-clitic features according to Junghanns (2002):
- a. Passive auxiliary: [+V, -N, +aux, -cl]
 - b. Past auxiliary: [+V, -N, +aux, +cl]
 - c. Prosodic subcategorisation of clitics: [[]_ω -]_ω

Four views on the status of clitic auxiliaries

Franks and King (2000) assume that “clitic auxiliaries are pure realizations of person-number agreement features, whereas the nonclitic copulas consist of the verb ‘be’ plus these features”.

Anderson (2005): “The clitic is not itself a syntactic constituent of its phrasal domain, but rather a phonological marker of some feature(s) associated with the domain”, i. e. a phrasal affix.

Four views on the status of clitic auxiliaries



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Morphology of clitic and non-clitic auxiliaries

Should we assume that these clitic and non-clitic forms are one lexical entry, or not?

COP	PASS.AUX	PAST.AUX
jsem (su)	jsem (su)	jsem
jsi (seš)	jsi (seš)	jsi
je	je	–
jsme	jsme	jsme
jste	jste	jste
jsou	jsou	–

Table: Present tense forms of the verb *být*

Omission and reduction

Only clitics: obligatory gap in 3SG and 3PL

- (20) a. *Spala.*
sleep.PTCP.F.SG
‘She slept.’
- b. *Spaly.*
sleep.PTCP.F.PL
‘They slept.’

Omission and reduction

Only clitics: in colloquial language, with an overt subject, the 1SG and 1PL may optionally be null

- (21) a. *Já už spal.* (for: *Já **jsem** už spal.*)
I already sleep.PTCP

‘I was already asleep.’

(cf. Toman, 1980, 307)

- b. *My už spali.* (for: *My **jsme** už spali.*)
we already sleep.PTCP

‘We were already asleep.’

Omission and reduction

Only clitics: 2SG can be contracted to *-s* in colloquial language

- (22) a. *Tys přišel.* (for: *Ty jsi přišel.*)
you:2SG come.PTCP

‘You came.’

- b. **Tys učitel.* (for: *Ty jsi učitel.*)
you.2SG teacher

‘You are a teacher.’

(cf. Toman, 1980, 306)

Omission and reduction

	clitic	non-clitic
1SG	jsem / \emptyset	jsem
2SG	jsi / -s	jsi
3SG	\emptyset	je
1PL	jsme / \emptyset	jsme
2PL	jste	jste
3PL	\emptyset	jsou

Table: Clitic and non-clitic present-tense forms of *být* ‘to be’

Colloquial allomorphy

Only non-clitics: colloquial variants *su* (1SG) and *seš* (2SG)

(23) a. *Ty seš hlupák.* (for: *Ty jsi hlupák.*)
you COP.2SG fool

‘You are a fool.’

b. *Ty seš pozván.* (for: *Ty jsi pozván.*)
you AUX.2SG invite.PASSPTCP

‘You are invited.’

c. **Ty seš spadl.* (for: *Ty jsi spadl.*)
you AUX.2SG fall.PASTPTCP

‘You fell.’

Frequentative formation

Only non-clitic present tense forms: compatibility with frequentative suffix

(24) a. *Já jsem chválíván.*
I PASSAUX.1SG praise.FREQ.PASSPTCP

b. *Já byvám chválen.*
I be.FREQ.1SG praise.PASSPTCP

‘I am repeatedly being praised.’

Frequentative formation (cont.)

c. *Já jsem chválíval.*
I PASTAUX.1SG praise.FREQ.PASTPTCP

d. **Já bývám chválil.*
I be.FREQ.1SG praise.PASTPTCP

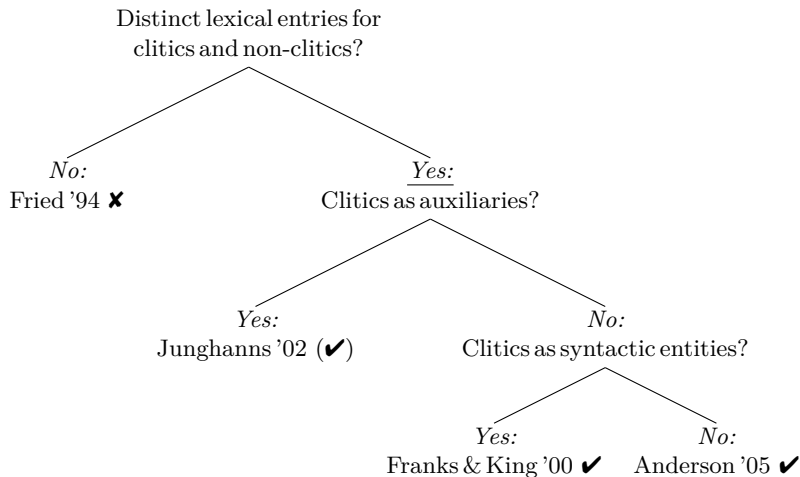
‘I was repeatedly praising.’

(cf. Veselovská, 2008, 559)

Morphology of clitic and non-clitic auxiliaries

- The great amount of morphological idiosyncrasies indicates that clitic and non-clitic auxiliaries are distinct lexical entitites.
- The fact that the clitic past auxiliary cannot support the frequentative suffix follows directly if clitics are pure feature realisations or affixes.
 - They do not possess a verbal stem that the frequentative suffix can attach to.

Morphology of clitic and non-clitic auxiliaries



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Syntax of clitic and non-clitic verbal elements

Are clitic auxiliaries verbs, or do they constitute a different category?

→ We will now take a closer look at the syntactic behaviour of different types of clitic and non-clitics verbs.

Fronting to the left periphery

Remember that verbs behave differently in 3P contexts:

- (8) *... *že* *nedal* *by* *mu* *to*.
COMP NEG.give.PTCP COND.3 him.DAT it

‘...that he would not give it to him.’

(cf. Veselovská, 1995, 110)

Fronting to the left periphery

Also, Avgustinova and Oliva (1995) report that not all verb types can bring along their objects:

- (25) a. *Posílat dopisy ti budu pravidelně každý týden.*
send.INF letters you will.1SG regularly every week

‘I shall send letters to you regularly every week.’

- b. **Posílal dopisy jsem ti pravidelně každý týden.*
send.PTCP letters AUX.1SG you regularly every week

Intended: ‘I sent letters to you regularly every week.’

(cf. Avgustinova & Oliva, 1995, 27-8)

Fronting to the left periphery

Acceptability judgement study with 13 participants:¹

	main clause		embedded clause	
	V	V+DP	V	V+DP
infinitive	✓✓	✓✓	?	✓
finite verb	✓✓	*	?	*
past ptcp	✓✓	*	?	**
pass. ptcp	*	**	*	**

Table: Acceptability judgements for fronting of verbal material

¹ ** = 1.0-1.7; * = 1.8-2.5; ? = 2.6-3.4; ✓ = 3.5-4.2; ✓✓ = 4.3-5.0

Fronting to the left periphery

→ Finite verbs and past participles pattern together, whilst infinitives and passive participles each display their own behaviour.

Note that the past participle (“*l-participle*”) is the one that combines with the clitic auxiliaries (both past and conditional).

⇒ This might suggest that the past participle *is* a finite verb – but then, the clitic past tense auxiliary cannot be a finite verb as well!

Interaction of participle and *-li*

According to Toman (1996), the verbal clitic *-li* only attaches to finite verbs. But:

- (26) *Byl-li* *však* *Bůh* *svědkem toho,* *co* *se*
be.PTCP-if however God witness this.GEN what REFL
stalo, *pak* *zná* *stejně* *dobře* *jako* *já*
happen.PTCP then know.3SG equally well as I
pravdu.
truth.ACC

‘If however God was witness to what happened, then He knows the truth as well as I do.’

(SYN2015 corpus)

Interaction of participle and *-li*

Acceptability judgement study with eight participants:²

	perfective	imperfective
infinitive+ <i>li</i>	*	*
finite verb+ <i>li</i>	✓✓	✓✓
past ptcp+ <i>li</i>	✓	✓✓
pass. ptcp+ <i>li</i>	?	*

Table: Acceptability judgements for different verb types with *-li*

→ Again, the behaviour of past participles and finite verbs is strikingly similar!

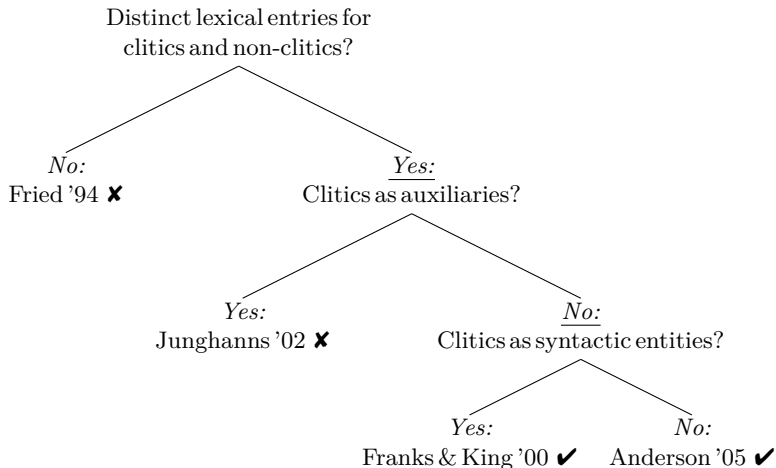
² ** = 1.0-1.7; * = 1.8-2.5; ? = 2.6-3.4; ✓ = 3.5-4.2; ✓✓ = 4.3-5.0

Interaction of participle and *-li*

→ Only if we assume clitic and non-clitic forms of *být* to be fundamentally different, we can explain the peculiar behaviour of Czech 2P clitics and *l*-participles.

⇒ The auxiliary clitic might not be a verb, but instead some spell-out of features/an affix that combines with an inflected participle, which functions as the finite verb of its sentence.

Summary: Comparing Clitic and Non-Clitic Verbs



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Climbing out of infinitival clauses

Climbing occurs out of complements of modal verbs:

- (27) a. *Včera mu to musel dát.*
yesterday him.DAT it.ACC must.PTCP give.INF

‘Yesterday he had to give it to him.’

- b. **Včera musel mu to dát.*
yesterday must.PTCP him.DAT it.ACC give.INF

- c. **Včera musel dát mu to.*
yesterday must.PTCP give.INF him.DAT it.ACC

(cf. Veselovská, 1995, 305)

Climbing out of infinitival clauses

And also out of complements of phasic verbs:

(28) a. *Jan se začal smát.*

Jan REFL.ACC start.PTCP laugh.INF

‘Jan started to laugh.’

b. [?]* *Jan začal se smát.*

Jan start.PTCP REFL.ACC laugh.INF

c. [?]* *Jan začal smát se.*

Jan start.PTCP laugh.INF REFL.ACC

(cf. Avgustinova & Oliva, 1995, 14)

Climbing out of defective clauses

Matrix verbs associated with clitic climbing (cf. Spencer & Luís, 2012, 166):

- phasic verbs (for example *begin*, *finish*)
- verbs of desire/belief (for example *want*, *believe*)
- modals (for example *must*, *may*, *seem*)

Climbing out of defective clauses

Acceptability judgement task with 16 participants:

- (29) a. **Lucie už dlouho chce koupit si nové kolo.*
Lucie already long wants buy.INF REFL new bike
- b. **Lucie už dlouho chce si koupit nové kolo.*
Lucie already long wants REFL buy.INF new bike
- c. ✓✓ *Lucie si už dlouho chce koupit nové kolo.*
Lucie REFL already long wants buy.INF new bike

‘Lucie has been wanting to buy herself a new bike for a long time now.’

Domains that block clitic climbing

In contrast, climbing out of finite clauses is ungrammatical:

- (30) a. *Já si myslím, že mu to*
I.NOM REFL.DAT think.1SG COMP him.DAT it.ACC
Mařenka neřekla.
Mařenka NEG:say.PTCP

‘I think that Mařenka did not tell him that.’

- b. **Já si mu myslím, že to*
I.NOM REFL.DAT him.DAT think.1SG COMP it.ACC
Mařenka neřekla.
Mařenka NEG:say.PTCP

(cf. Franks & King, 2000, 242)

Domains that block clitic climbing

Also infinitival clauses with PRO subjects block climbing:

- (31) a. *Nutil* *Petra*₁ *PRO*₁ *dát* ***mu*** *tu* *knihu*.
make.PTCP Petr.ACC give.INF him.DAT that book

‘He made Petr give him that book.’

- b. **Nutil* ***mu*** *Petra*₁ *PRO*₁ *dát* *tu* *knihu*.
make.PTCP him.DAT Petr.ACC give.INF that book

(cf. Veselovská, 1995, 303-4)

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Climbing out of defective clauses

If complements that permit climbing are not CPs, but only vPs, then climbing is a direct result of EDGEMOST(Cl,L,TP). But:

- (32) *Místo toho se ho rozhodl [TP na moment /*
instead it.GEN REFL him decide.PTCP for moment
příště ignorovat ho].
next.time ignore.INF

‘He decided instead to ignore him for a moment/next time.’

(cf. Lenertová, 2004, 157)

Climbing out of defective clauses

- (33) $\text{EDGE}_{\text{MOST}}(\text{Cl}, \text{L}, \text{MaxTP})$ = A clitic must occur as close to the left edge of the highest TP in its clause complex as possible.


	THE TA	NI (CP)	EM (MxTP)	ST AY
a. $[_{\text{CP}} \text{cl } [_{\text{XP}} [_{\text{TP}} [_{\text{TP}} [_{\text{vP}} \text{e}^{\dagger}]]]]]$		*!	*	*
 b. $[_{\text{CP}} [_{\text{XP}} [_{\text{TP}} \text{cl } [_{\text{TP}} [_{\text{vP}} \text{e}^{\dagger}]]]]]$				*
c. $[_{\text{CP}} [_{\text{XP}} [_{\text{TP}} [_{\text{TP}} \text{cl } [_{\text{vP}} \text{e}^{\dagger}]]]]]$			*!	*
d. $[_{\text{CP}} [_{\text{XP}} [_{\text{TP}} \text{cl } [_{\text{TP}} [_{\text{vP}}]]]]]]$	*!			

Table: OT tableau illustrating clitic climbing to the highest TP

Blocked climbing out of CP complements

Clitic climbing is barred out of

- finite clauses
- control clauses with PRO subjects

→ If we just assume that these complements are CPs, all is well, right?

Blocked climbing out of CP complements

No! Our current constraint set gives the wrong result:

	NI (CP)	EM (MxTP)	ST AY
a. [CP [TP V DP [CP [TP PRO V cl]]]]		**!*	
☹ b. [CP [TP V cl DP [CP [TP PRO V e]]]]		*	*

Table: OT tableau illustrating wrongly predicted climbing out of a CP

→ Since $\text{EDGEMOST}(\text{Cl}, \text{L}, \text{MaxTP})$ allows multiple violations, the further a clitic is from the highest TP, the worse it gets.

⇒ The candidate with the lower clitic position has more EDGE-MOST violations than the one with the clitic in the higher CP.

Blocked climbing out of CP complements

So far, we have not looked at *how* the clitic can actually leave the lower CP. But if we assume that it must, like other elements, obey a non-derivational analog of the phase impenetrability condition, then we get the ban on climbing out of CP for free:

- (34) a. CP-BARRIER = *... X_i ... [CP ... [YP X_T ...] ...]
= An element which has a copy within CP must also have a copy at the left edge of that CP.
- b. CP-BARRIER \gg EDGEMOST(Cl,L,MaxTP)

Blocked climbing out of CP complements

	NI (CP)	CP BAR	EM (MxTP)	ST AY
☞ a. $[_{CP} [_{TP} V DP [_{CP} [_{TP} PRO V \mathbf{cl}]]]]$			***	
b. $[_{CP} [_{TP} V \mathbf{cl} XP [_{CP} [_{TP} PRO V \mathbf{et}]]]]$		*!	*	*
c. $[_{CP} [_{TP} V \mathbf{cl} DP [_{CP} \mathbf{et} [_{TP} PRO V \mathbf{et}]]]]$	*!		*	*

Table: OT tableau illustrating clitic climbing out of a CP

Blocked climbing out of CP complements

Why do clitics avoid the left edge of CP?

Dotlačil (2007):

- What goes through the CP edge must be interpreted as a contrastive topic or as a focus.
 - But Czech 2P clitics cannot be contrastive topics or foci.
- ⇒ Clitics are illicit at the CP edge!

→ NONINITIAL(Cl,CP) might actually have its source in a more general restriction on placing information-structurally “weak” elements in salient positions!

Summary: Clitic Climbing

- Clitics climb out of most infinitival complements.
- They do not climb out of finite clauses and infinitival clauses with PRO subjects.
- NONINITIAL(Cl,CP) is an offshoot of a general constraint which requires material at CP's left edge to be focused or contrastive.
- Due to this restriction, clitics cannot climb out of CPs – otherwise they would violate phase impenetrability.
- Constraint ranking:
THETA; NONINITIAL(Cl,CP); CP-BARRIER; INTEGRITY(XP)
>> EDGEMOST(Cl,L,MaxTP) >> STAY

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Conclusions

- Auxiliary clitics are not finite verbs. Instead, 2P clitics form a distinct class, with distinct properties and placement restrictions.
- The OT concept of violable, ranked constraints can be used to model clitic placement in Czech in simple and complex clauses.
- Due to conflicting constraints on their placement, clitics do not necessarily mark the left periphery.
- Czech 2P clitics do not fit the classical definition of being prosodically dependent.
- What causes their unusual syntactic behaviour is not prosody, but their inability to fulfil prominent information-structural roles.
- Clitics are also subject to STAY, THETA, and other general constraints, but the only clitic-specific constraint is EDGEMOST(CI,L,MaxTP).

Outlook

- The fact that different kinds of verbs and VPs behave differently with respect to fronting requires closer investigation and more data.
- Also, we need to thoroughly investigate the conditions that make clitic climbing possible/necessary.
- The hypothesis that the left edge of CP is not accessible for information-structurally deficient elements, also in simple clauses, still lacks independent support.
- Since OT aims at capturing differences between languages, the model should be extended to more Slavic and non-Slavic languages.

Further aspects of the analysis

- A closer investigation of the composition of the conditional auxiliary clitic (*by*, *bychom* etc.)
- A discussion of alternative constraints proposed by Billings (2002): SCOPE and SUFFIX
- A discussion of “syntax-and-PF” approaches as proposed by Bošković (2004) and Franks (2017) for South Slavic
- An analysis of verbal and VP topicalisation and its interaction with clitic placement
- An extension of the analysis to BCMS, where prosodic domains do play a role for clitic positioning

References

- Anderson, S. R. (1992). *A-Morphous Morphology*. Cambridge: Cambridge University Press.
- Anderson, S. R. (1996). How to put your clitics in their place, or why the best account of second-position phenomena may be something like the optimal one. *The Linguistic Review*, 13, 165–91.
- Anderson, S. R. (2000). Towards an optimal account of second position phenomena. In J. Dekkers, F. van der Leeuw & J. van der Weijer (Eds.), *Optimality Theory: Syntax, phonology and acquisition* (pp. 302–333). Oxford: Oxford University Press.
- Anderson, S. R. (2005). *Aspects of the theory of clitics*. Oxford: Oxford University Press.
- Avgustinova, T. & Oliva, K. (1995). *The position of sentential clitics in the Czech clause*. Saarbrücken: Universität des Saarlandes.
- Billings, L. A. (2002). Phrasal clitics. *Journal of Slavic Linguistics*(10), 53–104.
- Bošković, Ž. (2004). Clitic placement in South Slavic. *Journal of Slavic Linguistics*, 12, 37–90.
- Dotlačil, J. (2007). Why clitics cannot climb out of CP: A discourse approach. In M. G. Ulyana Savchenko & R. Compton (Eds.), *Formal Approaches to Slavic Linguistics (FASL): The Toronto meeting 2006* (pp. 76–93). Ann Arbor: Michigan Slavic Publications.
- Franks, S. (1998). *Clitics in Slavic*. Position paper presented at the Comparative Slavic Morphosyntax Workshop, Indiana University, Bloomington.
- Franks, S. (2017). *Syntax and Spell-Out in Slavic*. Bloomington: Slavica Publishers.
- Franks, S. & King, T. (2000). *A handbook of Slavic clitics*. Oxford: Oxford University Press.
- Fried, M. (1994). Second-position clitics in Czech. *Lingua*, 94, 155–75.

References (cont.)

- Halpern, A. (1995). *On the placement and morphology of clitics*. Stanford: Center for the Study of Language and Information.
- Junghanns, U. (2002). Klitische Elemente im Tschechischen: Eine kritische Bestandsaufnahme. In T. Daiber (Ed.), *Linguistische Beiträge zur Slavistik IX* (pp. 117–49). München: Sagner.
- Junghanns, U. (2003). *Non-cliticizing clitics?* Paper presented at the Fifth Conference on Formal Description of Slavic Languages (FDSL-5), University of Leipzig, 26–28 November.
- Lenertová, D. (2001). On clitic placement, topicalization and CP-structure in Czech. In G. Zybatow, U. Junghanns, G. Mehlhorn & L. Szucsich (Eds.), *Current issues in formal Slavic linguistics* (pp. 294–305). Frankfurt: Peter Lang.
- Lenertová, D. (2004). Czech pronominal clitics. *Journal of Slavic Linguistics*, 12(1/2), 135–71.
- Prince, A. & Smolensky, P. (2006). Optimality: From neural networks to Universal Grammar. In P. Smolensky & G. Legendre (Eds.), *The harmonic mind: From neural computation to optimality-theoretic grammar* (Vol. 1, pp. 123–43). Cambridge: MIT. (Originally published 1997 in *Science*, Vol. 275, pp. 1604–10.)
- Richardson, M. (1997). Czech clitics: 2P or not 2P, that is the question. In L. Kaiser (Ed.), *Studies in the morphosyntax of clitics* (pp. 131–50). New Haven: Yale University.
- Spencer, A. & Luís, A. (2012). *Clitics: An introduction*. Cambridge: Cambridge University Press.

References (cont.)

- Toman, J. (1980). Weak and strong: notes on *be* in Czech. In G. Brettschneider & C. Lehmann (Eds.), *Wege zur Universalienforschung. Sprachwissenschaftliche Beiträge zum 60. Geburtstag von Hansjakob Seiler* (pp. 305–310). Tübingen: Gunter Narr.
- Toman, J. (1986). Cliticisation from NPs in Czech and comparable phenomena in French and Italian. In H. Borer (Ed.), *The syntax of pronominal clitics* (pp. 123–47). New York: Academic Press.
- Toman, J. (1996). A note on clitics and prosody. In A. Halpern & A. Zwicky (Eds.), *Approaching second. Second position clitics and related phenomena*. Stanford: Center for the Study of Language and Information.
- Veselovská, L. (1995). *Phrasal movement and X⁰-morphology* (Unpublished doctoral dissertation). Palacký University Olomouc.
- Veselovská, L. (2008). The extended verbal projection in Czech: Three variants of the verb *be*. In G. Zybatow, L. Szucsich, U. Junghanns & R. Meyer (Eds.), *Formal Description of Slavic Languages: The fifth conference, Leipzig 2003* (pp. 555–69). Frankfurt: Peter Lang.
- Zwicky, A. (1977). *On clitics*. Bloomington: Indiana University Linguistics Club.

Děkuji za vaši pozornost!

Thank you for your attention!

