Quadripartitaratio
REVISTA DE RETÓRICA Y ARGUMENTACIÓN

AÑO 8, NÚMERO 16, JULIO-DICIEMBRE 2023 | YEAR 8, ISSUE 16, JULY-DECEMBER 2023 | ISSN: 2448-6485

Some relations between philosophical problems

Andrzej Wiśniewski
Adam Mickiewicz University

Note of the editor. In other publications, I have been trying to make people aware of the importance of questions for the theory of argumentation. This is the reason for publishing the present paper in this journal. Its author is professor in the Department of Logic and Cognitive Science at Adam Mickiewicz University in Poznań, Poland, and a well-known pioneer in the field of erotetic logic, a branch of formal logic in which questions are subject to strict logical analysis. This paper was originally written in Polish and published in the journal *Studia Filozoficzne* [*Estudios Filosóficos*], núm. 8–9 (213–214), pp. 211–225, in 1983. It thus represents a very early phase in Professor Wiśniewski's research. The reader who wants to know the current logical position of the author should consult his book *Questions, Inferences, and Scenarios* (London, College Publications, 2013) or his most recent papers available in his website (http://andrzejwisniewski.edu.pl/). In spite of its being outdated within Wiśniewski's work, this paper is well worth making it available in English both because of the high quality of its arguments as well as because it deals directly with philosophical questions, whereas the bulk of its author's work deals with questions in general, without any special attention to philosophical questions. The perceptive reader will notice that the author relies throughout on the celebrated tradition of Polish formal logic. Although some of his references may be obscure to us, I trust that the content of the papers is perfectly clear and useful. As for the translation, it was done in three steps: (1) two different pieces of software were used, the Google translator and DeepL, going carefully through each sentence and each paragraph; (2) the two translations were compared with each other and with the original at all points, trying to recover as many linguistic nuances as possible and eliminating errors due to the technical character of the discussion; (3) a clean draft was sent to Professor Wiśniewski for review and correction. The present versions has thus been amended and approved by the author himself, to whom we are very grateful for the permission to publish it. (Fernando Leal.)

RESUMEN: El artículo presenta algunas relaciones típicas que se dan entre problemas filosóficos y discute los métodos que permiten determinar la existencia de tales relaciones entre problemas concretos. Además, el autor menciona otras relaciones entre problemas filosóficos. Dado que estas relaciones ordenan los problemas filosóficos jerárquicamente y determinan su estructura interna, los resultados obtenidos pueden ser útiles en los estudios pertinentes. También arrojan algo de luz sobre la cuestión de las interdependencias entre las disciplinas filosóficas.

PALABRAS CLAVE: pregunta, problema, presupuesto (de una pregunta), solución (a un problema), respuesta (a una pregunta)

ABSTRACT: The article presents some typical relations obtaining between philosophical problems and discusses methods permitting to determine the existence of such relations between concrete problems. The author moreover mentions some other relations between philosophical problems. As these relations both arrange philosophical problems hierarchically and determine their internal structure, the results obtained can be helpful in pertinent studies. They also shed some light on the question of interdependencies between philosophical disciplines.

KEYWORDS: question, problem, presupposition (of a question), solution (to a problem), answer (to a question)

1. INTRODUCCIÓN

In philosophical texts, one can sometimes find claims to the effect that between philosophical problems certain *relations* obtain.

Thus, sometimes the following is asserted:

> PROPOSITION **A**. Some problems presuppose solutions to other problems.

For instance, Roman Ingarden writes:

> A distinct group of metaphysical problems is formed by questions that concern the *ground* of the factually existing world. They already presuppose decisions regarding both the existence and the essences of the world. (Ingarden 1962: 62)

To take a differently oriented philosopher, Hans Georg Gadamer believes that every *statement*—and therefore any *philosophical* statement—is the answer to a question, but such a question has certain presuppositions that are answers to some other questions; again, those other questions have their own presuppositions, which are answers to yet other questions, and so on (Gadamer 1979 [1955]: 40–46).

Another proposition we find in the works of philosophers is this:

> PROPOSITION **B**. It is pointless to pose certain philosophical problems if other problems have been given a certain solution.

For example, in relation to one of the formulations of the problem of the objectivity of sensual perception, Ingarden says:

> Should no distinction between the 'object' and the 'content' of knowledge be drawn, then the possibility of considering this issue in terms of the relation between object and content disappears. (Ingarden 1971: 139)

Similar intuitions are expressed when stating that there are problems that presuppose affirmative solutions to related problems that are 'more basic' than those former problems. When such affirmative solutions are false, the 'less basic' problems have not been posed correctly. This is, for example, how Cackowski (1964: 175–177) puts the matter.

A third claim we find in philosophical works is:

> PROPOSITION **C**: When we are trying to solve problems, we sometimes rely on solutions to other problems.

Another proposition not infrequently emphasized by philosophers is:

> PROPOSITION **D**: In order to solve some problems, we need to have at our disposal solutions to other, strictly defined problems.

Thus, Ajdukiewicz begins by formulating the main problem of epistemology as the following question:

> What are the conditions of truth or the conditions of justification of our knowledge?

And he writes:

> Apart from this main problem, there is a group of other issues, the solution of which is necessary to solve the main problem. And it's so hard to talk about the conditions of something that you don't know well yourself. So, before we get down to solving the main task, we need to answer the following questions: what is cognition? what is truth? (Ajdukiewicz 1923: 19)

In philosophical texts, we can also find other comments regarding the relationship between problems. For example, it is sometimes claimed that certain philosophical questions 'generate' other, well-defined questions; that some problems 'contain' other problems; and so on.

Although philosophers are aware of at least some of the relations linking philosophical problems, they usually do not characterize these relations in isolation from concrete problems. I think, therefore, that it may be interesting to try to characterize abstractly and as precisely as possible at least some of the relationships linking philosophical problems. It might be equally interesting to develop methods that will allow for testing whether the so characterized relationships obtain between given concrete problems.

In this work, I define eight typical relations between problems and present general methods for detecting these relationships. I also draw attention to some further relations between philosophical problems. In my discussion, I refer to the intuitions contained in Propositions **A–D**. As it is easy to see, these statements are not unequivocal, nor are they homogeneous. For example, Proposition **A**, in characterizing a certain relationship between problems, defines it directly, whereas Proposition **B** describes such a relationship indirectly, saying that the performance of a certain activity is pointless when the previously performed activity has given us certain results. In this article, I characterize the relationships between problems in a direct way, referring to the relationships between the solutions to various problems or between their solutions and their presuppositions.

II. CHARACTERIZATION

1. BASIC CONCEPTS

A further characterization of the relationships between problems of interest requires that we define, first of all, the meanings of such expressions as

- problem
- solution to a problem
- presupposition of a problem

but also

- posing a problem
- solving a problem
- presupposing

It seems that the simplest (and at the same time consistent with intuition) way to achieve this goal is to refer to the theory of questions and to the broadly understood methodology of sciences.

Thus, by understanding the term 'interrogative sentence' as it is understood in grammar, we assume here that a question is an interrogative sentence of a certain language (e. g. Polish). Besides, we assume here that, just as a sentence expresses a proposition, so a question expresses a problem. Therefore, the problem is what is expressed by a question.

In theories of questions, strictly defined sentences are deemed to be either presuppositions of questions or answers to questions. Accordingly, we will say that a solution to a problem is any direct answer to the question that expresses the problem.[1] (We will hereinafter refer to direct answers simply as answers.) In turn, we will consider presuppositions of the problem both the presuppositions of the question expressing a given problem and the sentences specifying the meanings of expressions (words or idioms) appearing in this question. Let us note that by 'presuppositions of a question' we mean its so-called absolute presuppositions.[2]

By *solving a problem* we understand here the justification of any of its solutions. Again, *posing a problem* is understood as posing a question that expresses that problem.

When we speak of *presupposing*, we mean the acceptance of propositions that do not have to be justified (although they may have been previously justified if they can be justified at all). Note that, when posing a problem, we start from presuppositions (in the above sense)

[1] In theories of questions, direct answers (or proper answers or simply answers) to a given question are, generally speaking, sentences that 'anyone who understands a question should be able to identify as the simplest, most natural, most acceptable answers to this question' (Kubiński 1971: 12). To put it a bit more strictly, direct answers to a specific question are sentences linked to that question by specific syntactic or semantic relationships; such relationships (characterized in particular theories of questions) are usually selected in such a way that the direct answers meet the above-mentioned intuitive condition. On answers to questions, see Ajdukiewicz 1960: 279–283, Giedymin 1964: 19, 36, 39, 74, etc.; Ingarden 1972: 334–339; Kubiński 1971, *passim*; Wejland 1977: 21–24, 28–34 etc.

[2] In theories of questions, we distinguish the presuppositions of a question relativized to questioner and respondent from the presuppositions that are not so relativized. (These are also called absolute, logical or syntactic presuppositions.) On non-relativized presuppositions of various questions, see Ajdukiewicz 1960: 281–282, Giedymin 1964: 18, 25–26, 30–32, 36–37, 39–40, 76–79 etc.; Kubiński 1969: 192–197, 1971: 78–86, 93–94 etc., Wejland, 1977: 24–28, 40–45 etc.

of the question expressing the problem and presuppose that the expressions appearing in this question have certain meanings. (Logically, this means that we presuppose sentences defining the meanings of these expressions.)

In the following discussion, we will use the variables X, Y, S and W, whose values are problems. We also assume that the values of those variables are always different.*

2. POSING A PROBLEM

Using the terminology introduced above, we will now try to explicate some of the insights contained in Proposition **A**, namely, that some problems presuppose solutions to other problems.

As it seems, we deal with the situation described in Proposition **A**, first, when two problems are related in such a way that some presupposition of the first is also the solution to the second problem. So, let's introduce the following concept:**

> DEFINITION 1: Problem X is *of a higher order*$_1$ than problem Y if and only if there is a solution p_i to problem X which is a presupposition of problem Y.

Let us note that when we say that the solution to a given problem is a presupposition of another problem, we mean that a given solution of the first problem is the same sentence as some presupposition of the second problem. Thus, problem X is of a higher order$_1$ than problem Y when there is an answer to the question expressing the problem X among the presuppositions of the question expressing problem Y or among the sentences that define the meanings of the expressions appearing in that question. For example, the problem expressed by the question:

(1) Is there a world that is real and transcendent to the subject?

is of a higher order$_1$ than the problem expressed by the question:

(2) Does the subject come to know a world real and transcendent to the subject so that the results of that cognition are true of this world?

Indeed, the affirmative answer to question (1), that is:

---

* [*Note of the editor*. This is a very important convention, and we should warn the reader that it not only covers the variables over problems, as stated here, but all other variables used in the definitions below.]

** [*Note of the editor*. Each of the concepts henceforth defined have numerical subindices attached to them to indicate that we are dealing with a hierarchy of concepts.]

(3) There is a world real and transcendent to the subject

is also one of the presuppositions of question (2).[3]

When characterizing acceptance, it is usually assumed that, if we accept a proposition, then we also accept what logically follows from that proposition (Marciszewski 1972: 68–69 etc.). Bearing in mind that being presupposed is, as mentioned before, a special case of acceptance, we can explicate further intuitions contained in Proposition **A** by introducing the following concept:

> DEFINITION 2: Problem X is *of a higher order*$_2$ than problem Y if and only if there is a solution p_j to problem X that follows logically from some presupposition or presuppositions of problem Y.

According to the above definition, problem X is of a higher order$_2$ than problem Y when an answer to the question expressing problem X follows logically from some presupposition or presuppositions of problem Y, i.e., from the presuppositions of the question expressing this problem or from the sentences characterizing the meanings of the expressions appearing in this question.

A problem that is of a higher order$_2$ than the problem expressed by question (2) is, for instance, the problem expressed by the question:

(4) Is there a world that is transcendent to the subject?

This is because the affirmative answer to question (4) follows logically from sentence (3), which is a presupposition of question (2).

Generally speaking, to find out whether problem X is of a higher order$_1$ than problem Y, we compare the presuppositions of problem Y with the solutions of problem X. If we find that in at least one case they are the same, then we can say that problems X and Y have the intended relationship. In a similar manner, to find out whether problem X is of a higher order$_2$ than problem Y, we compare the solutions of problem X with the logical consequences of the presuppositions of the problem Y.

Let us note that the considerations carried out so far do not exhaust all the content of Proposition **A**. For example, we are also dealing with the situation described in **A** when there is a relationship between the problems X and Y in which a specific solution to problem X is a consequence, but not a classical logical consequence, of one or several presuppositions of

[3] We assume here that the presuppositions of a question are, *inter alia*, sentences stating the existence (in a broad sense) of objects whose names appear in it––unless, of course, the question is a question about the existence of one of these objects. Cf. Kubiński 1969: 196–197, 1971: 93–94). Thus, since question (2) uses the complex name 'world real and transcendent to the subject', sentence (3) is a presupposition of question (2).

problem Y.[4] It can also be said that problem Y presupposes a solution to problem X when a solution to problem X follows from the presuppositions of problem Y and from specific analytic sentences of the language in which the questions that express problems X and Y are formulated (and the solution does not follow from the analytic sentences of the corresponding language alone).[***]

3. CORRECTLY POSING A PROBLEM

We stated above that philosophers sometimes assert Proposition **B**, namely that it is pointless to pose certain philosophical problems when other problems have been resolved in a certain way. It seems that the state of affairs claimed by Proposition **B** occurs due to many, not just one, underlying relations linking problems under consideration. One of these relations is characterized by the following definition:

> DEFINITION 3: Problem Y is *negatively dependent*$_1$ on problem X if and only if there is a solution p_k to problem X and a presupposition z_i of problem Y such that:
> a) p_k is inconsistent with z_i, or
> b) a sentence inconsistent with z_i logically follows from p_k.

Thus, the problem expressed by the question:

(5) What acts of will are not determined by any physical cause?

is negatively dependent$_1$ on the problem expressed by the question:

(6) Are there acts of will that are not determined by any physical cause?

Indeed, the negative answer to question (6) contradicts the statement:

(7) There are acts of will that are not determined by any physical cause

which is one of the presuppositions of question (5).

Another relation between problems is characterized by the following definition (the symbol $\neg z_i$ denotes a sentence contradicting z_i):

[4] The characteristics of various concepts of consequence can be found, for instance, in Zinov'ev (1976: 144–185, 238–241 etc.)

[***] [*Note of the editor*. The author speaks here about theses of natural language and refers to Kmita (1977: 53–58). By and large, theses of a natural language correspond to analytic sentences defined in terms of necessary acceptance induced by rules of the language.]

DEFINITION 4: Problem Y is *negatively dependent*$_2$ on problems S and W if and only if there is a presupposition z_i of problem Y, a solution p_l to problem S, and a solution p_m to problem W such that:

a) $\neg z_i$ follows logically from p_l and p_m, and
b) p_l and p_m are not mutually inconsistent and $\neg z_i$ does not logically follow from either p_l or p_m.[5]

Thus, problem Y is negatively dependent$_2$ on problems S and W when the problems S and W have such (mutually consistent) solutions, whose conjunctions logically result in a sentence contradicting some solution to the problem Y.[6] We can therefore say that, for instance, the problem expressed by question (5) is negatively dependent$_2$ on the problems expressed by the questions:

(8) Are there phenomena that are not determined by any physical causes?
(9) Are acts of will phenomena?

This is because the negative answer to question (8) and the positive answer to question (9) logically result in a sentence that contradicts statement (7), i.e., one of the presuppositions of question (5).

We can also obtain definitions of negative dependency in senses 3, 4, etc. when a sentence contradicting some presupposition of problem Y may be logically derived from certain (non-contradictory) solutions to three, four or more problems.

If problem Y is negatively dependent$_2$ on problems S and W, then we will say of each of problems S and W that it is one of those on which problem Y is negatively dependent$_2$. The expression

problem Y is negatively dependent$_2$ on problem W

will, however, be used here only when the sentence contradicting a certain presupposition of problem Y follows logically from a specific solution to problem W and from some analytic sentence of the language in which questions expressing the problems Y and W were

[5] Let us emphasize here, in order to avoid possible misunderstandings, that by saying that $\neg z_j$ follows logically from p_l and p_m, we mean that $\neg z_j$ follows logically from p_l and p_m taken together. Thus, when we say that $\neg z_j$ follows logically from p_l and p_m, we do not mean that $\neg z_j$ follows logically both from p_l and p_m.

Let us also note that if p_l and p_m were contradictory, we would have to recognize that not only problem Y, but also any other problem is negatively dependent$_2$ on problems S and W (as any sentence logically follows from a pair of contradictory sentences). Since such a conclusion is counterintuitive, definition (4) was formulated in such a way that the above situation could not take place.

[6] Let us note that when we say that a given sentence follows logically from the conjunction of two other sentences, we mean that it follows logically from these two sentences only if taken together, but not from any one of these sentences taken separately.

formulated (and so when the appropriate solution to problem S is an analytic sentence of that language). For example, we can say that the problem expressed by question (5) is negatively dependent$_2$ on the problem expressed by question (8), because the affirmative answer to question (9) is an analytic sentence of English.

Let us note that if problem Y is negatively dependent$_1$ on problem X, then if we presupposed that the solution p_k of problem X is true, so we must recognize (based, among others, on the metalogical principle of contradiction) that the presupposition $\sim q_i$ of problem Y is false. We will issue the same verdict on the presupposition of problem Y when problem Y is negatively dependent$_2$ on problems S and W and we accept as true the solutions p_l and p_m of these problems. On the other hand, correctly posed problems are usually required to have true presuppositions. So, if problem Y is negatively dependent (in senses 1 and 2) on problems X or S and W, and we have solved these problems so that we consider p_k or p_l and p_m to be their true solutions, then we must admit that problem Y was not correctly posed. Assuming that it is pointless to pose problems that do not satisfy the correctness conditions, we can then say that when the problem Y is negatively dependent$_1$ on problem X and we have solved problem X in a certain way, then posing problem Y is pointless—hence the state of affairs described by Proposition **B**. The situation is similar in the case of the negative dependence$_2$ of problems.

So, it seems that we can say in general, although not very precisely, that if a hypothetical acceptance of some solution(s) to certain problem(s) yields that a given problem is not correctly posed, then there are situations in which it is pointless to pose the latter problem. Let us emphasize, however, that the fact that it is pointless to pose certain philosophical problems when other problems have been resolved in a certain way, is mainly determined by the appropriate relationships between these problems (including the relationships specified above).

Now I would like to introduce some additional concepts that are tied up with the content of Proposition **B**:[7]

DEFINITION 5: Problem X is *more fundamental*$_1$ than problem Y if and only if:

a) problem X is of a higher order$_1$ than problem Y, and
b) problem Y is negatively dependent$_1$ on problem X.

For example, the problem expressed by question (6) is more fundamental$_1$ than the problem expressed by question (5). This is because a presupposition of question (5) is the affirmative answer to question (6) and the negative answer to question (6) is inconsistent with statement (7), which is a presupposition of question (5).

At the end of this part of the discussion, let me say a few words about the methods by which we can determine whether the defined relationships obtain between given concrete problems.

[7] A similar relationship between questions is described by Cackowski (1964: 172–177 and elsewhere.

When examining whether problem *Y* is negatively dependent$_1$ on problem *X*, we compare the presuppositions of problem *Y* with the solutions of problem *X*, checking if there is a solution to problem *X* that contradicts some presupposition of problem *Y*. If we do not find such a solution, we check whether a sentence contradicting one (any) of the presuppositions of problem *Y* follows logically from some solution to problem *Y*. Similarly, when examining whether problem *Y* is negatively dependent$_2$ on problems *S* and *W*, we check whether there is such a pair of non-contradictory solutions to problems *S* and *W* which logically implies a sentence contradicting a certain presupposition of problem *Y*. When it is so, we additionally check whether the sentence logically follows only from the considered solution to problem *W* or only from the analyzed solution to problem *S*.

In turn, by examining whether problem *X* is more fundamental$_1$ than problem *Y*, we simply determine whether *X* is of a higher order$_1$ than *Y*, and whether *Y* is negatively dependent$_1$ on problem *X*.

4. SOLVING A PROBLEM: INDIRECT JUSTIFICATION

In order to find out which relations between problems are responsible for the existence of the state of affairs described by Proposition **C**, namely, that when solving problems we rely on solutions to other problems, we must analyze the meaning of the expression 'solving of a problem' in more depth.

We said above that the solution of a problem is the justification of any of its solutions, i.e., a (possible) answer to the question expressing the problem. Let us assume that

> To justify a sentence (...) is to demonstrate that the conditions sufficient for considering the sentence to be true have been met. (Marciszewski 1970: 339)

The usual conditions can be:

(a) the carrying out of relevant observations
(b) the recourse to terminological conventions
(c) an appeal to intuition
(d) the use of certain sentences previously accepted as true.

In case (d) we are dealing with the so-called indirect justification, in the remaining ones with direct justification. Let us first deal with *indirect justification*.

Indirect justification consists, as it is well known, in carrying out reasoning, as a result of which the justified sentence is inferred from other sentences previously considered to be true. Thus, in indirect justification we always deal with some kind of inference, and it can be both deductive and non-deductive.

We base our conclusions on certain premises. These premises are not arbitrary. In order for certain sentences to be premises of specific inferences of some type, not only should they

be previously known and recognized, but also certain relations must exist between these sentences and the conclusions of the respective inferences (e. g. the relation of logical consequence, the relation of enthymematic consequence[****], and so on). These relations, however, obtain whether or not the given sentences are premises and conclusions of actually realized inferences. On the contrary, it is because certain sentences have specific relationships that we can infer one of these sentences from the other. On the other hand, both sentences that can be premises in an inference and sentences that can be conclusions are answers to questions expressing specific problems (and so are solutions to these problems). We can therefore say that the problems expressed by the relevant questions have certain relationships that are determined by the relationships between the answers to those questions. These relationships are, as it were, brought to light when, in solving problems, we use certain inferences. On the other hand, we can make use of these inferences precisely because there are appropriate relationships between the sentences that answer certain questions (and therefore also between certain problems). So, let us now introduce the following concept:

> DEFINITION 6: Problem X is *more important*$_1$ than problem Y with respect to solution q_i to problem Y if and only if there is a solution p_r to problem X such that q_i follows logically from p_r.

According to the above definition, problem X is more important$_1$ than problem Y with respect to q_i when q_i follows logically from some answer to the question expressing problem X.[8] So, for instance, the problem expressed by question (1) is more important$_1$ than the problem expressed by question (2) with respect to the affirmative answer to the question. For this answer follows logically from the affirmative answer to question (1).

Another relationship between problems is defined as follows:

> DEFINITION 7: Problems S and W are *more important*$_2$ than problem Y with respect to solution q_i to problem Y if and only if there exist a solution p_o to problem S and a solution p_n to problem W such that:
>
> a) q_i follows logically from p_o and p_n, and
> b) p_o and p_n are not inconsistent and q_j does not logically follow either from p_o or from p_n.[9]

**** [*Note of the editor*. In correspondence, the author of this paper told me that the concept of enthymematic consequence is taken from Ajdukiewicz (1974, §37). Here we find the following definition: 'A statement B follows enthymematically from a statement A under a statement C if and only if the statement B does not follow logically from the statement A, but it does follow logically from the conjunction of the statements A and C' (p. 104).]

[8] Note that although q_i follows logically from q_i, this does not lead to the conclusion that problem X is more important$_1$ than problem X on the basis of q_i, for we have assumed here (see p. 5) that variables X and Y always represent different problems.

[9] In saying here that q_j follows logically from p_o and p_n, we mean that q_j follows logically from p_o and p_n taken together. Note, moreover, that if p_o and p_n were to be contradictory, then as before (see footnote 5) we would

Hence, we can say that problems *S* and *W* are more important$_2$ than problem *Y* with respecto to q_j when there are (mutually consistent) answers to the questions that express problems *S* and *W*, whose conjunction logically implies the answer q_j to the question expressing problem *Y*. Thus, for instance, the problems expressed by the questions:

(10) Does the mind know only its own experiences?
(11) Does the mind know physical bodies?

are more important$_2$ than the problem expressed by the question:

(12) Are physical bodies experiences of the knowing mind?

with respect to the affirmative answer to question (12). Indeed, the affirmative answer to question (12) follows logically from affirmative answers to questions (10) and (11).

The definition of the relation of *being more important*$_3$ is obtained by considering the case in which a specific solution to problem *Y* follows logically only from (consistent) solutions to three different problems. In an analogous way, we can define the relations of being more important$_4$, being more important$_5$, and so on.

When examining whether problem *X* is more important$_1$ than problem *Y* with respect to a specific solution of problem *Y*, we check whether this solution to problem *Y* follows logically from some solution to problem *X*. Similarly, by examining whether problems *S* and *W* are more important$_2$ than problem *Y* with respecto to solution q_j of problem *Y*, we check whether q_j follows logically from a pair of mutually consistent solutions to problems *S* and *W*. If we find such a pair, we additionally check whether q_j does not logically follow from just one of the solutions in the pair.

Let us note that, in the same way as before, if problems *S* and *W* are more important$_2$ than problem *Y* on the basis of q_j, then we will continue to say about each of problems *S* and *W* that it is one of the problems that are more important$_2$ than problem *Y* on the basis of solution q_j to problem *Y*. The expression

> Problem *S* is more important$_2$ than problem *Y* with respect to solution q_j of problem *Y*

is, however, used here only if q_j logically follows from a certain solution to problem *S* and an analytic sentence, in which the questions that express problems *S* and *Y* are formulated (and so, the corresponding solution to problem *W* is an analytic sentence of the language).

---

have to conclude that problems *S* and *W* are more important$_2$ than any other problem––which would be counterintuitive.

A deductive inference is usually defined as an inference in which the conclusion follows logically from the premises. Note that if we use deductive inference when solving a given problem, it shows that the problem being solved is less important (with respect to its currently justified solution) than some other problem or problems. On the other hand, we can solve this problem on the basis of deductive inference precisely because it is less important than those other problem or problems. Moreover, when solving a given problem by means of deductive inference, we rely on premises that are solutions to other problems, and so we have the state of affairs stated in Proposition **C**.

We deal with an analogue situation when, for the justification of a given solution to a certain problem, we infer a conclusion which follows enthymematically from the premises.

On the other hand, if when solving a problem we recur to reductive inference[*****], this means *either* that the problem to be solved is more important$_1$ than another problem with respect to the specific solution of this other problem, *or* that it is one of problems that are more important$_2$ (or is simply a more important$_2$ problem) than another problem on the basis of the corresponding solution of that other problem. And here we can use reductive inference precisely because the corresponding problems remain in the relation of greater importance$_1$ or greater importance$_2$. Besides, when solving a given problem by means of reductive inference, we rely on premises that are solutions of other problems, and so holds the same thing that Proposition **C** describes.

It seems that deductive and reductive inferences, as well as inferences involving, among others, implicit premises, are not the only inferences used to justify philosophical statements. For instance, we often use non-deductive inferences by analogy in justifying these claims. However, in this paper we shall not elaborate any further on the problems that are hereby raised.

5. SOLVING A PROBLEM: DIRECT JUSTIFICATION

In the previous section we have analyzed some relations linking philosophical problems that appear when we give an indirect justification of solutions to these problems. However, in philosophy (or in individual philosophical conceptions), we also encounter *direct* justification of claims. It consists, generally speaking, in an appeal to perceptions or to intuition, understood in one way or another.

When justifying directly, we do not adduce any sentences. Nevertheless, in the case of perceptual justification we assume that the perceptions have cognitive value ('correspond to reality'). Similarly, when we appeal to an intuition, understood in a certain way, we are convinced that this intuition yields cognitively valuable results. This seems to mean that,

***** [*Note of the editor*. The meaning of the phrase 'reductive inference' is illustrated by Ajdukiewicz (1974, §47, p. 130) as follows: 'Suppose that I am sitting at the table busy with my reading and do not pay attention to what is going outside. At a certain moment I stop reading, come up to the window and see that the sky is cloudy, the roadway and the pavements are wet, but it does not rain. These observations make me conclude that it must have rained when I was reading.' It thus corresponds roughly to what Peirce called 'abduction'.]

when we produce direct justifications in a certain way, we assume a principle that says that sentences which are directly justified in that way are true. For example, when we justify by appeal to eidetic intuition, we assume that sentences justified by eidetic intuition are true. Again, when we justify by appeal to perception in a certain way, we assume that sentences justified by perception in that way are true, and so on. In the case of such claims, however, we are dealing with solutions to some philosophical (epistemological) problems. The emerging relationship between problems is defined by the following definition (which is somewhat less strictly formulated than the previous ones):

DEFINITION 8: Problem X is *more fundamental*$_1$ than problem Y if and only if:

a) there is a solution p_t to problem X, which states that sentences directly justified in way M are true, and
b) there is a solution q_t of problem Y, directly justified in way M.

Note that by saying that a specific solution to problem Y is directly justified in way M, we mean that it has been justified directly or can be justified directly in way M. Also note that the simplest method of checking whether a given sentence can be justified directly in way M is the justification of this sentence in way M.

Definitions of the relation of being more fundamental$_2$, more fundamental$_3$, more fundamental$_4$, more fundamental$_5$, and so on, are obtained by considering that the proposition which states that sentences directly justified in a specific way are true may be the conclusion of such inferences (deductive or non-deductive), whose premises are solutions of other problems.

When examining whether problem X is more fundamental$_1$ than problem Y, we simply check whether these problems have solutions that meet the conditions (a) and (b) of Definition 8.[10]

6. SOLVING A PROBLEM AND THE NEED TO RECOGNIZE SOLUTIONS

We said at the outset that philosophers sometimes put forward Proposition **D**, stating that in order to solve certain problems we must have solutions to other, well-specified problems. In the light of the above considerations, this claim, when interpreted literally, is obvious. For if resolving a problem consists in justifying an answer to the question expressing this problem, and the justification is indirect, then we must rely in it on previously known and

[10] The considerations carried out so far do not seem to exhaust all the content of Proposition **C**. And so, for example, when justifying indirectly, we take for granted that by inferring according to certain patterns, we can receive, or even receive true conclusions from true premises. Moreover, when resolving problems, we rely on solutions to specific terminological problems. However, in this paper we are not going to describe the relationships between problems that seem to emerge here.

accepted premises. On the other hand, if the problem is really to be solved, these premises cannot be arbitrary but should remain in certain logical relations with the justified solution to the problem. However, if in accordance with the previous discussion, there are certain logical dependencies between the premises and the conclusion, then this proves that the problems solved by these premises and the conclusion remain in appropriate relations (e. g. the relation of being more important$_2$). Hence, when solving a given problem, we must have solutions to other problems, and these are well-specified problems. One may therefore claim that the state of affairs described by Proposition **D** obtains, *inter alia*, due to some of the above-defined relations.

7. REMARKS

We have characterized above some of the relations between philosophical problems. These are certainly not the only relations. For example, we can *a priori* assume that in certain situations the presuppositions of certain problems are premises or one of the premises of such (deductive or non-deductive) inferences, whose conclusions are solutions to other problems. Similarly, the solutions to certain problems may be premises of inferences whose conclusions are presuppositions of other problems. Let us also emphasize that in logical theories of questions, certain relations between questions are defined in terms of logical relations between their presuppositions—or sets of presuppositions—or between their answers—or sets of answers (see e. g. Kubiński 1971: 50–53, 60, 87–88, etc.; Wejland 1977: 46–51). In the overwhelming majority of cases, these relations differ from those described above. Such relations are probably connected by questions expressing philosophical problems. Let us also note that some of the relations characterized here obtain only between problems whose solutions or presuppositions are declarative sentences, and not, for example, value judgments or norms.

We have discussed above the procedures that allow us to determine whether the relations specified in Definitions 1–8 obtain between given concrete problems. These procedures consisted, generally speaking, of checking whether certain relations (contradiction, logical consequence, etc.) exist between, on the one hand, the presuppositions or solutions of problems, or the consequences of presuppositions or solutions of problems, and the presuppositions or solutions of other problems. It should be remarked that the above-described procedures apply only when we (among other things) actually know at least some of the solutions and presuppositions or at least some of the solutions to the problems under consideration. Thus, when conducting analyses, we should rely either on a list of presuppositions and solutions of problems we are interested in, or on a theory of questions that is able to give us the presuppositions and answers to questions expressing these problems. (In the latter case, we should also, in certain situations, know the sentences that characterize the meanings of expressions occurring in one of the analyzed questions.)

III. CONCLUSIONS

The richness and relative invariability of problems in the absence of agreement on their answers is one of the features distinguishing philosophy from other areas of intellectual activity. When researching philosophy, it therefore seems, one should focus not so much on the claims (theses, assertions, statements) made in it as on the questions philosophers raise. I would like to highlight a few possible applications of the results obtained in this paper.

1. HIERARCHIES OF PHILOSOPHICAL PROBLEMS

Many people who get involved with philosophy are inclined to argue that there is a hierarchy of philosophical problems. This observation seems in principle correct, yet it requires some modification in the light of the considerations presented in this paper. For if we assume, naturally enough, that the hierarchy of problems is determined by their interrelations, then, given that these relationships are of different kinds, we must recognize that there cannot be one but many hierarchies of philosophical problems. Nonetheless, these hierarchies are as objective as the inter-sentential relations underlying the relations between problems. As soon as we know the characteristics of the relations between philosophical problems and the procedures enabling us to detect those relations, we can investigate which hierarchies exist in regard to the philosophical problems that interest us.

2. STRUCTURE OF PHILOSOPHY

In research in the field of philosophy of science, we sometimes use the concept of a relational structure. A relational structure is a tuple $<U, R_1, R_2, ..., R_m)$, where U is a set, and $R_1, R_2, ..., R_m$ are relations defined on U. They can be monadic or polyadic relations. Set U is usually called the domain of the relational structure, while the set of relations $R_1, R_2, ..., R_m$ is defined as the characteristic of this structure.[11] I would like to say here that we can treat philosophical issues as a relational structure. The domain of this structure is the set of philosophical problems, and its characteristic are relations between these problems, including the relations defined above.

The considerations carried out so far do not allow us to provide a full description of the characteristic of philosophical issues conceived as a relational structure: we have defined here only a few relations linking philosophical problems. Nevertheless, our considerations define some elements of the characteristic of this structure. Moreover, the knowledge of the procedures for detecting the relations characterized here allows us to investigate which of these relations occur between the philosophical problems that interest us. It means, however,

[11] This definition of a relational structure is taken from Wójcicki 1972: 15.

that it is possible to uncover certain fragments of philosophical issues conceived of as a relational structure.

3. THE ISSUE OF THE RELATIONSHIP OF PHILOSOPHICAL DISCIPLINES

The results obtained in this article also shed some light on the issue of dependence of philosophical disciplines.

When we say that discipline D_1 is dependent on discipline D_2 we mean (in close accordance to the several meanings of the expression 'is dependent on') different relations between D_1 and D_2.[12] I would like to point out here that, if we consider philosophical disciplines as sets of problems, then, when we say that discipline D_1 is dependent on discipline D_2, we may also mean that the problems belonging to disciplines D_1 and D_2 stay in specific relationships. In other words, if we agree that philosophical disciplines are sets of problems, then the problem of dependence of discipline D_1 on discipline D_2 transforms into a series of specific problems, expressed by questions such as:

> Is there a problem belonging to discipline D_2 such that it is a higher-order$_1$ problem than some problem belonging to D_1?
> Is there a problem belonging to discipline D_2 such that it is a higher-order$_2$ problem than some problem belonging to D_1?
> Is there a problem belonging to discipline D_2 such that a certain problem belonging to discipline D_1 is negatively dependent$_1$ on this problem?
> And so on.

In view of the results obtained in this work, we can say that the problems expressed by the above questions are, in principle, solvable.

Finally, let us note that, while we are interested in the relationship between *philosophical* problems, the definitions given here are so formulated as to apply to *all* problems. The results obtained in this work can therefore be transferred to non-philosophical problems and disciplines.

REFERENCES

Ajdukiewicz, K. (1923). *Główne kierunki filozofii w wyjątkach z dzieł ich klasycznzych, przedstawicieli: Teoria poznania, logika, metafizyka*. [*The main directions of philosophy in the excerpts from classical works: Theory of knowledge, logic, metaphysics*.] Lwów.

—— (1960). Zdania pytajne. [Interrogative sentences.] In: *Język i poznanie*. [*Language and knowledge*.] Vol. 1. Warsaw. [Engl. transl. *The Scientific World-Perspective and Other Essays 1931-1963*, pp. 155-164. Dordrecht, Reidel, 1978.]

[12] On the issue of the relations between disciplines, see for example: Ingarden 1971: 387–389, Stępień 1966: 97.

Cackowski, Z. (1964). *Problemy i pseudoproblemy*. [*Problems and pseudo-problems*.] Warsaw.

Gadamer, H.-G. (1979). *Rozum, słowo, dzieje: Szkice wybrane*. [*Reason, word, history: Selected sketches*]. Warszawa. The reference is to the article 'Was ist Wahrheit?' ['What is truth?'], published in 1955.

Giedymin, J. (1964). *Problemy, założenia, rozstrzygnięcia*. [*Problems, assumptions, solutions*.] Poznań.

Ingarden, R. (1962). *Spór o istnienie świata*. Warsaw. [Engl transl. *Controversy over the existence of the world*, Vol. 1. Frankfurt am Main: Peter Lang.]

—— (1971). *U podstaw teorii poznania*. [*The foundations of the theory of cognition*]. Warsaw.

—— (1972). Pytania esencjalne. [Essential questions.] In: *Z teorii języka i filozoficznych podstaw logiki*. [*On the theory of language and the philosophical foundations of logic*.] Warsaw. [German version: *Essentiale Fragen. Ein Beitrag zum Problem des Wesens*, Halle, Max Niemeyer, 1925.]

Kmita, J. (1977). *Wykłady z logiki i metodologii nauk*. [*Lectures on logic and the methodology of science*.] Warsaw.

Kubiński, T. (1969). Analiza logiczna pojęcia założenia pytania. [Logical analysis of the concept of the presupposition of a question.] In: L. Gumański (Ed.), *Rozprawy filozoficzne*, pp. 192–197. Toruń.

—— (1971). *Wstęp do logicznej teorii pytań*. [*An introduction to the logical theory of questions*.] Warsaw.

Marciszewski, W. (Ed.) (1970). *Mała encyklopedia logiki*. [*A short encyclopedia of logic*.] Wrocław.

Stępień, A. B. (1966). *O metodzie teorii poznania*. [*On the method of the theory of knowledge*.] Lulin.

Wejland, A. P. (1977). *Analiza logiczna interrogacji i jej zastosowania w badaniach społecznych*. [*Logical analysis of interrogation and its application in social research*.] Wrocław.

Wójcicki, R. (1972). Metody formalne w problematyce teoriopoznawczej. [Formal methods in the theory of epistemology.] *Studia Filozoficzne*.

Zinov'ev, A. (1976). *Logika nauki*. [*The logic of science*.] Warsaw.