

EWELINA MOKROSZ

TAK AS A DEGREE EXPRESSION IN POLISH

Abstract. The aim of this paper is to identify the syntactic position of the comparative operator *tak*. First, we present a classification of degree phrases as proposed by Neeleman, van de Koot and Doetjes (2004). The authors divide degree expressions into two classes, namely class-1 and class-2 degree expressions. The expressions of the first class function as heads while expressions of the second class form a group of maximal projections. Only the former but not the latter c-select prepositional phrases, nominal phrases with a gradient property and verbal phrases. Since class-2 degree expressions are adjuncts, they can have a rich internal structure and appear without the host element. As for the movement, only class-2 degree expressions can undergo leftward movement. In the paper we demonstrate that comparative *tak* looks like a class-2 degree expression in contrast to its English counterpart in an analogical construction, i.e. the comparative *as*. The crucial difference between English and Polish degree expressions is the fact that in English the dummy operator *much* appears only in a limited number of contexts while its Polish equivalent, i.e. *bardzo*, is very common among degree expressions from class-1. This observation does not allow us to adopt Neeleman et al. (2004) syntactic analysis of degree expressions without any modifications.

Key words: degree phrase; comparative clause; topicalization.

1. INTRODUCTION

Polish has an equative comparative construction in which the compared property is introduced by the degree expression *tak* ‘so’. The other distinguishing feature of the construction in question is a comparative clause with an ellipted constituent. The comparative clause is introduced by a special lexical item, namely *jak* ‘as,’ which alternates with a non-standard complementizer *co*.¹ The introductory element *tak* is optionally followed by the adjective *sam(e/o)* ‘same.’ Below we provide an example of the equative construction just described. We will call such a construction a degree equative.

EWELINA MOKROSZ, PhD—Department of Theoretical Linguistics, Institute of English Studies, John Paul II Catholic University of Lublin; address for correspondence: Al. Raławickie 14, PL 20–950 Lublin; E-mail: ewelina.mokrosz@kul.lublin.pl

¹ For the derivation of comparative constructions in Polish see Bondaruk (1998).

- (1) *Degree equative*
 Jan zaśpiewał *tak* (samo) głośno *jak/co* Piotr [zaśpiewał].
 John sang so same loudly as Peter sang
 ‘John sang as loudly as Peter.’

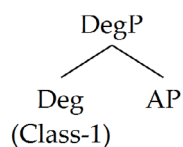
The aim of this paper is to identify the syntactic position of the comparative *tak* that features in a construction presented in (1). Section 2 presents a classification of degree expressions on the basis of their syntactic properties. Section 3 focuses on *tak* and attempts to classify it in accordance with the criteria set out in section 2.

2. CLASSIFICATION OF DEGREE EXPRESSIONS IN ENGLISH AND POLISH

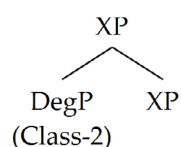
First, we would like to present a classification of degree expressions proposed for English by Neeleman, van de Koot and Doetjes (2004). Then we check whether the same division can be made in Polish.

Neeleman et al. (2004) assume the existence of two classes of degree expressions in English. Class-1 includes *very*, *as*, *too*, *that*, and the interrogative *how*. This group of degree expressions *c*-selects adjectives, as shown in (2). Class-2 degree expressions such as *more*, *less*, *enough*, *a little*, *a good deal* are adjuncts that can adjoin not only to APs but also to PPs, nominal categories and VPs (see (3) below).

(2) Class-1 degree expressions



(3) Class-2 degree expressions



Neeleman et al. (2004, 6)

Degree expressions seem to have a similar semantic function and, yet, in Neeleman et al.’s (2004) analysis, they receive two different syntactic realizations (cf. Bresnan 1973 and Corver 1997). Neeleman et al. (2004) do not agree with Bresnan’s (1973) analysis of degree expressions in which a comparative construction always has a degree word, an unmarked quantifier (*much* in English) and an adjective, the degree item and the quantifier being

located in the specifier of an adjective. *Much* is deleted when it immediately precedes an adjective. Yet, in the context of *so* substitution, *so* being an underspecified category, *much* obligatorily appears only after a limited group of degree expressions, i.e., *as*, *very*, *too*. *More* and *less* are morphologically complex items derived from the morpheme *-er* and the quantifier *much* and *little*. By postulating the abovementioned division of degree items each with a different syntactic realization, Neeleman et al. do not have to turn to any deletion rule which, as they state, is unjustifiably limited to a pre-adjectival context. Corver (1997), on the other hand, maintains that a degree word and a quantifier are heads in the extended part of an AP projection. However, Neeleman et al. show that class-1 and class-2 degree expressions are heads and maximal projections respectively.

As already pointed out, the division of degree expressions into two classes is strongly connected with their selectional restrictions. In what follows we are going to check whether Polish equivalents of some of the English degree expressions exhibit the same behaviour with regard to c-selection and, thus, form a non-uniform group. Additionally, Neeleman et al. (2004) underline that class-1 degree expressions as heads are devoid of any internal structure in contrast to class-2 degree expressions, which also will be commented upon with regard to Polish. Apart from that, we will examine the behaviour of Polish degree expressions in the context of topicalization, which points to the adjunct-like nature of class-2 degree expressions. The degree item *very* will be discussed separately at the end of this section while *that* and *as* will be examined in section 3 together with Polish *tak*.

Class-2 degree expressions as adjuncts can attach to APs, PPs, DPs, and VPs. Class-1 degree expressions as heads select only for APs. Phrases such as PPs, DPs, and VPs can accompany class-1 degree expressions only when the dummy adjective *much* intervenes between each phrase and the degree expression. The distribution of *much* will be also discussed in the context of Polish degree expressions. Below we will examine each class of degree expressions with regard to its c-selectional properties starting with adjectives.^{2,3}

Neeleman et al. (2004) point out that class-1 degree items (*very*, *as*, *too*, *that*, *how*) followed by adjective phrases do not need *much* for reasons of economy, which means that inserting *much* after each degree item in (4)

² In this paper, the list of class-2 degree expressions examined by Neeleman et al. (2004) has been reduced to two, i.e. *more* and *less*, for reasons of space.

³ The examples from Neeleman et al. (2004) have labelled phrases while examples from Polish are devoid of them in order not to impose any analysis at the point of testing them.

would yield ungrammatical sentences in English. Since class-2 degree items like the ones in (5) are adjuncts, they do not impose any categorial restrictions on the item they modify.

- (4) a. He is [_{DegP} *too* [_{AP} famous]] to leave town.
 b. I wonder [_{DegP} *how* [_{AP} rich]] he really is t.
- (5) a. He is [_{AP} *more* [_{AP} famous]] than I thought.
 b. His paper is [_{AP} *less* [_{AP} interesting]] than I thought.

Neeleman et al. (2004, 10)

As examples in (6) show, Polish does not comply with the pattern that emerged in English (see (4)).

- (6) a. On jest *za* bardzo pijany, żeby mówić.⁴
 he is too much drunk to talk
 ‘He is too drunk to talk’.
- b. Zastanawiam się, *jak* (bardzo) bogaty on naprawdę jest.
 wonder-1PRS.SG REFL how much rich he really is
 ‘I wonder how rich he really is.’
- (7) a. On jest *bardziej* (*bardzo) inteligentny.
 he is more much intelligent
 b. On jest *mniej* (*bardzo) interesujący.
 he is less much interesting

The presence of *bardzo* with class-1 degree expressions followed by adjectives calls into question their status of class-1 degree expressions as the same degree items in English disallow *much*.

In (8) and (9), respectively, there is a group of class-1 and class-2 degree expressions accompanied by different prepositional phrases. Sentences in (10) and (11) present Polish degree expressions divided in a similar way and also followed by prepositional phrases.

⁴ Even though *bardzo* ‘very’ is obligatory with *za* ‘too’, a variation may be observed within a group of adjectives. Adjectives in (i), in contrast to adjectives in (ii), do not accept the presence of *very*.

- (i) *za* (*bardzo) głupi/mądry
 too much drunk/stupid
- (ii) *za* *(bardzo) przejęty/zmęczony
 too much concerned/tired

It is likely that the difference between (i) and (ii) is connected with the fact that the adjectives like the ones in (ii) are derived from verbs but we leave this matter open.

- (8) a. He is [_{PP} [_{DegP} *too* [_{AP} *(much)]]] [_{PP} under scrutiny]] to be elected at this time.
 b. I wonder [_{PP} [_{DegP} *how* [_{AP} *(much)]]] [_{PP} into syntax]] he really is t.
- (9) a. He is [_{PP} *more* *(much)] [_{PP} on drugs]] than any of his friends.
 b. He is [_{PP} *less* *(much)] [_{PP} like his father]] than he used to be.
- Neeleman et al. (2004, 11)
- (10) a. On jest *za* *(bardzo) pod presją.
 He is too much under pressure
 ‘He is too much under pressure.’
 b. Zastanawiam się *jak* *(bardzo) za Wisłą ona naprawdę jest.
 I wonder-1PRS.SG REFL how much for Wisła she really is
 ‘I wonder how much she really supports Wisła.’
- (11) a. Jest *bardziej* na rauszu niż jakikolwiek jego przyjaciel.
 is more on drunkenness than any his friend
 ‘He is more drunk than any of his friends.’
 b. On jest teraz *mniej* pod jej wpływem niż kiedyś.
 he is now less under her influence than ever.
 ‘He is now less under his influence than he used to be.’

Similarly to English, Polish class-2 degree expressions in (11) can modify PPs. As for class-1 degree expressions in (10), *za* and *jak* require the presence of an extra lexical item in the same way as *too* and *how*.

Let us now see how the two groups of degree expressions behave in the context of nominal expressions.⁵ The English examples are followed by their nearest Polish equivalents.

- (12) a. He is [_{DP} [_{DegP} *too* [_{AP} *(much)]]] [_{DP} a scientist]] to care about such problems.
 b. wonder [_{DP} [_{DegP} *how* [_{AP} *(much)]]] [_{DP} the village idiot]] he is generally considered t.
- (13) a. He is [_{DP} *more* *(much)] [_{DP} a theoretical linguist]] than a psychologist.
 b. This is [_{DP} *less* *(much)] [_{DP} a typical Italian opera]] than most of Puccini’s.
- Neeleman et al. (2004, 11)
- (14) a. Jan jest *zbyt* *(wielkim) naukowcem.⁶
 ‘John is too great a scientist.’
 b. Zastanawiam się *jak* *(wielkim) idiotą on musi być.
 wonder-1PRS.SG REFL how big idiot he must be
 ‘I wonder how big an idiot he must be.’

⁵ Neeleman et al. (2004, 11) add that nominal phrases modified by degree expressions have to possess a gradient property.

⁶ In example (14), *za* is replaced with *zbyt*. Even though both mean the same and are often used interchangeably, in this context only *zbyt* is grammatical.

- (15) Jan jest *bardziej* językoznawcą niż pragmatykiem.
 John is more linguist than pragmatician
 ‘John is more a linguist than a pragmatician.’

The degree expressions in (14) are obligatorily accompanied by *wielki*. It has to be remarked, though, that, in contrast to English, the obligatory item intervening between the degree expression and a nominal phrase is not the same dummy item that appeared in (10), i.e. *bardzo*. Polish seems to lack constructions equivalent to the ones presented in (12). The mandatory presence of adjectives in (14) indicates that the degree expressions in (14) do not modify noun phrases, as initially hypothesised, but adjectives. Thus, it can be argued that, in Polish, class-1 degree expressions do not modify nominal expressions. In (15) we have one representative of class-2, i.e. *bardziej* ‘more’, as *mniej* ‘less’ does not modify noun phrases in Polish. In example (15), in contrast to example (13a), an adjective is intentionally left out in order to show that *bardziej* doubtless can modify nominal expressions as a class-2 degree item.

The third group of phrases with which class-2 degree expressions can co-occur includes VPs. As presented below in (16) and (17), in English class-1 degree expressions in contrast to class-2 degree expressions cannot modify VPs. Their ungrammaticality is lifted when *much* is added to each degree expression in (16) (see Neeleman et al. 2004: 13).

- (16) a. *He [_{DegP} *too* [_{VP} likes venison]] for his own good.
 b. *I wonder *how* he [_{DegP} *t* [_{VP} really expects to be nominated]]. (on a degree reading)
- (17) a. He [_{VP} [_{VP} likes venison] *more* (*much)] than his family does.
 b. He [_{VP} [_{VP} lives like a celebrity] *less* (*much)] than he would like to.

Neeleman et al. (2004, 12)

In (18) and (19) below Polish degree expressions modify verbal phrases.

- (18) a. On *za* *(bardzo) lubi dziczyznę.
 he too much likes venison
 ‘He like venison too much.’
 b. Zastanawiam się *jak* *(bardzo) on oczekuje, że zostanie wybrany.
 wonder-1PRS.SG REFL how much he expects that will-be chosen
 ‘I wonder how much he expects to be chosen.’
- (19) On lubi dziczyznę *bardziej/mniej* niż ja.
 he likes venison more less than I
 ‘He likes venison more/less than I do.’

In Polish, class-1 degree expressions modifying verbal phrases behave in a uniform way. Both require the presence of *bardzo*. As expected, class-2 degree expressions in (19), i.e. *bardziej* and *mniej*, can modify verbal phrases on their own.

A clear division between class-1 and class-2 degree expressions in Polish can be observed when they modify adjectival, prepositional and verbal expressions. Only class-1 degree expressions require the presence of *bardzo* ‘much’ when followed by prepositional and verbal expressions. In contrast to English, they can be followed by *bardzo* when modifying an adjective phrase. When it comes to modification of nouns, only *bardziej* ‘more’, a representative of class-2 degree items, can accompany nominal expressions. Class-1 degree items such as *zbyt*, alternating with *za*, and *jak* do not modify nominal expressions in Polish. Below we consider two more features distinguishing class-1 from class-2 degree expressions.

Neeleman et al. (2004) point out that only class-2 degree expressions, which are modifiers, can have an internal structure. In this group, except for *more*, *less*, *enough*, we also find *a bit*, *a great deal* and *above average*. In Polish it could be argued that a group of class-2 degree expressions apart from *bardziej* ‘more’ or *mniej* ‘less’ may include also complex degree expressions such as *w takim samym/wysokim stopniu* ‘to the same/a great extent’. As presented below in (20), the complex degree expression such as *w wysokim stopniu* may modify adjective phrases, verbal phrases and prepositional phrases, which shows that the phrase *w wysokim stopniu* should be analysed as a class-2 degree phrase and that, indeed, class-2 expressions as adjuncts may have an internal structure.

- (20) a. Czuję się w wysokim stopniu odpowiedzialna.
 feel-1PRS.SG REFL in high degree responsible
 ‘I feel responsible to a great extent.’
- b. Współczesne społeczeństwa w wysokim stopniu korzystają z
 modern societies in high degree use from
 dostaw energii elektrycznej.⁷
 supplies energy electric
 ‘Today’s societies use supplies of power to a great extent.’
- c. Polska myśl ekonomiczna jest w wysokim stopniu pod
 Polish thought economic is in high degree under
 wpływem doktryn socjalistycznych.⁸
 influence socialist doctrine
 ‘Polish economic thought is to a great extent under the influence of socialist doctrine.’

⁷ <http://www.szczecin.uw.gov.pl/bip/?type=article&action=view&id=5617>

⁸ <http://mises.pl/wp-content/uploads/2011/12/Heydel-Stosunek-panstwa-do-przedsiębiorstwa.pdf>

Neeleman et al. (2004) also maintain that class-1 degree expressions as heads can only precede their complements while class-2 degree expressions show greater flexibility with regard to the item they modify. This assumption is corroborated by examples shown in (21) and (22) below.

- (21) a. *John is fond of Mary *too* for his own good.
 b. *I wonder intelligent *how* John really is.
- (22)⁹ a. Fond of Mary *more* than Bill, only John can claim to be.
 b. Proud of his achievements *less* than Bill, only John is.

Neeleman et al (2004, 17)

When it comes to Polish, again a clear division between degree expressions seems to be justified. Sentences in (23) show that class-1 degree expressions cannot follow the head they modify. Class-2 degree expressions following their hosts, as in (24), yield grammatical sentences in Polish.

- (23) a. Jan jest odważny *za* *(bardzo).
 John is brave too much
- b. *Zastanawiałam się inteligentny *jak* jest Jan.
 wonder-1PRS.SG REFL intelligent how is John
- (24) a. Jan jest zakochany *bardziej* niż Piotr.
 John is in-love more than Peter
 ‘John is more in love than Peter.’
- b. Jan jest dumny ze swoich osiągnieć *mniej* niż Piotr.
 John is proud from his achievements less than Peter
 ‘John is less proud of his achievements than Peter.’

We would like to argue that, despite Polish being a free word order language, the sentences in (23) show that there is a group of degree expressions which as heads cannot appear on the right of their complements.

Also, class-1 degree expressions as heads cannot function on their own in a clause. To prove their point, Neeleman et al. (2004) insert class-1 and class-2 degree expressions in a subject position.

- (25) a. **Too* is inadvisable.
 b. **How* would be acceptable?

⁹ Neeleman et al. (2004, 17) admit that some of the class-2 degree expressions, for example *enough* or *a little*, do not show positional flexibility. It is very often dependent on the category they modify.

- (26) a. *More* is not always better.
 b. In fact, *less* is more.

Neeleman et al. (2004, 18–19)

In English the two classes of degree expressions behave differently in a subject position. Polish degree expressions show a similar behaviour.

- (27) a. *Za* *(bardzo) też jest źle.
 too much also is bad
 b. **Jak* byłoby akceptowalne.
 how would-be acceptable
- (28) a. *Więcej* nie oznacza zawsze lepiej.
 more not mean always better
 ‘More does not mean always better.’
 b. *Mniej* może oznaczać więcej.
 less can mean more.
 ‘Less can mean more.’

The last piece of evidence confirming validity of the classification of degree expressions proposed by Neeleman et al. (2004) concerns topicalization. Neeleman *et al* (2004) assume that topicalization is grammatical only in the case of class-2 degree expressions. They only provide examples from Dutch. We provide a set of sentences with different degree expressions from Polish.

- (29) a. *Za*_i *(bardzo) Jan był .t_i. odważny.
 too much John was brave
 b. Chciał sprawdzić *jak*_i *(bardzo) Jan jest .t_i. odważny.
 Wanted-1PRS check how much John is brave
- (30) a. *Bardziej*_i Jan był .t_i. odważny niż Piotr.
 more John was brave than Peter
 ‘John was more brave than Peter.’
 b. *Mniej*_i Jan był .t_i. przestraszony niż Piotr.
 less John was scared than Peter
 ‘John was less scared than Peter.’

Again we see that the group of degree expressions in (29), which we hailed class-1 degree expressions, does not allow topicalization unless they are accompanied by *bardzo*. It has to be added, though, that, in sentences like (29b), *jak* usually undergoes *wh*-movement. Since the movement of a single *jak* is unacceptable in (29b), *jak* functions as a head.

Finally, we would like to discuss *very* which is classified by Neeleman et al. (2004) as a class-1 degree expression, see (31).

(31) AP

- a. The door is [_{DegP} *very* [_{AP} red]].
 b. Te drzwi są *bardzo* czerwone.

Neeleman et al. (2004, 10)

Very is translated into Polish as *bardzo*, thus, we expect *bardzo* to behave like other class-1 degree expressions. The examples below in (32)–(36) show contexts which have been already used to identify the class of a degree expression.¹⁰

(32) Selection of PP

- a. He is [_{PP} [_{DegP} *very* [_{AP} *(much)]] [_{PP} on drugs]] indeed.
 b. On jest *bardzo* na rauszu.
 he is very on drunkenness
 ‘He is really drunk.’

(33) Selection of VP

- a. *He [_{DegP} *very* [_{VP} loves Mary]] indeed.
 b. On *bardzo* kocha Marię.

(34) Postmodification

- a. *John is unreliable *very* for a priest.
 b. Jak na księdza Jan jest nieufny *bardzo*.
 how on priest John is distrustful very

(35) Topicalization

- a. *Bardzo*_i Jan był_{t_i} odważny.
 very John was brave

(36) Predicate omission

- a. **Very* might be offensive.
 b. **Bardzo* jest nieakceptowalne.
 very is unacceptable.

Bardzo appears to have a very complex status. Examples (32)–(35) show that *bardzo* should rather be classified as a class-2 degree expression as it is not dependent on the presence of other items in a sentence. Example (36) remains problematic though since *bardzo* as a degree-2 item should be able to occur without a predicate. In examples (10) and (18), it has been used as

¹⁰ All English examples in (32–34) and (36) are from Neeleman et al. (2004).

an equivalent of the dummy *much* with class-1 degree expressions. The question remains whether the obligatory *bardzo* can be considered a fully-fledged equivalent of the English dummy adjective *much*. Corver (1997) distinguishes two types of *much*, a dummy *much* (as in 37a) and a semantically charged *much* (as in (37b)) (cf. Solt 2010).

- (37) a. John is too *much* under the weather to come to work.
 b. John is *much* different from his brother.

Neeleman *et al* (2004, 48)

It appears that in Polish *bardzo* also has two functions. As a dummy expression, it is obligatory after some degree expressions, as in (10) or (18). This instance of *bardzo* is translated by us as *much*. *Bardzo* can also function as a degree phrase as in (31) which corresponds to the English degree expression *very*. Thus, the same item, i.e. *bardzo*, can be either dummy or function as a degree expression.

To conclude, in this section we have put Polish degree expressions in different contexts, originally described by Neeleman *et al.* (2004), to see whether their division, which we have preliminary assumed for Polish, is valid. It turns out that indeed two groups of degree expressions should be distinguished in Polish. Degree items such as *za* and *jak*, as opposed to *bardziej* and *mniej* optionally or obligatorily take *bardzo*. Even though the distinction between the two classes remains legitimate, it differs slightly from the one proposed by Neeleman *et al.* (2004). English class-1 degree items select for *much* only in the context of prepositional, nominal and verbal expressions; thus, they could be analysed as heads selecting a maximal projection or together with *much*, a maximal projection attaching to another maximal projection. In Polish *bardzo* is either optional or obligatory, which makes the analysis closer to the one proposed by Bresnan (1973) where *much* is structurally always present. This is how Neeleman *et al.* (2004, 2) depict Bresnan's proposal.

- (38) [AP [QP [DegP too] [Q much]]] [A fond of Mary]].

Analysis like the one in (38) would explain the possibility of topicalization of class-1 degree expressions only when accompanied by *bardzo* which would occupy the Q head. Below we draw attention to a degree expression which is of particular interest to us, namely comparative *tak* in an equative construction.

3. SYNTACTIC PROPERTIES OF COMPARATIVE *TAK*

In this section we would like to explain what kind of relation, a head-complement or an adjunction relation, binds the comparative degree expression *tak* and a phrase following it in a comparative construction. In order to do that we will apply Neeleman et al.'s (2004) tests to phrases containing the comparative *tak*. We would like to check whether this type of *tak* represents a class-1 or class-2 degree expression. The items that could be considered its English equivalents, namely *as* and *that*, have been classified by Neeleman et al. (2004) as class-1 degree expressions.¹¹

Firstly, it has been said that class-2 degree expressions can adjoin to PPs, DPs and VPs apart from APs. As presented in (39–42), *as* and *that* do not comply with this claim unless they are accompanied by the dummy adjective *much*.

(39) AP

- a. He is [_{DegP} *as* [_{AP} intelligent]] as Bill.
- b. I didn't know he was [_{DegP} *that* [_{AP} impatient]].

(40) PP

- a. He is [_{PP} [_{DegP} *as* [_{AP} *(much)]] [_{PP} in the running]] as anyone I know.
- b. I didn't realize that he was [_{PP} [_{DegP} *that* [_{AP} *(much)]] [_{PP} over the limit]].

(41) DP

- a. He is [_{DP} [_{DegP} *as* [_{AP} *(much)]] [_{DP} a typical Hollywood celebrity]] as Robin W.
- b. [_{DP} [_{DegP} *That* [_{AP} *(much)]] [_{DP} the village idiot]], I never thought John was.

(42) VP

- a. *He [_{DegP} *as* [_{VP} lives like a typical Hollywood celebrity]] as Robin W.
- b. *I didn't realize he [_{DegP} *that* [_{VP} enjoyed opera]].

Neeleman et al. (2004, 10–12)

Degree *tak* in (43) as well as comparative *tak* in (44), on the other hand, can modify a variety of expressions. Both need an extra item only when they modify a prepositional phrase. Degree *tak* needs *bardzo* and comparative *tak* takes *samo* 'same'.

(43) a. AP

- Nie wiedziałam, że jest *tak* (bardzo) bogaty.
 not-knew-1PRS.SG that is that much rich
 'I didn't know that he is that rich.'

¹¹ *Tak* in degree equatives will be called comparative *tak* while *tak* translated as *that* in English will be referred to as degree *tak*.

b. PP

Nie wiedziałam, że był *tak* *(bardzo) pod wrażeniem mojego wystąpienia.
 not-knew-1PRS.SG that was that much under impression my performance
 'I didn't know he was so impressed with my performance.'

c. VP

Nie wiedziałam, że ta opera *tak* (bardzo) mu się podobała
 no-knew-1PRS.SG that that opera that much him-DAT REFL liked
 'I didn't know that he enjoyed that opera that much.'

(44)

a. AP

One są *tak* (samo) (bardzo) mądre jak ty.
 They are so (same) very smart as you
 'They are as smart as you.'

b. PP

Liverpool jest *tak* *(samo) w formie jak Barcelona.
 Liverpool is so (same) in shape as Barcelona
 'Liverpool are as fit as Barcelona.'

c. VP

Maria spieszy się *tak* (samo) jak swoja mama.
 Mary hurries REFL so same as her mother
 'Mary is in a hurry as much as her mother.'

Since class-2 degree expressions are maximal projections, we expect comparative *tak* to (i) have an internal structure, (ii) allow for the possibility of dropping the modified element, (iii) optionally appear after the modified element and (iv) be able to be topicalized.

Comparative *as* and *that*, degree *tak* and comparative *tak* seem to lack an internal structure as such. Yet, comparative *tak* can be always accompanied by *samo* 'same' which is quite unique in contrast to *bardzo* which can join different degree expressions. It could be argued that *samo* makes the structure of the comparative *tak* phrase quite complex. We leave this issue, however, unresolved here.

As presented below, *as* and *that* cannot follow the modified element. They also do not allow for predicate dropping and cannot be topicalized.

(45) Postmodification

- a. *John is indebted to his colleagues *as* as Bill.
 b. *I didn't know John was rich *that*.

Neeleman et al. (2004, 17)

(46) Predicate omission

- a. *Half *as* would be acceptable.
 b. **That* would be horrible. (on a degree reading of that)

Neeleman et al. (2004, 19)

- (47) Topicalization
 a. **As_i John is .t_i. fond of Mary as Bill*
 b. **I didn't know that_i he was .t_i. impatient.*

Polish degree *tak*, see (48–50), and comparative *tak*, see (51–53), exhibit a different behaviour. Postmodification is possible only when degree *tak* is followed by *bardzo* while comparative *tak* is obligatorily followed by a clause and optionally by *samo*. As for predicate dropping, we would like to argue that it is possible only with comparative *tak*. Topicalization appears to be grammatical with both expressions in question with or without additional items like *bardzo* or *samo*.

- (48) Postmodification
 Nie wiedziałam, że Jan był pijany *tak* *(bardzo).
 not-know-1PRS.SG that John was drunk that much
- (49) Predicate omission
 **Tak* (bardzo) ~~głośno~~ byłoby niedopuszczalne.
 hat much loud would-be unacceptable
- (50) Topicalization
 ?Nie wiedziałam, że *tak* (bardzo) Jan (*bardzo) zachwycony był moim występem.
 not-knew-1PRS.SG that that much John much impressed was my performance
 'I didn't know that John was impressed with my performance that much.'
- (51) Postmodification
 Jan śpiewa głośno *tak* (samo) jak Piotr.¹²
 John sing loudly so same as Peter
- (52) Predicate omission
Tak (samo) jest ze wszystkim.
 As same is with everything
 'Everything works that way.'
- (53) Topicalization¹³
 Tak_i (samo) Jan śpiewa .t_i. (*samo) głośno jak Piotr.
 so same John sings same loudly as Peter

¹² Postmodification changes slightly the interpretation. If we compare (i) with (ii), we see that from (i) we learn that both John and Peter sang with the same loudness but it does not mean that they sang loudly. In (ii) it is implied that John and Peter sang loudly.

¹³ (i) Jan śpiewa tak samo głośno jak Piotr.
 John sings so loudly same as Peter
 (ii) Jan śpiewa głośno tak samo jak Piotr.
 John sings loudly so same as Peter

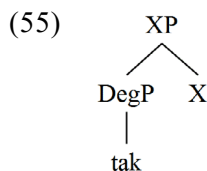
The movement of *tak* seems to be ungrammatical when the comparative clause is introduced by *co*.

Examples (50) and (53) show that degree *tak* and comparative *tak*, respectively, must move together with *bardzo* or *samo* when these items are spelled out.

Finally, on the basis of the facts connected with coordination, we would like to show once again that *tak* with optional *samo* attaches to a modified phrase as a maximal projection and not as a head. Since we can coordinate only items functioning as constituents (e.g., Freidin (2012) calls it *Constituency Constraint on Conjuncts*), we expect comparative *tak* to coordinate with another degree expression functioning as a maximal projection. As (54a) below shows, *tak* can be coordinated with *bardziej* considered by us a maximal projection. For the sake of comparison, let us have look at one of the items which we regard to be a class-1 degree expression, namely *za* ‘too’. As predicated, (54b) shows that *za* as a head cannot function as a conjunct in a coordinate structure.

- (54) a. Chciałabym, żeby Jan był [tak (samo/bardzo)] (jak Piotr) [nawet bardziej]
 would like-1st that John was so same much as Peter or too much
 zainteresowany polityką.
 interested politics-INST
 ‘I would like John to be that much/as much as Peter or even more interested in politics.’
 b. *Mówili, że będzie [za] lub [bardziej] gorąco.
 said-3pl that will too or very hot

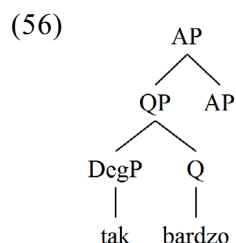
To sum up, we would like argue that degree *tak* and comparative *tak* could be considered the same degree expression that heads the maximal projection DegP. On the surface, in Neeleman et al.’s (2004) terms, *tak*, in contrast to *as* and *that*, should be classified as a class-2 degree expression as it (i) can attach to different phrases (APs, PPs, DPs and VPs), (ii) can be topicalized, (iii) and coordinated with other maximal projections. Thus, the structure of an expression containing *tak* could be argued to be the one in (55) with *tak* as a class-2 degree expression.



- (i) *Tak_i Jan śpiewa .t_i. głośno co Piotr.
 so John sings loudly as Peter

We leave the ungrammaticality of sentences like (i) for further investigation.

Yet, we may observe either optional or obligatory presence of *bardzo* or *samo* with *tak*. Class-2 degree expressions do not exhibit such a property while class-1 degree expressions have a construction like the one in (55) only when they are followed by *much* obligatorily. We will finish with a proposal closer to Bresnan's (1973) analysis of degree expressions, as presented in (56), in which the projection with *bardzo* is always present in the comparative construction.



The presence of *samo* in a degree phrase requires further investigation. It is likely that it occupies some position within the DegP.

4. CONCLUSIONS

In this paper we have presented the syntactic properties of the comparative expression *tak*. First, we have shown that degree expressions in Polish could be divided in two classes exactly like in English. On the basis of syntactic properties exhibited by *tak*, it was concluded that comparative *tak* exhibits more properties of class-2 degree expressions. Yet, the optional presence of *bardzo* makes us consider Bresnan's (1973) analysis more appropriate one not only for *tak* but also for other degree expressions which look like class-1 degree expressions.

REFERENCES

- Bondaruk, Anna. 1998. *Comparison in English and Polish adjectives. A syntactic study*. Lublin: Folium.
- Bresnan, Joan. 1973. "Syntax of the comparative clause construction in English." *Linguistic Inquiry* 4: 275–343.
- Corver, Norbert. 1997. "Much-support as a last resort." *Linguistic Inquiry* 28, 119–164.

- Freidin, Robert. 2012. *Syntax: Basic concepts and applications*. Cambridge: Cambridge University Press.
- Neeleman, Ad, Hans van de Koot, and Jenny Doetjes. 2004. "Degree expressions." *The Linguistic Review* 21, 1–66.
- Solt, Stephanie. 2010. *Much support and more*. Amsterdam Colloquium 2009 (LNAI 6042) 446–455.

TAK JAKO OPERATOR GRADACJI W JĘZYKU POLSKIM

Streszczenie

Tematem niniejszej pracy jest fraza wprowadzająca gradację. Praca podzielona jest na dwie części. W części pierwszej zostaje omówiony podział operatorów gradacji na operatory klasy pierwszej oraz operatory klasy drugiej zaproponowany przez Neeleman, van de Koot i Doetjes (2004). Operatory klasy pierwszej pełnią funkcję elementu głównego we frazie wprowadzającej gradację. Operatory klasy drugiej przedstawione są jako maksymalne projekcje. W tej samej części pracy sprawdzamy czy taki sam podział jest możliwy w języku polskim. Na podstawie składniowych dowodów, takich ich dobór dopełnienia czy topikalizacja, pokazujemy, że obie klasy operatorów gradacji powinny być wyróżnione również w języku polskim. Część druga niniejszej pracy poświęcona jest operatorowi *tak* w zdaniach porównawczych. Za pomocą tych samych dowodów składniowych pokazujemy, iż *tak* zachowuje się jak operator klasy drugiej a nie jak można by się spodziewać klasy pierwszej. Analogiczne operatory w języku angielskim, tj. *as* i *that*, zostają zaliczone przez Neeleman et al. (2004) do klasy pierwszej operatorów gradacji. Kluczową rolę w analizie odgrywa również operator *bardzo*, który w kontekście polskich operatorów gradacji poddaje w wątpliwość analizę składniową zaproponowaną przez Neeleman et al. (2004).

Streszcila Ewelina Mokrosz

Słowa kluczowe: fraza gradacji; zdania porównawcze; topikalizacja.

