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**HOW TO DO THINGS WITH CONTRADICTIONS?
SOME REMARKS ON THE PRAGMATIC INTERPRETATION
OF CONTRADICTIONS**

The reference of the title of this article to the famous words of John Austin is not accidental; in his text he proposed to distinguish a special class of statements called performative, whose purpose, contrary to the constative ones, is not to say something about something but to perform something. I would like to concentrate however, not on the essence of performative utterances postulated by Austin, but rather on the intuition which underlay the foundations of their differentiation. Austin questioned the very significant philosophical assumption, based on which each statement must by necessity describe some condition or state a specific fact, being therefore assigned to a classical truth-false value. For Austin some groups of statements simply cannot be subject to truthfulness classification, as their role is completely different. In their case one can only determine their efficiency or inefficiency, as here the utterance is synonymous with the performance of a certain act (perlocution), which is obviously different from only uttering the given content (locution). Thus obtained departure from the typically semantic approach to linguistic statements opened a completely new perspective for the analysis of a range of extremely problematic phenomena of the natural language. One of such phenomena I would like to concentrate on in this text is the problem of informative non-triviality of contradictory statements.

Contradiction itself presents substantial problems related to definition, however those are not the ones I would like to scrutinize now. I am first of all interested in how we deal with the overcompleteness resulting from the presence of contradiction, how does logic deal with it? In the classical approach, it is attempted to solve the problem of overcompleteness by eliminating the contradictions or by constructing the framework which prevents their occurrence. Theoretical systems containing contradictions are perceived as highly undesirable, mostly because of the danger of occurrence of triviality with disastrous consequences. Non-classical logics, paraconsistent in particular, are characterized by a sort of tolerance to contradiction; one could have the impression though, that this tolerance is only limited to “bypassing” the problem, taming it. The question is then, if the occurrence of contradiction each time has to be followed by triviality, to what extent the problem of overcompleteness is connected with the very occurrence of contradiction and to what extent it is linked to our understanding of it? In everyday use of the language it seems that the occurrence of a contradictory message does not necessarily exclude its informative contents.

How to understand contradiction? For instance a relation between a pair of sentences one of which is a negation of the other one, or such a pair of statements W and $\neg W$, one of which is the negation of another can be viewed as contradictory. Such a contradiction can be of logical nature and emerge as a consequence of an error made at some stage of the reasoning. Much more interesting, though, is the situation where within a correct conclusion, without making formal logical errors two mutually contradictory sentences α and $\neg\alpha$ are justified (such contradictions are called antinomians). Talking about contradictions resulting from some conclusions I do not only mean the area of propositional logic or logic of belief, but also the logic of abstract systems, as well as the logic of discourse or language. That would correspond to the three planes of interpretation distinguished by Łukasiewicz from the Principle of Consistency formulated by Aristotle: psychological, ontological and logical. This division, although questioned by Stuchliński¹ or Bocheński and brought down to the form of logical and metalogical contradictions is only quoted here to emphasize the areas in which the problem of contradiction can occur. For instance Stanisław Jaśkowski in his discussion logic, conceived as a tool for discourse modeling, distinguishes two levels of contradiction. The discourse in which each of the interlocutors presents internally cohesive views, which do not contain contradictions, but are contradictory to the statements of the other interlocutors can be assumed unthreatened because the contradiction occurring in it is *isolated* (weak, separating)² while the discourse itself remains undisturbed. If, however, mutually contradictory statements appear within the utterance of one of the interlocutors, we experience the overcompleteness disturbing the discourse and the *conjunctive* contradiction (strong, collective). The differentiation of contradictions suggested by Jaśkowski would imply the need to differentiate the planes within which we want to discuss the contradiction. It turns out, that contradiction which

¹ Stuchliński replaces the Łukasiewicz's division differentiating the pragmatic-logical, formal and semantic approach. Stuchliński J.A., *Pragmatyczno logiczna zasada sprzeczności. W obronie Arystotelesa*, Filozofia Nauki 5, pp.37-53, In: Pietryga A., *Status zasady sprzeczności w świetle logiki współczesnej*, Aureus, Kraków 2004, p.18.

² Cf. Poczobot R., *Spór o zasadę niesprzeczności*, Lublin, TN KUL p.335

leads to destructive consequences and triviality at one level, seems less destructive at a different one.

We can only talk about the occurrence of overcompleteness, when under the assumed principles of evidence we are forced to consider true each sentence that can be possibly formulated in the language we are currently using. This dependence, called the Duns Scotus's Law, or the law of overcompleteness can be expressed in the following way³:

conjunctive form $(p \wedge q) \rightarrow q$
 implicative form $p \rightarrow (\neg p \rightarrow q)$

In other words it is a law of logic, which authorizes the introduction into the propositional calculus of a pair of contradictory statements of any language formula used in this propositional calculus. The communication in which we would deal with the contradiction resulting in overcompleteness could hence be paradoxically called informatively empty, as it would force us to accept all the informative alternatives included. Is there a way then, to capture contradictions and their consequences in a non-trivial way? Does suspending the logical principle of contradiction always have to lead to redundancy?

Classical logic gives a positive answer to such a question and solves the problem of contradiction by elimination. The situation is different in non-classical logics, especially in the paraconsistent ones. Those approaches seem to be undisturbed by the contradiction, at least as long as it is possible to construct such a system of propositional calculus, in which the operations of consequences are not explosive, and hence, in the event of contradiction the system will not be overcompleted and trivialized. Graham Priest, representing the radical form of paraconsistent logics, accepts even the existence of the so-called *true contradictions*, i.e. situations in which some statements have to be assumed both true and false. It is the expression of a strong ontological thesis, which assumes that reality can be contradictory not only in our description, but also in itself. A similar intuition, in a slightly milder form is formulated by Newton da Costa, who claims that both in everyday life and in science there are situations which force us to have contradictory beliefs about them. Does the acceptance of cognitive value of contradiction really have to involve the assumption of internal contradiction of the world?

There seems to be no need to transfer our problems with the description of reality onto the reality itself. Priest's views should rather be read in the category of a devious trick (NB very close to the problems of paradox), thanks to which the author wanted first of all to justify the necessity of building a logic which allows the existence of contradictions, and secondly to gain proper publicity. An entirely different look should be taken at da Costa's paraconsistent logic. His interests focused around the problems of an adequate theoretical description of phenomena observed in science and the related contradictions. For instances the Niels Bohr's principle of complementarity based on physics and in use when presenting the phenomena of the quantum world, involves the problem of contradictory presentation of the same subject areas of one universe using locally contradictory theoretical systems. Each attempt of bringing the mutually complementary, though contradictory sentences down to a single theoretical form leads

³ Assuming, of course that the Law of Modus Ponens is still valid.

inevitably to the logical contradictions. Da Costa pointed out that the explanations of the conjunctive contradictions of complementary sentences should be found in the specifics of the language of description of the physical phenomena, in other words in the universe of the discourse of a given language. The solution he suggests assumes extending the classical logic by an alternative relation of consequences, which would protect the conjunctions that also are the consequences of complementary descriptions⁴ from overcompleteness. Theories created using this extended logic, called the *paraclassical P logic*, additionally protected with the so-called *meaning postulates*⁵ limiting the acceptability of certain sentences used in the description would constitute the protection from the destructive and explosive impact of contradiction.

In my opinion, attention should be given to da Costa's pointing out of the linguistic aspect of the problem of contradiction. In the context of what has already been said, the attempts to redefine logic seem obvious, at least because nobody wants to commit *logical suicide in the form of overcompleteness*⁶. Much too often are we forced to deal with and draw conclusions based on mutually contradictory implications. The greatest problem so far has been with the natural language. Priest thought that each semantically closed language in the Tarski's⁷ sense, and ethnic languages were viewed as such, implies contradiction by necessity. He suggested that instead of adjusting the internally contradictory natural language to the formalized languages of logics, as it has been so far, we should reverse the perspective and verify if more benefits will be brought by bringing the logical structures down to the natural language containing contradictions. He also postulated the removal of the differentiation introduced by Alfred Tarski into the object language and metalanguage, which in Tarski's assumption was to protect from contradiction, removing the predicate of truth from the area of object language. Priest's idea seems too radical, although there is a kernel of truth in it. We are not able to formalize everyday language communication, hence we cannot protect it from the occurrence of contradiction. It is however interesting that we deal surprisingly well with the contradictory messages, so perhaps there are some mechanisms preventing the overcompleteness, linked to the very use of the natural language. Perhaps the way we deal with the overcompleteness can be found not only in the semantics and syntax of the formalized languages.

The proposal of logics adaptive towards contradiction, derived from the concept of Batens' dynamic dialectic logics seems to partially respond to the doubt I stated above. Situated between the classical propositional calculus and the paraconsistent approach, Batens' logics, giving up the use of Duns Scotus's Law emphasizes the significance of

⁴ The relation of consequence put forth by da Costa and Krause allows the introduction of a given thesis α from the set X of specific formulas in three cases: if the thesis is a) an element of X , b) a classical tautology, or c) consequences of subset of X which is non-contradictory based on classical logic. Cf. Pietryga A., *O leksykologicznych aspektach logiki komplementarności*, 21 June 2007, <<http://pts.edu.pl/subdomains/seminarium/httpdocs/ap.pdf>>, p.1

⁵ The problem is the existing meaning of the extralogical terms, hence the attempt at constituting new meanings through resolutions in which it is determined that the terms are to denote specific objects for which the theoretical postulates are met.

⁶ Pietryga A., *Status zasady sprzeczności w świetle logiki współczesnej*, Aureus, Kraków 2004, s.56.

⁷ A semantically-closed language is a language in which standard logical principles are in force and which contains the names of expressions and semantic terms with the rules of their correct application (it refers to the term *true* in particular) besides the expressions that can be formulated on its basis.

the live discourse and the contradictions in it. In the dynamic method of evidence he introduced, any formulas are considered logical theses only conditionally and only as long as the evidence provided so far did not show their contradiction. Contradiction viewed in this way always, along the principle of indirect evidence, refers further and is closely related to the dynamics of the very evidence. Batens puts the solution he proposed in the categories of *the dramatic movement from the syntactic and semantic level to the pragmatic one*⁸.

Anthony Hunter, similarly to Batens believes that the occurrence of contradiction implies undertaking the specific actions. Contradiction does not damage the informative contents of the message, to the contrary, the very fact of its occurrence is some sort of information. In this logics, seemingly like in Tarski's, it is postulated to separate the semantics of object language from metalanguage. Thus, the occurrence of contradiction on the object level does not require the existence of contradiction at metalevel, which Hunter understood as the language of action. While commenting Hunter's logics Anna Pietryga notices that the solutions he suggests allow to move from the level of the very sentences among which the contradiction occurred to the actions connected with them⁹. Contradiction observed at the sentence level of the object language seems to inform from the *meta* level on the need to take up some corrective actions. The actions proposed by Hunter are mainly based on the analysis of the occurrence of contradiction, location of the problem source, measurement of the degree of contradiction of a set of sentences (a novelty in the non-classical logics – the contradiction ceases to be an absolute value, it becomes gradable) and planning the appropriate corrective steps.

Although I realize that the examples quoted are fragmentary and the overview of problems related to paraconsistent logics is selective does not entitle me to formulate general conclusions, I would like to take the risk and suggest a certain tendency, also compliant with Zbigniew Tworak's critical remark on Priest's logics in which he points out the following: „*The situations that justify the approval of contradictory theories are always of pragmatic nature. In certain circumstances such an approval can even be a rational (purposeful) behavior. Logics, however, should not be mistaken for rationality.*”¹⁰ The escape towards pragmatics, if this how the situation I am interested in can be called, seems to be an interesting alternative in the case of explanation of the problems of contradictions, in particular if the efficiency of contradictory communication is to be explained. Still the matter of „stretching” the formalized languages or the logics in general for explaining the patterns of the natural language and more broadly – communication, remains doubtful. The removal of logics is obviously not synonymous to the removal of rationality. In this sense the paraconsistent logics seem interesting as long as contrary to the classical logics, the contradiction occurring in the systems built over them does not have to involve cognitive uselessness¹¹. Thus, in the reflection aimed at attempting to understand contradiction, it is possible to build a theoretical bridge

⁸ Batens D., *Inconsistencies-adaptive logics*, p. 194-195, in: Orłowska E. (ed.), *Logic at work. Essays dedicated to the memory of Helena Rasiowa*, Heidelberg, NY, p. 445-472, after: Pietryga A., *Status...*, p. 61.

⁹ Pietryga A., *Status zasady sprzeczności w świetle logiki współczesnej*, Aureus, Kraków 2004, p. 75.

¹⁰ Tworak Z., *Kłamstwo kłamcy i zbiór zbiorów. O problemie antynomii*, WN UAM, Poznań 2004, p. 297

¹¹ *Ibidem* p. 286

between the solutions presented in the paraconsistent approaches and the explanations suggested from the language pragmatics viewpoint. It should be emphasized though, that the above proposal of conceptualization of the problem of contradiction should first of all relate to the explanation of the pragmatic efficiency of contradictory communication.

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