Predicative adverbs in Polish

Data It is sometimes claimed that adverbs cannot be used predicatively (cf., e.g., Rothstein 2001: 129). The aim of this paper is to present an analysis of predicative adverbs in Polish.

It is well-known that clauses (CPs) and infinitival phrases (InfPs) may act as subjects in predicative constructions; a recent corpus study of English constructions of this kind may be found in Uhrig 2018: ch. 6, and two examples from the National Corpus of Polish (NKJP; http://nkjp.pl) involving such verbal subjects are:

- (1) Ciekawostką jest, [że w akumulatorach jako paliwo używany będzie alkohol]. curio.INST is.3SG that in batteries as fuel used will alcohol 'An interesting fact is that in batteries alcohol will be used as fuel.'
- (2) Ciekawe jest [odpowiadać na znane sobie pytania]? interesting.NOM.SG.N is.3SG answer.INF on known self questions 'Is answering questions known to oneself interesting?'
- (1) involves a nominal precopular predicate and a postverbal CP subject and (2) involves an adjectival predicate and an InfP subject, but all four possibilities (NP/AP predicate \times CP/InfP subject) are fully acceptable and well attested.

It turns out that in such cases – when the subject is clausal or infinitival – the predicate may be expressed by an adverb in Polish, as in the following corpus examples:

- (3) Dobrze jest, [że czują respekt]. 'It is good that they feel respect.' good.ADV is.3SG that feel respect
- (4) Najłatwiej i najtaniej było [upłynnić ziarno czy ziemniaki]. easy.ADV.SUP and cheap.ADV.SUP was.3SG.N sell.INF grain or potatoes 'It was easiest and cheapest to sell grain or potatoes.'

Forms marked in (3)–(4) as ADV, though derivationally related to the corresponding adjectives, cannot themselves be analysed as adjectives (despite their adjectival English translations): they are not syncretic with any forms in the inflectional paradigms of corresponding adjectives, they cannot be used ad-nominally, and they can be used ad-verbally. Moreover, since the adverbs in (4) are superlative forms, it is not feasible to analyse them as defective verbs, e.g., as 'quasiverbs' – a class of predicates sometimes distinguished in Polish linguistics.

Such constructions with verbal subjects and adverbial predicates are fully analogous to those with nominal and adjectival predicates: in both the verbal (hence, non-nominative) subjects trigger the 'default' 3rd person singular neuter agreement on the copula (Dziwirek 1990, Przepiórkowski 1999), in both the copula may be dropped in the present tense, in both other copula-like verbs may be used (e.g., *wydawać się* 'seem'), both satisfy the same word order constraints, and – when the adverb is replaced by the corresponding adjective (compare (5)–(6) below with (3)–(4) above) – they have the same meaning as predicative constructions with adjectival predicates.

- (5) *Dobre* 'good.ADJ' jest, [że czują respekt].
- (6) Najłatwiejsze i najtańsze 'easiest.ADJ and cheapest.ADJ' było [upłynnić...].

On the other hand, an interesting feature of predicative adverbs is that they may take a dative argument expressing the experiencer, as in the attested (slightly simplified) (7)–(8):

- (7) Maciusiowi przyjemnie było, [że poseł nie mówił w zagranicznym języku]. Maciuś.DAT pleasant.ADV was.3SG.N that envoy NEG spoke in foreign language 'That the envoy did not speak in a foreign language was pleasant to Maciuś.'
- (8) Oczywiście autorowi najtrudniej było [uzyskać szczegóły]. obviously author.DAT difficult.ADV.SUP was.3SG.N get.INF details 'Obviously, to get the details was the most difficult for the author.'
- In (7), the experiencer is an argument of (bardzo) przyjemnie '(very) pleasant.ADV' only, but

in (8) the dative dependent of *najtrudniej* 'most difficult.ADV' is at the same time the subject of the infinitival phrase headed by UZYSKAĆ 'gain'. While the idea of obligatory control into subject is controversial (Landau 2013), (8) seems to be a genuine example of this phenomenon.

Analysis The proposed analysis of predicative adverbs is couched in Lexical Functional Grammar and Glue Semantics (Dalrymple 2001) and will be illustrated with the constructed (9).

(9) Janowi było miło {[pływać] / [że Maria pływa]}. (10) [PRED 'NICE<[],2>' Jan.DAT was nice.ADV swim.INF that Maria swims 'It was nice for Jan {to swim / that Maria swims}.'

The constituency structure of such examples does not differ from that of other copular constructions, so it will not be discussed here. The functional structure projects from the lexical entry of the predicative adverb, which specifies two syntactic arguments: the verbal subject and the dative complement. In the case the verbal subject is infinitival, its subject is controlled by that dative argument, as shown in the f-structure (10) corresponding to (9) with InfP subject.

We assume the following simplified semantic representation of this example:

(11) $\lambda s. \, nice(s) \wedge experiencer(s, j) \wedge arg(s, ^ \lambda e. swim(e) \wedge agent(e, j))$

This representation follows the predicative schema proposed in Rothstein 2001, on which the semantic representation of, for example, *John is nice* would be $\lambda s.\ nice(s) \wedge arg(s,j)$ (leaving out the contribution of the copula); such states s may host various semantic roles (p. 295), here the experiencer role. What is special about the constructions considered here is that the subjects of prediction are not ordinary entities, but rather events – or kinds of events (cf., e.g., Gehrke 2019 and references therein). The representation in (11) makes use of Chierchia's (1998: 348–349) down operator $^{\cap}$, which shifts properties into corresponding kinds. In this case, it shifts the property (function from entities to truth values) of being a swimming-by-Jan event to the swimming-by-Jan event kind (i.e., an entity). Hence, after existential closure, the target representation states the existence of a nice state experienced by Jan and concerning (predicating of) the event kind of swimming-by-Jan.

It might not be immediately clear on the basis of (9) that event kinds – rather than ordinary event tokens – are needed here, but consider the constructed (12):

- (12) Janowi było trudno [wstać]. 'It was difficult for Jan to get up.'
 Jan.DAT was difficult.ADV get up.INF
- (13) $\lambda s. difficult(s) \wedge experiencer(s, j) \wedge arg(s, ^{\cap} \lambda e. getup(e) \wedge agent(e, j))$

This example does not entail the existence of a getting-up event, and neither does its representation in (13). The difference is in lexical entailments: *mito* 'nice.ADV' is more factive than *trudno* 'difficult.ADV'; see Grimm and McNally 2015: 92 for similar considerations.

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