# Verb-echo answers in Polish as V-stranding VoiceP/vP ellipsis\*

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## 1. V-stranding ellipsis in answers to polar questions

Polish is one of the languages which can employ V-stranding ellipsis in answers to polar (yes/no) questions (V(erb)-echo answers; see (1)).<sup>1</sup> When the question contains auxiliary and modal verbs, it is the auxiliary or the modal which is echoed (see (2)).<sup>2</sup>

- (1) A: Kupiłeś truskawki? bought.2SG.M strawberries.ACC 'Did you buy strawberries?'
  - B: Kupiłem  $[X_{[+V]}]^p$  kupiłem truskawki]. bought.1SG.M bought.1SG.M strawberries.ACC 'I did.'
- (2) A: Będziesz jutro kupowała truskawki? will.2sG tomorrow buy.SG.F strawberries.ACC 'Will you be buying strawberries tomorrow?'
  - B: Będę  $[X_{[+V]}]$  jutro kupowała truskawki]. will.1SG tomorrow buy.SG.F strawberries.ACC 'I will be.'

<sup>\*</sup>I would like to thank the NELS reviewers and audience for their useful questions and suggestions.

<sup>&</sup>lt;sup>1</sup>See especially Holmberg (2015), and see Ruda (2014), Mendes (2020), Arregi and Pietraszko (2021) for some (preliminary) discussions of V-stranding in Polish.

The pattern is represented as  $\Sigma$ -stranding VP ellipsis in Ruda (2014), C-stranding IP ellipsis in Mendes (2020), and T-stranding VP ellipsis in Arregi and Pietraszko (2021), though these contributions do not focus on diagnosing the identity of the relevant projections.

<sup>&</sup>lt;sup>2</sup>In what follows, I will be concerned only with lexical V-echo answers, answers performed with auxiliaries and modals potentially following a different licensing path (VP ellipsis following an auxiliary/modal is available in a broader range of contexts than lexical V-stranding; see also footnote 10 for some relevant remarks).

In this contribution, I first offer some evidence supporting the analysis on which V-echo answers in Polish result from  $X_{[+V]}P$  ellipsis (as opposed to pro-drop/argument ellipsis) in section 2. Next, in section 3, based on arguments from the answering options, I show that in Polish  $X_{[+V]}P$  cannot be higher than AspP (see also some supporting evidence from V-echo answers to questions formulated with nominalisations in Appendix B) and, in sections 4 and 5, based on feature mismatch options, I show that it is lower than AspP and at least in some contexts can be lower than VoiceP.<sup>3</sup> This thus adds to the literature showing that such low V-stranding  $X_{[+V]}P$  ellipsis is available, pace Landau (2020a,b), but in line with Gribanova's (2020) analysis of Uzbek and Portelance's (2020) of Lithuanian.<sup>4</sup> There is thus a growing body of empirical evidence against the suggestion that the movement of X across a spell-out boundary (i.e., outside the complement of a phase head, e.g., V-to-Voice movement, where Voice is a phase head) bleeds XP ellipsis (e.g., V-stranding VP ellipsis; see Landau 2020a,b). To this I add a theoretical argument pertaining to the phasal nature of derivations in section 6.

# 2. Verb-echo answers in Polish as $X_{[+V]}P$ ellipsis

While diagnosing  $X_{[+V]}P$  ellipsis (as opposed to pro-drop/argument ellipsis) is a complex process, a number of features of Polish V-stranding in this context favour this analysis here. Firstly, based on data in Mendes and Ruda (2019), Mendes (2020) argues that first conjunct agreement, available in VS structures in Polish (see A's question in (3)), can be used for this purpose. In particular, the acceptability of first conjunct agreement in V-echo answers such as the one in (3) testifies to the presence of &P in the structure, singular agreement being incompatible with a pro-dropped subject referring to a group (see (4); see also Mendes 2020:26).<sup>5</sup>

<sup>&</sup>lt;sup>3</sup>Such (non-standard) diagnostics need to be employed because determining the category of  $X_{[+V]}P$  in Polish is a challenging problem due to the inadequacy of the usual diagnostics for determining the height of V movement in the language (see Ruda 2014 and references therein).

<sup>&</sup>lt;sup>4</sup>The elided projection is thus much lower in Polish than what is standardly assumed for V-echo answers (TP ellipsis; see, e.g., Gribanova 2017, McCloskey 2017, Mendes 2020, Sato and Maeda 2020; though see also Holmberg 2015). Higher ellipsis site has been motivated by word order and subject pronunciation-related facts. These cannot be employed in an analysis of Polish, whose word order is too unconstrained to make any relevant tests possible and which is a consistent *pro*-drop language.

 $<sup>^5</sup>$ As consistent null subject languages have been widely noted to block the indefinite reading of the null subject, Holmberg (2015) proposes the indefinite subject test to diagnose 'big ellipsis' in V-echo answers, that is the analysis on which the subject is elided as part of  $X_{[+V]}P$  ellipsis, as opposed to *pro*-drop coupled with VP-ellipsis. However, as Polish null subjects are in principle compatible with indefinite interpretations (see Ruda 2022), a more reliable diagnostic for a complex syntactic structure of the subject relies on clauses with &P subjects.

### Verb-echo answers in Polish

- (3) A: Czy tam na plaży leżała Maria i Jan? if there on beach lay.F.SG Maria and Jan 'Did Maria and Jan lie there on the beach?'
  - B: Leżała/ leżeli.
    lay.F.SG lay.M.PL
    'Yes, they did.'
    [lay.F.SG [xp there on beach t<sub>tav</sub> [&p Maria and Jan]]]
- (4) Na plaży leżała Maria i Jan. Po jakimś czasie #postanowiła/ postanowili on beach lay.F.SG Maria and Jan after some time decided.F.SG decided.M.PL wejść do wody.

enter to water

*Intended:* 'On the beach lay Maria and Jan. After some time they decided to get into the water.'

A similar argument can be made based on QP subjects with numerals above 4, which require default, third person singular neuter agreement in Polish, as A's question in (5) shows.

- (5) A: Czy tam na plaży leżało pięć kobiet? if there on beach lay.N.SG five women 'Did five women lie there on the beach?'
  - B: Leżało/ leżały.
    lay.N.SG lay.F.PL
    'Yes, they did.'

[lay.N.SG [ $_{XP}$  there on beach  $t_{lay}$  [ $_{QP}$  five women]]]

(6) Na plaży leżało pięć kobiet. Po jakimś czasie #postanowiło/ postanowiły on beach lay.N.SG five women after some time decided.N.SG decided.F.PL wejść do wody.

enter to water

*Intended:* 'On the beach lay five women. After some time they decided to get into the water.'

In addition to &Ps and QPs, also Negative Concord Item (NCI) subjects in Polish cannot be null independently of  $X_{[+V]}P$  ellipsis (see (7) from Ruda 2022).

(7) Nikt nie zdał egzaminu z semantyki we wtorek. W środę nobody not passed.SG.M exam from semantics on Tuesday on Wednesday też #(nikt) nie zdał egzaminu ze składni. also nobody not passed.SG.M exam from syntax *Intended:* 'Nobody passed the semantics exam on Tuesday. On Wednesday also nobody passed the syntax exam.'

While the NCI subject interpretation is available with V-echo answers in Polish (see (8)), this is not the case when the internal arguments are overt (see (9)), suggesting that the NCI reading in V-echo answers results from  $X_{[+V]}P$  ellipsis.

- (8) A: Czy nikt nie ukradł mi roweru?if nobody not stole me.DAT bike.GEN'A: Hasn't anybody stolen my bike?'B: (Nie,) nie ukradł.
  - no not stole
    B: (No,) nobody has.'

[not stole [ $_{XP}$  nobody  $t_{stole}$  you bike]]

- (9) A: Czy nikt nie ukradł mi roweru? if nobody not stole me.DAT bike.GEN 'Hasn't anybody stolen my bike?'
  - B: #(Nie,) nie ukradł ci roweru/ go. no not stole you.DAT bike.GEN him.GEN Intended: '(No,) nobody has.'

Yet another piece of evidence suggesting that answers to polar questions in Polish involve  $X_{[+V]}P$  ellipsis comes from answers consisting of a focused element: any element focused in the question can be given as an answer (see (10–11); see also Ruda 2014).

- (10) A: TYLKO ROWERU Ci jeszcze nikt nie ukradł? only bike.GEN you.DAT yet nobody not stole 'Is it only a bike that nobody has yet stolen from you?'
  - B: Tylko roweru.
    only bike.GEN
    'Yes, it's only a bike.'
  - B: [only bike [XP] me yet nobody not stole  $t_{[only\ bike]}]$ ]
- (11) A: Czy Tomek ZAWSZE się tak spóźnia? B: Zawsze.
  if Tomek always SE so is.late always
  'A: Is is always the case that Tomek is so late? B: Yes, it's always the case.'
  - B: [always  $\{x_P \text{ Tomek } t_{always} \text{ SE so is.late}\}$ ]

While this pattern does not involve V-stranding, it is yet another environment, in addition to the stranding of auxiliaries and modals, which clearly involves  $X_{[+V]}P$  ellipsis, strengthening the conclusion that this is the mechanism employed in answers to polar questions in Polish in general (i.e., including V-echo answers; see section 5 for yet additional supporting evidence).

# 3. $X_{[+V]}P$ cannot be higher than AspP: Impossible answers

That the elided  $X_{[+V]}P$  cannot be as high as TP in Polish is suggested by patterns involving the conditional marker, which can be separated from V (see (12)).<sup>6</sup>

(12) Może by-m jutro kupiła truskawki. maybe COND-1SG tomorrow buy.SG.F strawberries.ACC 'Maybe I could buy strawberries tomorrow.'

Still, the conditional marker cannot be used as an answer on its own. The answer needs to include V, with the marker either preceding it or attached to its right, the two options being in general available in the language.

(13) A: Czy by-ś mi jutro pomogła?

if COND-2SG me.DAT tomorrow help.SG.F

'Would you help me tomorrow?'

B: \*By-m./ By-m pomogła./ Pomogła-by-m.

COND-1SG COND-1SG help.SG.F help.SG.F-COND-1SG

'I would.'

[CP CCOND-1SG \*[TP T you tomorrow help]]

On the assumption that the marker originates in C, the unavailability of by-m as an answer and the concomitant availability of the order marker + V (suggesting no (obligatory) V-to-C movement) is unexpected on the TP ellipsis analysis.<sup>7</sup>

Furthermore, a similar argument can be made with respect to T and  $\Sigma P$  based on the (e.g., past tense) person/number marker. The marker is a clitic and in addition to attaching to V, in colloquial speech it can also be realised pre-verbally on the pleonastic morpheme  $\dot{z}e$  (see (14); see, e.g., Embick 1995, Migdalski 2006 for some discussion of the person/number markers in Polish).

- (14) a. Wczoraj im pomogła-m. yesterday them.DAT helped.SG.F-1SG 'Yesterday I helped them.'
  - b. Wczoraj że-m im pomogła. yesterday ŻE-1SG them.DAT helped.SG.F 'Yesterday I helped them.'

<sup>&</sup>lt;sup>6</sup>I assume the standard clausal structure for Polish C-T-Σ-Asp-Voice-v- $\sqrt{}$ .

<sup>&</sup>lt;sup>7</sup>A limitation of this argument is that these data may be inconclusive if C is split into Mood-Pol, where *by-m* could be in Mood and V in Pol, making TP ellipsis possible, as in (i).

<sup>(</sup>i) [MoodP MoodCOND-1SG [PolP Polhelp [TP T you tomorrow help]]]

Here, again, the unavailability of  $\dot{z}e$ -m as an answer in (15), combined with the assumption that the marker originates in T, the standard position for person/number agreement, shows that  $\Sigma P$  ellipsis is not an option.

A: Czy że-ś im pomogła?
if ŻE-2SG them.DAT helped.SG.F
'Have you helped them?'
B: \*Że-m./ Że-m pomogła./ Pomogła-m.
ŻE-1SG ŻE-1SG helped.SG.F help.SG.F-1SG
'I have.'
[CP C [TP TŻE-1SG \*[ΣP them.DAT help]]]

Thus, based on these data, V-echo answers in Polish feature at most AspP ellipsis.<sup>8</sup>

- (i) A: Czy że-ś im pomogła? if ŻE-2SG them.DAT helped.SG.F 'Have you.SG helped them?'
  - B: ŻE-ŚMY pomogły (razem z Mają) ŻE-1PL helped.PL.F together with Maja 'WE have helped (together with Maja).'
- (ii) A: Czy że-ś im pomogła? if ŻE-2SG them.DAT helped.SG.F 'Have you helped them?'
  - B: BY-M im pomogła (gdyby tego potrzebowali).

    COND-1SG them.DAT helped.SG.F if this needed.PL.M

    'I would have helped (if they had needed it).'

Secondly, clitics have been shown to be available as answers to polar questions in Slovenian (see (iii) from Dvořák 2007:210).

(iii) A: A ga poznaš? B: Ga.

Q CL3.M.ACC know.2SG.PR CL3.M.ACC
'Do you know him?' 'I do.'

Thirdly, in plusquamperfect the conditional marker is attached to the auxiliary  $by\acute{c}$  'be'. The auxiliary cannot serve as an echo answer (see (iv) from Saloni 1976:122). Here, again, the lexical V needs to be echoed as well (see (iv-B<sub>2</sub>)).

(iv) A: Czy był-by-ś tu przyszedł, gdybyś wiedział, że [...]? if be.SG.M-COND-2SG here came.SG.M if knew.SG.M that 'Would you have come here if you had known that [...]?'

B<sub>1</sub>: \*Był-by-m. B<sub>2</sub>: Był-by-m przyszedł. be.SG.M-COND-1SG be.SG.M-COND-1SG came.SG.M 'I would have.'

<sup>&</sup>lt;sup>8</sup>The potential clitic status of these markers does not invalidate the conclusion reached here, a suggestion for which I would like to thank a NELS reviewer. Firstly, both the conditional marker and the person/number markers supported by *że* can be stressed, as in (i)–(ii).

# 4. $X_{[+V]}P$ can be lower than AspP and VoiceP: Possible mismatches

The argumentation in this section is based on the assumption that (interpretable) features in the ellipsis site must match these features in the antecedent (see Merchant 2008, 2013). If this is the case, mismatches can diagnose the lower bound of  $X_{[+V]}P$ .

Firstly, V-echo answers can differ in aspect from V in the antecedent (the question), as (16–17) show.

(16) A: Czy kupowałaś wczoraj kawę?

if bought.IMPERF.2SG.F yesterday coffee.ACC

'Were you buying coffee yesterday?'

B: Kupiłam.

bought.PERF.1SG.F

'I did (buy it).'

[IMPERF-PERF]

(17) A: Czy kupiłaś wczoraj kawę?

if bought.PERF.2SG.F yesterday coffee.ACC

'Did you buy coffee yesterday?'

B: Kupowałam (ale ostatecznie nie kupiłam).

bought.IMPERF.1SG.F but finally not bought.PERF.1SG.F

'I was buying it (but I didn't buy it in the end).'

[PERF-IMPERF]

This implies that Asp is outside the ellipsis site and that at most VoiceP is elided.<sup>9</sup>

While contexts where Voice mismatches are felicitous are not easy to construct in the *yes/no* environment, they are not impossible, as illustrated in (18–19). <sup>10</sup>

(i) A: Czy kupisz jutro kawę? if buy.PERF.2SG tomorrow coffee.ACC 'Will you buy coffee tomorrow?'

B: Bede \*(kupowała).
will.1SG buy.IMPERF.SG.F
'I will be buying it.'

[PERF-IMPERF]

Aux-stranding ellipsis (see, e.g., (2) above) may thus require the deletion of the complement of Aux.

<sup>&</sup>lt;sup>9</sup>A potential caveat here is that since aspect is reflected on V, which is outside the ellipsis site, it is recoverable from the remnant V (I am grateful to Professor Idan Landau for pointing this out). However, recoverability does not alleviate Voice mismatches in sluicing or fragment answers discussed in Merchant's work, even though the passive structure should be recoverable from the *by*-phrase remnant. The extent to which this is an issue for the current approach will thus depend on the nature of the relevant identity conditions on ellipsis and the precise mechanisms behind the recovery process, a topic for future research.

 $<sup>^{10}</sup>$ Regarding (19), an answer featuring the auxiliary *zostanie* 'become' without the lexical V is not felicitous in this context, suggesting that VP ellipsis following an auxiliary targets at least VoiceP. Similarly, the auxiliary b e d e in the future imperfective cannot be used on its own in a reply to a perfective question, as in (i), suggesting that in this context at least AspP is elided, with the auxiliary positioned higher. This is why these environments require the inclusion of the lexical V in the answer, which involves lower VP ellipsis.

- (18) A: Czy mój zakup zostanie (przez was) zapakowany na prezent?

  if my purchase become by you wrapped for gift

  'Will my purchase be gift-wrapped (by you)?'

  [if [my purchase] become [VoiceP [by you] VoicePASS-wrapped [VP twrap t[my purchase]

  [for gift]]]]
  - B: (Tak/ oczywiście,) zapakujemy.

    yes certainly wrap.1PL

    '(Yes/certainly), we will wrap it.'

    [wrap.1PL [VoiceP pro VoiceACT-twrap [vP twrap [your purchase] [for gift]]]]
- (19) A: Czy zapakujecie mój zakup na prezent?

  if wrap.2PL my purchase for gift

  'Will you gift-wrap my purchase?'

  [if wrap.2PL [VoiceP pro VoiceACT-twrap [vP twrap [my purchase] [for gift]]]]

  B: (Tak/ oczywiście,) zostanie zapakowany.

  yes certainly become wrapped

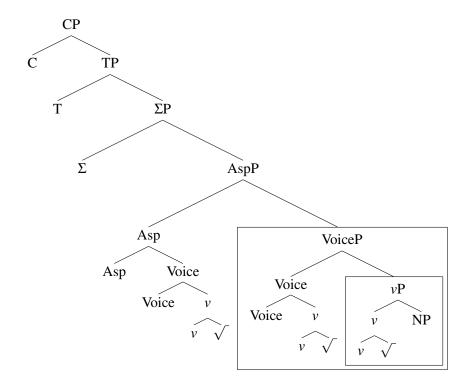
  '(Yes/certainly), it will be wrapped.'

  [ACT-PASS]

  [become [VoiceP VoicePASS-wrapped [vP twrap [your purchase] [for gift]]]]

This suggests that vP ellipsis is an available option.

# (20) VoiceP and vP ellipsis available in Polish



# 5. vP ellipsis and $X_{[+V]}P$ ellipsis diagnostics

As I have shown in section 2 with reference to &P, QP, and NCI subjects (with indefinites fitting the pattern too, though being somewhat less ideal as evidence in Polish), V-echo answers in Polish result from the application of  $X_{[+V]}P$  ellipsis (see (21), repeated from (8)).

(21) A: Czy nikt nie ukradł mi roweru?
if nobody not stole me.DAT bike.GEN
'A: Hasn't anybody stolen my bike?'
B: (Nie,) nie ukradł.
no not stole
B: (No,) nobody has.'
[not stole [XP nobody tstole you bike]]

If Voice introduces the external argument, the NCI in this case, (21) needs to involve VoiceP ellipsis. This is supported by the fact that combining a subject NCI with a mismatch in Voice yields an unacceptable result, as in (22), the two requiring different options (VoiceP vs. vP ellipsis).

A: Czy mój zakup nie zostanie przez nikogo zapakowany na prezent?
if my purchase not become by nobody wrapped for gift
'Will my purchase not be gift-wrapped by anybody?'
[if [my purchase] not become [voiceP [by nobody] VoicePASS-wrapped t[my purchase]
[for gift]]]
B: \*(Nie,) nie zapakuje.
no not wrap.3SG
Intended: 'No, nobody will wrap it.'
[PASS-ACT]
\*[not wrap [voiceP nobody VoiceACT-twrap [your purchase] [for gift]]]

Parallel judgments are observed with QP and &P subjects: when the simple NP subject in (23) is substituted with QP or &P subjects, the expected default and first conjunct agreement (see (24) and (26) respectively) is unavailable in the answer (see (25) and (27)).

(23) simple NP subject

A: Czy uzasadnienie wyroku zostanie upublicznione przez tych if reason sentence.GEN become made.public by these adwokatów? attorneys

'Will the reasons for the sentence be made public by these attorneys?'

B: ?(Tak,) upublicznią. yes make.public.3PL 'Yes, they will make them public.'

[PASS-ACT]

- A: [if [reason sentence] become [VoiceP VoicePASS-made.public [by these attorneys]]]
- B: [make.public.3PL [voice] pro Voice\_ACT-t<sub>make.public</sub> [vp v-t<sub>make.public</sub> [reason sentence]]]]
- (24) default agreement with a QP subject

[QP Tych pięciu adwokatów] upubliczni uzasadnienie wyroku. these five attorneys make.public.3SG reason sentence.GEN 'These five attorneys will make the reasons for the sentence public.'

- (25) default agreement in the answer impossible
  - A: Czy uzasadnienie wyroku zostanie upublicznione przez tych pięciu if reason sentence.GEN become made.public by these five adwokatów? B: \*(Tak,) upubliczni. attorneys yes make.public.3SG 'A: Will the reasons for the sentence be made public by these five attorneys? B (intended): Yes, these five attorneys will make them public.' [PASS-ACT]
  - A: [if [reason sentence] become [VoicePASS-made.public [by these five attorneys]]]
  - B: \*[make.public.3sG [VoiceP [QP these five attorneys] VoiceACT-tmake.public [vP v-tmake.public [reason sentence]]]]
- (26) first conjunct agreement with an &P subject

Uzasadnienie wyroku upubliczni [&P sędzia i adwokat]. reason sentence.GEN make.public.3SG judge and attorney 'The judge and the attorney will make the reasons for the sentence public.'

- (27) first conjunct agreement in the answer impossible
  - A: Czy uzasadnienie wyroku zostanie upublicznione przez sędziego i if reason sentence.GEN become made.public by judge and adwokata? B: \*(Tak,) upubliczni. attorney yes make.public.3SG 'A: Will the reasons for the sentence be made public by the judge and the attorney? B (intended): Yes, the judge and the attorney will make them public.'
  - A: [if [reason sentence] become [VoicePASS-made.public [by judge and attornev]]]
  - B: \*[make.public.3sg [VoiceP [&P judge and attorney] VoiceACT-tmake.public [vP v-tmake.public [reason sentence]]]]

These data also speak against an argument ellipsis analysis, which predicts that these answers should be available, as there is nothing which could block the ellipsis of the NCI,

QP, and &P subjects on this approach, V-echo answers with such subjects being available in the absence of a Voice mismatch (see (3), (5), and (8) above).

Thus, the results of the current research show that both VoiceP and vP ellipsis is available in V-echo answers in Polish, an analysis compatible with the general theoretical proposal that ellipsis can target either the phase or the complement of the phase head (see Baltin 2012, Bošković 2014).

## 6. Summary and extensions

The present discussion has provided further evidence that low V-stranding VP ellipsis is available (as, e.g., in Uzbek (Gribanova 2020) and Lithuanian (Portelance 2020), pace Landau 2020a,b) and has shown that more than one low V-stranding VP ellipsis height is possible in a single language (VoiceP and  $\nu$ P ellipsis; in addition to a high and low VP ellipsis, as in TP and  $\nu$ P ellipsis, e.g., in Gribanova 2017). Importantly, the availability of V-stranding VoiceP/ $\nu$ P ellipsis is also supported by theoretical considerations. Namely, if ellipsis is a cyclic operation (see Murphy and Müller 2022, Sailor 2021), as it needs to be in a phase-based derivation (otherwise the complement of the first phase (e.g., VP) would have undergone morphophonological processing before ellipsis could apply, ellipsis currently conceived of as non-pronunciation licensed by syntax (see Merchant 2001, Aelbrecht 2010, Saab 2022 a.m.o.)), any V-stranding  $X_{[+V]}$ P ellipsis necessarily employs the step which is forbidden in Landau's system: V needs to move to Voice and this needs to be followed by VP ellipsis (V is stranded, so it escapes the ellipsis site and VP is the complement of a phase head, so its non-pronunciation needs to be licensed before/at its spell-out).

# Appendix A: VoiceP as a phase in Polish

To make the argumentation complete, I present evidence that VoiceP is a phase in Polish, based on Citko (2014).<sup>11</sup>

- Voice is the locus of uninterpretable features as the head valuing the accusative case on the object NP (e.g., *pić kawę* 'drink coffee.ACC').
- The complement of Voice can be elided, as suggested by the availability of Voice mismatches (Merchant 2008).
- a. ?Portier musi [VoiceP VoiceACT [VP wynosić śmieci]], kiedy widać, janitor.NOM must remove trash when be.apparent że powinny być [VoiceP VoicePASS [VP wyniesione]]. that should be removed 'The janitor must remove the trash when it is apparent that it should be.'

[ACT-PASS]

<sup>&</sup>lt;sup>11</sup>VoiceP in the present contribution is Citko's (2014) vP.

- b. Ten system może zostać [VoiceP VoicePASS [VP użyty przez każdego]], this system.NOM can become used by everyone kto chce [VoiceP VoiceACT [VP go użyć]]. who wants it use.

  'The system can be used by anyone who wants to.' [PASS-ACT]
- The VoiceP edge is a landing site for movement (e.g., of the NP in the Left Branch Extraction structure in (29) from Wiland 2010<sup>12</sup>; see also Citko 2010 for *wh* movement).
- (29) Jaki Paweł [ $_{\text{VoiceP}}$  [ $_{wh\text{-NP}}$   $t_{\text{wh}}$  samochód] kupił swojej żonie  $t_{\text{wh-NP}}$ ]? what Paweł.NOM car.ACC bought self's wife.DAT 'What car did Paweł buy his wife?' (Wiland 2010:335)

# **Appendix B: Questions formed with nominalisations**

The conclusion that TP ellipsis is not an option in V-echo answers in Polish is also supported by the fact that V-echo answers can be given to questions formulated with nominalisations, as (30) illustrates.

- (30) A: Co z [nP wysłaniem Kasi do szkoły baletowej]? what with sending.PERF Kasia to school ballet 'What about sending Kasia to a ballet school?'

  B: Nie wyślemy. Nie mamy za co.
  - not send.PERF.1PL not have.1PL for what 'We won't do it. We don't have the money.'

As nominalisations are unlikely to contain T (though they can contain Asp: wystanie 'sending.PERF' vs. wysytanie 'sending.IMPERF'), the antecedent in (30) is at most a  $\Sigma P$  inside the nP. On the current analysis, the ellipsis site has a matching antecedent here (VoiceP/vP), as opposed to a situation in which the derivation seems to involve an antecedent smaller than the ellipsis site (see Yoshida 2010<sup>13</sup>), which would be required on the TP ellipsis analysis. That the latter is not the case here is supported by the observation that aspect mismatches are also possible in the case of questions expressed with nominalisations. For example, substituting the perfective form with the imperfective wysytaniem 'sending-IMPERF' in the question in (30) would not alter the judgment of the answer given with a perfective V (wyslemy; the opposite pattern is also available, see (31)).

<sup>&</sup>lt;sup>12</sup>VoiceP in the present contribution is Wiland's (2010) vP.

<sup>&</sup>lt;sup>13</sup>I would like to thank an anonymous reviewer for drawing my attention to this work.

- (31) A: Co z [<sub>nP</sub> upieczeniem wczoraj ciastek]? what with baking.PERF yesterday cookies 'What about baking cookies yesterday?'
  - B: Piekliśmy. baked.IMPERF.1PL.M 'We were baking them.'

[PERF-IMPERF]

### References

- Aelbrecht, Lobke. 2010. *The syntactic licensing of ellipsis*. Amsterdam: John Benjamins. Arregi, Karlos, and Asia Pietraszko. 2021. The ups and downs of head displacement. *Linguistic Inquiry* 52:241–290.
- Baltin, Mark. 2012. Deletion versus pro-forms: An overly simple dichotomy? *Natural Language and Linguistic Theory* 30:381–423.
- Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45:27–89.
- Citko, Barbara. 2010. On the (a)symmetric nature of movement: A view from Polish *Wh*-and passive movement. In *Formal approaches to Slavic linguistics 18: The Second Cornell Meeting 2009*, ed. by Wayles Browne, Adam Cooper, Alison Fisher, Esra Kesici, Nikola Predolac, and Draga Zec, 38–57. Ann Arbor, MI: Michigan Slavic Publications.
- Citko, Barbara. 2014. *Phase theory: An introduction*. Cambridge: Cambridge University Press.
- Dvořák, Boštjan. 2007. Slovenian clitic pronouns and what is so special about them. *Slovenski jezik Slovene Linguistic Studies* 6:209–233.
- Embick, David. 1995. Mobile inflections in Polish. In *Proceedings of the North East Linguistic Society 25*, ed. by Jill N. Beckman, 127–142. Amherst, MA: Graduate Linguistic Students' Association.
- Gribanova, Vera. 2017. Head movement and ellipsis in the expression of Russian polarity focus. *Natural Language and Linguistic Theory* 35:1079–1121.
- Gribanova, Vera. 2020. Predicate formation and verb-stranding ellipsis in Uzbek. *Glossa: A journal of general linguistics* 5:1–40.
- Holmberg, Anders. 2015. The syntax of Yes and No. Oxford: Oxford University Press.
- Landau, Idan. 2020a. Constraining head-stranding ellipsis. Linguistic Inquiry 51:281–318.
- Landau, Idan. 2020b. On the nonexistence of verb-stranding VP-ellipsis. *Linguistic Inquiry* 51:341–365.
- McCloskey, Jim. 2017. Ellipsis, polarity, and the cartography of verb-initial orders in Irish. In *Elements of comparative syntax*, ed. by Enoch Aboh, Eric Haeberli, Genoveva Puskás, and Manuela Schönenberger, 99–152. Berlin: Mouton de Gruyter.
- Mendes, Gesoel. 2020. Investigations on salvation and non-salvation by deletion. Doctoral dissertation, University of Maryland, College Park, MD.
- Mendes, Gesoel, and Marta Ruda. 2019. First conjunct agreement in Polish: Evidence for a mono-clausal analysis. *Snippets* 36:3–5.

- Merchant, Jason. 2001. *The syntax of silence: Sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.
- Merchant, Jason. 2008. An asymmetry in voice mismatches in VP-ellipsis and pseudogapping. *Linguistic Inquiry* 39:169–179.
- Merchant, Jason. 2013. Diagnosing ellipsis. In *Diagnosing syntax*, ed. by Lisa Lai-Shen Cheng and Norbert Corver, 537–542. Oxford: Oxford University Press.
- Migdalski, Krzysztof. 2006. *The syntax of compound tenses in Slavic*. Utrecht: LOT Publications.
- Murphy, Andrew, and Gereon Müller. 2022. Derivational ellipsis and vehicle change. In *The derivational timing of ellipsis*, ed. by Güliz Güneş and Anikó Lipták, 131–169. Oxford: Oxford University Press.
- Portelance, Eva. 2020. Genuine verb stranding VP-ellipsis in Lithuanian. In *Proceedings of the 50th Annual Meeting of the North East Linguistics Society*, ed. by Mariam Asatryan, Yixiao Song, and Ayana Whitmal, 59–72. Amherst, MA: Graduate Linguistic Students' Association.
- Ruda, Marta. 2014. On the V-stranding VP ellipsis analysis of missing objects in Polish. In *Proceedings of the Third Central European Conference in Linguistics for Postgraduate Students*, ed. by Balázs Surányi and Gergő Turi, 60–85. Budapest: Pázmány Péter Catholic University.
- Ruda, Marta. 2022. Interpreting null subjects in Polish: Against left-peripheral linking. In *Null subjects in Slavic and Finno-Ugric: Licensing, structure and typology*, ed. by Gréte Dalmi, Egor Tsedryk, and Piotr Ceglowski, 105–132. Berlin: De Gruyter Mouton.
- Saab, Andrés. 2022. Grammatical silences from syntax to morphology: A model for the timing of ellipsis. In *The derivational timing of ellipsis*, ed. by Güliz Güneş and Anikó Lipták, 170–224. Oxford: Oxford University Press.
- Sailor, Craig. 2021. Ellipsis in a modular perspective, handout, *Cambridge SyntaxLab*, Cambridge, UK (online), March 2021.
- Saloni, Zygmunt. 1976. *Cechy składniowe polskiego czasownika* [Syntactic features of the Polish verb]. Wrocław: Wydawnictwo Polskiej Akademii Nauk.
- Sato, Yosuke, and Masako Maeda. 2020. Syntactic head movement in Japanese: Evidence from verb-echo answers and negative scope reversal. *Linguistic Inquiry* 52:359–376.
- Wiland, Bartosz. 2010. Overt evidence from Polish Left Branch Extraction for punctuated paths. *Linguistic Inquiry* 41:335–347.
- Yoshida, Masaya. 2010. "Antecedent-contained" sluicing. Linguistic Inquiry 41:348–356.

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