On semantic and syntactic selectional restrictions of the Polish distributive preposition PO

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0. The Polish distributive element PO, usually treated as a preposition, has extremely idiosyncratic behaviour. One idiosyncrasy concerns its distribution: it seems that PO is limited to so-called structural case assignment positions, i.e., roughly, to nominative, accusative and certain genitive positions. The other idiosyncrasy concerns its syntactic and semantic selectional restrictions.

1. It has been long noticed (e.g., Łojasiewicz 1979) that the distributive PO combines with some phrases in the locative, as in Dałem każdemu po jabłku `I gave them an apple-LOC each', and some phrases in the accusative, as in Dałem każdemu po dwa jabłka `I gave them two-ACC apples each'. However, it is not clear whether the deciding factor is the grammatical number (singular or plural) or the categorial status of the phrase (nominal vs. numeral). We show conclusively (in our opinion) that, contrary to popular belief, it is the categorial status that is decisive here: PO combines with locative nominal phrases or accusative numeral phrases.

The argument is based on so-called `one'-numerals jeden as used in attested examples like Mieli po jednych ustach na twarz `They had one-PL.LOC mouth-PL.LOC for each face'. The phrase jednych ustach is unambiguously plural, so if the analysis based on grammatical number were right, the phrase should occur in the accusative; this is not possible: *Mieli po jedne usta...

If we constrain ourselves to the two hypotheses mentioned above, this implies that the categorial hypothesis is correct, contrary to the commonly held assumption.

Note that the categorial status of jednych is controversial in Polish linguistics, with proposed adjectival and numeral interpretations. As a corollary to the categorial analysis of PO, we can see that jednych cannot be a numeral here: if it were, the phrase would have to be accusative rather than the attested locative.

2. Perhaps even more difficult to characterise are the semantic restrictions on the argument of PO: it has been noted in passing (e.g., by Łojasiewicz 1979) that some such restriction holds, but – to the best of our knowledge – no attempt has so far been made to even perfunctorily describe it. We will illustrate the restriction with examples of the type: Przekazał każdemu z nich po Q informacji/informacje `He conveyed to each of them PO Q information(s)', where Q stands for a quantification-denoting expression. This sentence is fine with Q expressing cardinality, whether morphosyntactically realised by an adjective (jeden `one'), a numeral (dwie 'two', pięć `five', etc.) or a noun (e.g., dziesięć `ten'), it is also fully acceptable with kilka `several (normally 2-10)', kilkanaście `upteen', etc. Somewhat surprisingly, it is degraded with wiele `many', and completely unacceptable with większość `most' and wszystkie `all', although the intended meaning may be expressed without the use of PO (e.g., Przekazał każdemu z nich wszystkie informacje).

On the basis of these and many other quantifying expressions we claim that PO may only combine with phrases expressing cardinal quantifiers (cardinal numbers, kilka, kilkanaście, wiele, etc.), as opposed to proportional quantifiers (większość, wszystkie, etc.), cf. Keenan 2002 and references therein, and it prefers non-contextual cardinal quantifiers (many, as argued by Partee 1989, oscillates between a proportional and a contextual cardinal reading; the other cardinal quantifiers mentioned above are non-contextual).

3. Although this article concerns one idiosyncratic element in Polish, it has interesting general consequences. As far as syntactic restrictions are concerned, PO distinguishes between nouns (tuż `dozen') and numerals (dwanaście `twelve'), aducing support to this controversial morphosyntactic distinction. Concerning semantics, PO creates an environment for cardinal quantifiers, supporting the claim in Keenan 2002 (inter alia) that some selectional restrictions are best described in terms of types
of generalised quantifiers (Keenan himself shows that English existential constructions only admit intersective quantifiers, a class slightly larger than cardinal quantifiers).

References