INTRODUCTION

1. TYPOLOGICAL SKETCH OF POLISH

• Aspect- and tense-prominence

Figure 1  Aspectual pairmates of Polish verbs (following Młynarczyk 2004)

<table>
<thead>
<tr>
<th>class</th>
<th>( \mathfrak{a} ) (unmarked)</th>
<th>( \mathfrak{p} ) (unmarked)</th>
<th>( \mathfrak{p^A} ) (do a bit)</th>
<th>( \mathfrak{p^1} ) (smlf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>class 1</td>
<td>istnieć ‘exist’</td>
<td>( \rightarrow ) zaistnieć</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>jechać ‘ride (directed)’</td>
<td>( \rightarrow ) pojechać</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>tyć ‘put on weight’</td>
<td>( \rightarrow ) utyć</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>class 2</td>
<td>spać ‘sleep’</td>
<td>( \rightarrow ) *</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>jeździć ‘ride (manner)’</td>
<td>( \rightarrow ) *</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>class 3</td>
<td>pisać ‘write’</td>
<td>( \rightarrow ) napisać</td>
<td>popisać</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>oglądać ‘watch’</td>
<td>( \rightarrow ) obejrzeć</td>
<td>pooglądać</td>
<td>*</td>
</tr>
<tr>
<td>class 4</td>
<td>pukać ‘knock’</td>
<td>( \rightarrow ) zapukać</td>
<td>popukać</td>
<td>puknqc</td>
</tr>
<tr>
<td></td>
<td>mruczeć ‘grunt, mutter’</td>
<td>( \rightarrow ) zamruczeć</td>
<td>pomruczeć</td>
<td>mrukncq</td>
</tr>
<tr>
<td>class 5</td>
<td>zasypiać</td>
<td>( \rightarrow ) zasnąć ‘fall asleep’</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>przyjeżdżać</td>
<td>( \rightarrow ) przyjechać ‘come (riding)’</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>przepisywać</td>
<td>( \rightarrow ) przepisać ‘copy by writing’</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Figure 2 Polish ASP-features & TNS-inflections

\[
\begin{array}{cccc}
\mathfrak{p}^- \text{-PST} & \mathfrak{p}^- \text{-PRS} & \mathfrak{p}^- \text{-FUT} & \text{be} \backslash \text{t}. \text{FUT} \\
\checkmark & * & \checkmark & * \\
\end{array}
\]

(1) a. \{Obejrza-\( \mathfrak{p^-} \text{-em} \) | * | Obejrz-\( \mathfrak{p}^- \text{-ę} \}\} dziennik.
\{watch\( \mathfrak{p}^- \text{-PST.1SM} \) | \* | watch\( \mathfrak{p}^- \text{-FUT.1SG} \}\} news
I {watched | will watch} the news.

b. \{Ogląda-\( \mathfrak{p^-} \text{-em} \) | Ogląda-\( \mathfrak{p^-} \text{-m} \) | Będę ogłada-\( \mathfrak{p^-} \text{-l} \}) dziennik.
\{watch\( \mathfrak{p^-} \text{-PST.1SM} \) | watch\( \mathfrak{p^-} \text{-PRS.1SG} \) | be\( \backslash t \). \text{FUT.1SG} \text{ watch} \( \mathfrak{p^-} \text{-SM} \}\} news
I {was watching | am watching | will be watching} the news.

Figure 3 Grammatical aspect in Polish

\[
\begin{array}{cccc}
\mathfrak{p}^- \text{-DUR (jgc)} & \mathfrak{p}^- \text{-PRF (wszy)} \\
\checkmark & * \\
\end{array}
\]

(2) a. Zasną-\( \mathfrak{p^-} \text{-em} \) \{ogłada-jgc | obejrze-wszy\} dziennik.
fall.asleep\( \mathfrak{p^-} \text{-PST.1SM} \) \{watch\( \mathfrak{p^-} \text{-DUR} \) | watch\( \mathfrak{p^-} \text{-PRF} \}\} news.\text{ACC}
I fell asleep {watching | having watched} the news.

b. Zasypia-\( \mathfrak{p^-} \text{-em} \) \{ogłada-jgc | obejrze-wszy\} dziennik.
fall.asleep\( \mathfrak{p^-} \text{-PST.1SM} \) \{watch\( \mathfrak{p^-} \text{-DUR} \) | watch\( \mathfrak{p^-} \text{-PRF} \}\} news.\text{ACC}
I was falling asleep {watching | having watched} the news.
• **Subject-prominence: Argumental subject inflection**

(3) Ania jest młoda i ładna. Ma chłopca, 
Ania be\l.\PRS.\3SG young and pretty have\l.\PRS.\3SG boyfriend.ACC
**ale jeszcze nie=chce zakłada-ć rodziny.**
but still not=want\l.\PRS.\3SG start\l-INF family.GEN
Ann is young and pretty. She has a boyfriend but doesn’t want to start a family yet.

(4) Ania jest młoda i ładna. Ma chłopca, 
Ania be\l.\PRS.\3SG young and pretty have\l.\PRS.\3SG boyfriend.ACC
**ale on jeszcze nie=chce zakłada-ć rodziny.**
but he still not=want\l.\PRS.\3SG start\l-INF family.GEN
Ann is young and pretty. She has a boyfriend but he doesn’t want to start a family yet.

Ania go\l-PST-\3SF to home say\l-PST-\3SF C her dad be\l.\PRS.\3SG ill\l-\SG
**Jak ją zobaczyć, no pewno się=ucieszy.**
when her see\l-P.FUT.\3SG for sure se=rejoice\l-P.FUT.\3SG
Ann has gone home. She said her dad was ill. When he sees her, I’m sure he’ll be happy.

2. **Typological Sketch of Mandarin**

• **Topic-prominence: Missing arguments**

(6) i. Xiăoli niánqīng piàoliang , gōnzuò yĕ hāo. [Li:185]
Xiaoli\l\ young\l\ pretty\l\ job also good\l
Xiaoli\l\ is young and pretty. She\l\ has a good job, too.

ii. Suīrán yǒu ge nánpéngyou , kēshì bù xiāng jiéhūn. 
although have\l\ CL boyfriend , but NOT wish\l\ marry\l
She\l\ has a boyfriend, but she\l\ doesn’t wish to get married.

(7) Xiăoli māi-le qúnzi, dàojiā yīhòu mǎshāng chuānshàng le. [RM:354]
Xiaoli\l\ buy\l-PNC skirt\l\ after immediately put.on \l-PNC
Xiaoli\l\ bought a skirt\l. When she\l\ got home, she\l\ immediately put it\l\ on.

• **Aspect-prominence**

Figure 4 Mandarin ASP features

E: n-atom event (a.k.a. ‘action verbs’)
S-E: ān-shā (dark-kill) ‘assassinate’, …
S: n-degree state (a.k.a. ‘quality (or adjectival) verbs’)
N-S: nián-qǐng₂ (age-low) ‘young’, tòu-téng (head-ache) ‘have headache’, …
E: 1-atom event (a.k.a. ‘resultative (action) verbs’)
E–N: dào-jia (arrive-home) ‘come home’, …
S1: 1-degree state (a.k.a. ‘other stative verbs’)
S1: zuò2 ‘sit’, kǎi2 ‘be open’, zài ‘be in, on, at, in progress’, méiyǒu ‘have no’, …
⟨S1⟩: kāi⟨de⟩guò (⟨S1⟩/can)drive.across) ‘can drive across’, …

Figure 5 Mandarin ASP tests

<table>
<thead>
<tr>
<th>E/</th>
<th>E1/</th>
<th>S/</th>
<th>S1/</th>
</tr>
</thead>
<tbody>
<tr>
<td>event?</td>
<td>+</td>
<td>+</td>
<td>–</td>
</tr>
<tr>
<td>multi-stage event?</td>
<td>+</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>multi-degree state?</td>
<td>–</td>
<td>–</td>
<td>+</td>
</tr>
</tbody>
</table>

(8) [± event]: (in)compatibility with event measure ci ‘Mev’
a. Zhè–ge zǐ, tā xiě(*-cuò) sān-ci le.
   this-CL character 3SG E/write(*-/wrong) three-Mev PNC
   ‘He has written this character (wrong) three times.’
   b.* Tā {hěn lèi, lèi-sì} sān-ci le.
      3SG {POS S/tired, S/tired/-/die} three-Mev PNC

(9) [± multi-stage e]: (in)compatibility with phase-verbs, e.g. zài ‘S1/be.in.prg’
a. Tā zài xiě(*-cuò) zhè–ge zǐ.
   3SG S1/be.in.prg E/write(*/-/wrong) this-CL character
   ‘He is writing this character (*wrong).’
   b.* Tā zài lèi(-sì) le.
      3SG S1/be.in.prg S/tired(-/die) PNC

(10) [± multi-degree s]: (in)compatibility with degree-modifiers, e.g. tài ‘too’
a.* Tā tài xiě(-cuò) zhè–ge zǐ le.
   3SG too E/write(-/wrong) this-CL character PNC
b. Tā tài lèi(-sì) le.
   3SG too S/tired(-/die) PNC
   ‘He is too (*dead) tired.’

(11) Ann huìjiā le. Tā shuō tā bàba shēng.bìng le.
    Ann E1/return.home PNC 3SG E/say 3SG dad E1/get.ill PNC
    Tā bàba kǎndào tā, wǒ xiàng yídīng (hui) hèn gāoxìng.
    3SG dad E1/see 3SG, 1SG E/think definitely (EXP’) very S/happy
    Ann has gone home. She said her dad was ill. When he sees her, I’m sure he’ll be happy.
3. TYPOLOGICAL SKETCH OF KALAALLISUT

• Topic-prominence: Argumental person inflections

(12) Ole-p ikinngut-a ajugaa-ga-mi nuannaar-pu-q.
   Ole-ERG friend-3SG win-FCT-3SG, happy-DEC-3SG
   Ole’s friend\(^{1}\) has won so he\(^{\tau}\) (= the friend) is happy.

(13) Ole-p ikinngut-ni ajugaa-mm-at nuannaar-pu-q.
   Ole-ERG friend-3SG win-FCT-3SG, happy-DEC-3SG
   Ole\(^{\tau}\)’s friend has won so he\(^{\tau}\) (= Ole) is happy.

(14) i. Aqagu-a-¼ angut-taq-it qaajq-tur-ga-mik
    next.day-3SG,LOC man-of-3PL,PL kayak-use-FCT-3PL\(_{\tau}\)
    tikit-pu-¼ nipaat-qi-llu-tik
    come-DEC-3PL quiet-very-ELA-3PL\(_{\tau}\)
    The next day their menfolk\(^{2}\) came back from the day’s hunt very quiet.

   ii. Arnaq-taq-mik apiri-tur-mm-at tik
demand-FCT-3PL,PL ask-process-FCT-3PL,3PL\(_{\tau}\) tell.story-DEC-3PL
    timi-mik-ni qanig-tuq-mi taku-sima-llu-gu illu angisuuq
    inland-3PL,LOC near-ct-LOC see-prf-ELA-3SG\(_{\tau}\) house big
    When their womenfolk\(^{2}\) kept asking them\(_{\tau}\), they\(_{\tau}\) said that a bit further inland from their\(_{\tau}\) own [camp] they\(_{\tau}\) had seen a big house\(^{3}\).

(15) Ajugaa-ga-{ma,-vit} nuannaar-pu-ngu.
    win-FCT-1SG,2SG happy-DEC-1SG
    I am happy that {I, you} won.

• Mood-prominence

Figure 6  Kalaallisut mood inflections

<table>
<thead>
<tr>
<th>Matrix moods</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACT-ORIENTED</strong></td>
<td><strong>PROSPECT-ORIENTED</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Utir-pu-q.</strong></td>
<td><strong>Utir-pa?</strong></td>
<td><strong>Utir-ll!</strong></td>
</tr>
<tr>
<td>return-DEC-3SG</td>
<td>return-QUE.3SG</td>
<td>return-OPT.3SG</td>
</tr>
<tr>
<td>He(_{\tau}) has returned.</td>
<td>Has he(_{\tau}) returned?</td>
<td>May he(_{\tau}) return!</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent moods</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACT-ORIENTED</strong></td>
<td><strong>PROSPECT-ORIENTED</strong></td>
<td></td>
</tr>
<tr>
<td>**Utir-{ga-mi</td>
<td>-mm-at}...**</td>
<td>**Utir-{gu-ni</td>
</tr>
<tr>
<td>return-{FCT-3SG,</td>
<td>return-{HYP-3SG,</td>
<td>-HYP-3SG,3SG(_{\tau})</td>
</tr>
<tr>
<td>When/because {he(_{\tau})</td>
<td>he(_{\tau}) returned...</td>
<td>When/if {he(_{\tau})</td>
</tr>
</tbody>
</table>

| **Utir-{gaanga-mi | -gaang-at}...** | **Utir-{llu-ni | -tu-q}...** |
| return-\{HAB-3SG, | return-\{ELA-3SG, | -ELA-3SG,3SG\(_{\tau}\) |
| Whenever {he\(_{\tau}\) | he\(_{\tau}\) returns... | -Returning | At the time of his\(_{\tau}\) return}... |
(16) a. **Ajugaa-ga-mi isir-{-pu-q, | -pa? | -ll!}**
    win-FCT_{\tau},3SG_{\tau} enter-{DEC_{\tau},3SG}_{\tau} | QUE_{\tau},3SG | OPT_{\tau},3SG_{\tau}
    Since he_{\tau} won {he_{\tau} dropped in. | did he_{\tau} drop in? | let him_{\tau} drop in!}

    b. **Ajugaa-genga-mi isir-tar-{-pu-q, | -pa? | -ll!}**
    win-HAB_{\tau},3SG_{\tau} enter-habit-{-DEC_{\tau},3SG}_{\tau} | QUE_{\tau},3SG | OPT_{\tau},3SG_{\tau}
    When he_{\tau} wins {he_{\tau} drops in. | does he_{\tau} drop in? | let him_{\tau} drop in!}

    c. **Ajugaa-gu-ni isir-{-nlar-pu-q, | -nlar-pa? | -ll!}**
    win-HYP_{\tau},3SG_{\tau} enter-{intend-DEC_{\tau},3SG}_{\tau} | intend-QUE_{\tau},3SG | OPT_{\tau},3SG_{\tau}
    If he_{\tau} wins {he_{\tau} ’ll drop in. | will he_{\tau} drop in? | let him_{\tau} drop in!}

(17) i. **Aani angirlar-pu-q, ataata-ni-guuq naparsima-mm-at.**
    Ann go.home-DEC_{\tau},3SG [dad-3SG_{\tau}=RPT ill-FCT_{\tau},3SG_{\tau}]
    Ann has gone home. [She] said her dad was ill.

    ii. **Ataata-ata taku-gu-ni-uk nuannaar-ssa-pu-q**
    [dad-3SG_{\tau}.ERG see-HYP_{\tau},3SG_{\tau},3SG_{\tau}] happy-expect(ed)-DEC_{\tau},3SG
    When he sees her, [I’m] sure he’ll be happy.

4. **Toward Semantic Universals**

- **Algebra of things and eventualities**

  *Figure 7* Universal algebra of things and eventualities

  \[
  \begin{align*}
  \text{atom(istic) input} & \rightarrow \text{non-atomic output} & \text{non-atomic input} & \rightarrow \text{output atom} \\
  \text{plural-object } x & \rightarrow ^\gamma x \text{ (mass-equiv. of } x) & \text{plural-object } x & \rightarrow ^\Delta x \text{ (x-group)} \\
  \text{plural-event } e & \rightarrow ^\gamma e \text{ (state-equiv. of } e) & \text{plural-event } e & \rightarrow ^\Delta e \text{ (e-episode)} \\
  \text{atom } e & \rightarrow ^\epsilon e \text{ (plural-event culm. in } e) & \text{state } s & \rightarrow ^\phi s \text{ (s-start point)} \\
  \text{atom } e & \rightarrow ^\beta e \text{ (consequent state of } e) & \text{state } s & \rightarrow ^\psi s \text{ (s-culmination point)} \\
  \text{eventuality } & \rightarrow \text{thing (object or mass)} & \text{center preservation} \\
  \text{eventuality } u & \rightarrow \uparrow u \text{ (center of } u) & \uparrow^f u = \uparrow u \text{ if } f \in \{^\Delta, ^\nabla, ^\gamma, ^\delta, ^\epsilon, ^\beta\} \\
  \text{eventuality } u & \rightarrow \downarrow u \text{ (background of } u) & \\
  \text{temporal relations} & & \\
  \end{align*}
  \]

(18) **When they built\textsuperscript{e1} the 39th Street bridge...**

a. … a local architect drew up\textsuperscript{e2} the plans.

b. … they used\textsuperscript{e2} the best materials.

c. … my commute got\textsuperscript{e2} a lot better.

(19) **Wŏ jṳį-tê, Liši guixiółai qiȗ wȍ.**

1SG E\textsuperscript{1}/refuse-PNC Lisi E\textsuperscript{1}/kneel.down E/beg 1SG

When I refused…

A. Lisi knelt down (e\textsubscript{1}) to beg me (e\textsubscript{2})

B. Lisi knelt down (e\textsubscript{1}) begging me (e\textsubscript{2})

C. Lisi knelt down (e\textsubscript{1}) and begged me (e\textsubscript{2})
• Update with attention-guided anaphora

(20E) Ann has gone home. She said (that) her dad was ill.
Ann have.PRS go.PRF home she say.PST (C) her dad be.PST ill
He'll be happy to see her, I'm sure.
he=FUT be happy INF see him I=be.PRS sure

(20P) Ania pojechała do domu. Mówiła że jej tata jest chory.
Ann go.PST-3SF to home say1-PST-3SF C her dad be1-l.PRS.3SG ill\SM
Jak ja zobaczysz, na pewno się=ucieszy.
when her see1-P.FUT.3SG for sure se=rejoice1-P.FUT.3SG

(20M) Ann huíjīa le. Tā shuō tā bàba shēngbìng le.
Ann E1/return.home PNC 3SG E/say 3SG dad E1/get.ill PNC
Tā bàba kàndào tā, wǒ xiǎng yìdǐng (huì) hěn gāoxìng.
3SG dad E1/see 3SG, 1SG E/think definitely (EXP) very S/happy

(20K) Aani angirlar-pu-q, ataata-ni=guuq naparsima-mm-at.
Ann go.home-DEC+3SG dad-3SG=E=RPT ill-FCT+3SG+1
ataata-ata taku-gu-ni-uk nuannaar-ssa-pu-q
dad-3SG+1.ERG see-HYP+,3SG+,3SG+1 happy-expect(ed)-DEC+,3SG

• TAMPCategories as top-level anaphora

Figure 10 Centering TAMPCategories

(T) TNS fills, or pushes down, the verb’s reference time argument with a discourse referent anchored to a top-ranked time and/or event.

(A) ASP fills, or pushes down, the verb’s eventuality argument with a referent anchored to a top-ranked state and/or event.

(M) MOOD fills, or pushes down, the verb’s world argument with a referent anchored to a top-ranked world and/or event.

(P) PRN fills the verb’s subject or object argument with a referent anchored to a top-ranked individual and/or event.