

## Begging the Question in Arguments Based on Testimony

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**ABSTRACT:** This paper studies some classic cases of the fallacy of begging the question based on appeals to testimony containing circular reasoning. For example, suppose agents *a*, *b* and *c* vouch for *d*'s credentials, and agents *b*, *d*, and *e* vouch for *a*'s credentials. Such a sequence of reasoning is circular because *a* is offering testimony for *d* but *d* is offering testimony for *a*. The paper formulates and evaluates restrictions on the use of testimonial evidence that might be used to deal with such problematic arguments. One is called the *Non-repeater Rule*: in an extended sequence of argumentation based on testimony, once a source *x* has been appealed to at any given point in the sequence, that same source *x* must never be appealed to again at any next point in the same sequence.

**KEY WORDS:** argumentation schemes, begging the question, circular reasoning, evidence law, fallacies, multi-agent systems, testimony, reputation management, source trustworthiness

### INTRODUCTION

This investigation begins with some classic cases of circular reasoning in arguments based on testimony that have appeared in logic textbooks as examples of the fallacy of begging the question. Circular argumentation occurs in cases of arguments based on testimony where a source presents original testimony, and a secondary appeal to testimony is then made appealing to the same source to back up the evidential worth of the first appeal. The study of the problems posed by such cases is shown to lead to concerns about the evidential worth of arguments based on testimony in law. It also reveals connections to deeper problems of circular reasoning and of the fallacy of begging the question. Solutions, it is argued, require taking account of how an argument was used in an attempt to prove a conclusion that was doubted by one participant in a dialogue or conversational setting.<sup>1</sup> These problems are shown to represent fundamental issues not only for argumentation theory and logic, but for agent communication systems currently being developed in distributed computing. Trust and testimony as

factors in evaluating argumentation are important concerns for artificial intelligence in multi-agent technology for Internet communication (Wooldridge, 2000). These systems are based on arguments that assume, subject to default, that testimony can be seen as provisionally acceptable, unless there is evidence to the contrary. Thus the problems posed are hardly trivial, even though the classic cases used to illustrate them in the logic textbooks don't initially seem very serious.

The classic cases that are used over and over again in so many textbooks appearing in the 'standard treatment' (Hamblin, 1970) are shown to be deeply problematic. These problems, it is shown, resurface even after the literature on a fallacy has become fairly sophisticated. So much for the standard treatment, many might say – it was always pretty superficial anyhow. There is something to this dismissal. It would be better to use examples of arguments that are obviously very important in matters like science, law or public affairs, in order to convince readers of the seriousness of our subject. Even so, some of these classic examples have a certain charm, and do present serious problems that are worth trying to solve. Their apparent simplicity can be an advantage compared to the complexity of many cases that occur in specialized contexts like artificial intelligence and legal argumentation.

#### TWO TYPES OF CIRCULARITY

Before approaching cases of circular testimony, it may be helpful to review the literature briefly on the fallacy of begging the question, and on the kind of circular argumentation that gives rise to charges of having committed this fallacy. Two types of circularity in arguments are recognized by Woods and Walton (1975), one is called equivalency circularity and the other dependency circularity. The equivalency type of circularity is the simpler to explain, and also the easier to identify in a given case. In the equivalency type of circularity, one of the premises of an argument is the same proposition as the conclusion to be proved. Either the two are stated using different tokens of the same sentence, or the two differently worded sentences by which they are stated express the same proposition.

In the very simplest type of equivalency circularity, the premise and the conclusion are expressed by the very same sentence. This is a type of circularity that would not be likely to deceive a respondent who is serious and attentive, but it is worth illustrating, to make some general points about circular reasoning. Consider the following example.

#### *The Auckland case*

Jenna asks Sean to prove that Auckland is in New Zealand, and he replies, "Auckland is in New Zealand, therefore Auckland is in New Zealand."

This circular argument has the form ‘*A*, therefore *A*’, which makes it deductively valid, but it is useless for Sean to deploy it as an argument to prove to Jenna that Auckland is in New Zealand. The argument is deductively valid, because it is logically impossible for the premise to be true and the conclusion false, the premise and the conclusion expressing the very same proposition. Even so, it is useless as an argument for Sean’s purpose. For he is using it in a dialogue in which issue of whether Auckland is in New Zealand is presumably unsettled for the respondent, Jenna. The purpose of his using the argument is to get Jenna to accept the conclusion that Auckland is in New Zealand. In a setting where she, as respondent in the dialogue, has expressed doubt whether this proposition is true, how could Sean ever use it as a premise in an argument that would prove to Jenna that Auckland is in New Zealand? The answer is that he couldn’t, because her role in the dialogue is to doubt whether Auckland is in New Zealand. Such a circular argument, where a premise you are asked to accept is the very proposition you are supposed to doubt, would always be completely useless.

In some other cases, the circularity is not as obvious as it was in the example above. In these cases, there is enough difference in the wording of the two sentences that their probative sameness is masked. Even though different in wording, they are still equivalent, in the sense that they make the same assertion. So to prove one, you necessarily (in effect) have to prove the other. The classic case of the equivalency type of circularity is the following example, given by Whately (1870, p. 134).

*Whately’s case*

To allow every man an unbounded freedom of speech must always be, on the whole, advantageous to the State; for it is highly conducive to the interests of the community, that each individual should enjoy a liberty perfectly unlimited, of expressing his sentiments.

Once again, the problem with this argument is its circularity. What the premise says is equivalent to what the conclusion says, despite differences in the wording. The argument is therefore not useful to prove something to someone who doubts the conclusion. Any respondent who doubted one sentence would surely equally doubt the other. A respondent in a persuasion dialogue would require a premise that he can accept as evidence that is independent of the proposition doubted.

In cases of dependency circularity, by contrast, the two sentences are not equivalent to each other, but one depends on the other, in a certain sense. Showing this requires that the line of argumentation has to be analyzed – for example, by using an argument diagram. The latter will show how the conclusion is assumed as a premise in the line of argumentation that has been diagrammed.

The following example, called the clock and gun case<sup>2</sup> illustrates the dependency type of circularity.

*The clock and gun case*

An efficiency expert visiting a factory was told that the workers knew when to return to work because a gun was fired at exactly one o'clock by a man standing on the roof. When asked how he knew it was one o'clock, the man on the roof said that he verified the time by looking across the street to the clock on the store. The efficiency expert then asked the store owner how he verifies the accuracy of his clock and the store owner replied that he checks it against the firing of the one o'clock gun.

In this case, there is a back-and-forth circular sequence of reasoning, involving two propositions: (1) the firing of the gun indicates one o'clock, and (2) the hands of the clock indicate one o'clock. This circular reasoning is indicated in figure 1.

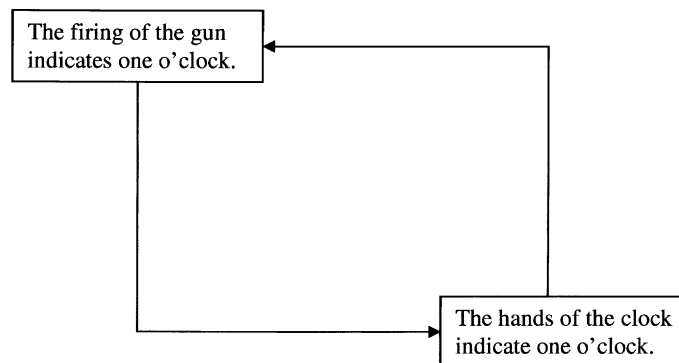


Figure 1. Circular reasoning in the clock and gun case.

*Circular reasoning in the clock and gun case*

The problem posed by the circularity in this case is that each party relies only on the other, so that if the clock runs slow, and becomes more and more inaccurate over the passage of time, neither party will be aware of the error in their estimate of the time.

What is needed to break out of the circle of dependency in the clock and the gun case is some third, independent means of verifying the time. For example, suppose the store owner were to check it as listed on his television weather channel. This indicator of one o'clock could be represented by the third proposition in figure 2.

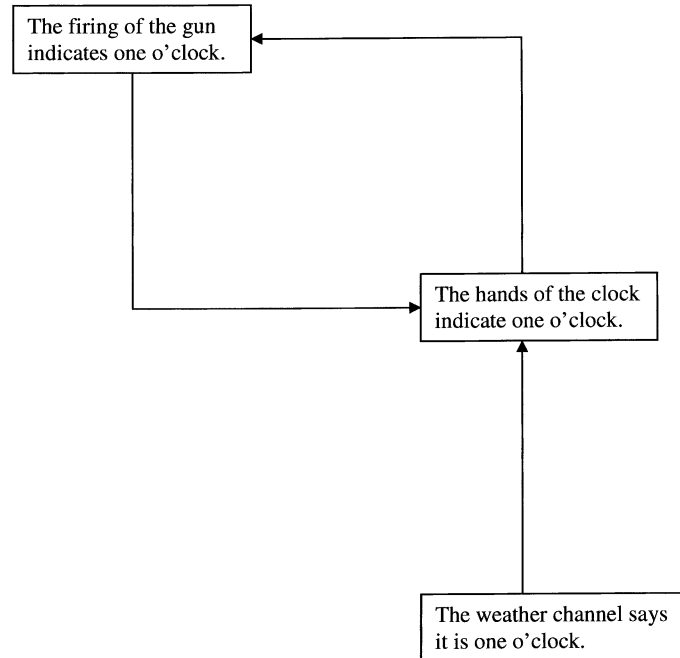


Figure 2. Additional evidence in the clock and gun case.

*Additional evidence in the clock and gun case*

In figure 2, there is still a circle in the reasoning (between 1 and 2), but the circularity is no longer an indicator of a fallacious argument. This is so because the store owner has an independent line of reasoning that can provide a premise base for proving that his setting of the clock is correct. This premise base is no longer dependent solely on the firing of the gun, so that when the man fires the gun, as timed by the hands of the clock, he too has a line of reasoning that is based (indirectly) on the independent evidence of the television channel. If the store owner regularly checks the television channel, instead of relying on the firing of the gun, the circle is removed altogether, as indicated in figure 3.

*Noncircular reasoning in the clock and gun case*

If the store owner is relying on the firing of the gun as his sole criterion for proving his clock is accurate, then the circular argument, represented by figure 3, would be fallacious. But if he is checking the time on television, using that as an additional and more reliable criterion, then there is no fallacy in the argument.

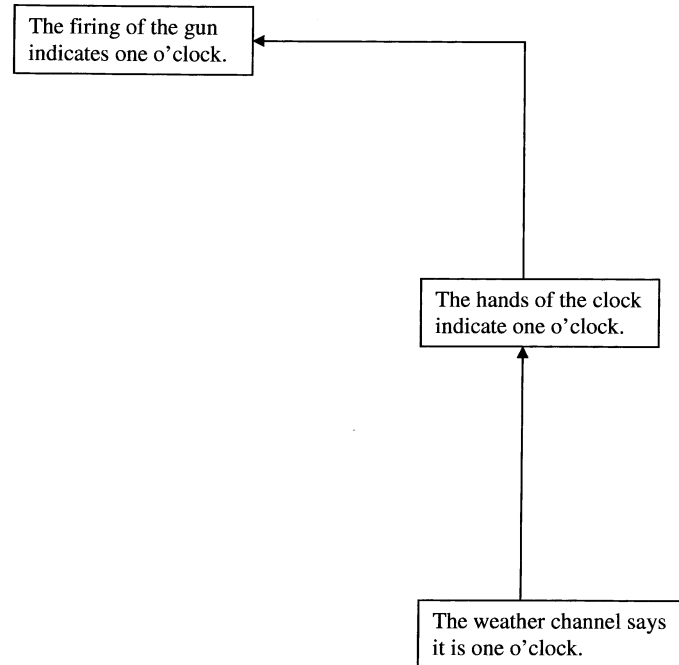


Figure 3. Noncircular reasoning in the clock and gun case.

The clock and gun case shows that it is important in some cases to distinguish between linked and convergent arguments when analyzing the structure of a sequence of argument. In the clock and gun example, three propositions were involved.

1. The firing of the gun indicates one o'clock.
2. The hands of the clock indicate one o'clock.
3. The time check on the weather channel indicates one o'clock.

The circle in the reasoning used in the clock and gun argument was revealed in figure 2. Now suppose we want to prove proposition 2, based on the evidence available in the clock and gun case. How significant is the circular reasoning, indicated by the circle in figure 2 that joins 1 and 2? Does the circle indicate that the fallacy of begging the question has been committed in this argument, or is the circle merely a benign or harmless type of circular reasoning? The answer depends on whether the argument from 1 and 3 as premises to 2 as conclusion is linked or convergent.<sup>3</sup> If it is linked, then to prove 2, both lines of reasoning from 1 and 3 are required. Therefore, the circle is a required part of the argument. But if the argument represented in figure 2 is convergent, there are two independent avenues for proving 2. In

this case, the circle is harmless. For if challenged on the ground that his reasoning is circular, the proponent of 2 can argue: “So what! If the circle bothers you, I can prove 2 without it, by using 3 as my only premise”. The store owner who is proving 2, that the reading of his clock is accurate, would no longer be relying on the firing of the gun as his sole criterion, or only route of reasoning, for proving that his clock is accurate. He can now rely on another method of verification, the weather channel, and there is no reason to think that this method is dependent on the reading of the store owner’s clock. If the argument is interpreted as convergent, the store owner has the option of using the gun as a criterion, or of using the alternative criterion of the time shown on the television channel. The latter method of verification has no dependency circularity in it, as far as we know. Thus it matters to our evaluation of the argument whether we analyze it as linked or convergent.

#### BEGGING THE QUESTION AS A FAILURE TO PROVE IN DIALOGUE

The phrase ‘begging the question’ is an ancient one, that has its roots in the Greek notion of a dialectical disputation (Hamblin, 1970, p. 33).<sup>4</sup> But it is often misunderstood in current speech, and it appears to have no clear meaning to most contemporary arguers. What it originally referred to was the old idea of burden of proof – the idea that if challenged, a participant in a dispute has the obligation, or “burden”, of offering proof of, or at least an argument to support, a proposition she had asserted. The thesis to be proved was sometimes called the “question at issue”. So begging the question refers to the practice of “begging for” the proposition in question – that is, asking for it to be granted without fulfilling the burden of proof. Thus according to these ancient ideas, begging the question is a species of failure to prove something that needs to be proved, or that should be proved, in a dispute. Using an argument to prove something is essentially a dialectical activity, meaning that it involves (in the simplest case) a conversational exchange between two parties. To be successful in such a dialogue, an argument used by a proponent must lead from premises that are not doubted by the respondent to a conclusion that was originally doubted by the respondent.

The dialectical analysis of what’s wrong with a circular argument is that such an argument is useless for proving what is supposed to be proved to a respondent in a dialogue. This analysis introduces what might be called an epistemic factor, in addition to purely dialectical considerations. It is assumed that putting forward an argument in a dialogue has a purpose, and that the success or failure of the argument can be judged in relation to the fulfillment of that purpose. The purpose of putting forward an argument in a dialogue is to get the other party to accept a proposition that s/he doubts, or is skeptical about. The purpose is to remove that doubt.

Wilson (1988) has argued against what he calls an epistemic account of the fallacy of begging the question. By 'epistemic' he means an account that judges an argument in relation to how well it establishes knowledge. Instead of an epistemic approach, Wilson (1988, p. 50) advocates a dialectical approach, in which an argument is evaluated on a basis of whether it is suited to fulfill a conversational purpose. Ritola (2001) has defended the epistemic approach against Wilson's criticisms by showing that the dialectical account that Wilson himself provides depends on epistemic conditions. Ritola (2001, p. 296) argued that both dialectical and epistemic factors need to be taken into account. Citing the analysis of begging the question in (Walton, 1991), he argued for a three-stage approach. First, the circularity of the argument needs to be judged by means of an argument diagram. Second, the dialectical context needs to be analyzed, to see how the argument is being used for some purpose in a conversational setting. Third, if it is being used to remove doubt, its epistemic properties need to be identified. Thus Ritola has shown that the epistemic factors are contained, so to speak, within the dialectical ones, and that both factors need to be considered in judging whether any circular argumentation begs the question. This word (epistemic) implies a framework of knowledge and belief, of the kind generally assumed in current epistemology. But there is another option. According to Hamblin's formal dialogue structures (1970), the notion of proving something to somebody in a dialogue, is said to be based on commitment, not belief or knowledge. One party proves a proposition to another party in a dialogue by using a chain of argumentation that has the proposition in question as its conclusion, and commitments of that other party as premises. On Hamblin's view, the notion of using an argument to prove something can be dialectical as well as epistemic.

There are different meanings of the term 'prove' that have been accepted. One meaning common in logic is that of the strict deductive demonstration of a conclusion from a set of premises. This meaning is semantic. The premises and the conclusion are designated propositions, and proving the latter from the former takes place by a set of rules for deductive inferences, or by some comparable procedure. Another meaning of the term 'prove' is pragmatic. In this sense, the conclusion is a claim, or some statement that is doubtful, and the purpose of the activity of proving it (or attempting to do so) is to support the claim by giving reasons that would remove or lessen the doubt. According to this pragmatic conception, argument is meant to be something used to prove something to somebody. As illustrated by the examples above, it should fulfill a probative function. The probative function is the use of reasoning to get a respondent who has expressed doubt about the truth of a proposition to come to accept that proposition as true. Three things are required for an argument to fulfill the probative function in a given case: (i) an inference or chain of reasoning must be presented, (ii) the reasoning, including all the inferences in the chain of reasoning, must be structurally correct, and (iii) the chain of reasoning must have as its ultimate



conclusion the proposition that the proponent is supposed to prove, called her thesis. This third requirement has to do with the way the roles of the proponent and a respondent are defined. The proponent is the participant who puts an argument forward, in order to get the respondent to accept the conclusion. The respondent is the one to whom the argument was put forward. How do you tell whether the probative function is required by the context of conversation? You have to look at the language of the questions asked and the replies given in the dialogue exchanges. Indicator words like “establish on this basis”, “prove by verifiable evidence”, “proves conclusively”, or “therefore, on this basis” in the replies, are evidence of the existence of a probative function. Indicator phrases in questions like “How can you prove it?” or “Can you show beyond reasonable doubt?” also show that a probative function is present.<sup>5</sup> If such indicators are not present, that is some evidence of the absence of a probative function.<sup>6</sup>

There are various ways an arguer can fail to fulfill the probative function. One way is failure of relevance. Another is to use premises that are useless to persuade the respondent, or to provide the right kind of evidence required to prove something to him. For generally what the proponent of a claim needs to do in order to prove that claim, as noted above, is to use a chain of reasoning based on premises that are commitments of the respondent, or at least are premises that the respondent can be gotten to accept by further argumentation. Of course, finding the right premises is a strategic problem for the proponent. A failure to find them is not necessarily fallacious, or against the rules of a dialogue. It is just bad strategy. For example, suppose you and I are arguing about tipping, and you are arguing that tipping is a bad practice. You are a Marxist, and have made it plain that you are against tipping because it is against the centrally controlled economy advocated by Marxism. Suppose I try to convince you that tipping is a good practice by arguing that it expresses the values of a free market economy. This argument will be useless, because it is central to your commitment as a Marxist that your position is incompatible with capitalism and values of a free market economy. Thus, although my argument may be valid, it will be useless to fulfill the probative function.

The probative function represents a kind of forward movement from the premises to the conclusion. By getting the respondent to accept the premises, the proponent shifts acceptance forward. If the respondent accepts all the premises, and the inference is structurally correct, then the respondent, if he is a rational participant in a dialogue, must concede that the conclusion is (at least probably, or plausibly) acceptable as well. A circular argument of the equivalence or dependency type may be valid, but may fail to fulfill the probative function, or even have no potential for ever fulfilling it, because it depends on, or is equivalent to, what the respondent is committed to doubting in the dialogue as a whole. Such an argument begs the question, so to speak, because it is useless for removing the respondent’s doubt about the conclusion to be proved.

The clock and gun case showed that caution is needed in judging a circular argument to be fallacious. One must be careful to see whether a line of reasoning represents all the evidence available to support a conclusion. If one proposition is being used as the sole criterion to prove that another proposition is true, and vice versa, then circular reasoning is a problem. The fallacy of begging the question has been committed, since if the one proposition is the sole criterion used to establish the truth of the other, then the other cannot serve as a criterion to establish the truth of the first proposition by fulfilling the probative function. The problem is how the argument is supposed to be used by the proponent to prove something to a respondent in a dialogue. The premises are supposed to be used to prove a conclusion to a respondent – that is, to remove the respondent's doubt about the conclusion. But if the conclusion has to be used to prove one of the premises, then surely that premise is dubious, because the conclusion (which is in doubt) can't then be used to remove the doubt attached to that premise. Such a circular argument is quite useless as a means of removing the respondent's doubts about the conclusion. The mutual dependency between premise and conclusion renders the whole argument incapable of proving anything.

A circular sequence of reasoning may look as though it is an argument that fulfills a probative function. But if it exhibits either equivalency circularity or dependency circularity, it will be useless to fulfill that function. However, not all circular arguments or circular explanations commit the fallacy of begging the question. The idea is that in some, but not all of them, the premises may be evidentially prior to the conclusion, and thus useful for proving it. An example of argumentation illustrating evidential priority is the kind of proof used in Euclidean geometry, where a new theorem can only be proved by premises that are either axioms or previously proved theorems. When all the theorems are numbered, only those with a lower number can be used to prove a theorem to be proved next (Mackenzie, 1980). If evidential priority of the premises is essential in a given case of argumentation, fulfilling the probative function should be a requirement. A conclusion should only be proved from premises that are evidentially prior to it in the proper sequence of argumentation. The proper order of proving is clear in argumentation in Euclidean geometry. More difficult to evaluate are those cases of circular reasoning where either the sequence of reasoning is quite long, or some digging is needed into assumptions made in the argument – cases of incomplete arguments with non-explicit premises or conclusions. Other problematic cases are arguments where it may be difficult to know whether the requirement of evidential priority should apply or not.

#### THE BANKER CASE

Hamblin (1970, p. 34) cited a number of cases often used as a standard examples of the fallacy of begging the question in logic textbooks in logic

textbooks. The most interesting of these in relation to arguments based on testimony is the following dialogue, attributed by Hamblin to Black (1952, p. 236). The dialogue is between a man and his bank manager. Let's call the man Borrower.

*The banker case*

Borrower: My friend Jones will vouch for me.

Banker: How do you know *he* can be trusted?

Borrower: Oh, I assure you he can.

The problem in this case, like that in many other cases, lies in the use of appeal to testimony. When you get a referee to offer testimony for your trustworthiness, this is based on the assumption that your own trustworthiness is being questioned. It is at least something that needs to be proved. And a referee can only prove it if his/her own trustworthiness is not in doubt. One might therefore pick a respected business person, for example, one who has a good reputation in the community. But suppose Borrower picks a person whose reputation for trustworthiness is not apparent to Banker, someone not previously among those known to Banker as established in the community. Suppose Borrower appeals to his own reputation for trustworthiness to resolve Banker's doubts? That's no good, because it is Borrower's reputation for trustworthiness that is in doubt. What he needs is a referee whose trustworthiness Banker already accepts.

The circular reasoning in the banker case can be represented in argument diagram in figure 4.

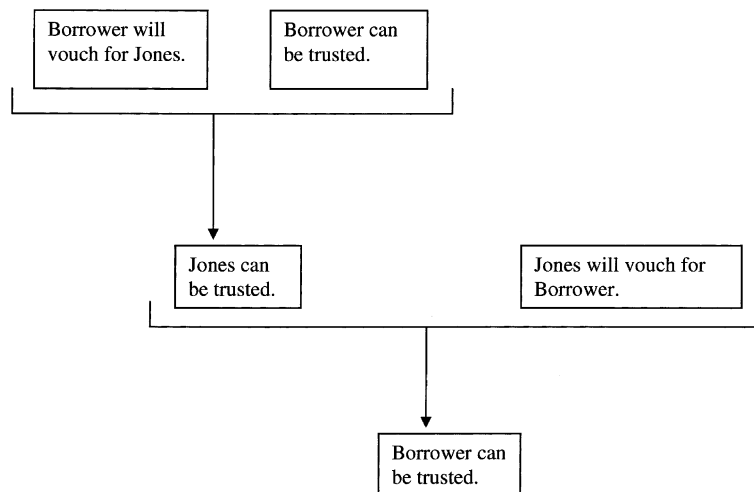


Figure 4.

In this diagram, the conclusion to be proved, 'Borrower can be trusted', appears again as a premise in the linked argument used to support the proposition 'Jones can be trusted'. Because the argumentation requires this dependence on the conclusion to be proved, the circular reasoning is a problem. No evidence independent of the conclusion is given as a reason for accepting the conclusion. The circle is vicious, so we can say that the Banker case, as presented in the dialogue above, contains argumentation which commits the fallacy of begging the question.

Reasoning based on the trustworthiness of a source has recently become a topic of importance in artificial intelligence. In multi-agent systems technology, software devices called agents are used to gather information on the world wide web and carry out services. An agent is an entity that can not only collect information but can also carry out actions based on it in an autonomous way. For example, a personal money management software can not only collect the latest stock and mutual fund information, but act on this information to help manage a client's portfolio. Rational agents have the four basic properties of autonomy, proactiveness, reactivity and social ability (Wooldridge, 2000, p. 3). Sociability comes in because agents must communicate with each other, based on assumptions about the trustworthiness and sincerity of a speech partner that are important for collaborative conversation in a dialogue. Such properties of collaborative conversation have been stressed in the maxims of politeness in (Grice, 1975) and in the Aristotelian notion of *ethos*, or the character of a speaker. An agent must be able to judge whether another agent is a reliable source of information. To make such judgments, it is often necessary to proceed on a basis of referrals from other agents (Yu, Venkatraman and Singh, 2002, p. 1). To deal with referrals among agents, Yu and Singh (2000) have developed a technology for reputation management. An agent *a* assigns a reputation rating to an agent *b* based on three kinds of evidence: *a*'s direct observations of *b*, the ratings of *b* given by *b*'s neighbors, and *a*'s ratings of these neighbors (Yu and Singh (2000, p. 4). The trust rating measures the trust *a* should have in *b* as a source of reliable information. It is updated as a dialogue proceeds. Suppose *a* encounters a "bad partner" *b*, who lies or gives false information. Agent *a* can then "penalize" agent *b* by downgrading its trust rating and informing other agents (p. 6). The neighbors are other agents that a given agent would normally have dialogue with in a multi-agent system (Yu and Singh, 2002, p. 2). The advent of trust rating technology in multi-agents systems has not yet encountered the problem of begging the question. It is clear, however, that the possibility of circular chains of referrals in argumentation raises a fundamental problem for this new technology.

There are two aspects of the cases of begging the question cited above that are especially interesting. One is the linking of them to recent developments in multi-agents systems of reasoning based on trustworthy sources of information. The other is the linking of the fallacy of begging the question to argumentation based on appeal to testimony.

## THE GOD AND THE BIBLE CASE

One example of the fallacy of begging the question or circular reasoning used in many logic textbooks is the God and the Bible case. For example, you can find it in (Engel, 1976, p. 76), (Kahane, 1982, p. 220), (Layman, 2000, p. 191), and (Moore and Parker, 2001, p. 188).<sup>7</sup> Most of us teaching informal logic know the example well, and it has been commented on and analyzed in (Walton, 1991) and Colwell (1989). In short, the argument is that God exists because it says so in the Bible, and the Bible is the word of God. The version given below is expressed in the form of a dialogue.

*The god and the bible case*

Ella: God exists.

Brad: How do you know?

Ella: The Bible says so.

Brad: How do I know what the Bible says is true?

Ella: Because the Bible is the word of God.

The alleged fallacy can be identified as an instance of dependency circularity. It assumes the conclusion that is supposed to be proved as part of a premise on which the conclusion supposedly depends. What is supposed to be proved is the statement that God exists. But the last premise in Ella's argument is the proposition that the Bible is the word of God. This premise depends on the assumption that God exists. Thus the case can be classified as one of dependency circularity. A premise of the argument depends on an assumption, the implicit premise that God exists, that is the conclusion that is supposed to be proved by the argument.<sup>8</sup> On this analysis, the argument is circular; and the circle in this instance seems like a fault or fallacy. An argument designed to prove the existence of God is presumably a failure if it has to presume the existence of God as a premise. Otherwise it could hardly be expected to convince an unbeliever. Such an argument could be deductively valid, but still fail to prove its conclusion successfully. The fault of begging the question in such a case is thus a failure to fulfill a probative function. Ella has failed to respond appropriately to Brad's doubt.

Not much is known about the history of the God and Bible case. Like many of the standard examples of informal fallacies, it just seemed to appear in modern logic textbook at some point, then to be used over and over again in subsequent textbooks. Sidgwick (1910, p. 208) cited the God and Bible case as an example of the fallacy of begging the question. He called it "the old and often-quoted example where the existence of God is supported by the authority of the Bible, while the authority of the Bible is supported by the fact of its being God's word." Offering some clues on earlier occurrences of the example, Sidgwick (p. 208) added a footnote.

There is no lack of orthodoxy in recognizing this argument as fallacious. It is condemned by Archbishop Whately, and again, so recently as 1889, in the *Stonyhurst Manual of Logic*, by Father Clarke, S.J.

After some searching through Whately's *Logic* (1936), I did not find the God and Bible example mentioned either in the Fallacies section, or in other parts of the book. Whately was a strong defender of Christianity, as might be expected of an Archbishop, and often referred to arguments about Christianity in his writings as well as to matters of logic and rhetoric. If he had commented on the argument somewhere, one would expect to find a careful treatment of it, perhaps in his various writings on testimony.<sup>9</sup> So far, however, I have not found a mention of the God and Bible argument the argument in Whately's writings.<sup>10</sup> I did find a remark in Isaac Watts' *Logic* (first published 1774) that seems to imply that at least some version of the argument might not be fallacious. Watts wrote, "Testimony is either divine or human" (p. 208), and added, "If the human testimony be strong, it produces a moral certainty; but divine testimony produces a supernatural certainty, which is far superior". Since a strong Christian advocate, like Watts or Whately, would take the Bible to represent divine testimony in its purest form, one would think that they might find at least some version of the God and the Bible case as representing a reasonable argument from testimony. On the other hand, many believers in God's existence have found the God and the Bible argument to be viciously circular, that is, fallacious. Still, the argument is more likely to be convincing to a believer in divine testimony than to an atheist or someone who is not a committed Christian.

McCosh (1870, pp. 184–186) presented several variants of the God and Bible case as instances of the fallacy of begging the question. The first one is quoted.

A man may prove that the Bible comes from God because it contains certain elevated doctrines which could not be discovered by the natural sagacity of the writers; but after he has done this he cannot turn round and prove that these doctrines are true because they are contained in the Bible (pp. 184–185).

After briefly explaining what arguing in a circle is, McCosh presented some further variants on the same theme as the example above.

Thus we find persons arguing that their church is the true one because sanctioned by God; and that since it is the true church, God has sanctioned it. Or they reach the truth of the Bible from the authority of the church and infer the authority of the Church from the Bible (p. 185).

None of these cases is identical to the God and the Bible case, but the argumentation is very similar. All the examples have to do with the Bible as a source and with proving some religious conclusion in a circular sequence of argumentation based on this source.

McCosh's use of such a variety of arguments comparable to the God and Bible case suggests that such arguments may have been controversial among

philosophers at one time. A further historical remark seems to support this conjecture.

Malebranche is believed by many to have become involved in this circle, when he proved the existence of an external world by the authority of Scripture; and he certainly did so, if it be impossible to establish the authority of Scripture unless you assume the existence of an external world (p. 185).

These remarks suggest that the God and the Bible case may represent quite a number of comparable arguments, all having to do with religious claims based on Scripture and all open to the charge of begging the question. I have been unable to probe more deeply into the history of this subject, but perhaps other readers may be able to trace concern with the possible circularity of such arguments further back.

The God and the Bible case raises some fairly serious questions about how religious scriptures can function as a kind of argumentation to support religious views or claims. In our increasingly secular age, those who tend to be somewhat skeptical to begin with tend to be even more skeptical about the claims of any religious argumentation to prove the existence of God. They are generally a receptive audience for the claim that the God and Bible case is a glaring example of the fallacy of begging the question. But like so many of the standard examples of informal fallacies, this case turns out to be more complex and subtle than it appears on the surface.

#### ARGUMENTS BASED ON TESTIMONY

Hamblin (1970, p. 34) noted that four of the cases commonly cited as instances of the fallacy of begging the question are at least partly appeals to authority. They are not appeals to expert opinion, however. They appear to be arguments based on testimony of some sort. Witness testimony is a very common form of argument that may be said to have the following form. Let  $A$  be a proposition and  $a$  be an agent.

##### *Argumentation scheme for appeal to witness testimony*

Major Premise: if a witness who is presumed to be in a position to know says that  $A$  is true (false) then  $A$  is true (false).<sup>11</sup>

Minor Premise: Witness  $a$ , who is presumed to be in a position to know, says that  $A$  is true (false).

Conclusion:  $A$  is true (false).

There are several critical questions matching the argumentation scheme for appeal to witness testimony. One is whether the witness is reliable. A reliable witness is one who is collaborating in a dialogue by trying to tell the truth, or at least not to lie or mislead the questioner. The major premise is a

defeasible conditional. It can be thought of as a Toulmin (1958) warrant that supports an argument having the form of appeal to witness testimony. An assumption built into the antecedent of the conditional is that the witness is in a position to know whether *A* is true or not. For example, if a witness in a criminal trial asserts that he saw the defendant holding a smoking gun pointed at the victim, this testimony can be taken as evidence. But several assumptions about the witness's position to know need to be made, in order to make the appeal stand up. For example, it might be assumed that the witness was present at the scene of the crime, when the crime was committed, and close enough to see the defendant holding the smoking gun. If the witness had poor eyesight, or if conditions for visibility were very poor at the time, these findings would tend to undercut or defeat the appeal to witness testimony in that case.

The argument in the God and Bible case is not an appeal to witness testimony, nor is it really an appeal to expert opinion, at least of the usual kind, represented by the argumentation scheme argument from expert opinion given in (Walton, 1996, 64–67). What kind of argumentation does it represent? It is based on scriptures. These scriptures are based on witness testimony about certain events that supposedly took place a long time ago. What is presumed to be eyewitness testimony was recorded in accounts and stories. But there are other kinds of argumentation in scriptures as well. This kind of argumentation is more similar to statutory interpretation in law than it is to witness testimony. It poses a problem for argumentation schemes, because it does not fit any existing schemes like appeal to witness testimony or appeal to expert opinion. It is more of an appeal to a written source that is supposed to be reliable or authoritative. Perhaps we could begin to sort out this matter by making a distinction as follows. Testimony includes witness testimony as a special case. For example, an appeal to the testimony of someone that he performed a certain action would not be an appeal to witness testimony. The latter would be an appeal to someone else who testifies that she has seen him perform the action. If this line of reasoning is correct, we need to consider arguments based on appeal to testimony as a genus in which arguments based on appeal to witness testimony are included. The issue is complicated by the fact that witness testimony represents a very important kind of legal evidence that has a legal meaning in relation to evidence law. But let's proceed on the assumption that we can take appeal to testimony as a generic kind of argumentation that includes appeal to witness testimony as special subtype.

Using appeal to witness testimony as a category of argumentation, an argument diagram representing the reasoning in the God and the Bible case can be constructed as follows in figure 5. Presumably, each of the premises of the argument diagram above could be backed up by further premises, and this network would fill out a larger sequence of argumentation. But the simple argument diagram in figure 5 represents the argumentation in the God and the Bible case as based on an appeal to testimony. The testimony



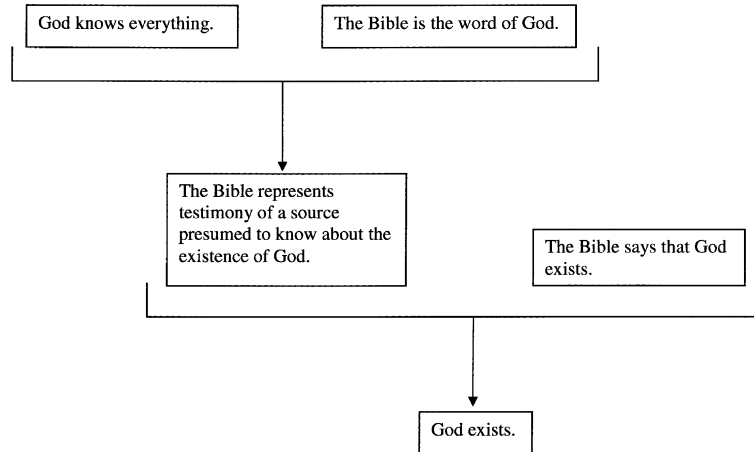


Figure 5.

found in the Bible is based on position to know because (according to the religious viewpoint presumed) God knows everything.<sup>12</sup> The circular reasoning in the argument is revealed when it is seen that the top two premises each presuppose that God exists. Thus the God and the Bible case is a good illustration of begging the question. Ella’s argument to prove the existence of God to Brad, as shown by the diagram, depends on her prior acceptance of the premise that the Bible is the word of God. This premise assumes that God exists, making the argument circular. The circular argument arguably commits the fallacy of begging the question because of this dependency.

But we can still ask what is wrong with the circular reasoning in this argument that makes it an instance of the fallacy of begging the question. The expression ‘begging the question’, as indicated in Section “Two types of circularity”, suggests something dialectical or dialogical, for example that a question in a dialogue was “begged” or not answered appropriately. The argument in this case is presumably aimed at removing Brad’s doubt that the proposition ‘God exists’ is true. So appealing to a premise used to remove that doubt begs the question. The conclusion Brad doubts is the proposition that God exists. To prove that proposition to Brad, Ella cannot use it as a premise she assumed that Brad takes as true. The argument is thus doomed to fail as an attempt to fulfill the probative function, and the circular reasoning is rightly judged in this case to be an instance of the fallacy of begging the question. The dialectical analysis of failure to fulfill a probative function where an argument commits the fallacy of begging the question has been brought out by van Eemeren and Grootendorst (1987, p. 288). One of the notions they see as important to setting the requirements for a useful argument in a critical discussion is that of a common starting

point. This is a set of propositions both parties can agree to as commitments at an early stage of a critical discussion, or at least agree not to dispute. Van Eemeren and Grootendorst require of a successful argument in a critical discussion (p. 288) that it be based on premises that belong to the common starting point. Only then can it be used to fulfill the probative function. This analysis can be nicely applied to the God and the Bible case. The proposition 'God exists' is surely not one that belongs to the common starting point. Far from it, that proposition is what is at issue, and is doubted by one party. Appealing to it as a premise in argument supposedly used to fulfill the probative function dooms the argument to being useless in a critical discussion. This analysis shows why the God and Bible case is a classic example of the fallacy of begging the question.

But this apparently simple case admits of complications. Like many cases used to illustrate fallacies in the logic textbooks, it is very short, and seems open to other interpretations. It appears that it could possibly be interpreted in such a way that the argumentation in it was non-fallacious. This possibility is acknowledged in the following remark quoted from (Walton, 1991, p. 3).

For a committed Christian, the Bible is the word of God, in a sense. At any rate, it is an important part of the testimony through which the Christian learns about, and comes to accept the existence of his or her God. Such testimony is important to Christian belief, at least in part, because it is supposed to be the record of the words and deeds of the Son of God.

Ideas about the possibility of alternative interpretations were also expressed succinctly by Kahane (1982, p. 220). He remarked that the God and the Bible argument, if used at a revival meeting, "would probably not be question begging, since God's existence would probably not be *questioned*, or *at issue*, in such a setting" (Kahane's italics). Looking at the argumentation in this light, even if we admit it contains circularity, the circular reasoning in the network of Christian beliefs does not seem to be, in itself, a bad thing. It does not seem to indicate the presence of a fallacy, as long as the Bible is only being used as a means of re-affirming religious commitment among those already committed. If neither participant doubts the existence of God, then no additional support for the top two premises in the diagram is required. But if Brad does not doubt that the statement 'God exists' is true, what would be the point of the dialogue? Would it still be a critical discussion of the kind set out by van Eemeren and Grootendorst? Or would it be some other kind of dialogue? The remark quoted above from (Walton, 1991, p. 3) offers a clue, by linking the case to some kind of argument from testimony.

#### TWO DIALOGUES EXTENDING THE CASE

The suggestion made above that the circular reasoning in the God and the Bible case could be non-fallacious needs proof. What one would like to see is an actual case of religious discussion in which the argumentation in the God

and Bible case was used but where it was not fallacious. In fact, it is possible to imagine two dialogues of this sort, the line of argumentation in each case being the same as that represented in the argument diagram of the God and the Bible case. The dialectical context, however, is different.

In the first such case, Bob and Ed are members of some fundamentalist sect. Both accept its doctrines, and the scripture it is based on. But Bob's wife just died, and he has become doubtful about the existence of God. He confesses his doubts to Ed.

*Dialogue 1*

Bob: I am having some doubts about the existence of God. If he really exists, surely he must have power over events in our daily lives? My wife was a wonderful person who never did anything wrong, and yet she died at such a young age when she deserved to live longer.

Ed: Well, you remember that in the Bible, God causes the sick to be cured miraculously. And he made Sodom and Gomorrah perish. God had power over these matters, and took action.

Bob: Yeah, but that's just what it says in the Bible.

Ed: Well, you do accept it that the Holy Scripture tells us about the true nature of God, don't you?

Bob: Yes, I have always been accepted that. But I still wonder God really exists and has power in the matters of my daily life.

Ed: Well causing miraculous cures and destroying cities is the sort of action that affects daily life, isn't it?

Bob: I guess you are right. OK I have to accept it that God does exist.

In this case, Ed's argumentation is successful in removing Bob's doubts. In dialogue 1 Bob doubts that God exists, as Brad did in the original God and the Bible case. But the argumentation in dialogue 1 does not seem to commit the fallacy of begging the question. The difference can be explained by drawing a distinction. In dialogue 1, Bob accepts the existence of God and accepts the Bible as the word of God. He only doubts the truth of the proposition 'God exists'. Bob is a kind of doubter, but not a complete doubter like Brad. He could be called a partial doubter.

From the viewpoints of Bob and Ed, the argumentation in dialogue 1 does not commit the fallacy of begging the question. Both accept the Bible as a source of reliable testimony. For them it has evidential priority, and can be nonfallaciously used to prove the thesis that Ed doubts. Thus as far as they are concerned, there is no fallacy in using this source to prove the conclusion that God exists in a physical sense. However from the point of view of a nonbeliever, someone who does not accept the Bible as a source that is reliable, the argumentation used by Ed to prove the existence of God might still be seen as begging the question. Whether the argumentation is question-begging appears to depend on what is accepted by the parties to a

dialogue as common starting points, propositions or sources of evidence that are not in dispute or subject to doubt.

In a second case, Barb and Emma are also believers belonging to some fundamentalist sect. Barb also has some doctrinal doubts, but of a different sort from Bob's. In this example, Barb and Emma, both fervent believers, are trying to construct a theology, or official set of doctrines that can be used to convert unbelievers and strengthen adherence of the faithful.

### *Dialogue 2*

Barb: How do we prove that God exists, or at least give reasons for this statement?

Emma: We have to base everything on the Bible. It is the revealed word of God.

Barb: Well hold on. How can we say it is the word of God to someone who doubts that God exists? Isn't that circular?

Emma: Well yes, sure. I guess so. But that has to be our theology. The whole thing comes from Holy Scripture, because that's what we've got, and it's our criterion.

Barb: Well, OK, that's the official doctrine then. If anyone doubts that God exists, it all comes back to the Bible.

The dialectical structure of this case is different from those of the previous two. In dialogue 2, a third party is more explicitly involved – an audience of unbelievers, the unconverted. This might also include a wide audience of persons whose faith in the gospel of the sect may be shaky. Barb and Emma are both true believers, and they are trying to construct a theology, or official doctrine, that can be presented to this audience.

A complication of this case is that it involves what Krabbe (2003) calls a metadialogue, a dialogue about a dialogue. Barb and Emma are having a dialogue about the kind of dialogue that could be used to convince the unbelievers that God exists. Begging the question is involved, because the unbelievers will see any proof of the existence of God based on scriptures held to be the word of God as circular in a way indicating the committing of that fallacy. Certainly circularity is involved. As Barb says, using the word of God as a basis for proving that God exists to someone who doubts it is a circular form of reasoning. But if you look at the dialogue from a different viewpoint there is no fallacy committed. From this viewpoint, Barb and Emma are discussing strategy of how to convince the unbelievers that God exists. They recognize that appealing to the Bible as the word of God is circular, but they also recognize that the testimony of scripture is the evidence they have, and that they need to work with that as their premise. From their point of view, such argumentation is not question-begging because the testimony of scripture has a kind of evidential priority. However, they seem to be aware that such argumentation is, or at least strongly

appears to be circular, and that therefore it will be open to the charge of begging the question by unbelievers.

The argumentation in the God and the Bible case, and that in the other two dialogues as well, can be placed in a dialectical context, but not that of one of the usual types of dialogue. The context of dialogue in this case might be called exegesis, and the fallacy involved could be called a fallacy of exegesis.<sup>13</sup> The fallacy exhibited in the God and the Bible case could be placed under the category of exegetical fallacies, representing problems of interpreting a text of discourse. The problem posed by the case is how circular appeals to certain kinds of sources, like testimony or religious Scripture, can be analyzed in some kind of clearly articulated context of dialogue in which two or more parties are reasoning together. Exegesis, or more properly critical exegesis, is that context. But it is a complex dialectical framework that has not been studied much. It is complex because it blends argument and explanation in a curious way. The source is used to support an argument. But the act of interpreting a source is more like a speech act of explanation than one of argument.<sup>14</sup>

The theoretical issue posed by cases like dialogues 1 and 2 can now be formulated more precisely. Let's call it the variation thesis.

*Variation Thesis:* It is possible to find a case that contains the same argumentation as that found in the God and the Bible case such that the argumentation in the new case does not commit the fallacy of begging the question.

The issue posed by the variation thesis is whether the same line of reasoning could represent a nonfallacious argument in one case, yet beg the question in another case. The test to confirm or refute the variation thesis can be formulated in the following way. Take the argument diagram for the God and the Bible case and apply it to the new case. This passes the test if the diagram fits the argumentation in it, and if the argumentation does not commit the fallacy of begging the question. Otherwise the new case fails to pass the test required to confirm the variation thesis.

In both dialogues 1 and 2, the argumentation is very similar to that of the God and Bible case, as represented in the argument diagram for that case. It can be argued that in these two cases, as in the God and the Bible case, there is a sequence of circular reasoning. But is the circular reasoning such that the fallacy of begging the question is committed? Admittedly the two cases may still seem a little opaque to religious skeptics. But they offer fairly clear and convincing cases that could be used to persuade the average textbook reader that, despite their resemblance to the God and Bible case, no fallacy of begging the question has been committed. That is probably enough to make the main point that needs to be made about the God and the Bible case, namely, that you can have cases containing the same line of reasoning but differing in the dialectical context of its use for some conversational

purpose. The reasoning can commit the fallacy of begging the question in some cases, but not in others. What makes the difference is the dialectical factor of the purpose for which the reasoning was supposedly used. In particular, the nature of the issue, and of the doubts expressed by the skeptical party to the dialogue, are extremely important. The question is “begged” only when a circular chain of reasoning fails to remove, or even to properly respond to, such doubts.

Analysis of the argumentation in dialogue 1 and 2 could raise doubts about whether they confirm the variation thesis. For example, the problem is whether dialogue 2 contains the same line of reasoning as the one diagrammed in the God and the Bible case. In dialogue 2, the conclusion to be proved is the proposition that God exists. In this respect the argument is the same as that in the God and the Bible case. But are the premises the same in both cases? Looking at the argument diagram of the God and the Bible case, and applying it to the argumentation in dialogue 2, it does look like a good match. What makes it different from that of the argumentation in the God and the Bible case is the way it is addressed to a potential doubter or unbeliever. Barb does not doubt the proposition ‘God exists’. It is the general audience of the uncommitted who are the doubters, and the argument is addressed to them. Barb and Emma are collaborating on devising a strategy that can be used to convert the unbelievers. On this analysis, it seems that the line of reasoning used in dialogue 2 is the same as that used in the God and the Bible case. The difference is in the dialectical structure of how that reasoning is being used. If the analyses of both the above cases are correct, dialogue 2 confirms the variation thesis. It can also be argued that dialogue 1 confirms it. What makes the difference between these two dialogues and the God and the Bible case is the different commitments of the participants in the context of persuasion in the two dialogues.

One difference between the banker case and the God and the Bible case is that the former does not admit of alternative dialogues in which the circular reasoning is non-fallacious. The reason is that the problematic circle can only be removed by changing the argument itself, by removing the dependence on Borrower’s testimony. This could be done by inserting a new party into the case whose trustworthiness is evident, or at least is not in question. But that would change the line of reasoning, and would require a different argument diagram from the one represented above.

#### EXTENDIBLE SOURCE DEFENSE DIALOGUE SEQUENCES

The problem of circularity in certain kinds of appeal to testimony is a real one, as can be shown by considering cases of testimony of academic colleagues. Consider a case where *a*, *b* and *c* vouch for *d*’s credentials, while *b*, *d* and *e* vouch for *a*’s credentials. Here we have *a* vouching for *d*’s credentials and *d* vouching for *a*’s credentials. This sort of situation must surely be very

common in letters of reference for jobs, refereeing papers for publication, and refereeing or supporting grant applications.

The above considerations indicate some interesting characteristics of appeal to testimony as form of rational argumentation that can yield evidence to support a claim. Appeal to testimony can be challenged by the respondent's questioning the trustworthiness of the proponent's source. The proponent can then respond with argumentation to back up his claim that the source is trustworthy. What characteristics should this argumentation have? One thing shown to be very important is that it should not be circular. What seems to be required is a linear or branching argumentation structure. As such, it must not contain circles. This could be called the non-circular defense of source hypothesis for argument from testimony (NCDS hypothesis). Dialogues 1 and 2 pose potential counter-examples to the NCDS hypothesis.

The banker example shows how such a sequence of argumentation can take the form of a dialogue sequence that could be extended indefinitely.

*Extendible Source Defense Dialogue Sequence*

Proponent: Source *a* is trustworthy.

Respondent: How do you know that?

Proponent: Because source *b* says that source *a* is trustworthy.

Respondent: How do you know that source *b* is trustworthy?

Proponent: Because source *c* says that source *b* is trustworthy.

Respondent: How do you know that?

This ESDD sequence can continue indefinitely. The respondent can just keep asking the same question, "How do you know that?" The proponent can just keep retreating to new, allegedly trustworthy sources at each of his moves. The imminent danger is that of an infinite regress. The proponent can keep the sequence moving by simply using a new source each time. There is nothing illegitimate about an ESSD sequence as a form of argumentation. The rules of dialogue should not bar such sequences. They seem to be syntactically reasonable, and it seems that they ought to be permissible. After all, the proponent is free to pick any source he chooses. Ultimately the chain of argumentation might successfully end at a source the respondent will accept as trustworthy. The respondent might be annoyed by a lengthy ESDD sequence. But the sequence does seem to have probative worth. For example in the sequence above, if the respondent does accept *c* as a trustworthy source, then that should be good evidence for him that *b* is trustworthy. And if he accepts *b* as trustworthy, then that should be good evidence for him that *a* is trustworthy. If the three-step ESDD sequence can be a reasonable argument, then so, presumably, can a longer one.

Another possibility should be mentioned however. It could be that an ESDD sequence fades out, or becomes weaker as evidence, the longer it is prolonged. Consider the bank manager case again, supposing that Borrower

uses a lengthy ESDD sequence that finally identifies a person, Truscott, who Banker accepts as trustworthy. And suppose that the ESDD sequence connecting Truscott to someone else, and that person to someone else, and so on, is quite long. The longer the chain, the more likely it is that one of the links could be weak. It is possible to make mistakes judging trustworthiness. People do it all the time. Thus it seems possible that if an ESDD sequence gets longer, its strength as evidence gets weaker. If the chain expands indefinitely without ever arriving at a source acceptable to the respondent, that is a problem. Some rule of dialogue must ban the proponent's being able to filibuster the dialogue by an infinite regress. But the rule should still allow ESDD's. It's hard to say where the line should be drawn. But on balance, it looks as though ESDD sequences should be regarded as legitimate argument moves in dialogues in which appeal to testimony is an appropriate form of argumentation.

Yet, though ESDD sequences should generally be allowed in dialogues, there seems to be something about arguments from testimony that makes them fail as arguments. Why is it that when you want an argument to support reliance on a source, you can't choose one that comes back to reliance on that original source? Why must you have evidence that is independent of that source? This question is a hard one to answer. Perhaps the answer is that testimony is not only a defeasible type of argumentation, but is also a type that can go badly wrong in some cases. Witness testimony, for example in law, has proven to be notoriously unreliable in some cases. The advent of DNA evidence in the courts has revealed a disturbing number of cases in which witness testimony led to unjust convictions. Sometimes witnesses just lied out of self-interest. Sometimes either the witness or the jury were deceived by the fallibility and trickiness of impressions based on memory. Sometimes aggressive prosecutors, determined to win at all costs, badgered witnesses into going along with their views. Thus when witness testimony goes wrong, it can go badly wrong. What initially seemed to be good evidence can suddenly turn out to be completely worthless, or even worse.

However, there are three points of view one can take on evaluating testimony (Adler, 2002, p. 142). The neutral view is that acceptance should be judged on a case-by-case basis. The critical view is that testimony should be regarded as suspect until proven otherwise. The default view is that one ought to accept testimony unless there is a special reason not to accept it. With regard to legal evidence in a trial, the critical view might be suggested by the failure-prone characteristics of testimony cited above. It would seem to be the default view, however, that is generally right for this context. On either view, the worth of a source should only be judged by evidence external to that source. Why? The reason is that estimates of the worth of the source are subject to default. In fact, allowing a source to testify to its own worth is a process even more subject to default than normal cases because of the circularity inherent in this form of argumentation.



In line with these worries about how appeals to testimony can default as arguments, a general rule for evaluating appeals to testimony can be formulated as follows. In an ESDD sequence, each source in the sequence must be different from each other source appealed to subsequently in the sequence. Thus in any ESDD sequence, the following rule applies.

*Non-repeater Rule:* In an ESDD, once a source  $x$  has been appealed to at any given point in the sequence, that same source  $x$  must never be appealed to again at any next point in the same sequence.

The non-repeater rule may be too strict to apply to all cases of appeal to witness testimony. It does seem to apply to some, like the banker case, where it does look like a solution to the problem posed by the circularity of the testimony. But there are various kinds of doubts about whether it is applicable to all cases of appeal to witness testimony.

Consider a case of murder, where a witness is questioned during cross-examination in court. The lawyer may ask him, “Was the evening still light enough for you to see?” or “Were you wearing your glasses at the time?” In such a case, the witness is being appealed to as a source concerning his own earlier testimony as a source. Thus he is being trusted as a source to answer these questions credibly, even though they are about his own reliability as a source. You could argue that this case does not violate the non-repeater rule, however. Even though the reliability of the source’s original eyewitness testimony is being questioned, the questioning provides evidence concerning the event the witness claimed to see. For these are not questions about the reliability of the original testimony, but questions seeking other information from which inferences can be drawn. Such inferences about the source’s reliability as an eyewitness yield evidence to the trier (judge or jury) who, by collecting all the relevant evidence, is trying to form a hypothesis about what really happened. In such a case, it can be argued, there is no circularity in trusting the witness as a source to answer these questions and furnish this evidence.

But suppose that the witness has been shown to have lied, or been biased, when he presented the original testimony. Let’s say he was found to have criminal financial ties to the accused, and he claimed that someone else committed it, someone who had an airtight alibi, and clearly could not have committed the murder. Would he still be a reliable witness when he said that the light was clear that evening or that he was definitely wearing his glasses? I would say not. Still, it can be argued that these questions are not about the reliability of the source’s original testimony. Instead, they are questions seeking other information from which the trier can draw inferences. Here the circular source-based argumentation does raise a red flag, suggesting worries that the repeated testimony begs the question. If the witness was originally unreliable, then, when he is questioned again, his testimony regarding his own reliability is surely impeached. It would certainly seem that the non-repeater rule is relevant to evaluating evidence based on witness testimony in some cases or even generally.

Finally, there is one more problem to be considered.<sup>15</sup> What if the same source is referred to again in a sequence of argumentation, but is eventually vindicated by independent evidence that supports the evidential worth of his testimony? Consider again the chain of testimonial argumentation represented by figure 3 in the clock and gun case. In this type of case, there is a circle in the argument. The conclusion not only depends on the premise, but the premise also depends on the conclusion. But there is also independent evidence that supports the premise without involving any circularity. For example, the witness says he was wearing his glasses, and another witness says that she saw him wearing his glasses at the time he witnessed the event. Here there is a circle, as in the clock and gun case, but there may not be any fallacy of begging the question. The second witness confirms what the source said, apparently making it credible as testimony. This certainly is a problematic kind of case. It does seem to be a case where there is circular argumentation. It does seem, therefore, that the argumentation would be discounted as worthy testimonial evidence by the non-repeater rule. And yet it would seem to stand up as presenting worthy testimonial evidence.

These problem cases suggest that the non-repeater rule does not always apply and that, as stated above, it is too strong. Maybe what is suggested is that this rule should be expressed in a more cautious version (version 2 below).

*Non-repeater Rule (Version 2):* In an ESDD, once a source  $x$  has been appealed to at any given point in the sequence, if that same source  $x$  is appealed to again at any next point in the same sequence, care must be taken. One must ask further questions and consider the possibility that the argumentation begs the question.

The problem now is to give exact instructions on how to take this kind of care in implementing the rule. The key is the probative function. The premises of an appeal to testimony must have more probative weight than the conclusion they are supposed to prove, or give evidence to support. If the argument is circular, the probative function won't do this unless there is some independent line of evidence, as in the clock and gun case, or unless some other factor makes it work. It remains uncertain, however, what other kinds of factors could play a role here. Hence it seems premature to make any final pronouncements on exactly how the non-repeater rule should be implemented in judging testimonial evidence.

These mundane examples from the standard treatment of fallacies have posed some fundamental problems about appeal to witness testimony that have proved to be hard to solve. The cases studied indicate that the non-repeater rule has an important role in evaluating testimonial evidence. But our study of such cases of arguments based on testimony has raised deeper issues about the fallacy of begging the question that have still not been entirely solved. Progress in solving these problems can only come through a better understanding of the probative function, and how it works in different contexts of dialogue - in which there can be different burdens of proof, representing different views on acceptance of testimony.<sup>16</sup> One might look to

the recent work in AI on distributed reputation management to pursue the investigation further. This work needs to be tied in with the study of testimony in evidence law. For it would be useful to study additional practical examples to be found in legal argumentation, where testimony is such a common and important form of evidence. But central to work on testimony in both evidence law and AI are the argumentation schemes for appeals to testimony as forms of argumentation that apply in many different fields and contexts.

## NOTES

<sup>1</sup> On the difference between circular reasoning and begging the question see (Walton, 1991).

<sup>2</sup> The original version of this case can be found in (Walton, 1984, p. 16).

<sup>3</sup> For an account of the distinction between linked and convergent arguments, see (Freeman, 1991, p. 97). On this account, an argument is linked if both premise must be taken together to provide a reason for the conclusion, whereas an argument is convergent where each premise independently provides a reason for the conclusion.

<sup>4</sup> The Greek phrase used by Aristotle in *On Sophistical Refutations* means “beg for that which is in the question at issue”. For further clarification of the etymology of the expression ‘begging the question’ see (Walton, 1991, pp. 10–14).

<sup>5</sup> It may be helpful here to cite the distinction between a normative requirement of the correct use of an argument and an actual performance of argumentation in a given case. Someone might be trying to prove something even when doing so is not required by the context of conversation. And someone might be under a requirement to prove something but fail to fulfill that requirement.

<sup>6</sup> Indicator phrases are not, by themselves, sufficient as evidence to determine whether a probative function is present in a given case.

<sup>7</sup> Moore and Parker (2001, p. 188) even add that this example is “quite famous”.

<sup>8</sup> Ritola (2001, p. 302) analyzed the God and the Bible case as an instance of the dependency conception of circularity, because “accepting the reliability of the Bible is dependent on accepting the existence of God”.

<sup>9</sup> In his remarks on presumption and burden of proof, Whately (1863, p. 75) held that bringing forward evidence to establish the divine origin of Christianity is not called for. His reason relates to burden of proof. He argued that the burden should be on the person who rejects the Gospel to “account for the origin of Christianity by human means” (p. 75).

<sup>10</sup> Whately (1836, p. 425) did discuss arguments about the testimony of miracles in Christian writings, but even in that discussion, did not mention the God and the Bible case.

<sup>11</sup> The warrant is not that that the testimony of anyone who happens to be presumed by some observer to be in a position to know is reliable, since such a presumption by the observer might be unjustified. The witness is presumed to be in a position to know by the rational critic of the argument from testimony who is a respondent in a dialogue. The warrant is that if there is a legitimate presumption of knowledge, the testimony is reliable.

<sup>12</sup> Argument from position to know is recognized as an argumentation scheme in (Walton, 1996, 61).

<sup>13</sup> Exegesis is recognized as a field concerned with logical principles underlying attempts to interpret a text of discourse, especially on the interpretation of religious Scriptures. Carson (1984, pp. 12–13) defines what he calls “critical exegesis” as a species of critical thinking: “Critical exegesis is opposed to merely personal opinions, the appeal to blind authority (the interpreter’s or anyone else’s), arbitrary interpretations, and speculative opinions.” Carson mentions many fallacies, but not, so far as I can tell, the fallacy of begging the question.

<sup>14</sup> One might mention again here the parallel here with statutory interpretation in law, where maxims of interpretation express the supposed purpose of the statute, and offer guidance on drawing inferences from the wording of it.

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<sup>16</sup> Adler (2002, p. 142) calls these views "minimal testimonial settings" in which the hearer has no specific information (at least to begin with) concerning his informant's reliability or trustworthiness.

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