

# ISSA Proceedings 2010 - Critical Inquiry: Considering The Context



## *1.Introduction*

The significance of considering the context surrounding an issue is underestimated and often overlooked in approaches to critical thinking theory and instruction based on informal logic. For example, fallacies of relevance such as *ad hominem* are seen as fallacious precisely because they appeal to the context rather than to the argument itself. In this paper we challenge this view, demonstrating how and under what circumstances considering context is relevant and even vital to critical thinking.

We begin by arguing that the downplaying of the relevance of context stems from the view of critical thinking as essentially the evaluation of individual arguments. This view, which betrays the vestiges of the deductivist heritage of informal logic, still underpins much critical thinking instruction.

We have argued, on the contrary, that critical thinking is better viewed in terms of what we refer to as critical inquiry in which argumentation is seen as a way of arriving at judgments on complex issues. This is a dialectical process involving the comparative weighing of a variety of contending positions and arguments in order to come to a reasoned judgment on the issue (Bailin & Battersby 2009; Battersby & Bailin 2010). Further, we argue that critical thinking instruction should focus on this inquiry process (Bailin & Battersby, 2010).

In the model we have developed for teaching critical thinking as critical inquiry, considering the context of the issue is an important component. We consider the following aspects of context:

- (1) Dialectical context
- (2) Current state of belief or practice
- (3) Intellectual, political, historical, social
- (4) Disciplinary context
- (5) Sources
- (6) Self

## *2. The Role of Various Contexts*

### *(1) Dialectical context*

The dialectical context includes the debate around an issue, both current and historical. A knowledge of the dialectical context is centrally important because reaching a reasoned judgment involves more than simply evaluating a particular argument. Rather, it involves making a comparative assessment of the relative strengths and weaknesses of the competing views.

To see the importance of considering the history of an arguments, consider the following example. This is a standardization of an argument written by a “lifer” in the Michigan prison system (from Johnson & Blair 2006):

Conclusion: We should not reinstate capital punishment in Michigan.

P1. We have capital punishment in 38 states and their statistics show no significant decrease in capital crimes.

P2. The 1<sup>st</sup> degree murderer is least likely to repeat.

P3. The 1<sup>st</sup> degree murderer is most likely to repent.

P4. Nationwide, corrections officials report that lifers are the best prisoners and stabilizers in their prisons.

Some individuals, upon seeing this argument, may initially judge many or even all the premises as irrelevant because they are unaware of the history of the debate about capital punishment. Whereas they usually seem to know the retribution argument, they often do not have the background knowledge of the argument about the alleged deterrent effect of capital punishment or the argument that lifers will produce mayhem in the prisons since there is no further punishment they can suffer. As a result, they fail to see the relevance of the statistics in premise P1 or the relevance of the remark in premise P4 about the contribution that lifers make to prison stability. More sophisticated readers will know about these debates and bring that knowledge to bear on understanding and evaluating the argument.

In addition, the question of premise acceptability is dependent on the reader’s awareness of the debate. The fact that capital punishment fails to deter murder has been quite widely accepted for many years. This means that people who know the history of the debate would be inclined to accept premise P1. But for those unaware of the history of this argument, premise P1 may seem counter intuitive and unacceptable.

Sophisticated readers use their awareness of the history of the debate all the time, but this awareness needs to be made self conscious to enhance reasoning and to teach it. The tendency of critical thinking instruction to extract arguments from their context ignores the methods that sophisticated reasoners use to evaluate arguments. In addition, such an ahistorical approach often results in arguments and insights being underappreciated. If you are unaware of the dialectical context of Newton's, Darwin's, or Descartes' theories, you will probably not appreciate the depth of the insights contained in their arguments. Appreciating philosophical arguments involves understanding the dialogue that has transpired between historical interlocutors, sometimes over millennia.

Perhaps under the influence of the paradigm of the natural sciences as ahistorical disciplines, 20<sup>th</sup> century analytical philosophy tended to minimize the importance of the historical embedding of arguments and an account of their history. While the validity of an argument cannot depend on the history of the debate in which it arose, the understanding of and credibility of the argument (and conclusion) can. The first questions given any argument that passes *prima facie* evaluation should be, "What is the history of this debate? What are the counter arguments?"

This is as true for scientific inquiry as it is for philosophical or public policy debate. In science, the current standing of a theory or claim determines the initial burden of proof of a new or counter claim. Without knowing the history of a scientific inquiry, one cannot make a reasonable assessment of the new claim.

## *(2) Current state of practice or belief*

An understanding of the current state of belief or practice surrounding an issue may reveal what is significant or contentious about the issue. It may also help to establish where the burden of proof resides and thus how strong alternative views and opposing reasons need to be in order to seriously challenge the prevailing consensus or practice.

To see the relevance of current states of belief or practice, consider what Canadians discussing the legalization of marijuana need to know. They need first to understand the current legal situation, including the fact that drug laws are not under provincial but rather federal jurisdiction. Without realizing this, one of our students made the unjustified argument that if marijuana were legalized, then "dopers" from the rest of Canada would flock to Vancouver. To make a reasonable evaluation of the consequences of not de-criminalizing, it is also important to

know the number of people convicted of possession every year in relation to the number of users. In addition, one should be aware of the popular belief, widely promoted by governments, that marijuana is a “gateway drug.” Knowing that governments generally oppose legalization means that government websites, normally more or less reliable sources of information, should be viewed with a critical eye.

Consider also the case of individuals evaluating the strength of the argument for raising the minimum wage. In order to make a reasoned judgment, they would need to know the wage in other jurisdictions, when the minimum wage was last raised in their location and by how much, the effect of inflation on wages, costs of living, etc.

As another example, in discussions regarding the provincial imposition of a carbon tax in the province of British Columbia last fall, most citizens did not know anything about the idea of pricing externalities (costs that are not charged through the market system). For most, it was just another tax grab. Some individuals, although they supported the idea of a carbon tax to reduce car usage, found it unintelligible that the tax was not used to support public transport. One could agree with them that the tax should have been used for this purpose, but to actually understand the pros and cons of the tax, they had to understand the political logic of pricing externalities and revenue neutral tax shifts. Without these concepts, they could not make a truly reasoned judgment about the tax.

### *(3) Intellectual, political, historical and social contexts*

Understanding the intellectual, political, historical and social contexts surrounding an issue can aid us in understanding and interpreting arguments and can reveal assumptions underlying arguments and positions. In addition, in the case of practical judgments, factors relating to the political, historical and social contexts (such as social consequences) play a crucial role in the evaluation of positions.

As an example of the way the larger social context is relevant to argument evaluation, consider the debates about separatism in Canada. One cannot understand or appreciate the debates without knowing the historical origins of the issues (i.e., that there were two founding countries, Britain and France and that Canada was created as a negotiated country which would respect its two different cultural and national bases). People who naively wonder why Quebec

should have special status fail to understand this history. Of course, one cannot argue that because a particular political arrangement has a history, it must be accepted. But to argue against such arrangements is to bear the burden of proof (often a very significant one). Even if one supports a more egalitarian idea of citizenship, the challenges of getting to such a state, given the history, is relevant to the deliberation on the issue. When former Canadian Prime Minister Pierre Elliott Trudeau argued for ending the Indian Act based on a typically liberal stance that ethnicity should not influence one's citizenship status, he was forced to quickly reverse his position in light of the historical basis of native relations and the reality of native living conditions. Arguments for the equal treatment of all sound morally and politically plausible until one comes up against the social realities to which this principle is to apply. Interestingly, the Canadian Charter of Rights and Freedoms, which is similar in many ways to the U.S. Bill of Rights, specifically allows for equality rights to be overridden for the purpose of social improvement.

We might compare our political and cultural world to a natural landscape. Every natural landscape is a product of historical processes, both geological and biological. But the current landscape also needs to be understood in terms of ecology – the current relationships among the various biological components.

The social/political world in which we live also has a formative history and a sustaining social ecology. This world has been shaped by historical processes and is maintained by a web of social relations. Why is marijuana illegal and not alcohol? Besides the beliefs adumbrated above, the history of marijuana prohibition is linked to the prohibition of serious addictive drugs. It is also connected to the fact that when criminalization began, marijuana's dominant use in the U.S. was by new Mexican immigrants (Bonnie & Whitehead, 1970). A relevant social fact is that at this point in time there is an enormous governmental and police investment in drug prohibition. It is also relevant that the primary users are a somewhat marginalized group – young people. Such facts help account for the drug's current legal status and should not be ignored in any debate on the issue.

Any debate about social policy must also take into account the likely consequences of policy implementation. To return to the marijuana debate, one of the likely consequences of legalization is that marijuana use would increase. Another likely consequence is that the sale of marijuana could generate tax

revenue. A third likely consequence is that the deployment of police forces could shift to more clearly harmful crimes or could perhaps be reduced. And finally, the market in this illicit drug would be ended and the power of organized crime possibly reduced. No *a priori* liberal argument (that the laws prohibiting marijuana use are an unjustified infringement of individual rights) can be taken as sufficient because these consequences cannot be ignored.

#### *(4) Disciplinary context*

Disciplinary context is part of the intellectual and dialectical contexts referred to above. But because disciplines are such a crucial source of claims and arguments, they deserve special attention. Most academic evaluation occurs within a disciplinary context. The criteria of evaluation vary in important ways from discipline to discipline: claims from sociology cannot be evaluated in the same manner as claims from physics. The disciplinary context can also include the dialectical history of the argument within the discipline. Arguments and claims that are novel within the history of the discipline bear a different burden of proof than less novel claims.

Knowledge production depends heavily on disciplines which apply varying criteria to assess claims and do so with varying degrees of rigour. There are important epistemic differences among disciplines. For example, appeals to authority have varying relevance, credibility and weight depending on the discipline involved. Anyone conducting a critical inquiry needs to understand the difference between those disciplines that tend to consensus and those that do not. The inquirer also needs to understand the inherent difficulty and uncertainty presented by certain forms of inquiry. Observationally based claims that are common in disciplines such as epidemiology and sociology are by their nature more uncertain than claims about particles in physics. Moreover, much of academic economics is based on highly questionable psychological assumptions (built into the concept of *homo economicus*) about human rationality. One only has to watch the gyrations of the stock market to see that other factors than rational assessment of information influence buying and selling.

Support from a consensus among experts is one of the primary bases for crediting a claim. A layperson assessing the credibility of a claim in a discipline needs to inquire whether the claim is supported by a disciplinary consensus. Disciplines characterized by “schools” notoriously do not develop the kind of disciplinary consensus that provides evidence for the reliability of their epistemic processes

and the credibility of their claims. Consensual views emerging from disciplines which have a tradition of achieving consensus based on well established epistemic criteria deserve our confidence. Nevertheless we can never ignore the possibility of “bandwagoning,” i.e., the tendency of individuals to support currently popular views in their discipline for social rather than rational reasons.

A possible example of the bandwagon phenomenon in the disciplines of epidemiology and nutrition studies is argued for in a recent book by Gary Taubes (2007). Taubes makes an extended case against the view that fat consumption is a primary cause of heart disease and obesity. His position is surprising since this view has been supported by hundreds of epidemiological studies (largely observational). Taubes provides his own analysis of many of these studies and reviews considerable alternative biological and epidemiological literature to support his critique. But he also makes the case that the widespread acceptance of this view was not the result of overwhelming scientific evidence, but rather the result of the intense efforts by leaders in the nutrition research community to promote their view. Taubes argues that adoption of an anti-fat position by governments was premature given the state of research, but once governments became committed, there was little interest in questioning the fat reduction research. As Taubes documents, the science supporting the benefits of reducing fat consumption is actually quite inconclusive. He adds to his argument an account of the political process by which reducing fat consumption became government policy and a health shibboleth, including intolerance toward objectors and the manipulation of funding opportunities by key players. In this part of his argument, he is attempting to explain why the theory that he is challenging could have such widespread acceptance. This is a relevant argumentative strategy since the existence of apparent consensus provides considerable support for the “anti-fat” point of view. To the extent that he is successful, his socio/political analysis enhances his critique of this widely accepted position.

We are not trying to judge his argument, but we do think that he is justified in using this additional non-scientific evidence about the dynamics of the relevant disciplines when making his case against the “fat theory.” Public acceptance of the “fat theory” depends on the assumption that the views of the experts are based on an appropriate evaluation of the evidence. Evidence of social and political processes inconsistent with an evidence based approach creates a

justified suspicion of the consensus.

### (5) Sources

Contrary to the view that arguments should be evaluated independently of their authorship to avoid the fallacy of *ad hominem*, we argue that information about who is making an argument is frequently relevant to evaluation (although not determinative) because the credibility of an argument often involves trust that the author of the argument is appropriately knowledgeable and fair minded. Knowledge of the point of view of a source can inform the process by which arguments and claims are checked. In addition, while explanations of why a person holds a view cannot be used to dismiss a view, such evidence can be used to explain why a view which is lacking sufficient rational support is nevertheless held.

It is well established that information about the source of a claim or argument is justified in cases where trust in the source is the primary basis for accepting the argument or claim. The acceptance of observational claims (testimony) and of claims by experts to special knowledge depend on these sources being both trustworthy and appropriately knowledgeable. Evidence that the sources do not meet these standards is always relevant and sometimes sufficient to dismiss their views. On the other hand, the evaluation of testimony and appeal to authority is usually cited as an exception to the general rule that the strength of an argument and the credibility of its conclusion are independent of the source of the argument. In all other cases, citing circumstantial facts about the author of an argument (such as who she works for or the fact that she does not follow her own environmental dictums) is treated as an irrelevant and fallacious basis for rejecting an argument or conclusion.

In our view, what makes *ad hominem* arguments fallacious is not that they use irrelevant information about the author, but that they are usually too persuasive. For example, if someone of a left-leaning political orientation hears that an argument against raising the minimum wage is coming from a right-wing policy institute, there is a powerful temptation to just dismiss the view. Arguably to do so would be to commit the *ad hominem* fallacy. But surely the source of the argument is not irrelevant. The problem is that knowledge of the source is often too persuasive. Many fallacies are argument patterns whose persuasive power greatly exceeds their evidential worth.



*Ad hominem* information can “lead us into fallacious temptation” but that does not mean that *ad hominem* considerations do not have some rational worth. The credibility of an argument is based in part on accepting the premises. In many cases, part of the basis for this acceptance is the trustworthiness of the author of the argument. In scientific papers we trust that the anonymous author is at least not lying about the data. In newspaper editorials, references to facts of the news are usually accepted to the extent that the newspaper is a trustworthy source.

Although one can challenge any premise, for argumentation to proceed most premises will need to be accepted provided that they are plausible and that the author is a trustworthy source. This acceptance is not based on the author’s expertise, but rather on a judgment that the author is a trustworthy source of information. In addition, the extent to which we credit the conclusion is not simply determined by the apparent support that the premises give the conclusion. Recognizing the dialectical nature of argument evaluation means that argument evaluation must involve assessment of an argument against its countervailing arguments and consideration. Whoever presents an argument has a dialogical duty to acknowledge counter arguments and to indicate why the supported argument is stronger than these. Trusting an argument’s author to be both candid and knowledgeable about alternative views is part of the basis for a rational acceptance of the argument. If we have reasons to believe that the source of the argument is either not trustworthy (e.g., is not someone who would tell us about key counter arguments or evidence) or is not reliably competent (e.g., is not likely to have done due diligence on the relevant objections to the view), then these characteristics provide a good basis for not accepting the argument or conclusion.

In addition, knowing that a source is coming from a particular point of view can and should inform a more detailed investigation of their argument. One should not dismiss an argument because of the political bias of its source, but such information may give rise to an appropriate skepticism about the view. In the climate change debate, it is striking that almost all opponents of the anthropogenic view appear to have financial and other bases for their opposition. But is this observation an instance of the *ad hominem* fallacy? We think not. While their views should not be dismissed on this basis, this observation can be used against the critics along with other arguments such as their lack of alternative explanations for global warming.

The standard view, with which we disagree, also treats reference to psychological

explanations of a person's argument as fallacious. On this view, how one comes to a position, including whatever psychological motivation may be behind it, is not relevant to the assessment of the argument for the position. While understanding a person's motivation is certainly not sufficient for dismissing an argument, we would argue that it is not irrelevant.

The relevance of these considerations is nicely illustrated in a recent column in *Scientific American* by Michael Shermer. Shermer argues against the widely held view that people experience grief in the stages "denial, anger, bargaining, depression, acceptance," citing evidence from a variety of relevant experts that rejects this reigning view. These include current experts in the field who claim that there are no studies that support this view and that in their counseling work, they do not see any standard pattern. But Shermer does not end his case against the view by merely citing counter evidence from current authorities. He goes on to ask why it is that such a theory is attractive.

Why stages? We are pattern-seeking, storytelling primates trying to make sense of an often chaotic and unpredictable world. A stage theory works in a manner similar to a species-classification heuristic or an evolutionary-sequence schema. Stages also fit well into a chronological sequence where stories have set narrative patterns. Stage theories "impose order on chaos, offer predictability over uncertainty, and optimism over despair," explained social psychologist Carol Tavris, author of *The Mismeasure of Woman* (Shermer 1997).

The well known errors in the perceptions of correlation and coincidence clearly support this view. Of particular interest to us is Shermer's argumentative use of this information. Shermer uses the fact that there is a non-rational explanation for the view that grief comes in well structured stages as further evidence against the view. We believe that this form of argument, which involves first providing a rational basis for rejecting a view and then adding a plausible non-rational explanation for why the view is held, is a legitimate use of genetic information and is not fallacious.

## (6) Self

At least since Socrates' famous "know thyself" injunction, self awareness has been advocated as a key to reasonableness. No one escapes the historical context in which he or she lives. Everyone can, however, become much more self-aware about this context and its influence on their point of view. We reject the idea that

all views are biases in the derogatory sense, but acknowledge that while there is no “view from nowhere,” striving for the regulative ideal of objectivity is one that can be facilitated by personal, intellectual and cultural self awareness. It can also be facilitated by a number of intellectual strategies such as always seeking alternative views and considering and developing counter examples to reduce the problem of confirmation bias.

While argument evaluation obviously focuses on the argument, the person doing the evaluation is a crucial component of the process. One’s initial views on an issue such as legalizing marijuana, or even one’s fundamental world view on such questions as free will, justice, or God can influence a person’s assessment of an argument. When trying to come to a reasoned judgment on a topic, one should be aware of one’s own biases, point of view, and assumptions. Admittedly this is a limitless task, but it is part of the regulative ideal of being reasonable. “My grandchildren are all wonderful” reflects a harmless bias; “The Irish are genetically criminal” (as was sometimes said in New York at the turn of the 20th century) reflects a sinister bias.

Students often have definite points of view on many issues by the time they reach the post-secondary level. This is problematic only when they are unaware that they are adopting a point of view (e.g., a laissez faire economic view) but think it is just common sense (e.g., the poor are poor because they are lazy). Clearly the insidious form of bias is unselfconscious bias. A point of view is a bias only if it influences our judgment in an unreflective and unwarranted manner.

Let us take the nurture/nature debate as an example. Within our intellectual lifetime, the relative weight given to these two factors has shifted from nurture to nature. The supposed political implications of this shift, along with the evidential basis for it, continue to be debated. The early reaction against sociobiology was clearly motivated by a suspicion that a renewal of the nature hypothesis had sinister implications, from racism to support for a laissez faire economic system built on human selfishness.

We do not wish to enter this debate, but we do wish to note that as argument assessors, we are much more willing to view explanations of human behavior through a lens of biological influences than was true forty years ago. This different lens reflects an objective shift of burden of proof. We are much more open to biological/genetic explanations of behavior. The new climate of fascination with

genetic and biological explanation also doubtless carries its own collections of blinders and prejudices such as the presumption of a one characteristic – one gene explanation, or the ignoring of the role of biological context in determining gene expression.

Reflective people understand that they evaluate arguments and claims in a particular personal and cultural climate. To ensure that they are making a fair evaluation, they should give special care to the consideration of those views with which they have initial disagreement. Given the well documented phenomenon of confirmation bias, reflective assessors should also be skeptical of their own enthusiasm for evidence supporting their view. One strategy for ensuring that one is taking a fallibilist position is to try to state what kind of evidence would lead one to change one's opinion.

In addition, there is growing body of literature from behavioral economics that documents the pervasive influence of a variety of social conditions that can undermine our ability to be rational (Ariely 2010). The antidote to these influences is self awareness and a commitment to fair-mindedly consider alternative views. We are not simply arguing that an evaluator of an argument should be a fallibilist, prepared to admit error and willing to consider other views. Rather we are arguing that reasonable assessors should attempt to be cognizant of their own assumptions and intellectual leanings and should make special efforts during an inquiry to seek alternative views and counter arguments. Students need to become aware that they are embedded in a context and need to reflect on their own judgments in light of this.

### *3. Summary*

A reasonable assessment of an argument with the goal of reaching a reasoned judgment must take into account not only the content of the argument itself, but also a much wider context. This context includes:

#### (1) Dialectical context

Evaluating arguments requires a knowledge of the history of the debate surrounding the issue, especially counter arguments to the current position or argument being evaluated.

#### (2) Current state of belief or practice

An understanding of the current practice and beliefs in an area is important for evaluation, especially to the extent that this determines burden of proof.

#### (3) Intellectual, political, historical and social contexts

No issue exists in a social vacuum. Understanding an argument, understanding the significance of a claim, and appropriately conducting an inquiry into an issue, all require knowledge of the historical and social contexts.

#### (4) Disciplinary context

An assessor should be sensitive to both the particular discipline and the state of consensus in that discipline.

#### (5) Sources

All arguments depend for their acceptance in part on trust. Evaluating the trustworthiness of the source of the argument is almost always relevant.

#### (6) Self

The argument assessor or a person conducting an inquiry must be aware that they too are part of the context of evaluation. Self awareness and a commitment to seeking counter evidence is crucial to reasonable evaluation.

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