

ISSA Proceedings 2006 - Circular Arguments Analysis



1. *Circular Arguments and Begging the Question (BTQ) or Petitio Principii*

Consider these three definitions:

- Standard Definition of Fallacy: “*argument that seems valid but is not*” (Hamblin 1970, p. 12)

- Standard Definition of Circular Reasoning: An argument in which one of the premises is identical or dependent to the conclusion to demonstrate.

- Definition of Logical Validity: An argument is valid if its premises cannot all be true without its conclusion being true as well.

Now, consider this argument: (1)P, therefore P

Taking into account the above definitions, this argument is circular, valid, and non-fallacious. Even so, there seems to be something wrong with this reasoning. If we interpret it by an example of a natural language (“it is snowing, therefore it is snowing”), it is obvious that this argument is not adequate to fill out the argumentative aim it is supposed to have (i.e. to persuade someone to believe about the actual weather). This type of arguments, out of the context of formal logic, has often been considered cases of the BTQ or *petitio principii* fallacy (later on, we will see more types of arguments within the fallacy of BTQ). If, as we have said, the fallacy of BTQ falls out of the Standard Definition of Fallacy, where can we situate its analysis? It is clear that we cannot do it only in terms of logical validity and circularity, so it must be something else.

As Tindale (1999, p. 162) points out, the emphasis to define fallacies as invalid arguments is due to a tradition that has stressed the logical sense of argument at the expense of other senses (dialectical, rhetorical). In the case of *begging the question*, it is clear that its analysis cannot be done only in terms of logical validity, so we have to consider those other dimensions of argumentation. To begin with, let’s present some different ways of explaining this fallacy that have arisen along the time.

1.1 *Aristotle’s analysis*

In Aristotle’s work, we can make out two different ways of dealing with *petitio*

principii: Epistemic View: In the Prior Analytics (64b), he defines *petitio principii* as a fallacy committed when attempting to demonstrate by itself something that it is not self-evident. In this work, he considers that this fallacy doesn't fulfil the condition of *priority requirement* in an argumentation in which the main aim is to demonstrate something. His definition of priority requirement is the following: "*argument in a demonstration must proceed from the premises that are better established -more certain and prior- in relation to the conclusion to be demonstrated*" (Aristotle, Prior analytics 64b 30-35).

Dialectical View: In the Topics (162b 35-163a 12), Aristotle considers that a participant in a disputation commits *petitio principii* if she asks her opponent to beg the very proposition to be proved. It is as if one participant in a dialogue has to defend her standpoint or point of view (which the opposite has called in question) and she defends it by using the same view not defended yet. For example:

- (1) Why p?
- (2) Because p.

Aristotle says that although it is not a logical error, this kind of redundancy or repetition is not acceptable in a dialogue. He also points out five different forms of *petitio principii* which can be found in a dialogue. Those forms could roughly be reclassified according to the notions of equivalence and dependence which we'll consider later on.

1.2 The actual literature concerning the analysis of this type of argumentative error is very broad and we can find different points of view to explain its nature. Some of the more relevant are the following ones:

Sceptical Thesis; *Petitio principii* is not a real fallacy, so, there is no need to characterize it.

- Robinson: There is a contradiction in asserting that this type of arguments is bad, because in his opinion they are conclusive. According to Robinson, there are only two proper ways of condemning an argument. One is to say that the conclusion does not follow from the premises. The other one is to say that the premises aren't true. BTQ seems to be neither of these cases. (Robinson 1971, p. 38-39). His analysis is purely formal, but, as we have just said, we think that for a correct analysis of BTQ we need other elements beyond those included in a purely

formal approach.

Positive Thesis: It is possible to define this type of arguments in an adequate way.

- Hoffman: He tries to give an explanation of the notion of *petitio principii* by means of the concept of *propositional identity*. According to him, if an argument has some premise that is identical (syntactic or semantically) to the conclusion, it is not a real argument, but an assertion, because there is no need for us to take into account the rest of the premises.

This characterization doesn't take into account all the cases of *petitio principii*, only the case of equivalence between a premise and the conclusion. But there are other cases too in which there is no propositional identity, for example, the following argument, that is currently considered a clear case of circular reasoning:

(1) *The Bible is the revealed word of God*

Bible says that God exists

Therefore, God exists

- Sanford: Psychological characterization. According to this author, a circular argument is a fallacy of *petitio principii* if it can't increase our confidence in the truth of its conclusion or, in other words, if the person to whom the argument is directed accepts or believes a premise only because she accepts or believes the conclusion.

This characterization supposes a new step with respect to the above views, but even so, it is clear that, the evaluation of the arguments should not be dependent on the beliefs of the actual agents in the argumentation but should remain closer to the idea of a reasonable audience.

- Biro: Epistemic characterization. Definition of *petitio principii*:

"... an epistemic non-serious one (argument)". "... an epistemically serious argument was said to be one whose premises were more knowable than its conclusion". (Biro 1984, p. 239). The concept of epistemic seriousness refers here to the propositional content of the argument, not to the form of it. For Biro, even though it is necessary to analyse the form of the argument, it is not enough to characterize all types of *petitio principii* (criticism to Hoffman).

He keeps on the idea that the relative propositional knowledge he suggests refers only to the relationship between the grade of knowledge of the premises with

respect to the grade of knowledge of the conclusion, not to the relativism of the audience or the arguer (criticism to Sanford).

Nevertheless, we think that the knowledge of the premises or the conclusion is also relative to the agents (after all knowledge is true belief) and can vary from one agent to other. So, the critics he does to Sanford can be of application here too. Moreover, in our opinion, he does not offer a very precise analysis of the notion of knowability, nor precise criteria for determining the relative knowledge that different agents could have about the same proposition.

From our point of view, the above definitions don't take us far beyond the analysis Aristotle gave, although we can appreciate a more general epistemic view. They also lead us to raise several questions concerning the lack of a satisfactory explanation of this fallacy: Is Begging the Question really a Fallacy? If so, is the Theoretical Unity of the Fallacies Possible?

2. Is Begging the Question really a Fallacy? Is the Theoretical Unity of the Fallacies Possible?

Let's begin this part of the work by setting down our departure points. We will consider BTQ as a circular argument used somehow viciously (although we should precise the term "viciously", by now, let's say that, in our opinion, not all the circular arguments are vicious).

In order to analyse circular arguments we can classify them according to two to two different criteria:

- An argument based either on equivalence (semantic or syntactic), or on an epistemic dependence between the premises and the conclusion. (Walton 1982).
- Arguments whose premises are based either on knowledge about the world (including a priori knowledge), or on personal beliefs (contentious beliefs).

In the both cases, the analysis of circular arguments is more straightforward in the case of equivalence between premises and conclusion and in the case of circular arguments based on knowledge about the world. Nevertheless most of the authors take the option of doing a joint analysis of all the cases.

There are interesting proposals related to the questions raised in the title of this section. We will consider only three of them connected directly to the analysis of BTQ.

2.1 BTQ, as a fallacy based on ambiguity?

Asked about the possibility of a theoretical unification of fallacies, Powers (1995, 1995a) proposed the *One Fallacy Theory*.

“One Fallacy Theory: There is only one fallacy; equivocation. By “equivocation”, I mean any playing on an ambiguity. So all fallacies involve playing on some ambiguity, according to the One Fallacy Theory”. (Powers 1995a, p. 303)

As a consequence of his theory, his definition of fallacy is the following: *“A fallacy is committed when the argument that is not good nonetheless appears to be good.”* (Powers 1995, p. 287) In an argument, this concept of *goodness appearance* can appear in several forms:

- A not-valid (deductive) argument can appear as valid.
- A weak inductive argument can appear as strong.
- A dialectic non-adequate argument can appear as adequate.

If for this theory there is no fallacy without the pretension of goodness, it is problematic for explaining BTQ. Accordingly, for Powers, we cannot consider it as a fallacy because there is no ambiguity in it, and it is valid. So, what's wrong with it? Powers doesn't consider it as an argument. For him, the internal presupposition is not justified and there is no intention to justify it. However, in our opinion, several cases of circular reasoning can be used to persuade someone about an issue in a particular context, and this is, in our opinion, one of the aims of arguments. The redundancy or repetition of some proposition, in some cases, make an idea or statement clearer or more intelligible to the audience and so, it can carry out an effect of persuasion.

2.2 BTQ, dialectic-epistemic-pragmatic analysis

2.2.1 Pragma-Dialectics on BTQ

Van Eemeren & Grootendorst (1987, p. 288):

“advancing an argument that amounts to the same thing as the standpoint”

Pragma-dialecticians see BTQ as the violation of the sixth rule, of the list of ten rules governing any critical discussion (dialectic point of view).

The sixth rule or starting point rule establishes that a standpoint must be regarded as conclusively defended if the defence takes place by means of arguments belonging to the common starting point (epistemic point of view).

This rule applies to the argumentation stage, and in general, can be violated both by the protagonist and the antagonist, but in the case of BTQ, only the protagonist can make this violation. In our opinion, in ordinary life arguments most of the time it is too difficult to appreciate explicitly which proposition belongs to the

common starting point of both parts in an argument. Moreover, the circular form of the argument is often due to some implicit premise. So, in order to see if the protagonist has violated this rule, it is necessary a more precise analysis of the context of the argument (pragmatic point of view) and, in our opinion, as today, this is still to be done. Moreover there are some other common criticisms in relation with this theory:

(1) The fallacy of *Many questions* is analysed as the violation of the same rule, so it is not clear which is the theoretical difference between them.

(2) When we propose a proposition falsely as a common point for both agents in a dialogue, there is an intention (for the protagonist) to escape from the burden of proof. In this way, we try to eliminate the possible doubts of the antagonist with respect to the standpoint. To do so, there are some techniques, and the fallacy of BTQ is one of them. The protagonist uses the same premise to defend the standpoint that must be defended. But, if there is an intention to escape from the burden of proof, we can consider that this fallacy violates also the second rule (whoever advances a standpoint is obliged to defend it if asked to do so; see Eemeren & Grootendorst 1987, p. 285). So, in our opinion, although Pragma-Dialectic's rules enable us to detect and give an explanation of begging the question, they can't account to define the real nature of this fallacy.

(3) *"the problem of seeing all violations of the rules of a critical discussion as fallacious, fails to distinguish between the relatively trivial violations, blunders (non-fallacious errors) and fallacies (more serious, systematic error)."* (Walton, 1995, p. 235).

Considering the above points, we think that even though the whole theory is a good improvement with respect to other analysis, in its actual form, it is not able to explain the specific theoretical error committed by BTQ (and also by other fallacies). Nevertheless, we can appreciate the defence of a pragmatic analysis of the context of the argument and, although in our opinion, it has still to be stated more precisely, we think that this is the way to follow with arguments in ordinary language.

2.2.2 Walton on BTQ

Walton (1991, p. 285) considers BTQ a pragmatic fallacy according to the following definition:

"... circular reasoning advanced by its proponent as a systematic kind of tactical maneuver designed to frustrate its respondent from raising critical questions

about the premises, or the evidential basis of the premises."

According to Walton, an argument has to meet two conditions in order to be considered a case of BTQ (Walton 1995, p. 230):

- There must be a circular sequence of reasoning, where the conclusion to be established is either identical to one of the premises, or the premise in question depends on the conclusion.*
- The circular sequence of reasoning must be used illicitly in a context of dialogue (conversation) to escape the proper fulfilment of a legitimate burden of proof in that context.*

This second condition is, in our opinion, an important advantage with respect to others definitions, since, in general, and except for the pragma-dialectical account, only epistemic conditions have been proposed to characterize *begging the question*. Moreover, Walton elaborates Pragma-dialectic's dialectical idea of argumentation to include other types of dialogue with different goals to fulfil depending on the type of dialogue.

To determine whether an argument meets both of the conditions above shown, he proposes an analysis of the argument in three steps:

Dialectic: Argumentation is always considered in a dialectical context, so, first we have to examine whether we have an unavoidable circular argument in the argumentation in question, because, in principle, a circular argument does not seem very acceptable to lessen the doubts of an antagonist about a critical point.

Epistemic: We should establish that if the argument meets some epistemic standards: (Walton 1995, p. 234): *"...evidence that the context of dialogue is one in which successful argumentation must meet a requirement of evidential priority..."*

Definition of evidential priority: *"The premises must be better established than the conclusion that is to be proved from them"*. (Walton 1992, p. 142)

For example, in a persuasion dialogue, are the premises more acceptable than the conclusion? In an inquiry, are the premises more knowable than the conclusion? In general, does the argument meet its probative function, i.e., does it meet the burden of proof?

Pragmatic: Finally, we should analyse the argumentation with respect to the pragmatic context in which the argument is uttered in order to determine

whether we have a case of fallacy or a simple case of weak or flawed argumentation. We have to raise questions about the argumentative tactics used by the proponent, to see whether the error in the argument is inevitable (fallacy) or, whether we can consider it only as a deception (blunder). Although Walton is not very explicit drawing the line between those cases, we associate it with the intention of the protagonist to mislead the antagonist in order to give a semblance of correctness in the context of the argument, and with the fact that he intentionally poses a serious obstacle to the realization of the goal of a dialogue.

To sum up, to look up for circularity and to find out if the premises aren't evidentially prior to the conclusion are necessary conditions for this fallacy, but detecting these errors is not sufficient, because they don't give us a complete explanation of its nature.

As we have already said, Walton's account of begging the question supposes an improvement with respect to other treatments of this fallacy because he introduces an analysis of the argument on three levels and for different types of dialectical contexts.

Moreover, Walton's analysis takes into account most of the ideas of the classical explanations of BTQ, and furthermore, it is more systematic than many. Also, comparing with the Pragma-Dialectical account, Walton's explanation follows a more traditional way of analysis, in the sense that he attempts to distinguish more clearly the formal, epistemic or pragmatic aspects or errors which can occur in this type of arguments.

2.3 BTQ as an epistemic fallacy

In the last years, Ikuenobe (2002, 2004) has claimed for a turn back to the definition of the fallacy as a kind of epistemic failure in reasoning.

"a fallacy is an error in reasoning, which involves illegitimately assuming or ignoring a contentious or significant belief that needs to be proved which has not been proved" (Ikuenobe 2002, p. 421)

If that, it immediately raises the question of whether BTQ is really a fallacy and if so, what kind of epistemic failure does it commit.

His definition of BTQ is the following: *"an epistemic error involving lack of adequate proof"* (Ikuenobe 2002, p. 421). *"To beg the question, an arguer uses a method to create the illusion that there is an adequate support for the proposed view"* (Ikuenobe 2002, p. 428).

He doesn't accept any of the views of the different authors that have tried to give

an explanation of BTQ before:

"Errors in proof do not derive solely from linguistic use with respect to ambiguity (...) a fallacy is fundamentally an epistemic error, it is more than a linguistic deception and an ambiguity (criticism to Power), it does not only occur in the context of dialogues (criticism to Walton), and it is not simply violations of rules of adequate communication and critical discussions (criticism to Pragma-Dialectic)(...) It is a violation of some epistemic standard about adequate proof."(Ikuenobe 2002, p. 427-428).

For Ikuenobe, it is not obvious that the sole purpose of the process of argumentation or dialogue is to resolve a discussion as Pragma-Dialectic proposes. Arguments, in the broad sense, perform a number of functions, such as to justify, inform, refute, explain, persuade... and so, an important and fundamental element of these functions is epistemic: to prove a point or to make it understandable to others in order to persuade them. In consequence, for him pragma-dialectical rules do not wholly appreciate the epistemic function and the nature of argumentation.

Nevertheless, as we already have seen, Pragma-dialectic also considers that there is an epistemic error in BTQ, but just not the only one. According to Ikuenobe, Walton's theory has two major flaws (Ikuenobe 2002 p. 425):

- (1) It makes a fallacy relative to different contexts of a type of dialogue and their goals, and also to the intent to argue with respect to how a technique is used.
- (2) It sees fallacies as errors committed not in terms of reasoning in general but only in terms of dialogue.

According to Walton a fallacy involves the failure to meet the requisite burden of proof in a determinate context of dialogue. But Ikuenobe thinks that this criterion is not sufficient for the analysis and evaluation of fallacies, because we have also to take into account whether the epistemic knowledge from premises to conclusion has increased.

Ikuenobe criticizes Walton's account of BTQ on three points:

- (1) The two conceptions of the fallacy of BTQ (equivalence and dependence) proposed by Woods & Walton (1989) are obscure. It is not clear how to construe the relations of equivalence and dependence, whether they are epistemic or logical. A conclusion may be logically dependent or equivalent to a premise, but may not be epistemically dependent or equivalent, in that one does not believe in the proposition of the conclusion.

(2) The concept of evidential priority proposed by Walton is not sufficient, because he cannot answer to the question of when a belief is clearly justified, or when some knowledge is more knowable than other.

(3) The evaluation of BTQ should not depend on the analysis of the context, because this leads to relativism, not to a normative justification.

Summarizing, according to Ikuenobe, we need an objective criterion to define this and other fallacies and this is absent in Walton's pragmatic and contextual account. Ikuenobe defends the necessity of a normative justification, independent of the context of the argument and he defines it as some sort of inadequacy of proof and different ways of disguising it.

"Although all fallacies are different degrees, forms, and guises of errors in the method of proof, some may be more egregious than others." (Ikuenobe 2004, p. 190)

But how can we analyse the different concepts he proposes for example, degrees of errors, the concept of adequate proof, and contentious arguments, out of the analysis of the context? All arguments, including contentious arguments are uttered in a definite context which includes among others, the participants in the argumentation, their common background, mutual beliefs, etc.... and, in our opinion, those elements have to be considered in order to evaluate the argument. In the analysis of BTQ proposed by Ikuenobe, we can see some points which can contribute to establish a better theory of fallacies. For example, he is right when stating that there is always an epistemic failure involved in every fallacy, but he fails to detail it for each specific type of fallacy. In consequence, his contribution isn't able to explain the nature of each fallacy and so, to make a classification of them. He doesn't try either to make any distinctions between fallacies and arguments that maybe are not very strong, but that aren't fallacious. In this respect, we think that the pragma-dialectical proposal which sometimes has been criticised for this same question, is much more systematic while inserted in a whole theory for argumentation.

On the other hand, taking into account his reluctance to consider the pragmatic context of the actual argument, it seems to us that he should conclude that any circular argument begs the question, but is it so? Shouldn't we consider, as he somewhere says, the speaker's intentionality to mistake the audience? And isn't it part of the context of the argument?

3. Concluding Remarks

When talking of BTQ we think that not everybody refers to the same class of arguments. Some remarks apply to the class of circular arguments, looking at the different authors whenever we try to define what circularity means, the outline of this class of arguments seems to blur. We should clarify what do we understand by BTQ and the other concepts linked to the analysis of this fallacy. For example what do we mean by equivalence or dependence? If we aren't talking about logical terms (and we aren't) where do we stand? Definitions of those notions should be made clearer and more precise.

In our opinion, it is not enough, although it is necessary, to have an epistemic objective criterion to analyse everyday arguments, because all them are uttered in a definite context. We also think that trying to base the analysis of all the fallacies on just one property or criterion results in a kind of underdetermination of it. Moreover, all the attempts to define it more precisely lead us to introduce the context of the argument or, other way said, some pragmatic criteria. It is then important to walk towards a more formal definition of the context of the argument.

Walton's and Pragma-Dialecticians' contribution to BTQ is, in our opinion, broader than others, because their analysis includes a dialectical analysis of such circular sequences of reasoning and also the context of the argument. But on the one hand, we think that Walton's epistemic criteria and explanation of his pragmatic analysis is not sufficient. Furthermore, as we have already said, in our opinion, his distinction between fallacies and blunders needs further analysis and clarification. On the other hand, Pragma-Dialectical analysis, although able to detect the cases of BTQ, is not able to link each fallacy with a unique rule. Thus, uncovering a rule violation is not a sufficient way of identifying the nature of a particular fallacy. Moreover, Pragma-Dialectic doesn't consider other kind of errors apart from fallacies. Maybe, would be interesting a linked analysis between Walton's and pragma-dialectical approaches (see, van Eemeren & Grootendorst 1989).

We believe that the best way to analyse the fallacies in general and the possibility to achieve a better theory of fallacies can come from the comparisons and the study of the relationships between the fallacies within a pragmatic analysis. For example, comparisons that can explain the precise epistemic error in each fallacy, or the logical and dialectical form of arguments, or the role of the arguer concerning the burden of proof (evading it, illicit shifts...) etc.

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