A Critical-rationalist Approach to Premise Acceptability

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1. Introduction

In this paper I consider the problem: 'When is a statement acceptable as a premise in an argument?' This question is widely discussed in informal logic and practical reasoning circles, but most of these considerations presuppose the correctness of a justificationist epistemology: where the information comes from is of paramount importance in assessing its legitimacy. This is explicit in the title of an important paper by Freeman (1996): "Consider the Source". Not only has justificationism got many faults, some of which I mention in the next section, but also the audience to whom the argument is addressed tends to be overlooked. In an argument we are, typically, trying to convince one or more people of something that they are initially reluctant to accept. We do this by showing them that it follows from premises that they do accept. My approach puts the emphasis on the audience to whom the argument is addressed.

I see premise acceptability as being part of the broader issue of testimony and I have developed a critical-rationalist account of how we respond to the assertions of others: we accept them unless we have a reason not to. (Critical rationalism is opposed to all forms of justificationism.) We do not need a reason to accept testimony. We have a tendency to believe other people and the default position when we hear or read an assertion is simply to accept it. The proposal I present in detail below is that a premise is acceptable in an argument if the audience has no objection to it. I also show that this proposal is better than a widely accepted account of premise acceptability.

2. Critical Rationalism

'Critical rationalism' is the name given to the philosophy developed and elaborated by Popper. It is a species of rationalism and, as such, is opposed to all forms of irrationalism. Popper does not try to give an exhaustive characterisation of all the forms that irrationalism has taken. He, rather, focuses on what he takes to be its key component: other people's opinions and arguments are not taken at face value. Irrationalists see thought as being 'merely a somewhat superficial manifestation' of what exists in 'the "deeper" layers of human nature' (Popper 1966, p. 235) and they look for the hidden motives from which they believe theories and arguments spring.

Rationalists seek 'to solve as many problems as possible by an appeal to reason, i.e. to clear thought and experience, rather than by an appeal to emotions and passions' (Popper 1966, p. 224). Popper (1966, p. 225) sums up his own brand of rationalism by means of the formula: 'I may be wrong and you may be right, and by an effort, we may get nearer to the truth'. This attitude of reasonableness, as Popper calls it, may sound simplistic, but it encapsulates a many-faceted and fecund position. At its heart is a readiness not to lightly dismiss contrary opinions and a willingness not to ignore or

evade criticisms directed at your own views. It is an attitude that welcomes such criticisms and actively encourages them. A moral commitment is required to adopt the attitude of reasonableness (Popper 1966, p. 231). This is one of the most distinctive features of critical rationalism. Living in accordance with this attitude is not an easy thing to do. It involves an almost daily struggle not to dismiss, in one way or another, inconvenient truths and irritating arguments that do more than merely suggest that our carefully-worked out opinions are not as perfect as we would like them to be.

Popper (1966, pp. 215–216) mentions several methods that irrationalists use to 'unveil the hidden motives behind our actions'. A psychoanalyst, for example, presented with an objection to one of Freud's theories, may say that that objection is due to the critic's repressions. A Marxist may well dismiss an opponent's disagreement by saying that it is due to his class bias and a sociologist of knowledge by saying that it is due to his total ideology. (This method, when used by a sociologist of knowledge, is dubbed 'socio-analysis'.) An Hegelian faced with an argument that shows his position to be inconsistent may proclaim that contradictions are fertile. A philosopher of meaning presented with objections to his ideas may well dismiss the views of his opponents as being meaningless. This is a very powerful way of dealing with criticism as it is always possible to use such a narrow conception of meaning that makes any inconvenient question senseless (Popper 1975, p. 51).

The practice of arguing logically exists in present-day societies and has existed for thousands of years. The difference between the rationalist and the irrationalist is not that the former engages in this practice and the latter does not, but rather in *how* they participate. Someone is an irrationalist if he fails to take *some* arguments seriously (Popper 1966, p. 240). An irrationalist may well treat certain arguments at face value, but 'without any feeling of obligation'. Thus, Popper (1966, p. 251) considers Arnold Toynbee, the author of the monumental *A Study of History* (1934–1947), to be an irrationalist even though he uses 'a fundamentally rational method of argument' when discussing different historical interpretations of the same series of events. He is an irrationalist because, when discussing Marx, he does not reply to his opinions and arguments rationally, but rather explains them away as being the product of Marx's social habitat rather in the manner of the sociologists of knowledge using their irrational methods, including that of socio-analysis.

As already mentioned, critical rationalism is opposed to all forms of justificationism. I have discussed the main differences between justificationism and anti-justificationism elsewhere (Diller 2006). I will briefly mention a few of the key differences here. (Unfortunately, I do not have enough space to discuss probabilistic varieties of justificationism and so my considerations are restricted to non-probabilistic justificationism.) These key differences can be brought out by considering some of the things that the justificationist Gilbert says about argumentation. It should be noted that my discussion of Gilbert's ideas is restricted to what he says in his book *How to Win an Argument* (1996). I do not wish to suggest that my criticism of what he says there necessarily applies to the more sophisticated analysis of argumentation that he presents in *Coalescent Argumentation* (1997) which, unfortunately, I do not have space to examine with the thoroughness that it deserves.

In its simplest form, a justification for some standpoint is a logical argument the conclusion of which is that very standpoint and the premises of which are themselves justified statements. Gilbert (1996, p. 35) accepts this idea of a justification and he proposes the following Principle of Rationality: 'Always assume that people have reasons for their beliefs.' On the basis of this he gives the following advice to those engaged in an argument (p. 32): 'Always attack the reasons for a claim, not the claim

itself.' This is bad advice for at least three reasons. In the first place, as Harman (1986, pp. 38–40) stresses, people rarely keep track of the reasons for their beliefs. This means that they simply would not be able to say why they hold certain beliefs. In the second place, showing that the reasons for a claim are false tells us nothing whatsoever about the truth or falsity of the claim itself, as a valid argument with just a single false premise can have either a true or a false conclusion. In the third place, it opens the door either to a charge of circularity or to the possibility of an infinite regress. Gilbert (1996, p. 34) is honest enough to acknowledge these faults of his advice: 'The sequence of claims and reasons may even come back and meet itself, so that in the end your beliefs form a circle.' Arguing in a circle is generally acknowledged to be fallacious. The threat of an infinite regress has even more dire consequences:

Someone who believes something without reason is being irrational. In terms of argument, being rational means providing reasons for beliefs. In the end all of us may be irrational, since sooner or later we reach a point of ultimate beliefs (for which it is impossible to provide reasons).

Rather than trying to improve his conception of rationality, Gilbert does not say anything more about the possibility that we are all irrational and carries on as if nothing is seriously wrong with his characterisation of rationality. A critical rationalist would agree with the deficiencies of rationality that Gilbert draws attention to, but he or she would say that these only apply to the particular account of rationality that Gilbert accepts. There are other conceptions of rationality that do not have these faults; Popper's critical rationalism is one of these.

Gilbert's approach exemplifies several elements of justificationism. One of these is the fusing of criticism with justification (Diller 2006, p. 123). This means that the main or only kind of criticism that is countenanced is that in which a claim is criticised by attacking the reasons that supposedly support it. In the previous paragraph I showed that Gilbert explicitly endorses this view. Another constituent of justificationism illustrated by Gilbert's position is that there have to be claims that cannot be criticised (Diller 2006, p. 123). Gilbert calls these 'ultimate beliefs'; for him they prevent an infinite regress of justifications being generated. As they have no reasons to support them there are no reasons to attack. Hence, they cannot be criticised.

Critical rationalists do not link criticism and justification. They employ various methods of criticism (Diller 2006, pp. 124–126). However, they do not criticise a claim by attacking its reasons. Critical rationalists would not give anybody the advice to attack the reasons for a claim rather than the claim itself. They would, rather, advise those involved in argumentation to directly criticise any claims they find objectionable. One kind of criticism they do use is that of criticising a claim by showing that it has clearly false consequences. Since falsity is retransmitted in a valid argument, this would mean that the claim itself was false. In general, they hold that the origins of a theory are irrelevant to its truth; the consequences of a standpoint are far more important in assessing its value. Gilbert (1996, p. 31), however, tells people not to criticise claims directly and attempts to provide a rationale for this: 'If the reasons are good and the logic is correct, you are bound to accept the claim. This is why you never attack claims directly.' He is correct in saying that truth is transmitted in a valid argument. However, falsity is not. If the reasons are bad and the logic is correct, you are not bound to reject the claim. (It is also correct to say that if the reasons are good and the logic faulty, then you are not bound to reject the claim.) Just because one particular set of reasons for a claim has been shown to be false does not mean it is irrational to accept that claim.

There may well be other considerations that show it is rational to believe it and carry on believing it.

As already mentioned, one of the differences between justificationists and antijustificationists, such as critical rationalists, is that justificationists are forced to admit that some statements are beyond criticism. Anti-justificationists, by contrast, are antiauthoritarian in the sense that they believe that everything can be criticised and that nothing is immune from criticism.

A critical rationalist would not endorse Gilbert's Principle of Rationality. In its place he or she would put something along the following lines: Assume that people are either unaware of any criticisms of their beliefs or they can rationally counter any criticisms of which they are aware. A critical rationalist does not think it is irrational to hold unjustified beliefs; it is irrational to carry on believing something which has been successfully criticised. The critical rationalist, however, needs to explain how we acquire our initial stock of beliefs, and continue adding to it throughout our lives, and this I do in the next section.

3. Testimony

Most of our beliefs have been received from the testimony of others. Before continuing, I need to point out that by 'testimony' I mean much more than just eyewitness testimony. 'Testimony' refers to propositional information about anything that we receive from another person in either written or spoken form. Virtually all of our knowledge about history and science, for example, comes from testimony. This is how we know that the Battle of Thermopylae, between the Greeks and Persians, took place in 480 B.C. and that the losing Greek force was led by the Spartan king Leonidas. It is also how we know that the speed of sound in dry air at zero degrees Celsius is 331.4 metres per second. I would also like to mention that, unlike some writers, I do not distinguish between *belief* and *acceptance*. Scholars who do distinguish between these differ amongst themselves as to how acceptance should be understood and I do not have the space here to evaluate their analyses. I do not deny that there are several different ways in which we can hold propositional information, but for my purposes I only need to consider one such method.

We have a tendency to believe what other people assert and I have argued elsewhere that we respond to testimony as if that response were governed by the defeasible acquisition rule: 'Accept other people's assertions' (Diller 2008, p. 434). We do not need a reason to accept testimony. In the absence of any other considerations we cannot but believe what others assert. It should be noted that our acceptance of testimony is neither the result of a decision nor a result of argumentation. Thus, the default position is that, when we hear or read an assertion, we simply accept it. However, we do not believe every piece of propositional information we come across. The acquisition rule is *defeasible*: it can be overruled. Young children are usually seen as being more prone to believe what they are told. However, as we grow up we learn that, for various reasons, the assertions that people make are not always true. People sometimes lie deliberately or they may be genuinely mistaken in what they themselves believe. We also learn that not all written information is correct. So, we learn to overrule the acquisition rule. The fact that such overriding factors are learnt has at least two consequences, namely that the way in which people respond to testimony changes over time and that not everybody necessarily responds to the same piece of testimony in the same way.

We receive information from various sources, including other people in the flesh, books, journal articles, the media and the Internet. For example, a visitor to London who asks a policeman for directions to the British Museum is likely to receive the information requested and accept it as being true; a person interested in Ancient Egypt will learn a great deal by reading books about that period. In considering the factors that people take into account when they are deliberating whether or not to reject an assertion, it is helpful to group those factors into categories. No doubt, several different categorisations are possible, but the most obvious one is suggested by the nature of communication itself. In its simplest form, communication involves the production of a message, in spoken or written form, by a single speaker or author and its reception by a single hearer or reader. Thus, many of the overriding factors will fall into one of the following three categories: those relating to the assertor, those relating to the content of the assertion and those relating to the recipient of the message. Factors relating to any of these three categories may come into play no matter where the encountered assertion is found. They apply equally to spoken assertions as well as to those found in books, in newspapers, in articles and on the Internet. In the case of spoken, but not written, assertions, whether heard on the radio, television or when listening to another person in the flesh, there is another category of factors that relate to the manner in which the spoken assertion is delivered. There are also specific factors pertaining to the medium by which the assertion is conveyed. Thus, there are specific factors that apply to assertions heard on the radio that do not apply to assertions read in a book. Some examples will make this clearer. An example of an overriding factor relating to the recipient of information is that the information is inconsistent with his or her pre-existing knowledge. Usually, people reject information that conflicts with what they already know. I recently read, for example, Kynaston's book Family Britain (2009) in which the author states that Colin Wilson, one of the most influential of the Angry Young Men of the 1950s, came from a lower middle-class background (p. 643). I did not accept this claim as, being interested in the Angry Young Men, I have read a lot about them and know from various sources that Wilson came from a working-class family and has never made a secret of this. In this case I overruled the operation of the acquisition rule.

Many overriding factors apply to the person making an assertion. Hume was aware of several of these. In section X of An Enquiry Concerning Human Understanding (1748) he mentions various factors that we take into account when assessing the truth or otherwise of what other people tell us. He says that we consider the character of the person involved. If he is of doubtful character, then we do not necessarily accept his testimony. We consider whether or not the person has an interest in what he tells us. We also take into account the manner of the person's delivery. If he either hesitates or presents his testimony with 'too violent asseverations', then this may arouse our suspicions. Hume's observations are as relevant today as when he first made them, though they should not be thought of as an exhaustive list of possible overriding factors that people use when listening to someone talk.

It should be stressed that in the critical-rationalist account of testimony that I am putting forward the beliefs we acquire by accepting other people's assertions are not justified in any way whatsoever. They just are beliefs that we have obtained from testimony. We cannot help but believe other people, unless we have some reason not to, as the powerful tendency to accept others' assertions has been built into us. I have argued elsewhere against the idea that testimonial beliefs are justified in any way (Diller 2008, pp. 421–425).

Two mechanisms are needed to account for the spread of information across

time and between people. In addition to the acquisition rule, which explains how people respond to the propositional information they come across, we also need a means of making such information available to other people. All we need for this purpose is the social practice or speech act of assertion. Assertion and the acquisition rule are all that is required to explain how propositional information is transmitted between people.

Unfortunately, for many reasons, including our inability to always spot when other people are lying and because people, being fallible, do make mistakes, we acquire some false beliefs by accepting the testimony of others. We thus need to check some of the propositional information we come across. We cannot test all this information because there is so much of it and because examining information can be a very timeconsuming activity. However, it is worth investing the time and energy to investigate the truth or falsity of information that is particularly important to us or which we find intriguing for some reason or other. Thus, in addition to absorbing propositional information, as explained by the acquisition rule, we need sometimes to engage in checking such information. There is a division of intellectual labour involved in the task of testing specialised information as not everybody is equally equipped with the expertise needed to evaluate the veracity of all kinds of information. Thus, an ancient historian would not be the right person to ask to investigate the speed of sound, but he would be able to research what happened at the Battle of Thermopylae. Most adults, however, have at least a rudimentary understanding of how to test everyday assertions and this can be improved by being taught critical-reasoning skills or informal logic. The activities of absorbing propositional information and criticising it are interleaved in our intellectual endeavours. An account of testimony that recognises them both can, therefore, be called a two-phase model. I have elaborated such a model elsewhere (Diller 2008, pp. 433-442).

4. Premise Acceptability

I see the issue of premise acceptability as being part of the more general topic of testimony. A theory of testimony must be able to account for our acceptance of other people's assertions no matter what, if anything, we intend to do with such information. Some people, for example, like to acquire knowledge for its own sake without any thought of its utility. Some of the information we acquire, however, guides what we do. Knowing that the weed henbane is poisonous may well save your life as you are unlikely to put it into your salad. (The English celebrity chef Antony Worrall Thompson advised readers of the August 2008 issue of Healthy and Organic Living magazine to add henbane to salads; he had confused it with the weed fat hen which actually is sometimes included in salads.) In the case of premise acceptability, we are interested in the acquisition of propositional information which will form the foundations of various sorts of argumentation. Two people, for example, may be discussing whether or not they should go swimming in the ocean later that day. In the course of their conversation one of them asserts that she heard the weatherman forecast a thunderstorm. The other one accepts this and, believing that swimming during a thunderstorm is dangerous, concludes that it would be dangerous to go swimming. This might well influence what they decide to do.

My proposal is that premise acceptability is governed by the acquisition rule. Thus, in the case of a face-to-face argument, a premise is acceptable if the antagonist has no reason to overrule the acquisition rule when the protagonist asserts that premise in the course of the argument. Different people, as mentioned above, do not necessarily

respond to the same piece of information in the same way. There is great variety in the factors that people use to overrule the acquisition rule. Because of this I think it is a mistake to look for intrinsic properties of statements that would make them universally acceptable as premises. In a face-to-face argument the onus is on the antagonist to inform the protagonist if he or she has any objections to a statement being considered as a premise. If the protagonist asserts a proposition which the antagonist does not explicitly reject, then both parties can use that proposition as a premise in their future arguments.

Many arguments are written in various sorts of document. Arguments occur, for example, in books, journal articles, newspaper columns, Internet blogs and so on. Similar considerations apply to all these cases, so I will only consider written arguments as they occur in journal articles. With slight changes what I say will also apply to other sorts of written arguments as well. In a journal article, premises are acceptable if it can be assumed that the intended readership would have no objection to them. The editor and referees are usually the final arbiters of which premises are acceptable and they are guided by the purpose and scope of the journal. Someone writing for the Marxist journal Capital & Class, for example, can assume that the intended readership accepts the fundamental tenets of Marxism and so these do not need to be argued for. Similarly, someone submitting an article to Analysis, a journal of analytic philosophy, would be advised not to take for granted the core assumptions of critical rationalism as these are not accepted by analytic philosophers who constitute the intended readership. There are, of course, journals like *Philosophy of the Social Sciences* which present themselves as not being partisan. In every issue they state: 'No school, party, or style of philosophy of the social sciences is favored. Debate between schools is encouraged.' Even in such cases, however, assuming the claim of non-partisanship to be correct, the intended audience can be assumed to have no objection to certain statements which can form the starting points for various sorts of argument. The journal is aimed, after all, at philosophers with a special interest in the social sciences.

Some of the advantages of my proposal are best brought out by contrasting it with a widely accepted alternative account. I give references to the version found in chapter 4 of Bickenbach and Davies (1997) because their account is clearly and concisely presented, but similar accounts are also to be found in books by Govier (1988, ch. 5), LeBlanc (1998, ch. 6), Moore and Parker (1989, ch. 3), Conway and Munson (2000, ch. 11) and no doubt many others.

Bickenbach and Davies (1997, p. 159) propose that a premise is acceptable if it is a necessary truth or it is a controversial claim accepted by both the protagonist and antagonist for the sake of argument. A premise is also acceptable if it is a contingent truth, but in this case it must either be supported by a cogent sub-argument or form part of common knowledge or be asserted by an appropriate expert or be a credible report of personal experience. I will look at each of these kinds of supposedly acceptable premises in turn. Thinking that a premise is acceptable because it is a necessary truth appears, at first sight, to be entirely reasonable and straightforward. Bickenbach and Davies (1997, p. 158) say that there are two types of necessary truth, namely statements that are true by definition and logical truths. Quine's essay "Two Dogmas of Empiricism" (1951) has spawned what seems to be an interminable flood of articles about analyticity and what it is for a statement to be true by definition. There exists no consensus and the protagonist and antagonist in a dispute may well disagree about what is true by definition. Just because one person thinks a statement is true in this way does not mean everyone will. Only if the protagonist and antagonist agree on this matter can the relevant statement be accepted as a premise and this is exactly what my proposal

amounts to in this case.

People also disagree about certain logical truths. Intuitionistic mathematicians and philosophers do not accept that many classically true logical laws, such as the law of excluded middle, really are correct. Thus, if the antagonist in an argument is an intuitionist, the protagonist cannot use the law of excluded middle as a premise as it is unacceptable to the antagonist. In this case my proposal for premise acceptability fares much better than that of Bickenbach and Davies (1997). It should be noted that intuitionists are not the only people who object to certain classically true logical laws. Various philosophers and logicians have proposed revisions of classical logic as documented, for example, by Haack (1996).

Bickenbach and Davies (1997, p. 163) allow controversial and even false statements to be acceptable as premises if the protagonist and antagonist agree to accept them because they are interested in seeing what would follow from them if they were true. They imagine a situation, for example, where the statement that Napoleon won the Battle of Waterloo is accepted in order to test the claim that 'later developments in Russia were a direct result of Napoleon's defeat'. I have no objection to this and it is easily accommodated within my general approach to premise acceptability.

For Bickenbach and Davies (1997, p. 159), a contingent truth is acceptable as a premise if either it is supported by a cogent sub-argument or it is a part of common knowledge or it is asserted by an appropriate expert or it is a credible report of someone's personal experience. A premise supported by a cogent sub-argument raises no new issues since it itself must have premises and some account must be given of their acceptability.

Bickenbach and Davies (1997, p. 159) see common knowledge as being relative to a country, for they say that it is common knowledge for 'people living in Canada' that 'Canadian winters are colder than Canadian summers' and 'among North Americans' that 'one of the most important holidays in the U.S.A. occurs in July'. The idea seems to be that if you are arguing with someone in Canada you can treat everything that is common knowledge in Canada as an acceptable premise and if you are arguing with someone in North America you can regard everything that is common knowledge there as an acceptable premise. Unfortunately, they do not provide any rationale for why this should be the case. Why relativise common knowledge to a country? Why not to a state, region, county, province or even tribe? The boundaries of many countries, such as those in Africa, were imposed by colonial powers with no regard to the needs or concerns of the indiginous populations. Why should common knowledge be relative to such an arbitrary political construct? In deciding which premises are acceptable we must always take account of the audience to whom the argument is addressed. Someone putting forward an argument in a newspaper article in Canada, say, needs to assume certain propositions as premises. On my proposal, these will be things that the intended readership of the newspaper would accept. This would depend upon various factors including the political affiliation of the newspaper and whether it was a serious paper or merely a tabloid. The category of such statements is not the same as what is common knowledge in Canada. That category is proposed without reference to the audience being argued with. Moreover, I have provided a rationale for my proposal, whereas Bickenbach and Davies (1997), as already mentioned, have not provided one for theirs.

In the case of expert or personal testimony the justificationist roots of the approach proposed by Bickenbach and Davies (1997) are finally made explicit. The idea is that the source of certain statements renders them acceptable. The truth is that we accept propositional information from any source unless we have a reason to reject it. We do not accept what an expert says, for example, because the information comes from

an expert; the fact that it comes from an expert affects the kind of reasons we can give for rejecting it. Expert testimony can indeed be rejected and experts can and do contradict one another. A widely reported recent example concerns the possibility that chronic fatigue syndrome may be caused by the XMRV virus. There was considerable media coverage of the results of a study by Lombardi et al. (2009) suggesting that maybe as many as 95% of sufferers had the XMRV virus compared to about 4% of the general population. A few months later, a study by Erlwein et al. (2010) found that none of the patients with chronic fatigue syndrome they tested had the XMRV virus. The truth of the matter is not decided by working out which team of researchers is the more expert. What is happening is that a critical discussion is taking place in order to try and explain both findings and understand what is really going on. Many people also feel that more research needs to be done. Examples of such discussions can be found, for example, on a number of websites, including those of the Whittemore Peterson Institute for Neuro-immune Disease (www.wpinstitute.org), ME Research UK (www.mereearch.org.uk) and the UK-based ME Association (www.meassociation.org.uk). (These websites were consulted in May 2010.) This is exactly what a critical rationalist would expect.

In the case of personal testimony, again, we do not accept someone's testimony because they are particularly reliable and the testimony is credible. We accept everyone's testimony unless there are reasons to reject it. The concepts that wear the trousers are those of unreliability and implausibility. We assume that everyone is reliable and all testimony is credible unless we have a definite reason to think the assertion is unreliable or the testimony implausible.

As well as having criteria of acceptability, Bickenbach and Davies (1997, p. 160) also have principles of unacceptability. There is no point in discussing these at length as they are mirror images of the acceptability criteria and so add nothing new to their account. Thus, corresponding to the rule that a premise is acceptable if it is part of common knowledge, they propose that a premise is unacceptable if it is refuted by common knowledge.

This comparison between my proposal and that of Bickenbach and Davies (1997) shows the advantages of my way of looking at things and the flaws in a widely accepted account that seeks to uncover intrinsic properties of statements that render them universally acceptable as premises irrespective of the context in which they are put forward.

5. Conclusion

In this paper I have presented a proposal concerning premise acceptability and compared it to a widely accepted alternative account. My proposal sees premise acceptability as being part of a more general theory of testimony and the specific account of testimony that I have made use of is a critical-rationalist one which sees us as accepting information unless we have definite reasons not to. Furthermore, my proposal for premise acceptability emphasises the role of the audience to whom an argument is addressed rather than looking for intrinsic properties of statements that would make them universally acceptable as premises.

REFERENCES

- Bickenbach, J. E., & Davies, J. M. (1997). Good Reasons for Better Arguments. London: Broadview Press.
- Conway, D. A., & Munson, R. (2000). *The Elements of Reasoning* (3rd ed.). London: Wadsworth.
- Diller, A. (2006). Constructing a comprehensively anti-justificationist position. In I. Jarvie, K. Milford & D. Miller (Eds.), *Metaphysics and Epistemology* (pp. 119–129). Aldershot: Ashgate.
- Diller, A. (2008). Testimony from a Popperian perspective. *Philosophy of the Social Sciences*, 38, 419–456.
- Erlwein, O., Kaye, S., McClure, M. O., Weber, J., Wills, G., Collier, D., et al. (2010). Failure to detect the novel retrovirus XMRV in chronic fatigue syndrome. *PLoS One*, *5*, e8519.
- Freeman, J. B. (1996). Consider the source: One step in assessing premise acceptability. *Argumentation*, 10, 453–460.
- Gilbert, M. A. (1996). How to Win an Argument (2nd ed.). New York, NY: Wiley.
- Gilbert, M. A. (1997). Coalescent Argumentation. London: Routledge.
- Govier, T. (1988). *A Practical Study of Argument* (2nd ed.). Belmont, CA: Wadsworth Publishing Company.
- Haack, S. (1996). *Deviant Logic, Fuzzy Logic: Beyond the Formalism*. London: University of Chicago Press.
- Harman, G. (1986). Change in View: Principles of Reasoning. London: MIT Press.
- Kynaston, D. (2009). Family Britain: 1951–57. London: Bloomsbury.
- LeBlanc, J. (1998). Thinking Clearly. London: W. W. Norton.
- Lombardi, V. C., Ruscetti, F. W., Gupta, J. D., Pfost, M. A., Hagen, K. S., Peterson, D. L., et al. (2009). Detection of an infectious retrovirus, XMRV, in blood cells of patients with chronic fatigue syndrome. *Science*, *326*, 585–589.
- Moore, B. N. and Parker, R. (1989). *Critical Thinking* (2nd ed.). Mountain View, CA: Mayfield.
- Popper, K. R. (1966). *The Open Society and its Enemies* (Vol. 2, 5th ed.). London: Routledge & Kegan Paul.
- Popper, K. R. (1975). The Logic of Scientific Discovery (8th ed.). London: Hutchinson.
- Quine, W. V. (1951). Two dogmas of empiricism. Philosophical Review, 60, 20-43.