## Logic Pointers Bryan R. Cross Mount Mercy University

There are essentially three possible proper responses to a deductive argument. Either we show the argument to be unsound, or we accept the truth of its conclusion, or we withhold judgment for the time being, explaining that we need time to think about it or investigate it more deeply, and we take the time to think about it, until we can either refute the argument or accept the truth of its conclusion. We do not change the subject or criticize the person presenting the argument or talk about ourselves. Arguments are not properly evaluated by self-referring statements, such as, "I don't buy that argument" or "I am unpersuaded" or "I am skeptical" or "I am ...." The question at hand is not about oneself, but about whether the argument is sound. So talking about oneself is changing the subject, and avoiding the question at hand. The only two ways to refute a deductive argument are to show one or more of the premises to be false or show that the conclusion does not follow from the premises. So the following statements are not refutations of an argument:

- (1) "That argument does not work." If this is merely shorthand for the notion that the conclusion does not follow from the premises, or that there is some good reason to disbelieve the truth of at least one of the premises, then that's what needs to be provided.
- (2) "That argument is unhelpful, uninformed, strange, betrays ignorance, or ignores x." Arguments are not informed or uninformed, knowledgeable or ignorant. Rather, *persons* are, more or less informed or uninformed. Hence claiming that the argument is uninformed or "betrays ignorance" is an *ad hominem*. Instead, refute the argument by showing either why the conclusion does not follow from the premises or that at least one of the premises is false.
- (3) "That argument is absurd."
- (4) "That argument is convenient."
- (5) "That argument is old/tired/tiresome." This is chronological snobbery (epistemological timeworship): a proposition or argument is not falsified or refuted by its age. Nor for this same reason is a novel position, idea, view, claim or argument shown to be true or sound by its novelty. This is why the "wrong side of history" charge is fallacious.
- (6) "That argument is impossible."
- (7) "That argument is unsatisfactory."
- (8) "That argument is offensive." (or hurtful, harmful, disrespectful, toxic, tragic, appalling, painful, unpleasant, insulting, bigoted, stupid, stigmatizing)

Likewise, none of these predicates falsifies a proposition. A proposition can be true and also be "unhelpful" in some respect, "hurtful" in some respect, "painful," to hear, etc. So treating a truth claim as if falsified by one of these propositions is fallacious.

- (9) "I'd like to suggest that ... " or "I suggest that ..." or "I submit that ..." are not arguments; they are mere suggestions. Merely adding this phrase to the beginning of a claim does not turn it into an argument.
- (10) An assertion is not an argument; it is merely an assertion. Assertions demonstrate nothing, establish nothing, show nothing.
- (11) Avoid begging the question (i.e. presuming precisely what is in question between you and your interlocutor).
- (12) We rightly accept or reject claims ultimately by their truth or falsity, not by whether believing them has (at least for some) desirable or undesirable consequences. A truth can lead to or result in undesirable consequences, and a falsehood can lead to or result in desirable consequences.
- (13) "Your attempt rings hollow" transfers focus to the will (i.e. an 'attempt'), which is internal and subjective, rather than keeping the focus on one's argument, which is external and objective. It also uses an entirely subjective and vague evaluative criterion (i.e. "rings hollow"), rather than using "truth" and "falsity", "soundness" and unsoundness" as criteria.
- (14) Similarly, an argument is not properly evaluated by whether it is "compelling," "convincing," or "persuasive." Those are subjective criteria. Just because I am not compelled, convinced or persuaded by the argument does not show that the argument is unsound. (Only if I were Rationality Itself would this follow.) To use one's own not-being-persuaded, not-being-convinced, or not-being-compelled as the criterion by which to evaluate arguments is to treat oneself as God, and for this reason can be referred to as the divine identity fallacy.
- (15) "That argument doesn't hold water" is not a refutation of an argument.
- (16) "I would argue that x" is not an argument for x, but a claim that under other conditions, one would provide such an argument. This phrase is typically used because of a conflation of 'argument' and 'claim.' It is the subjunctive phantom argument fallacy.
- (17) "That argument is hard to take seriously in all honesty." The fact that a person has difficulty taking an argument seriously (in all honesty) is not a refutation of the argument, but a statement about the person.
- (18) "Why do you feel the need to say things like [x]?" This is an ad hominem. Instead of showing that x is false, it sophistically calls into question the interlocutor's motivations, by framing them in terms of misguided feelings aimed at alleviating some psychological need. Psychological deconstruction avoids refuting the interlocutor's claim, but instead presumes its error and attempts to construct a psychological reason for the interlocutor's [alleged] error. This is a form of the bulverism fallacy. Another example of this fallacy can be seen when criticisms of position Y are re-described (by an interlocutor) as fears of position Y. Another form of the bulverism fallacy is the "if you disagree with me, you must be experiencing an illusion" stance. Rather than showing *that* the interlocutors are wrong, it presumes that the interlocutors are

wrong and attributes their disagreement with the speaker to illusion, hallucination, irrationality, or other epistemic or cognitive failure on their part. This can be seen in claims that if a person claims action type Y to be not ordered to human flourishing, then this person is saying this not fundamentally because of having a reason to believe this, but fundamentally because this person has an emotion about Y or about people who engage in Y, whether that emotion is fear, sadness, alarm, hatred, etc. This is why disparaging a position by attaching the term 'phobic' or 'alarmist' to it or its adherents is engaging in the <u>bulverism fallacy</u>.

The acceptance of the use of "virtue signaling" as a criticism is something quite dangerous, something that, without an explicit and principled difference provided, just is public judgment and negative deconstruction of the motives of others from the point of view of cynicism. Without additional contravening evidence the [apparently] righteous statements and actions of our neighbors should be taken at face value as sincere, on the principle of charity. But if additional evidence indicates that these righteous statements and actions are only for show, then that evidence (or the discord between that evidence and their 'righteous' words and actions) should be the means of criticizing these statements and actions. That evidence shows the hypocrisy, and makes the public criticism justified. Otherwise, without such evidence, the use of this term "virtue signaling" would be applicable to "people who display their virtue by acting virtuously," as sauce for the gander. Imagine Blessed Mother Theresa's life chalked up as "virtue signaling." Even by the Golden Rule, we would not want our (actual, authentic, sincere) good deeds or words to be treated as "virtue signaling." So when persons say that they love the environment or hate pollution, the principle of charity and the Golden Rule require taking them at their word, unless we have evidence indicating their insincerity. In short, there is an important difference between the use of the term 'virtue signaling' as a negative, cynical judgment of others' motives, and criticizing hypocrisy by showing the disagreement between their words and actions, or between their actions and other actions or inactions.

- (19) Abusus usum non tollit. Abuse does not nullify proper use. If people have appealed to a truth T in order to attempt to justify or rationalize harmful behavior B, that does not falsify truth T. The abuse of a truth does not falsify that truth. So appealing to truth T in order to rationalize wrongful behavior B is compatible with T being true. The objection conflates the truth and the misuse of the truth, by treating criticism of the misuse of the truth as if such criticism also shows T not to be true.
- (20) "Go read a book" or "Go read book x," or "you need to listen," or any other imperative, does not refute an argument or falsify a claim. As refutational responses to a truth claim, these are examples of bullying, all other things being equal.
- (21) "Only someone who has never contemplated x or attempted y or been through z would make that argument or think that argument a good or sound argument." This is the *ad hominem* fallacy, and leaves the argument unrefuted.
- (22) Criticisms of X are not endorsements of Y. Responding to another person's criticism of X with a criticism of Y, as if that nullifies the criticism of X, is a form the *tu quoque* falllacy.

(23) Knowing oneself and developing intellectual virtue require becoming aware of and overcoming one's tendency to engage in motivated reasoning and confirmation bias, especially under the influence of the bandwagon effect and/or the "us vs. them" effect. This requires developing the habit of always asking oneself in earnest whether fundamentally (a) one is reasoning so as to confirm what one already believes, and/or to fight the us vs. them battle, or (b) one is seeking out the truth, even if the truth turns out to contradict one's present beliefs, or the beliefs of one's present group.

A sign of this intellectual vice is a failure to recognize the role of motivated reasoning in one's own reasoning, a motivated reasoning such that one's ideology, itself typically shaped by the us vs. them phenomenon, determines what counts as evidence in order to ensure that the evidence matches one's ideology rather than allowing one's ideology to be corrected by the evidence. This is a kind of auto-apotheosis. We more readily recognize this error of reasoning when we see others engaging in it to rationalize evil.

(24) One clear sign that a source is ideologically driven (that is, has made itself a "shill" for an ideology, and is thus engaged in sophistry) rather than aimed at the truth, is that it generally responds to criticisms of the ideology with some form of *tu quoque* (or *illi quoque*) that attempts to deflect or rationalize the alleged errors, rather than allowing itself to confront, evaluate, and confess fully and openly whether the criticism is true, and what are the implications for himself of the truth of the criticism, especially in view of his role as a promoter and disseminator of that ideology. One form of the *tu quoque* is known as 'whataboutism,' which responds to objections with criticisms (often beginning with "What about...?") aimed at the opposition, much as children will attempt to rationalize behavior by pointing to other children doing the same or worse. For the ideologue, the error must be hidden by diversion of attention, or the ideology's closest conceived competitor shown to be no better, so as to win or at least not lose the contest of appearances in the eyes of the onlookers. Objections to positions are commonly met with *tu quoque* responses or charges of performative contradiction as the go-to 'response-of-choice', e.g. where was the outcry from group x when their party's candidate/leader did the same thing?

What makes whataboutism a fallacy and, when a habit, an intellectual vice, is that it avoids acknowledging/addressing a problem with one's own position/party/actions, where one has a moral responsibility to seek out, examine, and confront the problems with one's own position/party/actions. Whataboutism is a kind of refusal to examine and know oneself, where one has a moral obligation to examine and know oneself. It treats an additional redirected accusation (of hypocrisy, inconsistency, etc.) as a sufficient response to the pointing out of an alleged problem with one's own position/party/actions, when, in truth, because of our ethical and intellectual responsibility to examine ourselves, a reciprocal accusation is insufficient because such a response fails to fulfill that responsibility. The basis for our obligation to avoid whataboutism is therefore the same basis for our obligation to engage in the sincere examination of conscience. And inversely, whataboutism as a vice, both by individuals and as a society, is the unexamined life instantiated, not an ethical or truly human life.

A common form of sophistry is 'point-scoring.' Here the aim is to score points for one's own side, and against the other side, by presenting good or positive aspects of one's own side, and bad or negative aspects of the other side. (This mentality underlies the 'whataboutism' and tu quoque

tactics described above.) This is sophistry not because the points made are false. It remains sophistry even if every point stated is true. It is sophistry because in its teleology it aims fundamentally not at the truth, but at point-scoring for one's side, thereby subordinating truth to the service of something other than the truth. Sophistry of this sort opposes the truth by creating a distorted image of reality, hiding both the negatives about one's own side and the positives about the other side(s).

Truth and the truth lover, by contrast, embrace and do not deflect criticism, or rationalize error by comparing themselves favorably with error elsewhere, and thus do not follow a criticism of themselves with a criticism of someone else or something else, so as to save their own appearance. The truth lover is unconcerned with mere appearances, but genuinely longs for such criticisms, and therefore ponders them carefully, slowly, reflectively, and authentically, so that he can find out whether they are true or false, and, if true, then set out to root out the errors they describe, and take responsibility to make amends for what he did in advancing them. This kind of response to criticism is a sign that a source is aimed at truth.

(25) There are non-fallacious ways in which narrative can rightly be used in argumentation, but the widely popular (especially on social media) point-scoring, opportunistic (and often strawmannish) way in which particular events are highlighted, sensationalized, and used, especially on social media, as evidence for or against positions, groups, and institutions, even if those events are neither entailed by the positions nor are accurately representative of those institutions, groups, or persons holding such positions is a form of the [anecdotal evidence + hasty generalization] fallacy.

On top of the anecdotal evidence fallacy (unjustified induction) and confirmation bias, there is the intellectual vice of ideological opportunism, which, (a) regardless of the two logical flaws just mentioned treats events as means to advance publicly one's ideology or agenda by way of influencing public opinion, even if (b) from the perspective of ethics doing so instrumentalizes or exploits a person or an entire group of persons.

(26) Use of sources. Intellectual virtue applies to one's evaluation and use of sources. Intellectual virtue is aimed at attaining the truth, and so includes the disposition to determine rightly the truthfulness of sources, a determination which includes ascertaining a source's commitment to attaining and communicating the truth rather than merely advancing or defending an ideology. By way of such virtue one does not ignore, reject, or dismiss a source merely because it says things with which one disagrees, or that one does not want to believe, or that do not fit one's paradigm, or that others sharing one's paradigm have rejected. Rather, through intellectual virtue one refrains from giving credence to a source insofar as it has shown itself to be ordered by anything less than commitment to the truth. Likewise, by way of such virtue one does not make use of sources, whether reliable or unreliable, in an opportunistic way, selecting, utilizing, or advancing only or primarily those sources that agree with one's position because they agree with or support or advance one's position or ideology, while ignoring those sources that might show one's position to be false in certain respects. Nor does the person of intellectual virtue selectively use parts of the testimony of even reliable sources, so as to create or perpetuate a distorted interpretation or perception of reality that he or she wishes to be true, or wishes others to believe to be true but in fact is not true. Such an ideological consumerism selects only those sources that

itch one's ears, rather than guide one to the truth.

Just as consumerism leads to war, so ideological consumerism leads to ideological war, which makes use of and depends upon propaganda. When all one sees and thinks is [political] war, then everything is viewed with respect to its capacity to be used in that war, and then instrumentalized and utilized in this way, even if doing so distorts its purpose or intention or meaning, and thus distorts the truth, and thereby harms the common good. In this way, such weaponizing places (winning) the war over and above the truth and the common good, and in this way is disordered.

The person of intellectual virtue does not participate in an ideological war on either side, let alone use sources to do so, because participating in an ideological war is by its very nature incompatible both with seeking the truth and with seeking unity in the truth with those with whom he or she disagrees. Intellectual virtue disposes one to select and rely upon sources by determining these sources to be reliably truthful and committed to the whole truth more than to any ideology or party or cause. Good reasoning is in this way not marketing one's ideology to oneself or to others, so as to engage in an ideological war or to create an echo chamber that might keep one in error of any sort. Instead, virtuous reasoning is reasoning that by its very nature even in one's selection and evaluation of sources always allows one potentially to discover whether one is in error, and in such a case discover what is the truth.

A sign of this intellectual vice is a failure to recognize the social dependency of human rationality for the proper formation and functioning of our rational power in order rightly to actualize its capacity to carry out its proper function. Selecting and isolating our community around a shared epistemology hinders our rational formation by shielding our shared reasoning errors from correction through genuine engagement with those who do not hold our beliefs. Forming an echo chamber and circling the wagons is a way of insulating ourselves from possible correction, and is thus a failure to allow reason fully to be open to reality, and thus fully to be open to the truth.

Part of the habitus of intellectual virtue is at the second order level. Intellectual virtue is not only about avoiding this or that fallacy, but also about an appetitive stance toward good reasoning itself, namely, a formed disposition that values and is drawn toward good reasoning, and to which bad reasoning is repugnant. Forming this disposition requires seeing the difference between good and bad reasoning as such. For example, one cannot be drawn to excellence in a game such as baseball until one sees the difference between excellent and poor play. One cannot be drawn to excellence in vocal music until one experiences the difference between excellent and poor singing. And in the same way, in order to value and pursue excellence in reasoning, one must experience it as something distinct from bad reasoning. Otherwise the attempts by others to correct one's poor reasoning will be seen as mere exercises of arbitrary and uncharitable coercion that interfere with one's own autonomy and personal style.

So just as in baseball and vocal performance the individual must first see that there is a practice with internal standards of excellence one must meet and toward which one must strive if one wishes to participate in the practice, and he or she comes to see this especially by experiencing (directly or historically) the "greats" of the practice, so in good reasoning the individual must first see that this is a practice with its own standards of excellence one must meet and toward

which one must strive if one wishes to participate in the practice. And we come to see this through encountering directly or indirectly, persons with intellectual virtue who reason excellently. Through the example of their reasoning we see what are the standards of excellence for good reasoning and why reasoning well is so valuable.

But this is not an easy discovery, even upon meeting such persons, because the difference is not self-evident, otherwise we would already know it. So it is easy to remain unaware of the difference between poor reasoning and good reasoning, and thus easy to fail to form that second order valuation of good reasoning itself, and repugnance toward bad reasoning. In that condition poor reasoning is viewed subjectively not as such but merely as an individual's own personal style of reasoning. And if sophistry is an imitation of the practice of good reasoning, such that there can be shared standards for what counts as excellence (e.g. 'sick burn,' 'rekt', etc.), then seeing good reasoning is even more difficult still to discovery and value, because subjectively one seems already to have discovered the standards, not realizing that the activity in which one is participating is an imitation of the real thing. This is the back of the Cave.

In a context in which there are a vast number of sources, prudence first requires that we sift through the sources, to select a manageable number, on account of our human limitations. This requires rejecting a great many sources. The greater the number of sources available, the more selective the prudent person must be. Moreover, just as logic guides reason so as to attain and retain the truth, so prudence in the prudent person also guides the process of sifting through sources, so that he or she selects those sources by which he or she is most likely to discover and retain the truth, and by which he or she is most able to serve the common good.

While the prudent person may look to an ideologically driven source in order to determine the truth about what are the beliefs of that ideology, for determining the truth in general when selectivity is high because of a large number of possible sources, if a source shows itself to be ideologically driven, and sufficient non-ideologically driven sources are available for attaining and retaining the truth, the prudent person recognizes that all other things being equal, reading such a source, let alone promoting it, would not be intellectually virtuous, nor show good stewardship of the limited time and resources he or she has been given. The prudent person thus not only disciplines himself or herself not to waste time with ideologically driven sources, he or she develops a nose by which to sniff out and reject such sources, and readily distinguishes them from sources that are not ideologically-driven. Without such a nose, and such discipline, this person would not be prudent. This of course also requires distinguishing between, and not conflating, ideologically driven sources on the one hand, and on the other hand, fallible but credible sources that seek the truth from within a particular tradition.

(27) On the fallacy of the argument from silence: A person or group of persons' silence about event x does not mean or entail that they support or oppose or are indifferent to the event. They may have other reasons for remaining silent about the event, such as believing that in light of other factors either it would not be useful or fitting or beneficial to speak about the event at this time, or that it may even be harmful to speak about it at this time. The principle of charity calls us not to assume an uncharitable interpretation of silence when more charitable interpretations are available. And charity goes further still, seeking to understand the silence rather than exploiting it to advance one's own cause from a distance, i.e. from the third-person.

- (28) Seeking to persuade by way of labels, and hence fundamentally at the level of terms (i.e. adjectives, adjectival nouns, and adverbs), and thus at the level of impressions and emotions, is a form of sophistry, because it bypasses logic and argumentation. By contrast, philosophy as the pursuit of wisdom argues by way of premises, even when those premises are presented only implicitly, narratively, or performatively.
- (29) The "wrong side of history" criterion is sophistical because it subordinates truth to change, or implicitly and unjustifiably presupposes that it is impossible collectively to move in a false or evil direction in some particular area.
- (30) One intellectual vice is a second-order failure to grasp how much one does not know concerning the available evidence supporting the opposing position, and this comes both from a lack of adequate breadth of education and an a priori egalitarianism that at least implicitly denies (at least in the imagination) the possibility of expertise beyond one's own horizon of knowledge, making one vulnerable to the Dunning-Kruger effect.
- (31) Avoiding the straw man: If you're not able to refute the best responses to your criticisms of a position, responses by those who hold and best defend that position, and a fortiori if you're unable to describe or explain those responses or are unaware of their existence, you are not yet in an epistemic position to criticize that position. When constructing a criticism of a position therefore, always first learn what are the best responses to your criticisms by those who hold and best defend that position, and be able and prepared to explain these responses and show why they do not adequately defend the position from your criticisms of that position.
- (32) "You may not speak about x unless you have experienced x" is not an argument but rather an imperative that attempts to prohibit some persons from speaking about x, and in this way attempts to control the bodies of persons who wish to speak about x but have not personally experienced x. This imperative is a form of the fallacy of poisoning the well, because it is aimed at marginalizing the voices of those persons who have not experienced x. It is also an attack on reason, because it implicitly, arbitrarily, and falsely denies the capacity of reason to discover the truth about x without having physically experienced x. We can through reason come to know, for example, that genocide is evil, even if we have not experienced genocide. We can through reason come to know that animal abuse is unethical, without having engaged in animal abuse. So by attempting to silence a group of persons who have reason, this imperative engages in the fallacy of special pleading, granting the capacity of reason to persons who have themselves experienced x, but arbitrarily denying the capacity of reason to persons who have not themselves experienced x. And if a greater percentage of the persons who have experienced x believe y than persons who have not experienced x, then by attempting to silence the voices of persons who have not experienced x, the person issuing the imperative in an argument for y is engaged in motivated reasoning.
- (33) Concerning the three acts of the intellect (apprehension, judgment, reasoning), reasoning cannot occur if one remains at the mode of judgment. And if we wish to foster a culture of reasoning, then our own habit must not be to treat deliverances or exchanges of judgment as the manner or mode of reasoning, as if such deliverances or exchanges just are the intellect's highest

capacity, or just are what reasoning is. Reducing reasoning to judgment subordinates truth to power, and perpetuates the skepticism concerning reason by which truth is reduced to power and such reduction is treated as the only option, because without reasoning the resolution of disagreements at the level of judgment can be only by way of power. Instead, for deliberation, especially shared deliberation, our judgments should always be situated in the mode of reasoning, not only for ourselves as individuals, but to foster a culture of reasoning.

- (34) "I don't know what it would mean for x to be the case" is not an argument against x or an objection to x. It is a statement about oneself, about what one does not know. A person not knowing what it would mean for x to be the case is fully compatible with x being the case.
- (35) Fallacy of the beard. This fallacy infers from there being no *sharp* line between x and y, because there are cases in which we cannot determine whether something is x or y, to the conclusion that there is no distinction in reality between x and y, and that the distinction between x and y is merely a human social construct. For example, some bodily phenomenon is not clearly either proper bodily function/formation or a bodily malfunction/malformation. Therefore, the distinction between able-bodied and disability is merely a social construct.