Petitio Principii: The Case for Non-Fallaciousness*

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Abstract: This paper presents a case for the non-fallaciousness of petitio principii in the context where the only evidence which can confirm the conclusion of an argument has a content which is identical to the content of the conclusion. The more usual rhetorical and dialectical frameworks for the analysis of fallacies are challenged for what I describe as their proscriptive stance. As an alternative to proscription, I recommend an analysis of the context in which petitio arguments occur. Such an analysis, I argue, suggests the relaxation of a priority condition described by Walton (1985) and the relevance to the present case of Sorensen's (1991) analysis of the non-circularity of certain 'P, therefore, P' arguments.

Résumé: Cet article démontre qu'une pétition de principe n'est pas nécesairement fallacieuse dans un contexte où le seul appui pour une conclusion a un contenu identique à celui de la conclusion. Je critique la position proscriptive des approches courantes de la dialectique et de la rhétorique. Au lieu de la proscription, je conseille une analyse du contexte dans lequel se présente la pétition de principe. Une telle analyse suggère un assouplissement d'une condition de priorité décrite par Walton (1985). J'emploie aussi l'analyse de Sorensen (1991) selon laquelle certains arguments ayant la forme «P, donc P» ne sont pas circulaires.

Keywords: *Petitio principii*; fallaciousness/non-fallaciousness; evidence; knowledge; cognitive inquiry; scepticism; form and content.

Consider the following discussion from Woods and Walton (1982a):

A thesis may be refuted in what we call *the weak sense* when the discussion shows that the answerer has clearly insufficient grounds for holding the thesis in question. However, it does not follow, from the fact that I do not have enough evidence to show my thesis to be true, that my thesis is false. For all I know, it may be *true*, yet I do not have sufficient evidence to be able to *show* that it is true. In this kind of situation, we can say that the thesis is refuted in the sense that its defence is demonstrably inadequate. It can be seen, therefore, that the refutation in the weak sense of a given proposition does not entitle one to claim that the proposition is false and that its opposite is true. However, knowing that one's thesis has been refuted in the weak sense is something very much worth knowing. One comes to understand that, irrespective of whether that thesis is true or false, one's *grounds for holding* the thesis are inadequate, therefore, one's claim to *know* the thesis is deficient. (pp. 120-121; italics in original).

In relation to the passage quoted above, Woods and Walton explicitly reject the following argument which is subsequent to the first 'however':

I do not have enough evidence to show my thesis to be true.

:. My thesis is false.

This particular formulation of ad ignorantiam 'is located within confirmation theory as a confusion between the categories of "lack of confirming evidence" and "presence of disconfirming evidence" (Woods and Walton, 1978, p. 87). I will not comment on Woods' and Walton's description of this argument as fallacious except to say that this account does not represent their complete view of the fallaciousness or otherwise of this fallacy—rather, these writers view ad ignorantiam as fallacious in some contexts of use and as non-fallacious in other contexts of use. My concern is with the following argument by Woods and Walton which is subsequent to the second 'however' of the above passage:

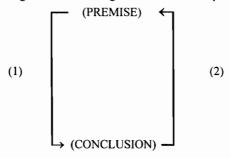
One's grounds for holding the thesis are inadequate.

.. One's claim to know the thesis is deficient.

By discussing the above argument my aim is to demonstrate that (1) Woods and Walton have employed an example of *petitio principii* and yet (2) their employment of this so-called 'fallacy' is not only non-fallacious, but can also be seen to be a mode of argument which is entirely warranted within the context in which it is presented.

The question-at-issue in the above argument clearly relates to certain epistemological concerns, viz., the adequacy of the evidence (reasons) which can be adduced in support of a thesis. Thus in order to understand any description of this argument as question-begging, it is necessary to address these epistemological issues. Through doing so we will examine both the way in which the premise entails the conclusion (route (1) in the diagram below), and also the further entailment relationship between conclusion and premise (route (2) in the diagram below)¹:

One's grounds for holding the thesis are inadequate.



One's claim to know the thesis is deficient.

I proceed by discussing the entailment relationship exhibited by route (1). Clearly it is not my proposal that to have grounds for holding a thesis entails a claim to knowledge for that thesis. To introduce such an entailment is to overlook all those theses for which we have some degree of cognitive warrant but for which we would still decline to use the title of knowledge. Indeed, knowledge under such an entailment would be reduced in our language to the role normally attributed to concepts such as presumption. To permit any such alterations in our concept of knowledge is to remove it from the conceptual schemes which find their manifestation in language.

There is, however, a condition under which a different form of the above entailment is not only permissible but is conceptually necessary. Such a condition relates to the adequacy of the grounds which support the thesis under consideration. To query the adequacy of such grounds is to immediately remove any possibility of claiming knowledge. The entailment nature of this relationship (inadequacy of grounds for holding a thesis \rightarrow impossibility of knowledge) is the very route by which the sceptic launches his attacks on knowledge—by introducing various forms of Cartesian demonology, the sceptic aims to undermine the grounds of our claims to knowledge with the inevitable result that we can never claim to know that p.

It can thus be seen that the entailment relationship represented by route (1) is most accurately described as being conceptually necessary—the very features of our knowledge concept (at least the knowledge concept that functions within human discourse) require an entailment relationship to exist: in faulting the grounds that we hold for any thesis we are conceptually required to deny the possibility of knowledge. However, we are still not at a position in our discussion to attribute the label of *petitio principii* to the above argument. It must now be established that a similar relationship, that of conceptual necessity, exists at route (2) in the diagram.

To establish a relationship of conceptual necessity at route (2), we must consider the entailment relation that exists between a claim to knowledge and the grounds which support a thesis, or, more specifically, what is entailed by the rejection of a knowledge claim. To describe any claim to knowledge as deficient entails locating the source of the deficiency within the supportive warrant (grounds) for the known thesis, i.e., the conclusion entails the premise. There is simply no other way in which a knowledge-claim can be defeated—all error must ultimately reside in the grounds that have been adduced for the known thesis. It may be argued, of course, that such an entailment relation only exists if we are prepared to interpret the premise as one's grounds for holding the thesis as knowledge are inadequate—the argument could be advanced that even when the making of a knowledge-claim is deficient, we may still possess perfectly adequate grounds for holding a thesis in a lesser cognitive commitment than knowledge, e.g., presumption. It may further be argued that such an interpretation of the premise is entirely unwarranted in view of the fact that when the entailment relation between premise

and conclusion was examined, a general and not a knowledge-specific interpretation of the premise was accepted. While it is true that my discussion of the entailment relation involves a description of the thesis in the premise as a *known* thesis, this is in no way essential to the issue being addressed by that entailment. For my point is rather that the deficiency which is sufficient to defeat a claim to knowledge would likewise be sufficient to defeat a claim of lesser cognitive commitment. The slightest defect in grounds can preclude a claim to knowledge. Also, however, a similar defect can preclude a claim to presumption—we only ever have a tentative commitment to a presumption and this commitment is eroded at the very onset of difficulties.

Thus it can be seen that route (2) in the above diagram represents an entail-ment relation which is secured, in a similar manner to that of route (1), via a conceptual analysis of knowledge. In formulating this account of petitio principii, the logical study of knowledge entailments has featured prominently. Yet without such considerations it is likely that the question-begging nature of this argument would have altogether evaded us. It is hard to see how an analysis of petitio principii can be conducted with any degree of success on the basis of formal accounts alone—after all, the very essence of this 'fallacy' relates to the evidential base of an argument's premises and whether or not the conclusion features in this evidence, and any accurate assessment of such matters requires more than content- and context-insensitive formal approaches. These contrasting approaches to the study of *petitio* can be demonstrated by comparing the view of Woods (1980)

A further advantage of this sort of formal approach is that it demonstrates that, and the extent to which, possession or lack of target-properties (e.g. circularity) is not a matter of parochial semantic status, and not a matter either of parochial contextual and pragmatic features. (p. 58)

with that of Hull (1967):

The fallacy of reasoning in vicious circles does not belong to this class of fallacies [formal fallacies]. Instead it is an example of what logicians call a *material fallacy*. In diagnosing material fallacies both content and the use to which the argument is being put play central roles. (p. 177)

We must now address the second motivation stated above for discussing this argument—the issue of whether it truly warrants the title of 'fallacy' and, if not, what features of this argument qualify it as a 'good' or 'correct' mode of reasoning.

As soon as we employ terms such as 'fallacy', 'good' and 'correct', we find ourselves within the realm of normative knowledge. The study of the normative aspect of argumentation generally proceeds in terms of a specification of criteria on the basis of which we describe some types of argument as rationally acceptable while other modes of argument violate these criteria and are accordingly viewed as fallacious. Numerous rhetorical and dialectical frameworks have been advanced for the purpose of argument evaluation. However, almost without exception, these frameworks have opted for a proscriptive stance towards *petitio principii*. This

proscriptive stance is problematic for the reason that it fails to accommodate the growing view that, in certain contexts of use, *petitio principii* represents an acceptable mode of argument. Indeed, this view receives indirect support from the continuing failure of these rhetorical and dialectical frameworks to establish a method of analysis which is effective in proscribing *petitio principii*. This continuing failure, I suggest, should force the proponents of these frameworks to query whether *petitio principii* is a truly fallacious mode of reasoning, a mode of reasoning which should be banned at all costs. As an example of this failure, I examine Rescher's (1977) model of formal disputation and, in particular, his efforts to proscribe sequences of *petitio* argument. The choice of Rescher's model is motivated by a further consideration. For in proposing the view that *petitio principii* is, in certain contexts, non-fallacious, I address specifically the setting of cognitive inquiry (the inquiry, of which the *petitio* argument under discussion is a part, is that of a theoretical analysis of the argument from ignorance). Rescher's aim is similarly epistemological in nature:

We shall explore this particular sector of dialectics (formal disputation) to see what epistemological lessons can be drawn from it in order to exhibit the utility of such 'dialectics' for the theory of knowledge. The goal of this exploration is the development of a dialectical model for the rationalization of cognitive methodology—scientific inquiry specifically included. (1977, p. x ii)

Rescher's approach to *petitio principii* is ambiguous to say the least. He clearly legislates against the use of circular sequences on a number of occasions:

. . . It is necessary to preclude the repetitive—indeed circular sequence:2

PROPONENT	OPPONENT
!P	+~P
!P	

This blockage is accomplished by adopting a special rule to proscribe the simple *repetition* of a previous move. The reason for such a non-repetition rule lies deep in the rationale of the process of disputation. A disputation must be *progressive*: it must continually advance into new terrain. Since its aim is to deepen the grounding of the contentions at issue, it must always endeavour to *improve* upon the reasoning already laid out, in the interests of achieving greater sophistication. Mere repetition would frustrate the aim of the enterprise (1977, pp. 10-11; italics in original).

It must also be stressed that the diagram needs to be supplemented by the (already mentioned) blockage rule which precludes the proponent from reasserting (or the opponent from rechallenging) something he has effectively asserted (or challenged) before. Examples of such blocked sequences are:

PROPONENT

!P

!
$$\sim$$
P = !P

Or again:

PROPONENT	OPPONENT		
!P	+~P		
P/Q&!Q	+~Q		
Q/P&!P		(1977,	p.20)

Rescher clearly views these argument structures as dialectical moves which fail 'to deepen the grounding of the contentions at issue' and accordingly must be prohibited through the use of blockage rules. However, even as Rescher is developing the mechanism which, it is expected, will proscribe circular sequences of argument, further sequences of circular argument fail of proscription by this mechanism. Consider, in this regard, Rescher's endorsement of the following countermoves to cautious denial:

A cautious denial (or *challenge*) of the form +~P is simply the cautious assertion of the negative thesis ~P. It may thus be met either by

1. The categorical counterassertion P or equivalently !P

or

2. A provisoed counterassertion of the form P/Q&!Q

(1977, p. 11)

Placing countermove (1) within a proponent/opponent table as above, we arrive at the following display:

In this way we end up with the very argument structure that Rescher's blockage rule was intended to proscribe.³ Clearly, to legislate completely against circular arguments is no simple task. As this example demonstrates, circular argumentation would appear to be almost implicit in the very frameworks that we use to discuss acceptable dialectical manoeuvres. While the response of dialectical and rhetorical theorists has been to propose yet further rules which block *petitio principii*, I suggest a somewhat different interpretation of the scenario that confronts us. We can and must resist steadily increasing the number, complexity and range of rules each time we come upon a circular argument which is acceptable by the standards of the rule set. I propose instead that we query the very validity of the project of prohibiting the circular argument at issue and set about describing the features of the case within the context in which it occurs. It is only when we begin to do so that we can fully appreciate the non-fallacious nature of *petitio principii*—and many other fallacies as well.

Returning to the Woods and Walton (1982a) petitio:

One's grounds for holding the thesis are inadequate.

... One's claim to know the thesis is deficient.

we can attempt to specify the features of both the argument itself and the context in which the argument is presented which justify an evaluation of non-fallaciousness for this example of *petitio*. In describing the above argument as a *petitio*, I have demonstrated how the entailment relations which exist between premise and conclusion and between conclusion and premise are secured within the conceptual 'logic' of knowledge. This analysis, however, resulted from a consideration of both premise and conclusion content and it is to this content that we must return if we are to establish the non-fallacious nature of this argument.

The very raison d'être of argument consists in the functions which it serves: 'One of the commonest uses of arguments is to prove conclusions that are in some way unknown or doubtful or that have been called into question' (Hull, 1967, p. 176). In order to prove any conclusion, irrespective of the type of proof at issue, we require as premises those propositions which are most likely to increase our certainty in the truth of the question-at-issue. This is not simply a matter of amassing a large number of premises in the hope that the quantity of propositions in the premises-set will be sufficient to force through the conclusion. Rather, we select the premises we require with considerations of conclusion content in mind, where such selection inevitably involves judgements of relevance to differentiate those propositions which can legitimately stand as evidence from other propositions which are either irrelevant or less relevant.

Now our standard view of the propositions which form the premises of an argument is that these propositions must be informative with respect to the proposition which forms the conclusion of an argument. And in the achievement of this end, it is argued that these propositions must possess a content which, while relevant to, is sufficiently distinct from, the content of the proposition which forms the conclusion. In most instances of argument this distinctness condition is satisfied. When it is not satisfied, a petitio principii argument results. The issue, then, is whether such a pattern of justification or grounding—the establishment of a conclusion on the basis of a premise which is identical to the conclusion—is rationally unacceptable or fallacious in all cases. It is my claim that this is not so. For in certain contexts of cognitive inquiry—under conditions of evidential bereftness, for example—it is rationally acceptable to validate a conclusion through a premise of identical content on the grounds that to do otherwise would lead to undesirable theoretical and practical consequences for the agent engaged in inquiry and to a devaluation of the type of reasoning involved. It is to a further examination of these issues that I now turn.

It was described above how judgements of relevance are essential to any process of evidence selection. These judgements are only possible in contexts where some form of selection must be made between information which we require for our deliberations and information which can quite safely be set aside. However, it

would be a mistake to assume that all argumentation proceeds against such a background of information. For as Perelman (1982) remarks 'Contrary to demonstration, which is developed in a well-defined system, argumentation most often draws upon a very ill defined corpus of premises, and the theses upon which it is based can be partially understood or implicit'. (pp. 48-49). Despite our best efforts at securing empirical knowledge during cognitive inquiry, we are not infrequently confronted with contexts of extreme evidential bereftness. In such situations we can decide to (1) suspend judgement until such time as appropriate evidence does become available, (2) continue in our inquiries employing the same probative ground rules (standards of rational acceptability) that were employed when evidential bereftness was not a consideration, or (3) continue in our inquiries employing different standards of rational acceptability in full recognition of the fact that our context is one of evidential bereftness.

The suspension of judgement in (1) is clearly one response, albeit a drastic response, to the situation of evidential bereftness—when a situation arises in which appropriate evidence is lacking the inquirer quite simply desists from any further activity within that particular process of inquiry. A similar suspension of judgement constitutes a possible response by the inquirer to the relentless charges of error on the part of the cognitive sceptic. (The sceptic, however, denies that we can acquire 'appropriate evidence'-irrespective of the grounds that we present for our beliefs, the sceptic simply continues to argue that we have failed to eliminate situations x, y, z, etc. as possible sources of our sensory deception.) However, both cases of suspension, in addition to being drastic, are completely misguided and for much the same reason. As for the inquirer who is responding to the critical challenges of the cognitive sceptic, he cannot engage in 'a systematic abstention from cognitive involvement' as a 'sure-fire safeguard against error' (Rescher, 1977, p.97). For while it is true that his deliberations are at the level of theoretical reasoning, where the emphasis is with the intellectual issues of truth and inquiry, he can ill-afford to neglect the realm of praxis with its demands for a rational basis. Of course, the sceptic is always at liberty to argue that appropriate praxis is altogether compatible with the suspension of judgement—he may insist on the sufficiency of noncognitive guides for action. However, mere success in action is not what is at issue here. As Rescher (1980) argues:

Action in a purpose-realizing way is not enough for rationality—the successes at issue may be wholly fortuitous and accidental. To meet the conditions of rationality, we must not only do what realizes our aims, but do it in an adequately grounded expectation that it will (or well may) realize them. And this calls for the factual knowledge that this amalgam of technology-cumtechnique is appropriate to the tasks at hand. (pp. 219-220; italics in original)

Therefore, while suspension of judgement certainly guarantees that the inquirer will not accept a falsehood, through adopting such a sceptical policy he runs the much greater risk of stultifying rational action on an indefinite basis—according to the cognitive sceptic, after all, appropriate evidence will never be forthcoming.

The inquirer who is confronted with the cognitive sceptic believes that he must abandon rationality altogether in order to evade the sceptic's challenges—only when he is completely outside of the enterprise of rationality, i.e., when he is no longer advancing grounds for his beliefs or, indeed, holding beliefs, can he avoid the sceptic's relentless challenges to the veracity of those grounds and beliefs. It is this complete abandonment of rationality which renders the inquirer in this case susceptible to a charge of stultifying action. The inquirer who confronts a situation of evidential bereftness, however, is committed to a rational enterprise—it is his commitment to this enterprise, after all, which results in his suspension of judgement in the case where the only alternative is to engage in the prohibited reasoning characteristic of petitio principii. It may be argued, therefore, that the above charge concerning the stultification of rational action does not apply to an inquirer in a context of evidential bereftness this inquirer has a rational basis upon which action can proceed. Yet it is a poor rationality indeed which prescribes a policy of 'doing nothing' in the case where specific items of information or evidence are not available: 'The task of rational inquiry is to provide *information* about the world. And here, as elsewhere, "Nothing ventured, nothing gained" is the operative principle' (Rescher, 1977, p. 97; italics in original). Inquiry, by its very nature, must proceed in conditions of less than complete information. Inquiry is, after all, the process by means of which we obtain 'information about the world', information which forms no part of our current cognitive commitments. The issue for the inquirer is one of how to respond to situations of information deprivation. To suspend judgement is to preclude the very possibility of acquiring information and, ultimately, to fall foul of the type of practical considerations described above. Rather than pursuing either of these destructive options for the inquirer, I propose instead a positive conception of petitio principii. On this conception petitio functions as a reasoning strategy which facilitates the progress of an inquiry when evidence is lacking from that inquiry until such time as this information or evidence deficit is resolved. Walton (1985) supports a broadly similar conception of petitio principii, this time within a dialectical context:

The basic problem with this strong approach however, is that in many contexts of reasonable dialogue, an arguer cannot always demand more plausible premisses from his opponent immediately. The opponent must often be given "room to argue", to proceed by way of premisses "not better known" in the hope of eventually arriving at some premisses the other party will accept as plausible. (p. 272)

Viewed within the context of an inquiry, especially an inquiry in its early stages of development, *petitio principii* constitutes an essential component of probative rationality—it is only a rather limited conception of inquiry, one based upon a linear model of demonstration in which we pass from well known premises to less well known conclusions, which makes this type of argument appear fallacious.

I turn now to an examination of the second option described above, that of continuing inquiry using the same criteria of rational acceptability that are employed in

contexts where evidential bereftness is not a consideration. As I see it, the effect of such a move will be to condemn as fallacious many acceptable forms of argument, *petitio principii* among them. And a likely secondary effect will be a further suspension of judgement on the part of the inquirer—if a particular argument pattern is judged to be fallacious by an inquirer's standards of rational acceptability and, owing to constraints of evidence availability, this is the only pattern of argument that is available to the inquirer, then the inquirer is left with little choice but to desist from any further activity within that inquiry. Returning to the central cause of these effects, one must take cognizance of the fact that probative standards cannot be applied in a context-insensitive manner across widely diverse evidential settings. That which qualifies as acceptable evidence within the context of a demonstration would represent a hyperbolical standard within the settings of inductive and plausible argumentation. As Sidgwick (1893) remarks:

Logic sometimes sets out from the fact that only a perfectly "universal" generalisation can properly serve as ground of inference; that if a rule be admitted to have even a single (unspecified) exception, its value for inference is lost, since any given case may be that one exception in the absence of knowledge to the contrary. And for some purposes this view is useful. But we are now to look at another side of the truth, and one that has a closer connection with the actual process of argument.

It is comparatively seldom in actual argument—never, perhaps, where a really disputed or difficult question is raised—that we are able to rest our case on a single faultless generalisation, like "all men are mortal" or "where there is smoke there is fire". Inferences so supported are not in practice the kind that encounter opposition. Where any doubt exists, our express or apparent ground of inference is, nearly always, a looser kind of generalisation; we are obliged to make what use we can of broad truths which we know to be incompletely universal. (pp. 23-24)

Even Sidgwick's 'broad truths which we know to be incompletely universal' represent a form of evidence which is lacking from the context of evidential bereftness that is the focus of this discussion. Sidgwick's remarks, however, serve to remind us that evidential standards cannot be applied to the normative evaluation of argument with a complete disregard for the evidential context in which the argument occurs. Much of what constitutes fallacy theory has been justly criticised for its failure to grasp the full significance of this issue:

...let us examine... the description of various devices which I wish to call by the neutral term of "disputed practices" [fallacies]. One problem with these descriptions is that they are usually prejudicial in the sense that their fallaciousness is built right into their description... There is a pattern in these biased descriptions, and it is the following. If the disputed practice is a type of inductive argument, namely one claiming that the conclusion is only strongly, but not conclusively, supported by the premises, then the practice will be described as a type of deductive argument, namely one claiming that the conclusion is conclusively supported by the premises. If the disputed

practice is a type of what might be called a partial argument, namely one claiming that the conclusion is only partly, but not too strongly supported by the premises, then the practice will be described as a type of allegedly inductively strong argument. One might think that the pattern runs out of material here, but it can be extended as follows: if the disputed practice is a type of non-argument, namely not an attempt to support one proposition with others, then it will be described as an argument claiming that certain propositions provide at least some support for another (the conclusion). Finally, if the disputed practice is an argument having as conclusion a special type of proposition, then it will be described as an argument having another conclusion; the pattern (or shall I say the fallacy?) is that of exaggerating the strength of the connection claimed between various assertions or of creating one where none is claimed. (Finocchiaro, 1981, pp. 15-16)

In effect, any argument can be described as fallacious when we set about its evaluation on the basis of inappropriate standards of evidence. More specifically, the criteria by means of which we judge the acceptability of evidence within one argumentative context should not be generalised to other, evidentially bereft argumentative contexts. Option (3)—the changing of normative standards to facilitate inquiry against a background of evidential bereftness—emerges as the only viable alternative to the various negative scenarios described so far. How *petitio principii* features within these normative standards has been examined only very generally to this stage. I now expand upon that account by returning to the Woods and Walton *petitio* with which we began.

In the discussion so far, the expression 'evidential bereftness' has been used to refer to contexts of cognitive inquiry which are lacking in evidence, evidence which is independent of the conclusion of a process of inquiry. However, little mention has been made of the various reasons why evidential bereftness comes to characterise certain contexts of inquiry. I want to say something of these reasons, as doing so will clarify the relevance of the foregoing remarks concerning the normative assessment of argument in general under conditions of evidential bereftness to the specific case of the normative assessment of petitio principii. More specifically, I want to present petitio principii in a positive light, as a strategy of reasoning which can facilitate the progress of inquiry-and, thus, forms part of the normative framework described in relation to option (3) above—and not as a form of argument which is inherently fallacious. The most obvious reason why an inquiry might be evidentially bereft relates to the immaturity of that inquiry. When an inquiry is in its early stages of development, evidence which is independent of the conclusion of that inquiry may be lacking for the simple reason that the period of time to elapse since the commencement of that inquiry has been insufficient for the purposes of gathering conclusion independent evidence. However, conclusion-independent evidence may also be lacking in the case where the content of the conclusion is such that only evidence of identical content to that conclusion can possibly confirm that conclusion. This latter scenario, I contend, characterises the petitio argument of Woods and Walton. Moreover if, as it was argued 12

above, an inquirer can ill-afford to suspend cognitive inquiry until the time when conclusion-independent evidence becomes available, it is all the more important that the proponent of a Woods- and Walton-type *petitio* argument does not opt to suspend inquiry the very content of the conclusion of such a *petitio* argument precludes the possibility that a time will be reached when conclusion-independent evidence becomes available. This second type of bereftness, I want to argue, is inevitable in view of the content of the conclusions of certain arguments. I now want to demonstrate this inevitability in the case of the argument of Woods and Walton.

When we consider the conclusion of the Woods and Walton petitio—one's claim to know the thesis is deficient—we come to realise that the only evidence that we could possibly use to warrant such a proposition must relate to the inadequacy of the grounds for holding a thesis, i.e. the proposition that is the premise of the argument. The very content of the question-at-issue imposes specific constraints on the evidence that can be used in this case. This can be illustrated by an examination of the issues discussed by Woods and Walton (1982a) prior to the premise of the petitio. The premise one's grounds for holding the thesis are inadequate is preceded in argument by the proposition one's thesis has been refuted in the weak sense. As Woods and Walton (1982a) define refutation in the weak sense, it is the state of affairs which exists when the conclusion of the argument obtains, that is when one's claim to know the thesis is deficient—the truth of a thesis is a presupposition of its knowability and it is the establishment of such truth which is lacking when we claim to have refuted a thesis in the weak sense. To attempt a claim to knowledge under such circumstances would simply present the knowledge-claim as deficient: the 'irrespective of whether that thesis is true or false' of weak refutation is the all-important consideration for any claim to knowledge. The pattern of justification in this argument can now be demonstrated as follows:

Woods/Walton argument:

One's grounds for holding the thesis are inadequate.

∴ One's claim to know the thesis is deficient.

One's thesis has been refuted in the weak sense.

(proposition identical in content to conclusion)

One's grounds for holding the thesis are inadequate.

(premise of argument)

One's claim to know the thesis is deficient.

(conclusion of argument)

[→ = entailment relation]

I have suggested that the Woods and Walton *petitio* has a condition of evidential bereftness imposed on it by the very nature of the content of the argument—the

only conceivable way in which to warrant the conclusion that one's claim to know the thesis is deficient is to employ the premise one's grounds for holding the thesis are inadequate. In view of the fact that we are restricted in the evidence that we can use to warrant the conclusion, we cannot then proceed to bemoan a situation in which that conclusion entails the premise. The movement from premise to conclusion and subsequently from conclusion to premise very obviously violates a priority condition which is often discussed in relation to argument. Walton and Batten (1984) describe this condition as follows:

The assumption is that the evidentiary well-knownness of A, in order to make A of utility as a premiss, must be prior to that of B. Once the deduction is granted however, the value of B should be adjusted upwards to a plausibility value equal to (and not greater than) A. Once A has been so utilized as a premiss for B however, B could never be used as a premiss in an argument that has A as a conclusion. Reason: to be useful as a premiss, the value of B must be greater than that of A. But as was just shown above, the value of B should not be greater than that of A, if A has been used as a premiss for B in a previous deduction. Thus arguing in a circle, from A to B, and then subsequently from B to A, violates some requirement of evidential priority. (p. 154).

However, this violation of the priority condition on argument can only result in an evaluation of fallaciousness for the argument in which it occurs when the context of that argument is clearly one in which considerations of priority are important. It is far from clear that Woods and Walton intend the premise in this case to have any such priority over the conclusion: they appear equally prepared to argue from conclusion to premise when they use the refutation of a thesis in the weak sense (a condition in which neither the truth nor the falsity of a thesis has been established and as such a condition under which a claim to knowledge would be deficient) as evidence for the inadequacy of the grounds that have been adduced for holding the thesis. Walton (1985) discusses the possible non-fallaciousness of this lack of priority within argument:

However, in the majority of circular arguments we looked at, the circularity cannot be condemned as wrong or fallacious precisely because the context of dialogue fails to indicate decisively that a priority condition is a procedural requirement. The economist's argument we began with, for example, should not be declared fallacious or viciously circular by a reasonable critic unless the critic can cite evidence of an agreement, or at least a clearly agreed upon context or background requirement to argue only in one direction or the other. Similarly for the mathematician. If the objective (the problem) is to prove from A to B, and also from B to A, there need be no fallacy in solving the problem by arguing in a circle. (p. 272)

The non-fallaciousness of the Woods and Walton argument can be summarized as follows. The content of the conclusion-to-be-proved imposed a condition of evidential bereftness on the context of argument. The condition of evidential bereftness functioned primarily by effecting changes in the argument's priority requirments. No longer constrained by these requirements, Woods and Walton are at liberty to

argue from conclusion to premise as well as from premise to conclusion. What is clear is that a charge of fallacy is only defensible when the purpose of argumentation is to move from a state of what is better known, or more plausible, to that which is less well known, or less plausible, for this is what *petitio principii* cannot achieve. The purpose of argumentation need not, however, reflect a concern for such priority requirements.

In the above discussion, I have been concerned to argue for the view that petitio principii is non-fallacious in the special context of evidential bereftness in cognitive inquiry. However also on this view, petitio principii has been characterised in a positive way, as a form of reasoning or argument which contributes to the process of justification in cognitive inquiry, and not simply in a negative way, as a form of argument which is not fallacious in certain contexts of cognitive inquiry. Roy Sorensen is also committed to the view that petitio principii can, in certain cases, contribute to the process of justification (in Sorensen's terms, rational persuasion) in argument. Indeed, Sorensen's thesis that 'a variety of arguments having the form 'P, therefore, P' do not beg the question' (1991, p. 245) is similar to my own thesis. This similarity warrants a brief examination in the present context of Sorensen's claims in relation to petitio principii.

Sorensen's position can be described as follows: an argument which exhibits a question-begging form (where this is defined as propositional identity of premise and conclusion) can, in certain cases, function as a rationally persuasive argument. Sorensen concludes that because certain 'P, therefore, P' arguments are rationally persuasive, they cannot be viewed as question-begging or circular in nature (hence, the 'without circularity' in the title of Sorensen's paper). Sorensen's ultimate conclusion is that such a state of affairs commits irreparable damage to the syntactic theorist's conception of circularity. The particular feature of arguments that Sorensen is concerned to investigate is that of exemplification. Although Sorensen never explicitly defines exemplification, the idea that he has in mind is quite clearly conveyed by a number of examples. Sorensen begins an illustration of this notion be employing two arguments which do not display premise and conclusion identity and accordingly are not of the form 'P, therefore, P':

- (B1) If there are syllogisms, then information can be combined.
 - There are syllogisms.
 - :. Information can be combined.
- (B2) An argument with a missing premise is an enthymeme.
 - :. There is an enthymeme on this page.

Sorensen explains the process of exemplification in relation to these two arguments as follows: 'Since (B1) is an argument with two premises, it is a syllogism and hence evidence for its second premise, which in turn enhances the credibility of the conclusion. Argument (B2) is itself an enthymeme and so ensures the truth of its own conclusion' (p. 248). It is clear that for Sorensen exemplification as-

sumes an evidential role within argument. It is also clear that in relation to the 'P, therefore, P' arguments that Sorensen describes as rationally persuasive, exemplification must function as a source of evidence for the conclusions of these arguments, a source of evidence which is entirely independent of these conclusions—if this independence condition is not satisfied, then the argument in question fails in its task of rational persuasion: instead of dealing with arguments of the form 'P, therefore, P' which are not circular, we are dealing with arguments of the form 'P, therefore, P' which are circular. Certainly this role of exemplification is borne out by the following example advanced by Sorensen:

- (E1) Some sentences are exactly seven words long.
 - .. Some sentences are exactly seven words long.

In (E1) the existential generalisation that is the conclusion receives evidential support from exemplification which is based on the premise alone. However it is clear that, on occasion, exemplification, as conceived by Sorensen, fails as a mode of rational persuasion. To see this, consider the following example:

- (C1) Some arguments are written in black ink.
 - ... Some arguments are written in black ink.

In relation to (C1), Sorensen argues: 'In addition to being sound, (C1) is rationally persuasive. A person who doubted the conclusion comes to know it is true by considering the argument' (p. 248). It is difficult to see, however, how (C1) is rationally persuasive. As part of our 'considering the argument', we must also consider the conclusion. The conclusion in this case is part of the exemplification by means of which a sceptic is 'persuaded' of the truth of the conclusion. In this way, evidence in support of the conclusion of this argument is not independent of the conclusion. Sorensen's exemplification has, on this occasion, failed in its task of rational persuasion.

Notwithstanding Sorensen's unfortunate use of the example (C1), it is clear that Sorensen has found in exemplification a novel method of analysis, not simply of question-begging argument, but of the notion of justification in argument in general. Sorensen calls this alternative view of argument justification ontic persuasion. He distinguishes ontic persuasion from the standard view of argument justification in the following way:

'Reason' sometimes refers to a justifying proposition and sometimes refers to the things the proposition is about. Thus I may explain my hospitalization with the propositional reason 'My leg broke', or by pointing to my broken leg as my "ontic" reason. We are used to thinking of arguments as aiming to have premises that are propositional reasons for their conclusions, but the (B)-(E) cases show that an argument itself can be an ontic reason for its conclusion. (1991, p. 253)

Although I have already indicated a difficulty for Sorensen's account of the non-circularity of *petitio principii* which is presented by the view that 'an argument itself can be an ontic reason for its conclusion', the non-propositional nature

of ontic persuasion opens the way for an evaluation of non-fallaciousness to be applied to an argument which, in terms of its propositional structure, displays complete circularity. Indeed, the non-propositional basis of ontic persuasion reveals a relevance of this form of persuasion to the present discussion of cognitive inquiry under conditions of evidential bereftness. The relevance is this: nonpropositional persuasion, of which exemplification is an example, is, on the basis of the analysis of this form of persuasion presented by Sorensen, an appropriate reasoning strategy for contexts of inquiry which are evidentially bereft on account of a lack of propositional knowledge. This lack of knowledge, it was argued above, can be seen to characterise immature inquiries, that is, inquiries which are in the very early stages of their development. A non-propositional mode of rational persuasion can facilitate the progress of such an inquiry, at least until a time when sufficient knowledge has been acquired by that inquiry to permit justification to proceed by propositional means. Even when such knowledge is acquired, nonpropositional persuasion might continue to operate alongside propositional modes of justification in grounding theses in cognitive inquiry. Of course, these uses of non-propositional persuasion are dependent in turn on the demonstration of a much wider domain of application for exemplification than that which has been achieved by Sorensen (Sorensen himself is aware of the limited application of exemplification in 'P, therefore, P' arguments when he writes: 'Self-supporting 'P, therefore, p' arguments are seldom propounded because we are rarely interested in establishing the sort of conclusions they demonstrate' (1991, p. 250)). However, my interest in exemplification in the above discussion has not been with the type of conclusions that it validates, but rather with the type of analysis that it makes possible, an analysis to the effect that certain 'P, therefore, P' arguments are non-fallacious/ non-circular/non-question-begging in nature.

Notes

- * This paper was written while the author was in receipt of the Eila Campbell Memorial Award from the British Federation of Women Graduates. The author wishes to express her gratitude to the Federation for its financial assistance. The comments of a referee of this journal on an earlier version of this paper are gratefully acknowledged.
- It is necessary to draw the reader's attention to a confusion in terminology which may arise during the discussion of this particular argument. Such confusion may come about by the fact that we are examining what is, in effect, an argument which is itself about aspects of argument. For example, in describing the question-begging nature of this argument, I will have occasion to discuss the entailment relationships which exist between premise and conclusion (route (1)) and conclusion and premise (route (2)). This is distinct from the evidential relationships discussed within the premise and conclusion as separate entities, i.e., how the grounds which we can adduce in support of a thesis stand in an evidential relationship to that thesis. This latter type of evidential relationship relates to premise and conclusion content and, contrary to the views of many theorists in the area, is essential to any adequate account of what constitutes a question-begging argument. This issue is discussed further in the main text.

- ² Central to Rescher's analysis are the concepts of categorical assertion, cautious assertion and provisoed assertion:
 - (1) Categorical assertion

!P for "P is the case" or "It is maintained (by me, the assertor) that P".

The proponent's opening move of a disputation must take this categorical form.

- (2) Cautious assertion
 - +P for "P is the case for all that you (the adversary) have shown" "P's being the case is compatible with everything you've said (i.e., have maintained or conceded)".

Moves of the !-type can be made only by the proponent, those of the +-type only by the opponent.

- (3) Provisoed assertion
 - P/Q for "P generally (or usually or ordinarily) obtains provided that Q" or "P obtains, other things being equal, when Q does" or "When Q, so *ceteris paribus* does P" or "P obtains in all (or most) ordinary circumstances (or possible worlds) when Q does" or "Q constitutes *prima facie* evidence for P".
 - NOTE: This move must always be accompanied by one of the two preceding forms of asser tion of its operative condition Q. Note also that corresponding forms of denial arise when ~P stands in place of P. (1977, p.6)
- ³ It might, of course, be argued that a *petitio principii* argument is only evident on the assumption that the proponent's thesis at stage (1) is !P, but that there is nothing in Rescher's passage to indicate that this is the case. However, for the opponent at stage (1) to produce a cautious denial of the form +~P, the proponent's thesis at (1) must be !P. The options available for the proponent's thesis at (1) are as follows:
 - (1) P
 - (2) Q
 - (3) ~P
 - (4) ~Q

If the proponent's thesis had a content other than P (options 2 and 4 above), the opponent's response of $+\sim$ P would clearly have been irrelevant. Similarly, if the proponent's thesis had taken the form of a negative assertion (options 3 and 4), the opponent's response would have been a mere repetition of the proponent's thesis in option 3, in which case it would hardly rank as a countermove, or alternatively an irrelevancy in option 4. The only option which avoids rendering the opponent's thesis at (1) as completely nonsensical is P.

⁴ It may be argued that I am describing as one notion what are, in effect, two separate notions, that of evidence and inference after all, is Finocchiaro not describing inference, 'the connection . . . between various assertions'? While evidence and inference are distinct notions, they are interdependent in their mode of operation. On the one hand, it is often the case that inferences play a role in the process by which we obtain evidence from perception. On the other hand, inferences are only ever as strong as the evidence which supports them (cf. Sidgwick's 'ground of inference'). In the following argument:

All men are mortal.

Socrates is a man.

.. Socrates is mortal.

the conclusion is established conclusively by means of a deductive inference from the premises. The strength of this inference derives from the universally quantified proposition which constitutes the major premise of the argument that is, it is the strength of the evidence represented by this premise which confers a corresponding strength on the inferential move from premises to conclusion.

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