

Agent prominence in the Polish *-no/-to* construction

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Abstract

The Polish *-no/-to* construction is an arb, i.e. a human impersonal with a similar meaning as the impersonal pronouns *man* in German or *on* in French or the 3^{PL} impersonal in Russian. The common view that it can be formed from virtually all verbs as long as the referent is human is here contested by an acceptability judgement test. It shows that verbs assigning more agentivity features to the subject are significantly better than verbs assigning fewer agentivity features, and completely un-agentive verbs are just as bad as inanimate referents. This reveals a prominence relation. The details of the findings indicate that the *-no/-to* construction behaves in a similar but nonetheless different way from other arbs and that the list of agentivity features has to be revised in order to model the prominence relation exactly.

1. Introduction

This paper is concerned with the so-called *-no/-to* construction in Polish, which is exemplified in (1):

- (1) *Zadanie wykona-no.* (Polish)
task fulfill-PST.IMPRS
'One/People/They fulfilled the task.' (Kątny 1999: 661)

This is a special kind of impersonal construction. In Malchukov & Ogawa's (2011) categorization of impersonal constructions it belongs to the category of *R-impersonals*, i.e. the implicit subject ('people/they') is less referential than prototypical subjects, in contrast to *A-impersonals*, where it is less agentive, as in (2), and *T-impersonals*, where it is less topical, as in (3).

- (2) *Dorog-u zanes-l-o sneg-om.* (Russian)
road.F-ACC.SG cover-PST-3SG.N snow.M-INSTR.SG
'The road was covered by snow.' (Malchukov & Ogawa 2011: 33)

- (3) *Il viendra une femme.* (French)
it will.come a woman
'A woman will come.' (Malchukov & Ogawa 2011: 30)

More narrowly, it belongs to the group of *human impersonals* (or "human impersonal pronouns", HIPS; Gast & van der Auwera 2013), which excludes *R-impersonals* like (4). However, even human impersonals are a rather open category, which also includes generic (or "universal", Cabredo-Hofherr 2003: 83) pronouns as in (5).

- (4) *Pada.* (Polish)
fall.PRS:3SG
'It is raining.' (Kibort 2008: 254)

- (5) *Čto pose[j]-eš', to požn-eš'.* (Russian)
 what sow:PF:FUT-2SG that harvest:PF:FUT-2SG
 'You reap what you sow.' (cf. Galatians 6:7; Švedova 1980: §1522)

In contrast to such generic constructions, the *-no/-to* construction belongs to a category of impersonals that Malamud (2013) has called *arbs*, which is short for “constructions with arbitrary interpretations”. This encompasses several semantically very similar kinds of constructions, e.g. arbitrary pronouns as in (6), reflexive impersonals as in (7), 3PL impersonals as in (8), and, of course, the Polish *-no/-to* construction as in (1) above.

- (6) *Man tanz-te die ganze Nacht.* (German)
IMPRS dance-PST:3SG the whole night
 'One danced the whole night long.' (Gast & van der Auwera 2013: 124)
- (7) *Pracowa-ł-o się ciężk-o.* (Polish)
 work-PST-3SG.N **REFL** hard-ADV
 'One worked hard.' (Krzek 2011: 69)
- (8) *Na zebraniu mówi-l-i o naprawie dróg.* (Polish)
 at meeting speak-PST-3PL.M.HUM about repair streets:GEN
 'At the meeting, people talked about street repair.' (Doros 1975: 81)

As one can see from (1), (7), and (8), the Polish language has three grammaticalized arb constructions with very similar meanings. While arb constructions can also have the generic reading of (5), it is vital that they must also be able to have the readings I–IV listed by Cabredo-Hofherr (2003: 83):

- (I) specific existential reading (temporally anchored) [...]
- (II) vague existential reading (not temporally anchored) [...]
- (III) inferred existential reading (inferred from a result) [...]
- (IV) corporate reading (predicates with a designated subject) [...]

In Russian linguistics, the difference between the generic-only type of human impersonals and arbs has traditionally been described as “generalized-personal sentences” (“obobščénno-ličnye predložénija”) vs. “indeterminate-personal sentences” (“neopredelénno-ličnye predložénija”; cf. e.g. Padučeva 2012, Švedova 1980: §1522–1525). However, according to Siewierska’s (2008: 116) generally accepted definition of impersonals as lacking a “canonical subject”, both constructions are clearly impersonal, not “personal”. Furthermore, for some Czech arbs like (9) Berger (1991: 72) has pointed out that they do not have “any generalizing or indeterminate meaning” (“weder eine generalisierende noch eine unbestimmte Bedeutung”), and Malamud (2013) has even found the implicit subject of some arbs to be definite, which contradicts their characterization as “indeterminate”.

- (9) *Po poledni ho zase vedli zpět.* (Czech)
 after noon him:ACC again lead:PST:3PL back
 'In the afternoon they took him back again.' (Šmilauer 1947: 110, Berger 1991: 72)

Sansò (2006: 255) classifies the Polish *-no/-to* construction as an impersonal passive because it is diachronically derived from a passive construction. Indeed, the form derives from a passive participle, and the variation between *n* and *t* (e.g. *jedzono* ‘people ate’ vs. *pięto* ‘people drank’) is related to the same variation in other Indo-European languages (e.g. English *woken* vs. *slept*, German *geschlafen* ‘slept’ vs. *erwacht* ‘woken’, Old Indic *chinna-* ‘cut’ vs. *datta-* ‘given’). However, nowadays the *-no/-to* form is not homonymous with any form of the passive participle anymore, because the neuter singular form of the latter now ends in *-ne/-te*. It also does not need a copula or auxiliary but acts as an inflected verb form of its own, even indicating the past tense, so that it has developed “from a more nouny to a more verby category” just like its Indo-Aryan cognate, the *ta*-form (Uta Reinöhl, p.c.). Furthermore, the *-no/-to* construction lacks typical features of passives and instead shows typical features of actives. For example, the expression of the subject in a prepositional phrase as in (10) is impossible, and direct objects have accusative case as in (11), not nominative case as usually in passives like (12).

- (10) **Tutaj tańczo-no przez uczniów.* (Polish)
 here dance-PST.IMPRS by pupils
 (intended) ‘The dancing was done here by pupils.’ (Kibort 2008: 266)
- (11) *Wypi-to cał-ę butelk-ę.* (Polish)
 drink-PST.IMPRS whole-F.ACC.SG bottle.F.ACC.SG
 ‘People drank up the whole bottle.’ (Rothstein 1993: 713)
- (12) *Cał-a butelk-a zosta-ła wypit-a.* (Polish)
 whole-F.NOM.SG bottle.F.NOM.SG COP-PST-F.SG drink-PTCP.PASS-F.NOM.SG
 ‘The whole bottle was drunk up.’

All descriptions of the Polish *-no/-to* construction agree that it can only refer to humans as implicit subjects (e.g. Laskowski 1984: 147; Kątny 1999: 660; Sansò 2006: 255; Kibort 2008: 267). Once this condition is met, as is often noted, in contrast to passives it can be formed from almost all verbs, including both unergative and unaccusative intransitive verbs (Kibort 2008: 265, 271; Krzek 2011: 68–69; there is only a handful of exceptions like *iść* ‘go’ or *być* ‘be’, cf. Małecki 1879: 445).

While it is certainly true that the *-no/-to* form is not restricted to transitive verbs, it is not true that all verbs are equally good. In fact, some classes of verbs are completely unacceptable even if the implicit subject is human. As shown in Bunčić (2018), the *-no/-to* construction and other Slavic arbs are the more frequent in corpora (in relation to the overall frequency of the verb lexeme) the more agentive the verb is, i.e. the more agentivity features the verb assigns to the implicit subject. This finding has given rise to the hypothesis that arb constructions depend on a prominence relation in the sense of Himmelmann & Primus (2015), in this case involving the agentivity of the verb. According to this

hypothesis, arb constructions, which demote the subject/agent, are only good with a prominent agent and less good with a less prominent agent.

In this paper, I present further evidence for this claim. While the corpus data show that the *-no/-to* construction is used less frequently with less agentive verbs (down to a frequency of zero in a ‘gigaword’ corpus – i.e. a corpus of about one billion words or more – for verbs with no agentivity features), only an acceptability judgement test with constructed sentences can reveal whether native speakers also consider this construction to be worse (rather than simply rarer) or even ungrammatical with a less agentive verb.

2. Test design

The notion of agentivity has recently undergone a considerable evolution. While traditionally the agent was seen as a more or less monolithic role within the hierarchy of roles in a sentence (including patient, experiencer, etc.), Dowty (1991: 572) has given a “preliminary list” of four entailments characterizing a prototypical agent (“proto-agent”): volition, sentience, causation and movement. This allows for less prototypical and peripheral agents that exhibit only some of these features. While the set of features as well as their exact status are still under discussion (e.g. Primus 1999, 2011), it seems to be widely accepted that there are more agentive and less agentive verbal arguments and that agentivity should therefore be decomposed into several features.

The aim of the following study was to test the German impersonal passive and the Polish *-no/-to* construction in the same (or at least very similar) circumstances. It was designed in close collaboration with Beatrice Primus and Markus Philipp and their project Bo7 “Agentivity as a key to prominence: Experimental approaches to argument alternations in German” of our Collaborative Research Centre 1252 “Prominence in Language” at the University of Cologne.

We used only intransitive verbs because the German impersonal passive can only be formed from such verbs (since with transitive verbs we only get the ‘normal’ passive with the direct object of the verb in nominative case). Consequently, we did not test for Dowty’s (1991: 572) agentivity feature ‘causation’ (“causing an event or change of state in another participant”). With the remaining three features we formed four classes of verbs with different degrees of agentivity:

1. 3 features: [+ volition] [+ movement] [+ sentience]
2. 2 features: [– volition] [+ movement] [+ sentience]
3. 1 feature: [– volition] [– movement] [+ sentience]
4. 0 features: [– volition] [– movement] [– sentience]

Note that by choosing these four classes we do not make any statement about the (in)dependence of the features from each other. Specifically, they do not seem to form an implicational scale. Consequently, with these three features

$2 \times 2 \times 2 = 8$ combinations are theoretically possible, and indeed at least some of the other four combinations certainly exist (e.g. ‘wait’, ‘think’, ‘listen’, etc. have the features [+ volition] [- movement] [+ sentience]). However, the only aim of this selection of features was to achieve classes of verbs with different numbers of features, so that an agentivity cline can be revealed in the data.

For each of the four verb classes, we chose six verbs to be tested (which were different from the ones used in Bunčić 2018 and had near synonyms in the German version of the test, so that the same sentences could be constructed as test items):

1. *pracować* ‘work’, *tańczyć* ‘dance’, *ćwiczyć* ‘do gymnastics’,
rozmawiać ‘talk’, *plotkować* ‘gossip’, *szeptać* ‘whisper’
2. *pocić się* ‘sweat’, *kichać* ‘sneeze’, *drżeć* ‘shiver’,
kaszleć ‘cough’, *krwawić* ‘bleed’, *jąkać się* ‘stammer’
3. *obawiać się* ‘fear’, *smucić się* ‘be sad’, *wątpić* ‘doubt’,
cierpieć ‘suffer’, *marznąć* ‘freeze, feel cold’, *dziwić się* ‘marvel’
4. *błyszcząć* ‘glisten’, *świecić się* ‘shine’, *lśnić* ‘glow’,
śmierdzić ‘stink’, *połykiwać* ‘glitter’, *cuchnąć* ‘smell bad’

In order to test these 4×6 verbs for acceptability, we created three contexts for each verb, each consisting of two sentences with the crucial verb form at the beginning of the second sentence (and therefore in the middle of the item). Each of these items was tested with two grammatical forms: the *-no/-to* form that we are interested in, as in (13a), and – for comparison – a personal form (an anaphoric 3PL, with pro-drop), as in (13b).

- (13) a. *Ze względu na nadchodzące egzaminy wiele uczennic szkoły baletowej było pilnych. Tańczo-no* (dance-PST.IMPRS), *mimo że oficjalne godziny treningu już się skończyły.*
‘Because of the upcoming exams many ballet students were motivated.
One danced although the official training hours had long been over.’
- b. *Ze względu na nadchodzące egzaminy wiele uczennic szkoły baletowej było pilnych. Tańczy-ły* (dance-PST-F.3PL), *mimo że oficjalne godziny treningu już się skończyły.*
‘Because of the upcoming exams many ballet students were motivated.
They danced although the official training hours had long been over.’

The resulting 144 items (4 verb classes \times 6 verbs \times 3 contexts \times 2 grammatical forms) were distributed over 6 online questionnaires in such a way that each questionnaire contained exactly one instance of each of the 24 verbs. The questionnaires were pseudo-randomized and supplemented with 50% of fillers: 16 positive control items (normal sentences with a full NP as a personal subject) and 8 negative control items (*-no/-to* constructions with inanimate referents). The participants in the study were asked to rate the acceptability of the items on a six-point scale (whose points were visualized by smiling vs. frowning emo-

ticons in addition to the numbers 1–6, which correspond to the common grading system in Poland, with 1 = *niedostateczny* ‘unsatisfactory’ and 6 = *celujący* ‘excellent’). They could also give a free-text comment on every test item if they wanted to.

The six questionnaires were made available online via *soscisurvey.de* together with a few questions about the sociolinguistic background of the test persons. After these questions were answered, an urn drawing mechanism decided about which of the six questionnaires would be presented. The link to the online test was sent to colleagues in Poland with the request to distribute it among their students, colleagues and friends.

3. Test results

The questionnaires were filled out by a total of 253 people. Since the question whether Polish was their native language was negated by 7 of them, we only used the remaining 246 questionnaires. Of these, 18 (7%) answered that they had another native language besides Polish, but their answers did not differ in any meaningful way from the answers of the Polish monolinguals, so that we did not exclude them.

The test persons were 84% female and 16% male. They were between 18 and 65 years old, with an average age of a little over 27 years (71% were under thirty and only 3% over fifty). As to the regional distribution, 45% of the participants came from the Mazovian Voivodeship, 19% from Lesser Poland, 13% from out-

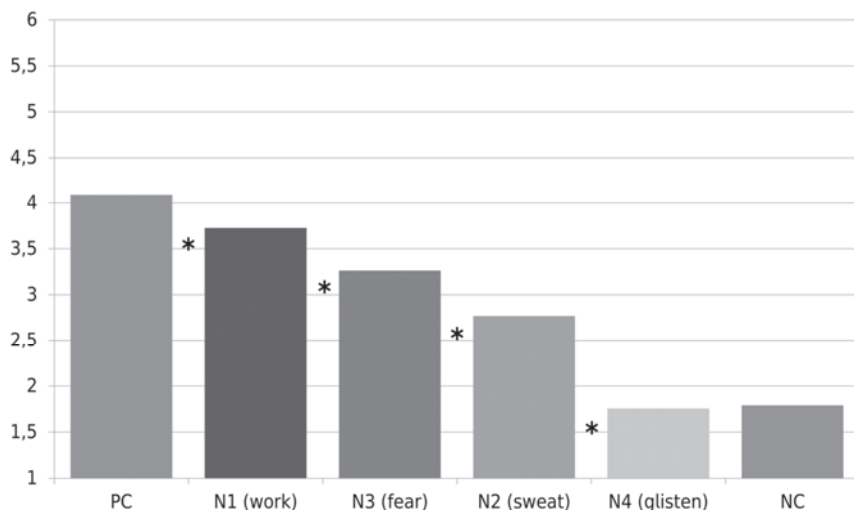


Figure 1: Results for the -no/-to construction

side Poland, and the remaining 23% were distributed over all the other fourteen voivodeships (except for Opole, for some reason). These numbers reflect the fact that many of the test persons were philology students of the University of Warsaw (because the link to the online questionnaire was kindly and very effectively distributed by Marek Łaziński of Warsaw University).

Figure 1 shows the acceptability judgements for the *-no/-to* construction in comparison to the positive control items (PC) and the negative control items (NC). Stars indicate that the difference between the adjacent values is statistically significant (in fact in each case highly significant with $p < 0.001$; ANOVA; each bar in figures 1–3 is based on $n \geq 371$ individual replies). As one can see, there is a clear cline, in which the verbs of class 1 ('work' etc.) are judged the best (though unexpectedly not quite as good as the positive control items) and the class 4 verbs ('glisten' etc.) are just as bad as the negative control items (the difference being insignificant with $p \approx 0.28$). The surprising result is that class 3 ('fear' etc.) turned out significantly better than class 2 ('sweat' etc.) although class 2 has two agentivity features ([– volition] [+ movement] [+ sentience]) and class 3 only one ([– volition] [– movement] [+ sentience]) so that according to our prediction class 2 should have been better than class 3.

In figure 2 we can see that the cline is not independent from the *-no/-to* construction: When tested with an anaphoric 3PL verb form instead of the impersonal *-no/-to* construction, the three first verb classes are all just as good as the positive control items (the apparent differences in the diagram being insignificant with $p > 0.1$ in all cases). Admittedly, the items with the 'glisten'

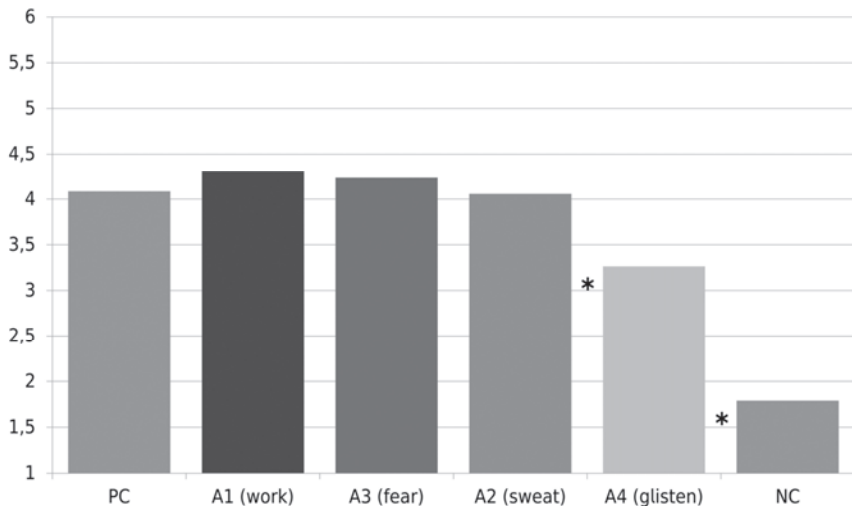


Figure 2: Results for the personal construction

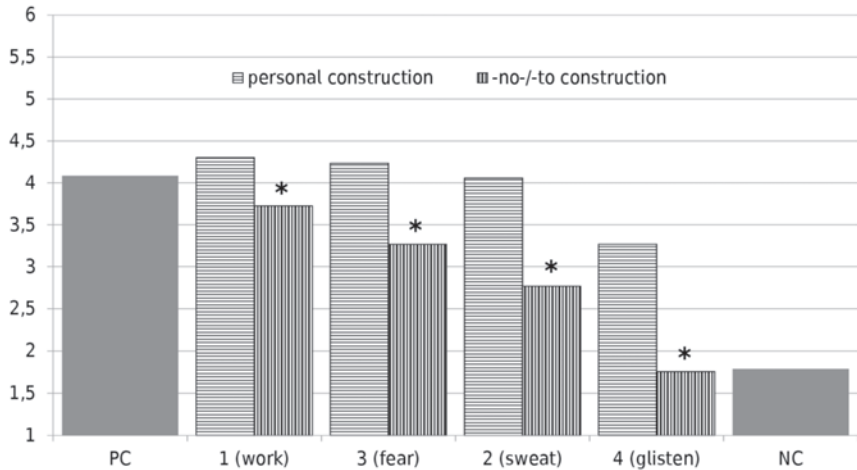


Figure 3: Comparison of the two constructions

verbs are judged less acceptable even in the personal construction ($p < 0.001$, with a rather small effect size of $\eta^2 \approx 0.07$), but in contrast to the *-no/-to* constructions with these verbs they are still significantly better than the negative control items ($p < 0.001$; large effect: $\eta^2 \approx 0.31$).

Figure 3 shows that in direct comparison with the personal form the impersonal construction is judged worse within each verb class. Although according to our prediction there should not be any reason why the *-no/-to* construction with the best verb class should be worse than the same sentences with an anaphoric verb form, this also holds for class 1 ('work', where there is a significant difference with $p < 0.01$ but a very small effect size of $\eta^2 \approx 0.02$, whereas in the other three classes the differences are always highly significant with $p < 0.001$ and exhibit larger effects with η^2 between 0.06 and 0.24).

4. Discussion

In the *-no/-to* construction, we find statistically significant differences between all four verb groups, so that the hypothesis about an agentivity cline could be substantiated. Note that the implicit subjects of all the four verb classes were humans, whereas the negative control items had inanimate implicit subjects. Since there is no significant difference between the fourth class ('glisten') and the negative control items, animacy seems to be less important for explaining the effect observed here than agentivity.

The fact that class 3 ('fear' etc.) turned out better than class 2 ('sweat' etc.) although it is clearly less dynamic seems to imply that Dowty's (1991: 572) "preliminary list of features" is not completely adequate for explaining the agentivity cline of the *-no/-to* construction. Movement seems to play only a minor role at least for the prominence relation examined here, although one should keep in mind that we tested only four out of eight theoretically possible combinations of agentivity features; it is still possible that our class 1 verbs ('work' etc.) with [+ volition] [+ movement] [+ sentience] are better than verbs with [+ volition] [- movement] [+ sentience] (e.g. 'wait', 'think', 'listen'), which have not been tested yet but will be included in further studies. Another possible reason why the verbs of the 'fear' class seem to be more agentive than Dowty's features would suggest might be the emotional involvement they imply ('fear', 'be sad', 'doubt', 'suffer', 'feel cold', 'marvel'). This might in some form have to be construed as an additional agentivity feature. In any case, a thorough semantic analysis and further tests are needed to refine the set of features of agentivity.

A problem with the results presented here is that even the test items expected to be flawless – including the positive control items – are far away from the top of the scale, receiving ratings of slightly more than four on a six-point scale. I have been able to identify several possible factors that might have contributed to this:

1. We had chosen a scale from 1 to 6, with 6 as the best rating, because these numbers are also the Polish school grades, which might serve as a mnemonic to prevent erroneous reverse ratings. Maybe the participants took the analogy with school grades too literally, for in Polish schools a six is only awarded very rarely, and it does not exist at all at universities. Maybe the test persons therefore avoided grading 'just normal' test items as 'excellent'. In further studies, we will therefore avoid using numbers and indicate the grade by plus and minus signs or graphic emoticons.

2. All the test items were translated from German to improve the comparability of the data. However, translations can involve small problems due to which the items might have been perceived as a little awkward. For example, while the German item (14a) is unproblematic, the Polish translation (14b) has an agreement problem: The form *tańczyły* 'danced', which grammatically agrees with the feminine noun *para* 'couple', was accepted by my informants, but some test persons might have felt that semantic agreement with the mixed-gender dancing couples and therefore the masculine-human form *tańczyli* would have been better.

- (14) a. *Aufgrund des bevorstehenden Abschlussballs waren viele Tanzpaare ehrgeizig. Sie tanzten [...].*
 'Due to the upcoming graduation ball many dancing couples were ambitious. They danced [...].'

- b. Z powodu nadchodzącego balu wiele **par** tanecznych było ambitnych. **Tańczyły** [...].
 couple.F:GEN.PL dance-PST-3PL.F

In another test item, *weil das ein spaßiger Zeitvertreib beim Warten auf die Dauerwelle war* ‘because that was a fun pastime while waiting for the perm’ turned out in Polish as *bo to było zabawne spędzanie czasu w czasie czekania na trwałą*, where the repetition of the word *czas* ‘time’ (first in *spędzanie czasu* ‘pastime’, then in *w czasie* ‘during’) might have been judged awkward. In future studies it will probably be better to abstain from translations and use modified corpus examples instead.

3. In all the test items the referent of the *-no/-to* form was mentioned as a topic in the preceding sentence. While this does not seem to be any problem in German, a little search in the Polish National Corpus (NKJP) showed that in actual texts the Polish *-no/-to* form is only used when there are different topics in the preceding text, as in (15).

- (15) *Auto z czterema młodymi mężczyznami wpadło do Wisły. Woda dostała się do tonącego samochodu. Trudno było otworzyć drzwi. **Podjęto** próbę wydostania się i wypłynięcia na powierzchnię. Trzej pasażerowie byli pijani [...] Wszystkim udało się wydostać na powierzchnię [...].*

‘A car with four young men fell into the Vistula. Water penetrated into the sinking vehicle. It was hard to open the door. **It was attempted** to get out and swim to the surface. Three of the occupants were drunk. [...] All managed to get to the surface [...].’

While the four people in the car have been mentioned before, so that it is clear that the impersonal *-no/-to* construction refers to exactly these four young men, they have not been topical in the sentences before. Unlike the German impersonal passive, which can easily demote topical subjects, the Polish *-no/-to* construction only seems to be used to refer to agents that are already backgrounded in some way (in the case of the news item in (15), because of the formal, ‘objectivizing’ style and because the four young men should remain anonymous). This feature of arbs, that some can actively demote a subject, whereas others only refer to already demoted subjects, has not been described anywhere so far. However, some of the test persons seem to have had a feeling for this, so that in their comments they requested test items like (13a) with a *-no/-to* construction to be rephrased as personal sentences like (13b). Apparently, if a referent has already been mentioned and can provide an anchor for an anaphoric verb form, that form should be used in Polish.

4. The *-no/-to* form is marked as rather formal – arguably because it has a touch of “objectivization” (“obiektywizacja”, Laskowski 1984: 147) –, so that it is less suitable in everyday contexts. One test person explicitly criticized the “excessive use of passive voice”: Obviously the presence of 20 *-no/-to* forms (12 test items and 8 negative control items) in 96 sentences (48 test items with two sentences each) was felt to be too much, turning the whole test into an ‘unnatural’ quasi-

text. In a follow-up study we are currently examining how several factors, including style and context, influence the use of the three Polish arb constructions, so that in the future we can create our test items in a more informed way.

Factors 3 and 4 might also have contributed to the fact that the *-no/-to* construction with class 1 verbs was rated lower than the positive control items (see figure 1).

Once the participants gained the impression that the test items were somehow ‘unnatural’, they might have read even the objectively flawless items in a much more critical way. The statement on the introductory page that the study was conducted by someone with a non-Polish name from a German university may also have contributed to a more suspicious attitude.

The fact that even in the personal construction the class 4 verbs (‘glisten’ etc.) were judged to be significantly worse than the other three classes might be an artifact of our test design. In order to make sure that the contexts were interpreted as [– sentience] in spite of the referents being [+ human], we created items with babies glistening because of too much cream, students having secretly put sparkling powder onto the teachers’ chairs, etc. These items might therefore have been given low ratings because of their unusual content. Furthermore, the contexts in this verb class, with *śmierdzieć* ‘stink’, *cuchnąć* ‘smell bad’, and all the unnoticed nuisances employed to provide for [– sentience], tended to be more emotionally negative than in the other verb classes, which might also have contributed to the relatively low rating of class 4 even in personal constructions.

The parallel study on “Agentivity in impersonal passives” in German, the results of which were presented by Tim Graf, Markus Philipp and Beatrice Primus at the 2016 annual conference of the German Linguistic Society (DGfS) in Konstanz but have not been published yet, showed a very similar picture. It also revealed a clear agentivity cline in the items with the impersonal passive, but there was no significant difference between the classes 2 and 3 (where the Polish study, as seen in figure 1, found class 3 to be significantly better than class 2). However, the German ratings are really good for the good items (positive control items, class 1 with the impersonal passive, classes 1–3 with a personal pronoun). There is also no significant difference between the personal control items and the impersonal passive with class 1 verbs. This points to the fact that there really is an important difference in usage between the German and the Polish arb construction we tested.

5. Conclusion

We have seen that the acceptability of the *-no/-to* construction shows a clear agentivity cline: The less agentive the verb is, the less acceptable the *-no/-to* construction becomes. This corresponds to the frequency of Polish and Serbo-Croatian arbs in texts (Bunčić 2018) and to the acceptability of the German impersonal passive (as found in the parallel study by Beatrice Primus, Markus Philipp and Tim Graf). Crucially, the non-agentive verbs of class 4 ('glisten' etc.) are judged just as bad as the 'ungrammatical' use of the *-no/-to* construction with inanimate referents, so that they should probably also be considered ungrammatical.

Since the same cline is not observed with personal constructions, it cannot be explained in terms of prototypicality: If the situations described by the class 1 verbs as such were more prototypical than the situations described by the verbs of the other classes, we should see the same effect no matter which grammatical construction is used. The solution is a prominence relation as defined by Himmelmann & Primus (2015): While prominent agents license the use of an arb construction, less prominent agents allow for it less easily. The logic behind this might be that the demotion of the subject that is the defining feature of impersonal constructions only makes sense where the subject is prominent in the first place; a non-prominent, in this case non-agentive, subject cannot be further demoted.

While this general relation might be a universal tendency (at least we have not found any counter-evidence so far in German, Polish, and Serbo-Croatian arbs), the present study has also found marked differences between the German impersonal passive and the Polish *-no/-to* construction: The latter is stylistically very marked, and it does not seem to allow the demotion of topical referents. The two alternative constructions in Polish, the reflexive impersonal and the 3PL impersonal (cf. (7) and (8) above), certainly have a different stylistic status (the reflexive seems to be more or less unmarked, whereas the 3PL impersonal is marked as colloquial) and might even differ with respect to topical referents.

Contrary to our expectation, the 'sweat' verbs did not turn out to be better than the 'fear' verbs (being judged significantly worse in the present study, while the German study and the corpus study in Bunčić 2018 found no significant difference). As a consequence, Dowty's (1991) agentivity features will have to be modified, possibly removing or redefining the feature [\pm movement] and/or adding features to account for a higher agentivity of verbs like 'fear' (verbs of emotional involvement, psych verbs, etc.).

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