# Marek Świdziński SENTENCES WITH THE PREDICATE ZALEŻY [depend (on)] AND TWO INDIRECT-QUESTION ARGUMENTS

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0. The title of the present article refers to an issue so specific that we ought to start with a justification.

In many descriptive works on the grammar of the Polish language indirect questions are identified with reported questions, i.e. questions in reported speech (cf. Świdziński 1975: 209-210). However, the material presented by the authors of such publications usually includes sentences with predicates which are never used to introduce a question (such as, e.g., powiedzieć [tell], napisać [write], dać znać [let ... know], wyczytać [read sth from], myśleć [think], wiedzieć [know], wątpić [doubt], chodzi o to, czy (kto) ... [the thing is whether (who) ...], jest obojętne, czy (kto) ... [it makes no difference whether (who)...], etc.). The defective verb zależy [depend (on)] (which does not conjugate for person) should be included in the last group of predicates. It is hope that the analysis of sentences with this predicate will lead to more general conclusions, which, moreover, are not connected with the issue of reported speech.

- 1. Here are some examples of sentences with this predicate:
- (1) Od decyzji Janka zależy koniec afery. [The end of the scandal depends on Janek's decision.]

- (2) Wynik meczu będzie zależeć od tego, co postanowi sędzia. [The result of the match will depend on what the referee will decide.]
- (3) (Czy kupisz tę książkę?) To będzie zależało od tego, kiedy nauczę się angielskiego. [(Will you buy this book?) This will depend on when I master English.]
- (4) To, czy pojedziemy do Krakowa, zależy od pieniędzy. [Whether we'll go to Cracow (or not) depends on the money.]
- (5) To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze. [Whether we'll go to Cracow (or not) depends on whether we'll get the money.]
- (6) To, czy pojadę do Krakowa, czy nad morze, czy też wybiorę się do Bułgarii, zależy od tego, czy szef zwolni mnie w czerwcu, czy w ogóle nie dostanę urlopu. [Whether I'll go to Cracow, to the seaside or to Bulgaria depends on whether the boss will fire me in June or whether I'll get any leave at all.]
- (7) To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi. [Where Jan will go to depends on who will invite him.]
- (8) To, dokąd Jan pojedzie, zależy od tego, czy ktoś go zaprosi. [Where Jan will go to depends on whether anyone will invite him.]
- 9) To, czy Jan gdzieś pojedzie, zależy od tego, kto go zaprosi. [Whether Jan will go anywhere depends on who will invite him.]

As we see,  $zale\dot{z}y$  is a predicate that takes two arguments, which are either (a) two nouns (one in the nominative case; the other in the genitive, accompanied by the preposition od (cf. (1)), or (b) two clauses (cf. (5), (7)—(9)) or sequences of clauses (i.e. a coordinated clause; cf. (6)), or (c) a noun and a clause; in this case the clause either takes the position of the noun in nominative (cf. (4)) or of the noun in genitive (cf. (2), (3)). The question arises which of those construction types is semantically primary.

Consider the following pair of utterances:

- (10) Jan kupił książkę. [Jan bought a book.]
- (11) Jan kupit (to), co miał kupić. [Jan bought what he was supposed to buy.]

It is clear that the former example represents the basic form of the structure, while the latter being the result of substituting the nominal complement by a clause. Such is the view of traditional and early generative grammarians. However, in case of (1)—(9), semantic analysis leads to the opposite conclusion. There are many ways in which (1) can be interpreted,

<sup>&</sup>lt;sup>1</sup>The pronoun to introducing the subordinate clause can be omitted.

e.g.:

- (12) To, czy afera się skończy, zależy od tego, czy Jan podejmie decyzję. [Whether the scandal will end depends on whether Jan will make a decision or not.]
- (13) To, jak afera się skończy, zależy od tego, czy Jan podejmie decyzję. [How the scandal will end depends on whether Jan will make a decision or not.]
- (14) To, czy afera się skończy, zależy od tego, jaką decyzję Jan podejmie. [Whether the scandal will end depends on what decision Jan will make.]
- (15) To, jak afera się skończy, zależy od tego, jaką decyzję Jan podejmie. [How the scandal will end depends on what decision Jan will make.]

This suggests it is sentences with the clausal component (i.e. (5)—(9)) that are (semantically) primary. It should also be added that the following sentences are not acceptable:

- (16) \*Stół zależy od okna. [\*The table depends on the window.]
- (17) \*Jan zależał od czekolady. [\*Jan depended on chocolate.]

Let us consider the following utterances:

- (18) Wszystko zależy od ciebie. [Everything depends on you.]
- (19) Wszystko będzie zależało od koloru krzeseł. [Everything will depend on the colour of the chairs.]
- (20) Jan zależy od Piotra. [Jan is dependent on Piotr.]
- (21) Janowi zależy, żeby Piotr przyszedł. [It matters to Jan that Piotr should come.]
- (22) Janowi zależy na Piotrze. [Jan cares for Piotr.

It is easy to see that (18) and (19) are elliptical, which means that they cannot be interpreted when examined in isolation, as would be required by the principles of semantic analysis. Sentence (20) involves a regular verb zależeć, synonymous to podlegać (komu) [be subordinate to (someone)]. The analysis of this predicate lies beyond the scope of the present work. The defective verb zależy used in (21) and (22) has a completely different syntax and meaning — it is equivalent to nie jest obojętne [is not indifferent to] (Doroszewski 1971: 594). Examples like (21), (22) will not be discussed in this paper.

It appears therefore that the noun phrases in (1)—(4) are not semantically primary. In fact, they are nominalisations of some sentences, which in most cases cannot be determined or guessed beyond doubt. Examples (16) and (17) seem unacceptable precisely due to the fact that the elements they contain cannot be interpreted as nominalisations (except for very specific contexts or situations).

Since the following sentences are incorrect:

- (23) \*To, że pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze. [\*That we'll go to Cracow depends on whether we will get the money.]
- (24) \* To, czy pojedziemy do Krakowa, zależy od tego, że dostaniemy pieniądze. [\*Whether we will go to Cracow (or not) depends on that we will get the money.]
- (25) \*To, że pojedziemy do Krakowa, zależy od tego, że dostaniemy pieniądze. [\*That we'll go to Cracow depends on that we will get the money.]

the minimal function (Bellert, Saloni 1972: 226) for such sentences is as follows:

(26) 
$$PZ_1$$
 — zależy (od tego) —  $PZ_2$ . [ $PZ_1$  — depends (on) —  $PZ_2$ ]

where PZ stands for an indirect question, i.e. a clause homographic with a direct question.<sup>2</sup> In (5), (6) the  $PZ_1$  and  $PZ_2$  are homographic with whether-questions, the  $PZ_1$  and  $PZ_2$  in (7) are WH-questions, wher<sup>3</sup>eas (8) and (9) containing both types thereof.

2. It is easy to show that the predicate  $zale\dot{z}y$  is not its own converse. The following examples are not equivalent to (5) and (7), respectively:

<sup>&</sup>lt;sup>2</sup>The concept of 'homography' (used instead of 'homonymy') allows us to avoid the prosodic opposition between direct and indirect questions. Naturally, in the written language direct questions begin with a capital letter and end in a question mark. It must be added that we will not discuss the formal distinction between indirect questions and relative clauses. A comprehensive though hardly conclusive analysis of the differences between these structures are to be found in Carl LeRoy Baker's dissertation Indirect Questions in English (1968: 7-30). Perhaps there exists a prosodic difference (cf. section 5); some utterances undoubtedly are ambiguous in this respect, e.g. the second argument in utterance (7) is to be understood as either an indirect-question, or relative clause. Section 5 of the present article will present some prosodic features.

- (27) To, czy dostaniemy pieniądze, zależy od tego, czy pojedziemy do Krakowa. [Whether we'll get the money depends on whether we'll go to Cracow.]
- (28) To, kto Jana zaprosi, zależy od tego, dokąd Jan pojedzie. [Who will invite Jan depends on where he will go.]

#### Consider now the example (5):

(5) To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze. [Whether we'll go to Cracow (or not) depends on whether we'll get the money.]

The addressee of (5) can understand it in one of those ways:

- (29) (a) Jeśli dostaniecie pieniądze, to pojedziecie do Krakowa. [If you'll get the money, you will go to Cracow.]
- (b) Jeśli dostaniecie pieniądze, to nie pojedziecie do Krakowa. [If you'll get the money, you will not go to Cracow.]
- (c) Jeśli nie dostaniecie pieniędzy, to pojedziecie do Krakowa. [If you won't get the money, you will go to Cracow.]
- (d) Jeśli nie dostaniecie pieniędzy, to nie pojedziecie do Krakowa. [If you don't get the money, you will not go to Cracow.]

Note that the following sentences are semantically deviant:

- (30) \* To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze, bo jeśli dostaniemy, to albo pojedziemy, albo nie, i jeśli nie dostaniemy, to też albo pojedziemy, albo nie. [\*Whether we'll go to Cracow (or not) depends on whether we'll get the money, because if we do get it, then we'll either go or not, and if we don't get it, then we'll either go or not, as well.]
- (31) \*To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze, bo jeśli dostaniemy, to pojedziemy, a jeśli nie dostaniemy, to też pojedziemy. [\*Whether we'll go to Cracow (or not) depends on whether we'll get the money, because if we do get it, then we'll go, and if we don't get it, then we'll go too.]
- (32) \*To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze, bo nie ma żadnego związku między dostaniem przez nas pieniędzy a pojechaniem do Krakowa. [\*Whether we'll go to Cracow (or not) depends on whether we'll get the money, because there is no connection between us

getting the money and us going to Cracow.]

Examples (33) — (35), in turn, are perfectly appropriate:

- (33) To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze, bo jeśli nie dostaniemy, to albo pojedziemy, albo nie, a jeśli dostaniemy, to pojedziemy. [Whether we'll go to Cracow (or not) depends on whether we'll get the money, because if we don't get it, then we'll either go or not, and if we do get it, then we'll go.]
- (34) To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze, bo jeśli dostaniemy, to nie pojedziemy, a jeśli nie dostaniemy, to pojedziemy. [Whether we'll go to Cracow (or not) depends on whether we'll get the money, because if we do get it, then we will not go, and if we don't get it, then we'll go.]
- (35) To, czy pojedziemy do Krakowa, zależy od tego, czy dostaniemy pieniądze, bo jeśli dostaniemy, to nie pojedziemy. [Whether we'll go to Cracow (or not) depends on whether we'll get the money, because if we do get it, then we will not go.]

As easy to see, each indirect question in (5) has two propositions, an affirmative and a negative one. Examples (30)—(32) rules out the following options: that both propositions of  $PZ_2$  imply both propositions of  $PZ_1$  (cf. (30)); that each of the propositions of  $PZ_2$  implies one and the same proposition of  $PZ_1$  (cf. (31)); and that none of the propositions of  $PZ_2$  implies any of the propositions of  $PZ_1$  (cf. (32)). One of the propositions of  $PZ_2$  simply must be a marked proposition: the one that implies a sentence (or sentences) other than the other proposition (cf. (33), (34)). As for (35), it seems ambiguous. The addressee of (35) may be asked a further question:

(26) A co będzie, jeśli nie dostaniecie pieniędzy? [And what will happen if you don't get the money?]

to which the addresser might reply:

- (37) (a) Jeśli nie dostaniemy, to albo pojedziemy, albo nie. [If we don't get it, then we'll either go or not.] (cf. (33))
- (b) Jeśli nie dostaniemy, to pojedziemy. [If we don't get it, then we'll go.] (cf. (34))
  - (c) Nie wiem. [I don't know.]

(d) Nie powiem. [I won't tell (you).]

Let us recall what follows from our analises of examples like (5), (30)—(35). Given that:

- i. the examples (33)—(35) which differ in the explanatory component (because...) are not equivalent;
- ii. none of them is a tautology of the type x is a driver because x is a chauffeur; and
- iii. the sentence (5) works properly without the explanatory part,

we can see that the addresser of those sentences does not specify (intentionally or due to ignorance) what is the implication of which proposition and whether a given proposition implies anything. What the addresser of (5) says is that there are at least two different propositions of  $PZ_2$ , which have different sets of consequents (i.e. the propositions of  $PZ_1$  they imply; in some cases this set can be empty; see below). Let p stand for a proposition of  $PZ_2$ , and p for a proposition of  $PZ_1$ . We get the following formulæ:

(38) (a) For 
$$k = 1, 2, \dots$$
  $Q(k) \stackrel{df}{=} \{q : p_k \Rightarrow q\}$   
(b)  $\bigvee_{i} \bigvee_{j \neq i} Q(i) \neq Q(j)$ 

The formula (38a) defines the set of consequents of the proposition  $p_k$  in  $PZ_2$ ; (38b) defines the consequence (in Irena Bellert's sense; cf. Bellert (1971: 157-158) of sentences like (5). Deviant utterances such as (30)—(32) do not fulfill (38b), which is due to their explanatory components (hence the contradiction): in (30),  $Q(i) = Q(j) = pojedziemy \ do \ Krakowa \ albo \ nie \ [we will go to Cracow or not]; in (31), <math>Q(i) = Q(j) = pojedziemy \ do \ Krakowa \ [we will go to Cracow]; in (32), <math>Q(i) = Q(j) = \emptyset$ . Note that the negated versions of (30)—(32) (those with  $nie \ zależy$  [It does not depend...]) are correct, while negation of correct examples (33)—(35) makes them unacceptable.

- 3. Consider now the example (6), in which  $PZ_1$  and  $PZ_2$  are homographic to disjunctive questions:
- (6) To, czy pojadę do Krakowa, czy nad morze, czy też wybiorę się do Bułgarii, zależy od tego, czy szef zwolni mnie w czerwcu, czy w ogóle nie dostanę urlopu. [Whether I'll go to Cracow, to the seaside, or to Bulgaria depends

on whether the boss will fire me in June or whether I'll get any leave at all.]

The possible implications are so numerous that it would be senseless to mention all of them. It should be noted that the examples given below, analogous to (33)—(35), are perfectly acceptable:

- (39) To, czy pojadę do Krakowa, czy nad morze, czy też wybiorę się do Bułgarii, zależy od tego, czy szef zwolni mnie w czerwcu, czy w ogóle nie dostanę urlopu, bo jeśli mnie zwolni w czerwcu, to nie pojadę do Bułgarii. [Whether I'll go to Cracow, to the seaside, or to Bulgaria depends on whether the boss will fire me in June or whether I'll get any leave at all, because if he fires me in June, then I will not go to Bulgaria.]
- (40) To, czy pojadę do Krakowa, czy nad morze, czy też wybiorę się do Bułgarii, zależy od tego, czy szef zwolni mnie w czerwcu, czy w ogóle nie dostanę urlopu, bo jeśli dostanę urlop, ale nie w czerwcu, to pojadę do Bułgarii, albo do Krakowa, w każdym razie nie nad morze. [Whether I'll go to Cracow, to the seaside, or to Bulgaria depends on whether the boss will fire me in June or whether I'll get any leave at all, because if I do get some leave, but not in June, then I will go to Bulgaria or to Cracow, but definitely not to the seaside.]
- (41) To, czy pojadę do Krakowa, czy nad morze, czy też wybiorę się do Bułgarii, zależy od tego, czy szef zwolni mnie w czerwcu, czy w ogóle nie dostanę urlopu, bo jeśli szef zwolni mnie w czerwcu i w ogóle nie dostanę urlopu, to pojadę do Krakowa i nad morze.<sup>4</sup> [Whether I'll go to Cracow, to the seaside, or to Bulgaria depends on whether the boss will fire me in June or whether I'll get any leave at all, because if he fires me in June and I won't get any leave at all, then I will go to Cracow and to the seaside.]

As it is easy to see  $PZ_1$  in (6) contains six propositions ( $q_1=q', q_2=\sim q', q_3=q", q_4=\sim q", q_5=q"', q_6=\sim q"'$ ), while  $PZ_2$  has four ( $p_1=p', p_2=\sim q''$ )

<sup>&</sup>lt;sup>4</sup>According to Jerrold J. Katz each disjunctive question presupposes that at least one of the propositions of a given interrogative is true (Katz 1972). Katz defines 'the proposition of a question' as each of its component sentences. In the present article we treat also negative counterparts of component sentences of a disjunctive question as propositions. As a matter of fact, the issue is more than a terminological detail; our understanding of the term 'proposition' seems closer to the way language users understand questions. Technically, propositions are candidates for the proper answer, and negated explicit propositions can freely be used by the addressee of a given direct disjunctive question. As (41) witnesses, the proposed understanding of the term works properly for indirect disjunctive questions as well.

- $= \sim p'$ ,  $p_3 = p''$ ,  $p_4 = \sim p''$ ).<sup>5</sup> It should be added that not only q, but also p can be a combination (disjunction or conjunction) of respective propositions. In any case, (6) fulfils all conditions specified by formula (38b).
- 4. Let us now analyse exmple (7) in which the indirect questions are homographic to WH-questions:
- (7) To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi. [Where Jan will go depends on who will invite him.]

The propositions of the indirect questions in (7) are sentential or propositional functions. We can, however, regard the propositions of  $PZ_1$  and  $PZ_2$  as sentences created by substituting the variables specified by the WH-pronouns with respective constants. Of course, sets of such propositions would be infinite; what is shown below are but examples thereof:

# (42) $PZ_1$ :

- (a) Jan pojedzie do Koluszek. [Jan will go to Koluszki.]
- (b) Jan pojedzie za granicę. [Jan will go abroad.]
- (c) Jan pojedzie do Koluszek lub za granicę. [Jan will go to Koluszki or abroad.]
- (d)  $Jan\ pojedzie\ tam,\ gdzie\ sprzedają\ piwo.$  [Jan will go where beer is sold.]

.....

## $(43) PZ_2$ :

- (a) Marysia zaprosi Jana. [Marysia will invite Jan.]
- (b) Kuzyn zaprosi Jana. [A cousin will invite Jan.]
- (c) Marysia~i~kuzyn~zaproszą~Jana. [Marysia and a cousin will invite Jan.]
- (d) Każdy, kto będzie mógł, zaprosi Jana. [Everyone who will be able to will invite Jan.]

.....

As in case of (6), the  $p_k$  in  $PZ_1$  or  $PZ_2$  in (7) may be a sentence or a combination of sentences (disjunction; conjunction). Let us check if formula (38b) is also valid for (7).

All examples below are deviant:

<sup>&</sup>lt;sup>5</sup>The superscripts correspond to subsequent component sentences.

- (44) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo nikt go nie zaprosi. [\*Where Jan will go depends on who will invite him, because nobody will invite him.]
- (45) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo nigdzie nie pojedzie. [\*Where Jan will go depends on who will invite him, because he'll go nowhere.]
- (46) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo sądzę, że nikt go nie zaprosi. [\*Where Jan will go depends on who will invite him, because I suppose that nobody will invite him.]
- (47) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo sądzę, że nigdzie nie pojedzie. [\*Where Jan will go depends on who will invite him, because I suppose he'll go nowhere.]
- (48) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo nikt go nie zaprosi i nigdzie nie pojedzie. [\*Where Jan will go depends on who will invite him, because nobody will invite him and he'll go nowhere.]
- (49) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo sądzę, że nikt go nie zaprosi i nigdzie nie pojedzie. [\*Where Jan will go depends on who will invite him, because I suppose nobody will invite him and he'll go nowhere.]

They are deviant because their explanatory components question the existence of objects satisfying the respective propositional functions in  $PZ_1$  and  $PZ_2$ .

The next examples are also deviant, i.e. contradictory sentences:

(50) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo jeśli Andrzej zaprosi Jana, to Jan pojedzie za granicę, a jeśli nikt, to za granicę. [\*Where Jan will go depends on who will invite him, because if Andrzej invites Jan, then Jan will go abroad, and if nobody invites him, then he'll go abroad.] (51) \*To, dokąd Jan pojedzie, zależy od tego, kto go zaprosi, bo jeśli Marysia go zaprosi, to pojedzie do Koluszek lub za granicę, a jeśli kuzyn, to nigdzie. [\*Where Jan will go depends on who will invite him, because if Marysia invites him, then he'll go to Koluszki or abroad, and if his cousin invites him, then he'll go nowhere.]

though they obviously fulfill (38b). Thus, (7) seems to imply (52a, b):

- (52) (a) Ktoś zaprosi Jana. [Someone will invite Jan.]
  - (b) Jan gdzieś pojedzie. [Jan will go somewhere.]

which are contradictory to sentences (53a, b) appearing in the explanatory components of (44)—(51):

- (53) (a) Nikt nie zaprosi Jana. [Nobody will invite Jan.]
  - (b) Jan nigdzie nie pojedzie. [Jan will go nowhere.]

In the next section we will revise the thesis that (7) implies (52a, b). Even including this proviso, it seems that (38b) works for sentences of that type. Naturally, the explanatory components which make sentences (50) and (51) incorrect can be freely added to sentences (8) or (9), each of which containing one indirect WHETHER-question:

- (54) To, dokąd Jan pojedzie, zależy od tego, czy ktoś go zaprosi, bo jeśli Andrzej zaprosi Jana, to Jan pojedzie za granicę, a jeśli nikt, to do Koluszek. [Where Jan will go depends on whether anyone will invite him, because if Andrzej invites Jan, then Jan will go abroad, and if nobody invites him, then he'll go to Koluszki.]
- (55) To, czy Jan gdzieś pojedzie, zależy od tego, kto go zaprosi, bo jeśli Marysia go zaprosi, to pojedzie do Koluszek lub za granicę, a jeśli kuzyn, to nigdzie. [Whether Jan will go anywhere depends on who will invite him, because if Marysia invites him, then he'll go to Koluszki or abroad, and if his cousin invites him, then he'll go nowhere.]
  - 5. The negated version of (7):
- (56) To, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi. [Where Jan will go does not depend on who will invite him.]

is to be used in the following situations: (a) if there is exactly one person to invite John; (b) if there is only one place to which Jan might go; or (c) Jan will go anywhere if invited by anyone. The following examples are correct:

- (57) To, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi, bo pojedzie wszędzie, byle tylko zaprosiła go Marysia. [Where Jan will go does not depend on who will invite him, because he will go anywhere if it's Marysia who will invite him.]
- (58) To, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi, bo Jan i tak pojedzie do Koluszek, ktokolwiek go zaprosi. [Where Jan will goes does not depend on who will invite him, because Jan will go to Koluszki anyway,

regardless of who will invite him.]

(59) To, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi, bo Jan pojedzie w dowolne miejsce, ktokolwiek go zaprosi. [Where Jan will go does not depend on who will invite him, because whoever invites him Jan will go to any place.]

same as negated versions of deviant sentences (30)—(32) (cf. final remarks in section 2).

On the other hand, sentences whose explanatory components question the existential sentences (52 a, b) are unacceptable:

- (60) \*To, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi, bo nikt go nie zaprosi. [\*Where Jan will go does not depend on who will invite him, because nobody will invite him.]
- (61) \*To, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi, bo nigdzie nie pojedzie. [\*Where Jan will go does not depend on who will invite him, because he won't go anywhere.]

The following utterances are also incorrect:

- (62) \*Nikt Jana nie zaprosi, więc to, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi. [\*Nobody will invite Jan; so, where Jan will does not depend on who will invite him.]
- (63) \*Nikt Jana nie zaprosi, więc od tego, kto Jana zaprosi, nie zależy to, dokąd Jan pojedzie. [\*Nobody will invite Jan; so, who invites Jan has no influence on where Jan will go.]
- (64) \*Jan nigdzie nie pojedzie, więc to, dokąd Jan pojedzie, nie zależy od tego, kto go zaprosi. [\*Jan will not go anywhere; so, where Jan will go does not depend on who will invite him.]
- (65) \*Jan nigdzie nie pojedzie; więc od tego, kto Jana zaprosi, nie zależy to, dokąd Jan pojedzie. [\*Jan will not go anywhere; so, who invites Jan has no influence on where Jan will go.]

Interestingly, the following utterances containing sentences with unreal conditional are acceptable:

(66) Nikt Jana nie zaprosi, a zresztą gdyby nawet ktoś miał go zaprosić, to i tak to, dokąd pojedzie, nie zależałoby od tego, kto go zaprosi. [Nobody will invite Jan and even if someone was to invite him, where he will go would

not depend on who would invite him.]

(67) Jan nigdzie nie pojedzie, a zresztą nawet gdyby miał gdzieś pojechać, to i tak to, dokąd pojedzie, nie zależałoby od tego, kto go zaprosi. [Jan will not go anywhere and even if he was to go somewhere, where he will go would not depend on who would invite him.]

Thus, we must say that (7) presupposes (52a, b), rather than implies it (as we have suggested in the preceding section). Intuitively speaking, this means that a language user is able to deduce existential sentences (52a, b) both from (7) and from its negated version (56). Sentences whose truthfulness is the necessary condition for a given utterance to be sensible are called 'presuppositions' of this utterance. Examples (52a, b) are the presuppositions of (7).

Actually, what has just been said can be questioned. First, the question below:

(68) Czy to, dokąd Jan pojedzie, zależy od tego, kto go zaprosi? [Does the fact where Jan will go depend on who will invite him?]

is to be answered the following way:

- (69) Nie, nikt Jana nie zaprosi. [No, nobody will invite Jan.]
- (70) Nie, Jan nigdzie nie pojedzie. [No, Jan will not go anywhere.]

Second, it is doubtful whether examples (60)—(65) are really unacceptable.

Everybody is likely to agree that answering (68) simply with 'No' does not prevent the addresser of (68) from asking further questions, such as:

- (71) A kto go zaprosi? [And who will invite him?]
- (72) A dokąd Jan ma właściwie pojechać? [And where exactly is Jan supposed to go?]
- (73) A ty jak sądzisz, kto go zaprosi? [And who do you think will invite him?]

<sup>&</sup>lt;sup>6</sup>Cf. Baker (1968: 33-34); Keenan, Hull (1974). On the general theory of presupposition see e.g. Austin (1971); Bellert (1974); Karttunen (1973); Karttunen (1974); Keenan (1973); van Fraassen (1968).

(74) A według ciebie to dokąd Jan pojedzie? [And where do you think Jan will go?]

If the answer 'No' ruled out the possibility of asking questions such as (71)—(74), i.e. if it ended the conversation, this would mean that adding negation to (7), as in (56), cancels its existential presuppositions (52a, b); in other words, if the answer 'No' suggested to the addressee of (56) that there is no substitution which would fulfil the propositional function of the respective interrogatives, then there would be no sense in asking (74)—(77).<sup>7</sup> The fact that such interrogatives can be posed proves that (7) presupposes (52a, b).

As for sentences (69) and (70), they should perhaps be treated as unacceptable. What *is* acceptable are their homographic equivalents in which the negation is emphasised (emphasis is represented below by capital letters):

- (75) NIE, nikt go nie zaprosi. [NO, nobody will invite him.]
- (76) NIE, Jan nigdzie nie pojedzie. [NO, Jan will not go anywhere.]

These sentences are equivalent to (77), (79) and (78), respectively:

- (77) Przecież nikt go nie zaprosi! [But nobody will invite him!]
- (78) Coś ty, on nigdzie nie jedzie! [Why, but he won't be going anywhere!]
- (79) Jakże to, dokąd pojedzie, może zależeć od tego, kto go zaprosi, skoro nikt go nie zaprosi?

[How could the fact where Jan will go depend on who will invite him, since nobody is going to invite him?]

Such emphatic negation seems to cancel the presupposition.<sup>8</sup>
Of course, none of the sentences (75)—(79) can be regarded as a

<sup>&</sup>lt;sup>7</sup>This is the basis for Ajdukiewicz's classic notion of answers canceling the assumption of a question (Ajdukiewicz 1974).

<sup>&</sup>lt;sup>8</sup>In the author's idiolect the following dialogue seems perfectly acceptable: (Q) Czy obecny król Francji jest lysy? [Is the current king of France bald?] — (A) NIE, Francja nie ma króla! [NO, France does not have a king!]. The emphatic NO cancels the presupposition of the question (P) (namely that there exists a current king of France). Irena Bellert's article (1974) throws some light on the issues discussed in the present article. Bellert suggests that the concept of presupposition can be formalized with the use of the necessity operator. The particle of emphatic negation NIE described in the present article seems to state that a given sentence cannot be true if its presupposition is false.

proper answer to (68). Such reactions to (68) move it to the category of wrongly posed questions.

As for the other of the two arguments against the existential presupposition of (7) which questions the legitimacy of treating (60)—(65) as semantically deviant, it seems possible to accept utterances homographic to (60) and (61) but with emphatic negation:

- (80) To, dokąd Jan pojedzie, NIE zależy od tego, kto go zaprosi, bo nikt go nie zaprosi. [Where Jan will go does NOT depend on who will invite him, because nobody will invite him.]
- (81) To, dokąd Jan pojedzie, NIE zależy od tego, kto go zaprosi, bo nigdzie nie pojedzie. [Where Jan will go does NOT depend on who will invite him, because he won't go anywhere.]

It is also possible to accept sentences homographic to (62)—(65) with the emphasis on the expression *od tego* that introduces the subordinate clause. This emphasis means that the clause following *od tego* is not an indirect question; rather, it is a relative clause (cf. footnote 2), e.g.:

(82) Nikt Jana nie zaprosi i (więc) to, dokąd Jan pojedzie, nie zależy OD TEGO, kto go zaprosi. [\*Nobody will invite Jan and (so) where Jan will go does not depend ON THE ONE who will invite him.]<sup>9</sup>

Thus, the problem of presuppositions of sentences like (7) has been definitely solved.

The issue of presuppositions in utterances containing indirect questions is crucial for the semantic interpretation of indirect question as a clause type (cf. Świdziński (1993)). It is important that the semantic properties of sentences containing an indirect question as their complement partly follow from the general properties of this type of constituent, and partly from the predicate that introduces such a clause. Predicates like kłócić się [quarrel about], pytać [ask], zastanawiać się [wonder] that have, inter alia, an indirect-question argument are "plugs," as they block the existential presupposition. On the contrary, sentences with the predicate zależy discussed in this paper do presuppose existence of objects satisfying the respective

<sup>&</sup>lt;sup>9</sup>Placing the emphasis on the element introducing the subordinate clause in fact transforms the "sentential" negation in (82) into "phrasal" negation (cf. Jan nie kupil  $KSI\dot{A}\dot{Z}KI$ . [Jan didn't buy a BOOK.] = Jan kupil nieksiążkę. [Jan bought a nonbook.]).

propositional function; we can call them "holes" (cf. Baker 1968).

- 6. The present analysis has resulted in the following conclusions:
- 1) In sentences of the structure  $PZ_1$   $zale\dot{z}y$  (od tego)  $PZ_2$  the predicate is a relation between two sets of sentences propositions of the indirect questions.
- 2) Such sentences imply that there are at least two different sets Q(i) and Q(j) of propositions of  $PZ_1$  which are the consequents of the implications whose antecedents are two sentences  $p_i$  and  $p_j$  the propositions of  $PZ_2$ .
- 3) The addresser of such sentence does not say anything about the network of implications between the propositions of  $PZ_1$  and  $PZ_2$ , i.e. he or she does not specify which propositions imply which and whether a given proposition implies anything at all.
- 4) In sentences with the predicate *zależy* all indirect questions homographic with WH-questions have the existential presupposition that leaks onto the whole sentence.
- 5) The analysis of sentences with the predicate  $zale\dot{z}y$  like (1)—(9) leads to the conclusion that it is not only sentences with the reported speech that can be explicated by disjunction. The formula (38b) stands for a sequence of possible implications (in special cases, the sequence is infinite; cf. (7)), where but three options do not work: 'every p implies every q', 'no p implies any q' and 'every p implies one and the same q'. It appears that paraphraseability by disjunctive sentences is the definitional feature of most structures with indirect questions.

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