ISSA Proceedings 2002 – Conceptualizing fallacies: The Informal Logic And Pragma-Dialectic Approaches To The Argumentum Ad Ignorantiam

1. Introduction
Within the medieval genre of proofs of the existence of God, there is one particular argument that is strikingly brief and simple. In our days, it is used more often to prove the existence of extraterrestrial life forms, but the medieval version goes as follows:

1. It has never been proven that God does not exist. So God exists.

It is not so very hard, however, to give a counterargument that is exactly as persuasive as this one, but leads to the opposite conclusion:

2. It has never been proven that God exists. So God does not exist.

How, then, are we to evaluate this pair of arguments? It would be problematic if someone would try to defend one of them on the basis of a critique of the logical form of the other. The invalidity of one argument implies the invalidity of the other, since both arguments share the same logical form: *It has not been proven that not-X, so X***(i)**.

Maybe agnosticism owes part of its popularity to the fact that it solves the problem of the congruence of two arguments with opposite conclusions. Nevertheless, this solution leaves the question open, whether or not this form of argument is valid. In the field of argumentation theory, there is little disagreement on this point. According to most handbooks, the argument is invalid and fallacious, and it is labeled the argumentum ad ignorantiam or *argument from ignorance* (see Hamblin 1970: 43-44).

Twentieth-Century critiques of the limitations of logical approaches to argumentation have made clear that invalidity and fallaciousness are not synonymous notions. Most present-day scholars agree on the logical invalidity of

the argument from ignorance, but that it is fallacious is not granted by everyone. So these critiques have not resulted in a reconsideration of the logical status of the argument, but rather in a transformation and extension of the possible ways to conceptualize it.

This paper will concentrate on two of the contemporary approaches to the argument from ignorance, the informal logic approach of Walton on the one side and the pragma-dialectical approach of van Eemeren en Grootendorst on the other. Although the insights provided by both theories are often very similar, there is an interesting difference between them concerning their judgment of the *argumentum ad ignorantiam*. According to Walton, some *arguments from ignorance* have to be seen as reasonable arguments, while van Eemeren en Grootendorst insist on the fallaciousness of every instance of *the argumentum ad ignorantiam.*

I will analyze this interesting difference of opinion by first explicating the criteria on the basis of which Walton makes a distinction between reasonable and fallacious variants of the argumentum ad ignorantiam. Most of what will be said about this is taken from two of Walton's articles on this subject: 'Profiles of Dialogue for Evaluating Arguments from Ignorance' and 'The Appeal to Ignorance'. Secondly, I will examine the pragma-dialectical approach to this fallacy as it is presented in 'Argumentation: analysis, evaluation, presentation'.

After presenting both views, some different concepts of reasonableness behind these approaches will be discussed. This will be done by situating them in Toulmin's well-known trichotomy of the geometrical, the anthropological and the critical concept of reasonableness.

2. Walton's approach to the argumentum ad ignorantiam
Walton makes his distinction between reasonable and fallacious variants of the argumentum ad ignorantiam on the basis of an observation that there are arguments that correspond formally with the fallacy of the argument from ignorance, but that cannot be denied a certain plausibility. One of the examples mentioned by Walton is Robinson's famous 'quintozene' example about negative evidence as it appears in science:

3. It has never been proven that quintozene is harmful to human beings, so it is not.

Walton considers this to be a reasonable variant of the argumentum ad

ignorantiam, for the conclusion that quintozene is not harmful to human beings is not exclusively drawn on the basis of ignorance or incomplete knowledge, but also based on positive knowledge gathered from scientific experiments. This in contrast to the afore mentioned disproof of the existence of God (example 2), in which case positive knowledge is completely absent. Thus, according to Walton, certain arguments have to be called arguments from ignorance because they have certain formal properties, but the very same properties do not necessarily make the argument a fallacious one (cf. 1999b: 369-371).

In Walton's view, the fallaciousness of an argument from ignorance is related to the function of that argument and the way it is used. Moreover, the fallaciousness of the use of the argument is connected with the burden of proof**(ii)**. The connection between the argument of ignorance and the burden of proof is specified by Walton by saying that it seems 'that fallacious arguments from ignorance are often connected with first, a reversal of burden of proof, and second, a difficulty in fulfilling that burden, once it has been reversed, especially in cases where genuine evidence is difficult to find.' (1999b: 375-376). So Walton considers the reasonableness of the argumentum ad ignorantiam to be a function of the proper placement or shifting of the burden of proof in the context of the use of the argument.

Now that Walton's norm for the evaluation of this type of arguments has been made clear, I will proceed by explicating his criteria for its fallaciousness. This will be done by looking at the way in which he has analyzed and evaluated a set of examples.

The first example I will discuss pertains to negative evidence as it occurs in science and also in the field of law. This is a form of proof in which a certain conclusion about an experiment or juridical survey is being put forward, although nothing has been found that can justify this conclusion in a positive way. Walton mentions the following examples: negative testing results from the field of chemistry; the so called *ex silentio* argument as it is used in historical science; *lack of knowledge inference* from computer science and social sciences; negative evidence in the field of law (see 1999b: 369-373).

Walton is of the opinion that in all these cases the form of the argument is that of the argumentum ad ignorantiam, because the conclusions are based on ignorance or a lack of knowledge. However, he considers the arguments non-fallacious, because the conclusions are also based on positive knowledge**(iii)**. This positive knowledge can be expressed in a premise of the following form: *if X would have*

been the case, evidence would have been found. Walton considers the possibility to explicate this premise to be an indicator for the reasonableness of the argumentum ad ignorantiam, because the completed argument is a *modus ponens*. The criterion that can be derived from this indicator would be: if an argument that has the form: *it has not been proven that X, so not-X* can be completed with the premise: *if X would have been the case, evidence would have been found*, than the argument is a reasonable variant of the *argumentum ad ignorantiam* (see 1999a: 57-66).

On this criterion, all of the examples of negative evidence mentioned before can be considered reasonable. What they all have in common is a negative conclusion: it is not the case that X (example 2). If this criterion would, conversely, be applied to arguments from ignorance with a positive conclusion (example 1), these arguments would all turn out to be fallacious. This is not at all surprising, since the premise that would complete the argument would have to be of the form: if not-X had been the case, evidence would have been found. This premise, however, does not contain any positive knowledge.

But Walton does not a priori reject all arguments from ignorance with a positive conclusion. From his evaluation of these arguments it is clear that the criterion of positive knowledge gives way to another criterion, that I will christen the *criterion of bad consequences.*

The first example of this type is that of handling a gun of which it is not known whether or not it is loaded. Walton considers it reasonable for a person to handle this gun with care; that is to say, this person should act as if the gun were loaded (see 1999b: 369). Of course, it could very easily be checked whether the gun is loaded, but when this does not happen for one reason or another, no positive knowledge would be available. So, Walton's conclusion here we have a reasonable variant of the argumentum ad ignorantiam is not based on the possibility of gathering evidence or the results thereof, but rather on the nature and the gravity of the consequences of acting in the absence of this knowledge.

A second example is Walton's evaluation of the argumentation used in the notorious McCarthy hearings. During these hearings, some people were accused of being a communist because there was nothing in the files that could disprove their Communistic sympathies. Walton considers this argument fallacious, because there is no real evidence (see 1999b: 367). In this evaluation, the criterion of positive knowledge again plays a role. But Walton's evaluation is also based on the criterion of bad consequences. He says that shifting the burden of

proof is in this case illegitimate, because accusing someone of communism is a serious accusation with serious consequences for the person involved (see 1999b: 368). However, unlike the example of the gun, in this case the bad consequences do not concern the person who is using the argument, but the other party, to whom the argument is addressed. The consequences of the presence of Communists in the United States are not considered in the evaluation of the argument.

My conclusion is that in some cases, Walton applies the criterion of positive knowledge, especially in those cases where the negative version of the argument is discussed, and in other cases he applies what I have called the criterion of bad consequences, mostly cases in which an instance of the positive version is evaluated. In some cases, however, he applies both criteria at the same time: sometimes they work together, and sometimes the one overrules the other, as in the case of the gun.

3. The pragma-dialectical approach to the argumentum ad ignorantiam

I will now turn to the pragma-dialectical approach to the argument from ignorance. According to van Eemeren and Grootendorst, fallacies have to be understood as violations of the rules for a 'critical discussion' (see van Eemeren e.a. 2002: 23-30,110). The argumentum ad ignorantiam is a violation of the rule that indicates which consequences should follow from the failure of the defense of a standpoint in the concluding stage of a critical discussion. This rule is called the closure rule: 'A failed defense of a standpoint must result in the protagonist retracting the standpoint, and a successful defense of a standpoint must result in the antagonist retracting his doubts'. The rule can be violated in various ways. The violation in which the antagonist concludes that a standpoint is true because the opposite has not been successfully defended corresponds to the argumentum ad ignorantiam. The pragma-dialectical name of this fallacy is 'absolutizing the failure of a defense'.

Van Eemeren en Grootendorst make clear that in committing this fallacy, the antagonist makes two mistakes that obstruct the resolution of the difference of opinion. First, the antagonist confuses his role with that of the protagonist and ignores the burden of proof that is attached to this position. Second, the antagonist mistakenly thinks that a discussion always has to result in a positive or negative standpoint. The possibility of a neutral position with no standpoint is ignored. (see van Eemeren e.a. 2002: 134-136).

Van Eemeren en Grootendorst insist that in *all* the cases where this combination of mistakes has been made, the fallacy of the argumentum ad ignorantiam has been committed. However, they mention that there are arguments that resemble the argumentum ad ignorantiam, but do not resort under the definition of this fallacy. Because these arguments correspond to Walton's reasonable arguments from ignorance, I will briefly discuss these cases (see van Eemeren e.a. 1986: 159-160).

Some arguments that resemble the argument from ignorance are those that fall under the scope of the principle of the *presumption of innocence* in the field of law. This principle states that in case of lack of evidence the suspect is being acquitted. According to van Eemeren and Grootendorst an argument that falls under the scope of this principle is not an argumentum ad ignorantiam at all, because the conclusion of the argument is not that the suspect is innocent, but only that it is not proven that he is guilty. The failure of the defense of the standpoint is thus not being absolutized.

A second type of arguments that resembles the argument form ignorance is that in which a scientific hypothesis is considered corroborated when an attempt to falsify it has failed. In this case, too, van Eemeren and Grootendorst do not consider the argument to be a fallacy. The failure of the defense of the standpoint is not being absolutized, since the conclusion is not that the hypothesis is true, but merely that it is not proven that it is not true.

4. Conclusions

An important, although not very interesting conclusion that can be drawn from this comparison between Walton's and van Eemeren and Grootendorst's approaches to the argumentum ad ignorantiam would be that the outcome of their evaluations of particular cases is more or less the same. There is only a minor terminological difference; whenever Walton is talking about a reasonable variant of the argument from ignorance, van Eemeren and Grootendorst are talking about arguments that are superficially similar to the argument from ignorance, but cannot be called a fallacy since the closure rule of a critical discussion has not been violated.

However, there are some more interesting differences in the way in which the criteria that Walton and van Eemeren and Grootendorst apply in evaluating arguments from ignorance are articulated theoretically. These differences can be clarified by situating the concepts of reasonableness that are involved in both approaches within Toulmin's well-known trichotomy of the geometrical, the

anthropological and the critical concept of reasonableness (see 1976).

In short, following the *geometrical* concept of reasonableness, arguments are sound when they correspond with or can be translated into a formally, i.e. logically valid argument. Argumentation theories that are based on the *anthropological* concept of reasonableness consider argumentation sound when it conforms to norms that are agreed upon within a certain community. Finally, the *critical* concept of reasonableness can be understood as an integrated combination of the other two concepts. In this case, argumentation is considered sound whenever it corresponds to a formal procedure that is agreed upon between discussants and that helps them to critically test the tenability of their arguments.

From the account of the pragma-dialectical approach to the argumentum ad ignorantiam in section 3 it is clear that this approach is based on a critical concept of reasonableness. The argument from ignorance is conceived of as a specific violation of the closure rule for a critical discussion, and this rule is part of the procedure that reflects the aim of discussants to resolve their difference of opinion by critically testing the tenability of their standpoints.

In section 2 it has been made clear that the criteria Walton applies in judging whether particular instances of the argument from ignorance are fallacious or not are somewhat arbitrary. This is reflected by the fact that these criteria relate to different concepts of reasonableness. Walton's first criterion, the criterion of positive knowledge, involves an appeal to the geometrical concept of reasonableness: arguments from ignorance are sound if they are logically valid or can be transformed into logically valid arguments. The second criterion, that of bad consequences, is connected to the anthropological concept of reasonableness. In this case, the reasonableness of an argument from ignorance depends on a certain consensus about the nature and the seriousness of the consequences.

Since Walton's criteria are separately connected to two different concepts of reasonableness, his evaluation of arguments from ignorance meets with certain problems that inhere in these concepts of reasonableness. As far as the criterion of positive knowledge is concerned, the apparent problem of a geometrical concept of reasonableness is yielded: how can the logical validity of an argument from ignorance tell us anything about its reasonableness in the context in which the argument is used? The criterion of bad consequences adopts a problem that comes with the anthropological concept of reasonableness: the consequences can

be differentiated in an infinite way and there are many exceptions to be formulated. Furthermore, it will remain arbitrary which consequences and for whom are to play a role in the evaluation of the argument. And if there is more then one, how do these consequences have to be weighed?

Apart from these problems, that are immanent to the criteria Walton applies, it has to be noted that it remains arbitrary in which cases and in which order these criteria for fallaciousness have to be applied**(iv)**. Walton seems to limit the applicability of the criterion of positive knowledge to arguments with a negative conclusion, and he uses the criterion of bad consequences to show the reasonableness of some arguments from ignorance with a positive conclusion that would have turned out to be fallacious in case the other criterion would have been used. Moreover, he is applying both criteria at the same time when this increases the plausibility of the reasonableness of a particular argument from ignorance.

I think this arbitrariness of the evaluation of arguments from ignorance that characterizes Walton's approach has to do with the absence of a general account of the nature of fallacies. Walton is not making laws, like van Eemeren and Grootendorst do, but he is trying to convince the jury of the innocence of some instances of the argumentum ad ignorantiam. But how has the jury to decide if they are not informed about the laws? As St. Paul put it in his letter to the Romans (7:7): 'Nay, I had not known sin, but by the law?'.

NOTES
i. Provided that not-not-X is equivalent to X. Cf. Krabbe 1994: 32.
ii. The connection between the argument from ignorance and the burden of proof is as old as Locke (cf. Walton 1999b: 373-374). It is also present in Hamblin's description of the 'standard treatment' of the argumentum ad ignorantiam, which says: "'The argumentum ad ignorantiam is illustrated by the argument that there must be ghosts because no one has ever been able to prove that there aren't any'. However, 'this mode of argument is not fallacious in court of law, because there the guiding principle is that a person is presumed innocent until proven guilty […].'" (Hamblin 1970: 43).
iii. About these cases Walton says that they "contain argumentation of a form that should properly be classified under the heading of the argumentum ad ignorantiam, that such arguments are typically based on a combination of ignorance and positive findings, of a kind that can be described as 'knowledge', and that such arguments are frequently reasonable (as opposed to being

fallacious)." (1999b: 371).

iv. In her review of Walton's 'Scare tactics', Snoeck Henkemans notes comparable problems with Walton's criteria for fallaciousness of fear appeal and ad baculum arguments (see Snoeck Henkemans, to be published in Informal Logic).

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