Is Ethics with moral dilemmas possible? A paraconsistent proposal

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ABSTRACT

Most classical philosophers, like Thomas Aquinas and Kant, defended that ethical systems should attend to general principles considered rational, assuming a connection between logic and metaphysics and ethics. Aquinas deduced syllogistically the civil law from natural and eternal law as well as Kant formulated the principle that "obligatory implies possible". In this philosophical tradition, the ethical problems were conceived to be practical problems in which it was possible to find one solution and a rational response. Consequently, there would be no moral or ethical dilemmas. Nowadays there are still attempts to found the Ethics of Discourse and the Theory of Legal Argumentation on rational principles. Both K. O. Appel and R. Alexy are examples and a part of their theories are based on "Münchhausen Trilemma" (Hans Albert). According to H. Albert and his Trilemma, it is not possible to support a philosophical theory or scientific argument using the circular argument and the regressive one. In the second half of the twentieth century logical systems alternative to systems of classical logic were formulated. One such logic is paraconsistent logic, which admits contradictions. We argue that, from the paraconsistent logic point of view, it is possible to formulate ethical and philosophical theories that accept the moral dilemmas as existing, as being real. In the same way, the circular argument of Münchhausen Trilemma would be no longer an impediment to support philosophical theories.

INTRODUCTION

The topic of moral dilemmas is as old as Western philosophy. Socrates in Republic, Book I (331a-e), in a dialogue with Cephalus, cites the example of someone who had received in deposit weapons from one of his friends in his right mind. When he was seized with madness, he claims the weapons back. There was a conflict between the command of restore what was given to us in confidence and the failure to repay. Socrates wisely opines that it would no be a right action to someone repay weapons to a friend in crazy state. In this case we have a dilemma and a solution.

Were we able to solve all moral dilemmas? For the purpose to say that it is not possible, in contemporary philosophy, it is common to cite the example due to Sartre. A young Frenchman lost his unique brother in the invasion of France by Germany in II World War. His family was just him and his mother. Would it be fair to the young man leave their mother and revenge his brother, enlisting himself in the French resistance, or is it just not do it and stay in his home and comfort his mother?[1]

1"As an example by which you may the better understand this state of abandonment, I will refer to the case of a pupil of mine, who sought me out in the following circumstances. His father was quarrelling with his mother and was also inclined to be a "collaborator"; his elder brother had been killed in the German offensive of 1940 and this young man, with a sentiment somewhat primitive but generous, burned to avenge him. His mother was living alone with him, deeply afflicted by the semi-treason of his father and by the death of her eldest son, and her one consolation was in this young man. But he, at this moment, had the choice between going to England to join the Free French Forces or of staying near his mother and helping her to live. He fully realised that this woman lived only for him and that his disappearance – or perhaps his death – would plunge her into despair. He also realised that, concretely and in fact, every action he performed on his mother's behalf would be sure of effect in the sense of aiding her to live, whereas anything he did in order to go and fight would be an ambiguous action which might vanish like water into sand and serve no purpose. For instance, to set out for England he would have to wait indefinitely in a Spanish camp on the way through Spain; or, on arriving in England or in Algiers he might be put into an office to fill up forms. Consequently, he found himself confronted by two very different modes of action; the one concrete, immediate, but directed towards only one individual; and the other an action addressed to an end infinitely greater, a national collectivity, but for that very reason ambiguous – and it might be frustrated on the way. At the same time, he was hesitating between two kinds of morality; on the one side the morality of sympathy, of personal devotion and, on the other side, a morality of wider scope but of more debatable validity. He had to choose between those two. What could help him to choose? Could the Christian doctrine? No. Christian doctrine says: Act with charity, love your neighbour, deny yourself for others, choose the way which is hardest, and so forth. But which is the harder road? To whom does one owe the more brotherly love, the patriot or the mother? Which is the more useful aim, the general one of fighting in and for the whole community, or the precise aim of helping one particular person to live? Who can give an answer to that a priori? No one. Nor is it given in any ethical scripture. The Kantian ethic says, Never regard another as a means, but always as an end. Very well; if I remain with my mother, I shall be regarding her as the end and not as a means: but by the same token I am in danger of treating as means those who are fighting on my behalf; and the converse is also true, that if I go to the aid of the combatants I

A more dramatic example is due to the novel of William Styron, of 1979, Sophie's Choice, which originated the term "Sophie's Choice" to designate a dilemma. Sophie Zawistowska (played by Meryl Streep in the homonym movie of 1982 directed by Alan J. Pakula) is a Polish woman, emigrated to the United States, who hides her past lived in the concentration camp of Auschwitz. In this concentration camp she was forced by a Nazi soldier to choose one of his sons to be killed. The refusal of Sophie to choose would result in the death of her both children.

The contemporary philosophy of law admits, almost consensually, that the moral and legal field is permeated by conflicts between values and principles[2]. To Robert Alexy is due a weighting formula to solve conflicts between legal principles. Legal systems, since the classical Roman law, had formulas to resolve conflicts between laws, as the principle *lex specialis derogat generali, lex posterior derogat priori* and *lex superior derogat inferiority*. The question of whether the proposed solutions to the moral and legal conflicts are only apparent or definitive solutions is an open question, as well as the admission whether the conflicts really exist or have existence only *prima facie*.

In this article we will not address the ontological question of conflicts, whether they are really existent or not. We address the epistemological question, whether it is possible to conceive them from a theoretical and logical point of view. The ontological question is related to the epistemological question, however, the first one depends on the second one, in the sense that reality depends on the scientific model which explains it, as understood Einstein.[3]

Another distinction adopted in the present article is the division between legal and moral dilemmas; however, both belong to the category of deontic dilemmas, in the same sense that we call deontic logic differentiating it from the modal logic or the epistemic logic. Deontic logic comprises the moral sense and the legal sense of obligation operator.

I- THOMAS AQUINAS AND KANT: TWO SYSTEMS WITHOUT ETHICAL DILEMMAS

In the history of Western philosophy, Aquinas and Kant formulated ethical systems founded on rational principles. The ethics of Thomas Aquinas, largely influenced by Aristotelian ethics, derived some principles from reason that ensured the coherence and consistency of his moral philosophical doctrine.

The thomistic doctrine related to Law is called Treatise on the Law. It is in the Summa Theologica, specifically in its Second Part, questions 90 to 108. The theoretical project of Thomas Aquinas is first, to define the essence, different brands and effects of the law; second, to differentiate the eternal law, natural law and human law, upholding the supremacy of divine law as the ultimate foundation of natural and human law; and finally, Aquinas wanted to instruct the reader in ancient Jewish law (old Testament) and in the Christian new Testament law.

It is not our intention to thoroughly review the work of Thomas Aquinas and his ethics, but merely to point out his division of law into four categories, their traditional scheme of derivation of human law from natural law, and this one from the eternal and divine law.

The Aquina's definition of law is treated during the four articles of Question 90. He says, in

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shall be treating them as the end at the risk of treating my mother as a means. If values are uncertain, if they are still too abstract to determine the particular, concrete case under consideration, nothing remains but to trust in our instincts." Sartre 1989.

2 About Moral and Legal Dilemmas, cf. the special issue of Discusiones VII 2008, Weber 2010 and McConnell 2010.

3"Physical concepts are free creations of the human mind, and are not, however it may seem, uniquely determined by the external world. In our endeavour to understand reality we are somewhat like a man trying to understand the mechanism of a closed watch. He sees the face and the moving hands, even hears its ticking, but he has no way of opening the case. If he is ingenious he may form some picture of a mechanism which could be responsible for all the things he observes, but he may never be quite sure his picture is the only one which could explain his observations. He will never be able to compare his picture with the real mechanism and he cannot even imagine the possibility or the meaning of such a comparison. But he certainly believes that, as his knowledge increases, his picture of reality will become simpler and simpler and will explain a wider and wider range of his sensuous impressions. He may also believe in the existence of the ideal limit of knowledge and that it is approached by the human mind. He may call this ideal limit the objective truth." EINSTEIN and INFELD 1938, p. 33.

the fourth and last article of this Question, that: “Thus, the four previous articles can be deduced from this definition of law: it is nothing more than an ordinance of reason to the common good, made by who take care the community, and promulgated”.[4]

From and after Question Number 91, Aquinas distinguishes four kinds of law: eternal law, natural law, human law and divine law.

Aquinas also distinguished a speculative reason and a practical reason. As in the speculative reason the conclusions are derived from indemonstrable principles, in practical reason human laws are derived from natural law, self-evident and general, which allow, through the use of reason, to derive an applicable law to a particular case.

How human law can be derived from natural law? Thomas Aquinas, in art. 2 of Question 95 indicates two ways: the first one was by logical deduction and syllogism, the second one, in a actual denomination, by exemplification or particularisation:

> “But it must be noted that something may be derived from the natural law in two ways: first, as a conclusion from premises, secondly, by way of determination of certain generalities. The first way is like to that by which, in sciences, demonstrated conclusions are drawn from the principles: while the second mode is likened to that whereby, in the arts, general forms are particularized as to details: thus the craftsman needs to determine the general form of a house to some particular shape. Some things are therefore derived from the general principles of the natural law, by way of conclusions; e.g. that "one must not kill" may be derived as a conclusion from the principle that "one should do harm to no man": while some are derived therefrom by way of determination; e.g. the law of nature has it that the evil-doer should be punished; but that he be punished in this or that way, is a determination of the law of nature.
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> Accordingly both modes of derivation are found in the human law. But those things which are derived in the first way, are contained in human law not as emanating therefrom exclusively, but have some force from the natural law also. But those things which are derived in the second way, have no other force than that of human law.”[5]

Through deduction and particularization, Aquinas conciliated in a creative way human law and natural law. Natural law would be superior to human law, since the second one should be conformed with the first one. There would be no conflicts or dilemmas between the two, because human law would be a logical derivation from natural law. In case of conflict, it would be only apparent, due to an incorrect derivation of human law from natural law.

About moral dilemmas in thomistic philosophy, the following passage of Thomas Aquinas is of fundamental importance, because in it he founded one of the reasons for the impossibility of dilemmas:

> “Wherefore the first indemonstrable principle is that "the same thing cannot be affirmed and denied at the same time," which is based on the notion of "being" and "not-being": and on this principle all others are based, as is stated in Metaph. IV, text. 9. Now as "being" is the first thing that falls under the apprehension simply, so "good" is the first thing that falls under the apprehension of the practical reason, which is directed to action: since every agent acts for an end under the aspect of good. Consequently the first principle of practical reason is one founded on the notion of good, viz. that "good is that which all things seek after." Hence this is the first precept of law, that "good is to be done and pursued, and evil is to be avoided." All other precepts of the natural law are based upon this (...)”[6]

In thomistic ethics there is any moral dilemma because his ethics is based on practical reason, which is derived from speculative reason and from some of principles of Aristotle's Metaphysics. Aristotle sets out by first time, as it is well known, the principle of non-contradiction. In his philosophical conception, or an action is directed to a good, or otherwise, to an evil which should be avoided. There would have any dilemmas because two actions being contrary, one turns to the good and other to the evil, or vice versa.

Aquinas presents a definition, obscure to a contemporary reader, of his conception of eternal law:

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4 Cf. Aquinas 1947.

5 Ibidem.

6 Question 94, art. 2nd , “The natural law”.

> "I answer that, as stated above (Question 90, Article 1 ad 2; Articles 3, 4), a law is nothing else but a dictate of practical reason emanating from the ruler who governs a perfect community. Now it is evident, granted that the world is ruled by Divine Providence, as was stated in the FP, Question 22, Articles 1, 2, that the whole community of the universe is governed by Divine Reason. Wherefore the very Idea of the government of things in God the Ruler of the universe, has the nature of a law. And since the Divine Reason's conception of things is not subject to time but is eternal, according to Prov. 8:23, therefore it is that this kind of law must be called eternal."[7]

Of course, this definition made sense in the Scholastic period, but in today's world, it could no longer be accepted as nothing more than an statement based on the argument of revealed authority of the biblical text.

Of great interest for the moral dilemmas is art. 4 of Question 91. Thomas Aquinas, addressing specifically the divine law, presents one more argument against the existence and possibility of moral dilemmas. Aquinas presents four reasons for the necessity of a divine law:

1st - the man should be oriented towards the end of a eternal happiness by a law given by God;
2nd – [see next paragraph];
3rd – as man is not competent to judge his inner impulses that are hidden, he require for this purpose a divine law;
4th – the divine law forbids all sins, because man, trying to abolish all evil, would abolish also many good and necessary things for human society.

In the second justification for the divine law, Aquinas explicitly justifies the reason why God prevents the emergence of a dilemma:

> "Secondly, because, on account of the uncertainty of human judgment, especially on contingent and particular matters, different people form different judgments on human acts; whence also different and contrary laws result. In order, therefore, that man may know without any doubt what he ought to do and what he ought to avoid, it was necessary for man to be directed in his proper acts by a law given by God, for it is certain that such a law cannot err."

The human judgment is uncertain and, therefore, there are different laws and judgments about human acts. The existence of a divine law ensures a coherent and consistent human law. Thus, the logical conditions of coherence and consistency of a legal system, for Aquinas, are ensured by the supremacy of natural and divine law over human law. In his legal theory, there were no (moral or legal) dilemmas of any kind.

The system of Kant's doctrine of law is, in its conclusions, similar to that of Thomas Aquinas, because *a priori* principles would ensure the consistency of the legal system.

The universal principle of law, according to Kant, is stated as:

> "Every action is right which in itself, or in the maxim on which it proceeds, is such that it can coexist along with the freedom of the will of each and all in action, according to a universal law."[8]

Another way to conceptualize the Kant's law is also affirming it as the set of conditions by which an agency can be in accordance with the will of another, through a universal law of freedom.

For Kant the consistency of his philosophical and ethical system is ensured by the

7 Question 91, art. 1st.
8 Cf. the chapter "Universal Principle of Right" in Kant, 2009.

conformity of individual actions with a universal law that formally governs the wills and freedoms of individuals.

Another important passage in which Kant asserts the impossibility of dilemmas deserves to be quoted:

> "A collision of duties or obligations (collisio officiorum s. obligationum) would be the result of such a relation between them that the one would annul the other, in whole or in part. Duty and obligation, however, are conceptions which express the objective practical necessity of certain actions, and two opposite rules cannot be objective and necessary at the same time; for if it is a duty to act according to one of them, it is not only no duty to act according to an opposite rule, but to do so would even be contrary to duty. Hence a collision of duties and obligations is entirely inconceivable (obligationes non colliduntur). There may, however, be two grounds of obligation (rationes obligandi), connected with an individual under a rule prescribed for himself, and yet neither the one nor the other may be sufficient to constitute an actual obligation (rationes obligandi non obligantes); and in that case the one of them is not a duty. If two such grounds of obligation are actually in collision with each other, practical philosophy does not say that the stronger obligation is to keep the upper hand (fortior obligatio vincit), but that the stronger ground of obligation is to maintain its place (fortior obligandi ratio vincit)". [9]

In the quoted passage Kant mentioned an important principle formulated by him: the obligation implies possibility. In fact Kant postulated that two actions may be both necessary, but may not be both contradictory. Because the duty and the obligation express a practical necessity of certain actions, a collision between obligations and duties is not possible for Kant's point of view.

The Kantian principle that obligation implies possibility will have an important role in standard systems of deontic logic, because this principle is formulated as an axiom of the systems. However, paradoxically, its presence implies the emergence of contradictions and dilemmas in these same deontic systems.

II- TWO ARGUMENTS BASED ON STANDARD MODAL LOGIC AND DEONTIC LOGIC

Some axioms of standard deontic logic, if adopted, result incompatible with the existence of moral dilemmas. A clear exposition of this topic can be found in Terrance McConnell 2010, which we followed in our exposition.

The first axiom can be called Deontic Consistency:

(PC) $OA \rightarrow \neg O\neg A$

This principle states that, intuitively, one action can not be obligatory and prohibited. This principle, in conjunction with another principle of deontic logic:

(PD) $\Box (A \rightarrow B) \rightarrow (OA \rightarrow OB)$ (where $\Box$ means necessity)

conflict when they are used in combination. PD intuitively means that if you do A, entails B, and whether A , then B. The demonstration that PC and PD, when applied together, are inconsistent, is made as follows:

(1) OA
(2) OB
(3) $\Box \neg (B \& A)$
(4) $\Box (B \rightarrow \neg A) \rightarrow (OB \rightarrow O\neg A)$ [an instantiation of $\Box (A \rightarrow B) \rightarrow (OA \rightarrow OB)$ where '$\Box$' means necessity]
(5) $OB \rightarrow O\neg A$ (from 3 and 4)

9 Cf. the Chapter IV, "General Preliminary Conceptions Defined and Explained" (Philosophia practica universalis) in Kant 2009.

(6) O¬ A (from 2 and 5)
(7) OA & O¬ A (from 1 and 6)
(8) OA → ¬ O ¬ A (PC)
(9) O¬ A & ¬ O ¬ A (from 1 and 8)

Line (9) is contradictory. If PC and PD are assumed, then the existence of dilemmas generates an inconsistency. The premises (1), (2) and (3) are the symbolic representation of a dilemma.

The second argument is based on standard deontic logic and it has, as the first example, the first three assumptions representing a dilemma. Two common principles of standard deontic logic are applied in the demonstration. First principle is well known as “Principle of Kant”, and states that the “obligatory” implies “can”. In other words, an obligatory action for an agent must also be a possible action. Symbolically this principle can be denoted by:

OA → ¬ □ ¬ A (for all A) axiom of Kant

The second principle, or the agglomeration principle, says that if an agent is obliged to comply with each of two actions, then he is obliged to fulfill both of these actions:

(OA & OB) → O(A & B) Principle of Agglomeration

The second demonstration is presented as follows:

(1) OA
(2) OB
(3) □ ¬ (A & B)
(4) (OA & OB) → O(A & B)
(5) OA & OB (from 1 and 2)
(6) O(A & B) (from 4 and 5)
(7) O(A & B) → ¬ □ ¬ (A &B) (axiom of Kant)
(8) □ ¬ (A & B) → ¬ O(A & B) (from 7)
(9) ¬ O(A & B) (from 3 and 8)
(10) O(A & B) & ¬ O(A & B) (from 6 and 9)

Thus, whether the axiom of Kant and the principle of Agglomeration are accepted, then a contradiction can be derived.

One way to avoid the contradiction is, of course, deny the validity of the presented principles. The fact is that all of them, when taken separately, are intuitively true. It will not be our purpose in this work to discuss all options and alternatives that were presented in the field of deontic logic in recent decades. In our opinion, a sensible attitude would be, and it is the purpose of this article, instead of trying to adapt the dilemmas to logic, change the logic, so the dilemmas can be adequately represented, for example, in a paraconsistent logic.

The adoption of a paraconsistent logic does not necessarily imply the point of view that the dilemmas are real. But it allows that, whether adopted this philosophical viewpoint, it can be adequately represented in a paraconsistent logic as the underlying logical system.

III- THE MÜNCHHAUSEN TRILEMMA AND THE CONSISTENCY OF ETHICAL SYSTEMS IN CONTEMPORARY PRACTICAL PHILOSOPHY

Hans Albert, in a work entitled “Critical theory of reason”[10], curiously designated a dilemma

10 Hans Albert 1976.

formulated by him, and subsequently it became quite widespread as the “Münchhausen Trilemma”. H. Albert says that every theory, to explain its foundations, is faced with a triple dilemma:

> "If our principle is taken seriously, then the following problem is presented: when it requires reasons for everything, then it will require also a foundation knowledge which is designed - i.e., the set of statements - to justify itself. This leads us to a situation with three alternatives, it seems, that are unacceptable, so the trilemma, in view of the analogy between our problem and the problem of the famous lying baron had to solve a time, I call of Munchausen trilemma. In this case you can only choose between:
> 1st: an infinite regress, which appears to result from the necessity of always, and increasingly, going back in the search of foundations, but in practice it is not possible to carry out and it provides no rule;
> 2nd: a logical circle in the deduction that results from the recovery, in the process of reasoning, of statements that have appeared previously as lacking foundation, and which, being logically faulty, leads likewise to any secure base, and finally;
> 3rd: an interruption of the procedure at a certain point, which, although it is feasible in principle, involve us in an arbitrary suspension of the principle of sufficient grounds.[11]

Hans Albert has a well-known work in the field of epistemology and philosophy of science in the twentieth century. The work of H. Albert is taken as a benchmark by Karl-Otto Apel and Jürgen Habermas when they give reasons to their theories of discourse.

Karl-Otto Apel hopes to avoid the trilemma formulated by H. Albert, referring to the principle of non-contradiction, including its origin in Aristotle, and to the principle of performative contradiction, as the conditions of possibility of the discourse itself:

> "The criterion for the incontestability of the presuppositions of argumentation is characterized as the pragmatic or performative self-contradiction that would appear in case of contestation, thus, for example, if someone wanted to say: I object with arguments that I am arguing and so someone should recognize as undisputed the existence of assumptions and rules of valid arguing”.[12]

Apel intends to base the rules of discourse in a transcendental way, in the same sense of Kant. However, he states that his theory also assumes a pragmatic validity, so he calls his way of grounds of "transcendental-pragmatic". Habermas disagrees with Apel in this point, so he proposes a “universal-pragmatic”.

Basically Apel states that a fundamental rule of practical discourse is the principle of non-contradiction. The fact that someone is arguing presupposes the existence of the argumentative activity and arguments, so anyone who argues that there is no argument incurs in a performative contradiction.

Under the German legal philosophy, beyond Karl-Otto Apel and J. Habermas, the theory of legal reasoning well-known and much widespread today is that of Robert Alexy, exposed in one of his major works, *Theory of Legal Argumentation*. Alexy started from a theory of rational discourse, based, in general, in Habermas's Discourse Theory, and considers the legal argumentation as a part of general practical discourse.

Alexy quotes what would be, for Habermas, an ideal speech situation. It was outlined four requirements for Habermas's ideal speech situation:

> 1 - All participants in a discourse must have the same possibility to use communicative speech acts, and can start a speech and keep it at any time with questions and answers, and counter-arguments;
> 2-All participants in the discourse must have the same opportunity to make statements, interpretations, recommendations, explanations and justifications, and discuss, support or contradict the claim of validity of them;
> 3 - Only you admit in the speech that speakers who have, as actors, the same possibilities to express (representing speech acts) their opinions, feelings, intentions, etc..
> 4 - Only you acknowledge the speakers who have in the speech, the same opportunities as actors to use regulative speech acts, such as order, permit, prohibit, pledge, charge, etc...[13]

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11 Hans Albert 1976, p. 26-27.
12 Karl-Otto Apel 1993, p. 316.
13 Cf. Alexy 1997, p. 127.

Following the model of Habermas, Alexy presents the following basic rules of general practical discourse:

1 - No speaker may contradict himself;
2 - Every speaker may assert only what he believes;
3 - Every speaker who applies predicate F to an object must be disposed to apply F also to any other equal object in all material respects;
4 - different speakers may not use the same words with different meanings.[14]

Alexy formulates also other categories of rules, like rules of grounds, the rules of charge of argumentation, and specific rules of legal discourse, as the dogmatics rules of argumentation and the general rules for the use of precedents. For the purpose of this article, is not essential that we consider the set of all rules of the argumentative model proposed by Alexy. For our purposes, the first three rules are more important. Alexy presents the following justification for the rule number one:

> “Rule one refers to the rules of logic. These rules are presupposed here. We have to do, though, a couple of observations. Firstly, it is necessary to point out that the rules of logic apply also to normative propositions, which remains problematic. If one considers the logic as 'the science of most general laws of truth' and this is understood further that normative propositions are incapable of truth, one could reach the conviction that the laws of logic do not apply to normative propositions. This issue has been discussed under the name “Jorgensen's Dilemma”. This "dilemma" can nevertheless be easily avoided. One way is to elect instead the values 'true' and 'false', values such as 'valid' and 'invalid' or 'lawful' or 'illicit'. Another way is to show that the existence of expressions like 'and', 'if ... then', 'all' and 'some' in normative statements is already a reason to think that there are logical relationships between such statements. The third and probably best way is to built semantics (model theory) in which normative statements can also be rated as true or false.
> The second point is closely connected with this. The first express reference to the rules of logic does not refer only to classical logic, but mainly to deontic logic that has, a few years ago, a troubled development and not yet completed. The prohibition of does not contradict itself also refers to deontic inconsistencies.”[15]

Alexy, in dealing with the grounds of normative propositions, positioned himself to the question of how to avoid the Münchhausen Trilemma. For Alexy, the Trilemma can be overcome considering that the rules of discussion are not only logical rules, but also pragmatic rules:

> "This situation, called by Albert as “Münchhausen Trilemma”, is not without exit. The situation can be avoided if the requirement of an uninterrupted grounds through each proposition to another proposition is replaced by a series of requirements on the activity of stating reasons. This requirement can be formulated as rules of rational discussion. The rules of rational discussion do not refer, such as that of logic, only to propositions, but also to the behavior of the speaker. In this sense, they can be described as 'pragmatic rules'. Compliance with these rules certainly would not guarantee the ultimate certainty of the entire result, but this result is characterized as rational. Rationality, therefore, can not be equated with absolute certainty. Herein lies the fundamental idea of the theory of rational practical discourse.”[16]

As noted above, Apel, Habermas and Alexy assume the principle of non-contradiction as a necessary foundation for the logical possibility of pragmatic and rational argumentative discourse. Similarly, when proposing a solution to the Münchhausen Trilemma of H. Albert, they are proposing a pragmatic version of the principle of non-contradiction through the concept of “performative contradiction”. Among them, Alexy seems to be more conscious of the fact that the legal argument does not intend to be rational, but reasonable, which implies a greater flexibility of the principles and rules of argumentation.

In the next section we explain our position, which is basically to defend that the principle of non-contradiction, as claimed by Apel, Habermas and Alexy, is not a necessary requirement for the logical and pragmatic possibility of practice and legal reasoning.

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14 Alexy 1997, p. 185.
15 Alexy 1997, p. 186.
16 Alexy 1997, p. 177.

With regard to the Münchhausen Trilemma, as proposed by H. Albert, we believe that his conception is problematic, since it brings the view that the use of the axiomatic method is impossible, which it is not true, because it has been widely used in contemporary logic and axiomatization of scientific theories, such as physics and economy. However, the arguments that would challenge Albert's Trilemma would be outside the scope of this article.

IV- CONSISTENCY: A NECESSARY PRINCIPLE TO ETHICS?

Ruth Barcan Marcus, in his article titled "Moral Dilemmas and Consistency", defines the consistency of a system of moral rules:

> "Consider, for example, a silly two-person card game. (This is the partial analogue of a two-person dilemma. One can contrive silly games of solitaire for the one-person dilemma.) In the two-person game the deck is shuffled and divided equally, face down between two players. Players turn up top cards on each play until the cards are played out. Two rules are in force: black cars trump red cards, and high cards (ace high) trump lower-valued cards without attention to color. Where no rule applies, e.g., two red deuces, there is indifference and the players proceed. We could define the winner as the player with the largest number of tricks when the cards are played out. There is an inclination to call such a set of rules inconsistent. For suppose the pair turned up is a red ace and a black deuce; who trumps? This is not a case of rule indifference as in a pair of red deuces. Rather, two rules apply, and both cannot be satisfied. But, on the definition here proposed, the rules are consistent in that there are possible circumstances where, in the course of playing the game, the dilemma would not arise and the game would proceed to a conclusion. (…) On the proposed definition, rules are consistent if there are possible circumstances in which no conflict will emerge. By extension, a set of rules is inconsistent if there are no circumstances, no possible world, in which all the rules are satisfiable."[17]

According to the definition of R. B. Marcus, a set of rules is consistent if there is a possible world where all rules are capable to be obeyed in all circumstances of that world and, accordingly, the rules are consistent if there are possible circumstances in which no conflict will arise. These would be the "normal circumstances" of the card game. Moreover, a set of rules is inconsistent if there is no circumstances, or no possible world, in which all rules are satisfied.

In the sense proposed by Marcus, the rules that usually collide in a moral dilemma would not be inconsistent rules, because there would be circumstances in which the rules are fully respected. The position advocated by Marcus, in the article mentioned, is that the dilemmas can not be avoided. What we can do, as moral agents, is try to minimize them. She considers the case of non-spontaneous abortion and the various arguments that can be offered to defend the various possible positions, but for her, no solution can be recommended as the perfect solution that leaves no 'residue':

> "Consider, for example, the controversies surrounding nonspontaneous abortion. Philosophers are often criticized for inventing bizarre examples and counterexamples to make a philosophical point. But no contrived example can equal the complexity and the puzzles generated by the actual circumstances of fetal conception, parturition, and ultimate birth of a human being. We have an organism, internal to and parasitic upon a human being, hidden from view but relentlessly developing into a human being, which at which at some stage of development can live, with nurture, outside of its host. There are arguments that recognize competing claims: the right to life of the foetus (at same stage), versus the right of someone to determine what happens to his body. Arguments that justify choosing the mother over the foetus (or vice-versa) where their survival is in competition. Arguments in which foetuses that are defective are balanced against the welfare of others. Arguments in which the claims to survival of others will be said to override survival of the others will be said to override survival of the foetus under conditions of great scarcity. There are even arguments that deny prima facie conflicts altogether on some metaphysical grounds, such as that the foetus is not a human being or a person until quickening, or until it has recognizable human features, or until its life can be sustained external to its host, or until birth, or until after birth when it has interacted with other persons. Various combinations of such arguments are proposed in which the resolution of a dilemma is seen as more uncertain, the more proximate the foetus is to whatever is defined as being human or being a person. What all the arguments seem to share is the assumption that there is, despite uncertainty, a resolution without residue; that there is a correct

17 Marcus, 1980, p. 128-129.

> set of metaphysical claims, principles, and priority rankings of principles which will justify the choice. Then, given the belief that one choice is justified, assignment of guilt relative to the overridden alternative is seen as inappropriate, and feelings of guilt or pangs of conscience are viewed as, at best, sentimental. But as one tries to unravel the tangle of arguments, it is clear that to insist that there is in every case a solution without residue is false to the moral facts."[18]

Marcus, in the same article cited above, argues that, in the sense proposed by her, the dilemmas are real. Alluding to the ethics of Kant and his well known postulate to transform individual action into a universal maxim, she proposes a similar principle, under which the agent must "try to maximize" the ruling principle of his action toward a universal one, and therefore minimize the emergence of the dilemmas.

The philosophical position of Marcus provides arguments to defend the view that the deontic dilemmas are real. In the next section we expose the thesis of the relation of deontic dilemmas with paraconsistent logic.

V- AN ARGUMENT FROM PARACONSISTENT LOGIC

Since the beginning of XX century, there were several attempts to formulate logical systems that admit contradictions. But only from the 50's and 60's the logical systems that tolerate contradictions were developped in its actual meaning. The word "paraconsistency" was coined in 1976 by the peruvian philosopher Francisco Miró Quesada.[19]

A paraconsistent logic is a logical system that does not have the principle of non-contradiction as an essential principle. In this logic it is relative, so the system can admit inconsistencies and contradictions. In classical logic, from a contradiction, any proposition can be deduced. This feature is known as the "Principle of explosion", or *ex contradictione sequitur quodlibet*, which means that from a contradiction, one can deduce anything. In formal terms, that principle can be expressed as:

$$A, \neg A \vdash B \text{ or } (A \& \neg A) \rightarrow B \text{ or } A \rightarrow (\neg A \rightarrow B)$$

$\vdash$ which represents a logical consequence. So if a theory is inconsistent, it results trivial in the sense that all well-formulated expression is a theorem. The distinguishing feature of a paraconsistent logic is that in it the principle of explosion is not valid. Different from classical logic and other logics, paraconsistent logics can be used to formalize inconsistent but non-trivial theories.

In classical logic, if the system is inconsistent, it is trivial. Inconsistency and triviality are mutually implicated. The paraconsistent systems can base inconsistent theories but avoiding the triavility.

The central idea is well explained by Costa, Krause and Bueno:

> "In a few words, paraconsistent logics (PL) are the logics of inconsistent but nontrivial theories. A deductive theory is paraconsistent if its underlying logic is paraconsistent. A theory is inconsistent if there is a formula (a grammatically well-formed expression of its language) such that the formula an its negation are both theorems of the theory: otherwise, the theory is called consistent. A theory is trivial if all formulas of its language are theorems. Roughly speaking, in a trivial theory 'everything' (expressed in its language) can be proved. If the underlying logic of a theory is classical logic, or even any of the standard logical systems like intuitionistic logic, inconsistency entails triviality, and conversely. So, how can we speak of inconsistent but nontrivial theories? Of course, by changing the underlying logic to one which admits inconsistency without making the system trivial. Paraconsistent logics do just this job."[20]

In paraconsistent logic, a contradictory proposition in classical logic may be true, as in the

18 Marcus 1980, p. 131-132.
19 For a good introduction, cf. Costa, Krause, Bueno 2007.
20 Costa, Krause, Bueno 2007, p. 791.

case of the formula (A∧ ¬A). The interesting possibility presented by the paraconsistent logic is the possibility to admit contradictory situations, as are the dilemmas, and even consider such situations as true. In classical logic, from a true dilemma, the system becomes trivial; in the case of paraconsistent logic not, the dilemma does not necessarily trivializes the system. The dilemma can be represented, operated, isolated, and the inference rules remain valid. In this sense, paraconsistent logic proves that consistency is not a necessary requirement for a logical system.

The paraconsistent logics have been used successfully in artificial intelligence of computer systems. In systems based on classical logic, computers, in front of to contradictory situations, for example, the reading of a faulty traffic light that indicates, at the same time, for the vehicles continue (light green) and for the vehicles stop (red light), generally crash and do not process any further information. If the computer is based on a paraconsistent system, there is not necessarily a lock, because the system can continue operating. Situations involving more complex contradictions, such as databases containing inconsistent information, can also be operated by computers based on paraconsistent systems.

Some paraconsistent deontic logics were specially formulated to formalize deontic dilemmas. In this sense, the work of N. C. A. da Costa, Walter Carnielli, Leila Z. Puga and Roberto J. Vernengo[21] were pioneers in the logical formalization of deontic dilemmas.

From the reconstruction of formal legal reasoning through a paraconsistent deontic logic, deontic dilemmas can be understood as dilemmas in which both options are valid options.The problem of choosing between the alternatives depends on the particular case and which inference rule is adopted. According to a classical system, only one of two alternatives is valid. In a paraconsistent system, one alternative is not excluded *a priori*, since both alternatives are preserved. The paraconsistent systems allow even the acceptance of contradictory beliefs.

In this sense, a curious argument for the convenience of paraconsistent logics is that certain cultures have beliefs that do not satisfy the principle of non-contradiction. N.C.A. da Costa, Steven French and O. Bueno argued that the Zande culture might have a paraconsistent logic that governs their system of beliefs:

> "The Azande, as Evans-Pretchard (1937) noted, apparently maintain inconsistent beliefs (in a sense to be made precise later) concerning witchcraft. They assume, one the one hand, that the presence of a certain witchcraft-substance constitutes both a necessary and a sufficient condition for a person to be classed a witch. Furthermore, this substance is inherited by the same-sexed offspring of a witch. So, if a certain person (a man, for instance) in a Zande clan (which is biologically determined) is a witch, it follows (by classical logic) that every man in this clan is a witch. More explicitly, we can state with Jennings (1989, 279) that:
> (1) All and only witches have witchcraft-substance.
> (2) Witchcraft-substance is always inherited by the same-sexed children of a witch.
> (3) The Zande clan is a group of persons related biologically to one another through the male line.
> (4) Man A of clan C is a witch.
>
> ---
>
> (5) Every man in clan C is a witch.
> However – and it is exactly here that the difficulty is set – Azande accept the premises, but not the conclusion of this argument.
> (…)
> In other words, given that, from the viewpoint of classical logic, the set constituted by propositions (1)-(4) and the negation of (5) is inconsistent, and in as much as Azande believe them, they hold inconsistent beliefs.
> (...)
> This suggestion is that it is possible to model Zande reasoning without having to meet an *a priori* consistency requirement, thus putting forward a different approach to the whole issue. (…) These are then some of the reasons to introduce paraconsistent logic in this debate."[22]

The set of inconsistent beliefs of the Azande is similar to the cases in which a judge, who has to utter a sentence, is faced with a situation in which laws and legal provisions are in contradiction, or are, by the own proper circumstances of the case, configured so as it not allow its

21 About this point cf. Serbena 2005, Serbena 2010, and Serbena, Cella, Rover 2010.
22 Costa, Bueno, French, 1998, p. 45-46.

full fulfillment. Generally judges reinterpret the legal dispositions in order to dispose of the contradiction, but there are cases in which even the interpretive methods are insufficient to reconstruct the case from a consistent set of premises. Such cases are recognized as authentic dilemmas.

One example cited by Neil MacCormick illustrates this situation. The Court of Appeal in England had to judge a real case of childrens, in which two siamese twins should be separated through a medical operation. Keeping them together would mean the death of both, however, with the separation, one could live, the other not. So the English Court decided that "the particular circumstances of the Siamese twins Jodie and Mary, an operation to separate them and let Jodie live was legally permissible and even mandatory, although the effect of this could also be to put an end to the life of Mary."[23]

Someone might interpret the decision as a mandate for the doctors kill Mary. However, the Court emphasized the extreme singularity of the case, and the fact that Mary would not survive for a long time. Of evils, they opted for the minor.

Another possible answer would be saying that the law had arrived at its limit and there was nothing to do. We disagree with this statement. What we advocate is that, as in the the case of Siamese twins, the deontic dilemmas can be formalized to a paraconsistent logic. This logic cannot offers a solution, however, may be a fundamental method for a better understanding of the deontic dilemmas in the Legal Theory and Philosophy of Law.

VI- BIBLIOGRAPHY

ALBERT, Hans. *Tratado da Razão Crítica* (Treaty of Critique Reason). Translated to portuguese by Idalina Azevedo da Silva et.al. Rio de Janeiro: Tempo Brasileiro, 1976.

ALEXY, Robert. *Teoría de la Argumentación Jurídica: la teoría del discurso racional como teoría de la fundamentacion jurídica.* (Theory of Juridical argumentation). Transl. Manuel Atienza and Isabel Espejo. Madrid: Centro de Estudios Constitucionales, 1997.

APEL, Karl-Otto. Fundamentação última não-metafísica? In: STEIN, Ernildo; BONI, Luis de (orgs.). *Dialética e liberdade*. Petrópolis, RJ: Vozes; Porto Alegre: Editora da Universidade Federal do Rio Grande do Sul, 1993.

AQUINAS, Thomas. *The Summa Theologica*. Translated by Fathers of the English Dominican Province. Benziger Bros. Edition, 1947. Available at <http://www.josephkenny.joyeurs.com/CDtexts/summa/FS/FS091.html#FSQ91OUTP1>

COSTA, N.C.A. Da; BUENO, Otavio; FRENCH, Steven. Is there a zande logic? *History and Philosophy of Logic*, Vol. 19, Issue 1, p. 41-54, 1998.

COSTA, N.C.A da; KRAUSE, Décio; BUENO, Otávio. Paraconsistent Logics and Paraconsistency. In: Handbook of the Philosophy of Science (Philosophy of Logic). Dale Jacquette (ed.). Elsevier, p. 791-911, 2007.

Dilemas Morales y Derecho. *Discusiones* VIII, Bahía Blanca: Universidad Nacional del Sur Press, 2008. Digital edition: Alicante : Biblioteca Virtual Miguel de Cervantes, 2009. Available at <http://bib.cervantesvirtual.com/servlet/SirveObras/01473951100415151032268/index.htm>

EINSTEIN, Albert and INFELD, L. *The evolution of Physics*. The Cambridge Library of modern science. C. P. Snow (ed.). London: Cambridge University Press, 1938.

23 MacCormick 2005, p. 119 (in brazilian edition)

KANT, Immanuel. *Introduction to the Metaphysic of Morals.* Translated by W. Hastie. Ebooks of University of Adelaide, 2009. Available at <http://ebooks.adelaide.edu.au/k/kant/immanuel/k16m/#section2.4>

MACCORMICK, Neil. Rhetoric and The Rule of Law. Oxford University Press, 2005.

MARCUS, Ruth Barcan. Moral Dilemmas and Consistency. *Journal of Philosophy*, 77 (3), p. 121-136, 1980.

MCCONNELL, Terrance. Moral Dilemmas. *The Stanford Encyclopedia of Philosophy* (Summer 2010 Edition), Edward N. Zalta (ed.). Available at <http://plato.stanford.edu/archives/sum2010/entries/moral-dilemmas/>

SARTRE, Jean Paul. *Existentialism from Dostoyevsky to Sartre*. Walter Kaufman (ed.). Translated by Philip Mairet. Meridian Publishing Company, 1989. First Published: World Publishing Company, 1956.

SERBENA, C. A. ;CELLA, J.R.G.; ROVER, A. J. . The Connections between Morality and the Connections between Morality and Law from a Logical Point of View. In: Tomasz Gizbert-Studnicki; Mateusz Klinowski. (Org.). *Law, liberty, morality and rights*. Polska: Wolters Kluwer, v. , p. 251-259, 2010.

SERBENA, C. A. . The Theoretical Relevance of Paraconsistent Deontic Logic. In: Jan-Reinard Sieckmann. (Org.). *Legal Reasoning: The methods of Balancing*. 1 ed. Stuttgart: Franz Steiner Verlag - Nomos, v. 124, p. 9-27, 2010.

SERBENA, C. A. Colisiones de principios y logica paraconsistente anotada.. *Ideas y Derecho*, Buenos Aires, v. 5, p. 275-275, 2005.

WEBER, Zach. Paraconsistent logic. *The Internet Encyclopedia of Philosophy*, ISSN 2161-0002. Last updated: April 14, 2010. Originally published: April 14, 2010. Available at <http://www.iep.utm.edu/para-log/>