

Argumentation

The domain of argumentation is that of the credible, the plausible, the probable, to the degree that the latter eludes the certainty of calculations

(Perelman & Olbrechts-Tyteca, 1969, p. 1).

In philosophy, we spend half our time arguing that our opponent's arguments are fallacious. No philosophers admit to being equivocators, but all philosophers agree that the *other* philosophers are equivocating. Exactly where the equivocations are is part of what everybody argues about"

(Powers, 1995, p. 300).

It would be difficult to overstate the importance of the role that argumentation has played in the history of humankind. Arguments are used to determine who will rule a nation and how a nation will be ruled. They are used to decide on the guilt or innocence of people accused of criminal behavior. Philosophers use them to justify or challenge world views. Academics use them to shape the thinking of their students regarding whatever they are teaching. Merchants use them to influence people's purchasing behavior. Parents use them to convince their offspring to behave, or not, in certain ways, and the offspring use them in the hope of showing their parents' arguments to be flawed.

What is an Argument?

In everyday language *argument* often connotes a verbal dispute or quarrel and arguing successfully is likely to be equated with getting the better of one's opponents in such interactions. The winning of verbal disputes requires ability in case building, which sometimes means marshaling evidence favoring a particular position while ignoring, discounting, or contesting evidence that opposes it. A more philosophical or idealistic connotation of the term would be an impartially reasoned support of

a conclusion; from this perspective, to reason well argumentatively means to judge evidence on its merits and to reach conclusions that unbiased inferential use of evidence supports. Both connotations are of interest in this book.

One can find many definitions of argument or argumentation in the literature, the following among them.

- Argumentation . . . is made up primarily of reasoning together with facts for your belief. It is designed to convince and to persuade others to subscribe to your facts and principles and to the conclusions warranted by these premises and evidence (Baird, 1950, p. 7).
- Arguments are more than mere inference-steps and may have a structure with different elements in them. Nevertheless there are clear cases of arguments that are non-deductive: inductive arguments, arguments from authority, and arguments which rely on one or another kind of emotive appeal (Hamblin, 1970, p. 249).
- a mode of conveying to readers or listeners organized evidence and reasons that tend to prove or disprove a proposition (Thompson, 1971, p. 6).
- a sentence or sequence of sentences containing statements some of which are set forth as supporting, making probable, or explaining others . . . a discourse in which certain claims or alleged facts are given as justification or explanation for others (Thomas, 1973, p. 2).
- Argumentation is the process of advancing, supporting, and criticizing claims (Rieke & Sillars, 1975, p. 6).
- a statement with the proper support for it (Ehninger & Brockriede, 1963, p. 48).
- an attempt to get someone to believe something, whether he wants to believe it or not (Nozick, 1993, p. 4).
- a conclusion supported by reasoning and evidence (Keefe, Harte, & Norton, 1982, p. 379).
- a claim and its associated rationale, either of which may be implicit (Benoit, 1986, p. 299).
- any statement, accompanied with reasons or evidence (Buchanan, 1986, p. 131).
- a speech act complex consisting of a constellation of statements designed to justify or refute an opinion and which is aimed at convincing a rational judge, who reacts reasonably, of the acceptability or unacceptability of that point of view (van Eemeren, 1986, p. 202).

- By the term “argument” I mean a set of natural-language declarative sentences, one of which is the *conclusion*, the remainder of which are the *premises*. Arguments, on this view, are products: they are artefacts, collections of text (Godden, 2003, p. 1).
- We define an *argument* to be a non-empty collection of sentences in the formal language, one of which is designated to be the conclusion. The other sentences (if any) in an argument are its premises (Shapiro & Kouri Kissel, 2018).
- The word “argument” can be used to designate a dispute or a fight, or it can be used more technically. The focus of this article is on understanding an argument as a collection of truth bearers (that is, the things that bear truth and falsity, or are true and false) some of which are offered as reasons for one of them, the conclusion (McKeon, undated).

Some definitions are very broad. Richard Rieke and Malcolm Sillars (1975), for example, describe argumentation as a process, and say that what they mean by it is “an ongoing transaction of advancing claims, supporting them with reasons, and the advancing of competing claims with appropriate support, the mutual criticism of them, and the granting of adherence to one” (p. 6). These writers contend that any claim is an argument to the extent that it is capable of being supported by other claims. Sally Jackson (1986) similarly holds that “*Any* conversational act is potentially arguable” (p. 218). Viveka Adelswärd (1986) says “all human interaction can be studied from a perspective of argumentation” (p. 327).

Sometimes a definition is given in terms of a function, or functions, that arguments may serve. “[A]rguments serve in finding a rational fulfillment of disputable claims of validity and as such serve in mastering crises or problem-situations in which the requirements or conditions for a possible understanding about something in the world have become problematic” (Kopperschmidt, 1986, p. 180). “Typically, conversationalists offer arguments only if they encounter disagreement or if they have some reason to expect disagreement; when arguments are offered, they are typically limited to just what is needed to satisfy expressed or expected disagreements” (Jackson, 1986, p. 218). “Conversational argument is a realization of general conversational principles adapted to the demands of a particular function – that of disagreement management” (Jacobs, 1986, p. 229). Charles Hamblin (1970) cautions against equating argument with implication. “There may be an argument where there is *no* implication: I may argue from *P* to *Q* when *P* does not, in fact, imply *Q*. ‘Argument’ is not synonymous with ‘valid argument’” (p. 229).

Kristiane Zappel (1986) makes the point that argumentation has been studied from many different perspectives over the years, but notes in particular Chaim Perelman and Lucie Olbrechts-Tyteca's (1969) *The New Rhetoric: A Treatise on Argumentation*, published first in French in 1958, and Stephen Toulmin's *The Uses of Argument*, also first published in 1958, as influential in setting the course for subsequent work. She describes the "salient feature" of more recent work as "the consideration of argumentation in practical and pragmatic terms, placing it between the poles of consensus and controversy" (p. 218).

Jos Hornikx and Ulrike Hahn (2012) distinguish three meanings of the word *argument* as one finds it in the scientific literature: "argument as a reason, argument as a structured sequence of reasons and claims, and argument as a social exchange" (p. 225). Several writers make a distinction between two types of argument. James Blair (1986), for example, distinguishes between a "set of reasons adduced to support a claim" and a "dispute" (p. 189). He stresses the importance of recognizing two very different types of interaction, both of which are referred to as arguments. (More regarding this distinction presently.) Blair, like Perelman and Olbrechts-Tyteca, also recognizes the possibilities of arguments with oneself regarding the acceptability of some point of view, as well as arguments involving disagreements between two or more people; he refers to the former as *inquiries* and to the latter as *disputes*.

Deanna Kuhn (1991) distinguishes between rhetorical arguments and dialogical arguments. "An argument in its first, more restricted [rhetorical] sense, can be defined simply as an assertion with accompanying justification," or, as the *American Heritage Dictionary* has it, "a course of reasoning aimed at demonstrating the truth or falsity of something." According to the more common [dialogical] connotation, "we think of an argument as a dialog between two people who hold opposing views. Each offers justification for his or her own view; in addition (at least in skilled argument), each rebuts the other's view by means of counterargument" (p. 12). Kuhn contends that the two kinds of argument are closely related with respect to the types of thinking they entail.

Citing Sally Jackson (1983), Scott Jacobs (1986) makes a related distinction in contending that American studies of argumentation have been in two major traditions, which he refers to as methodological individualism and methodological socialism. "The former tradition has tended to equate argument with those reasoning processes whereby a single individual privately arrives at a conclusion. The structure and process of argument is taken to mirror the structure and process of human cognition. The latter

tradition has tended to equate argument with those social procedures whereby two or more individuals publicly arrive at a consensus” (p. 236).

That what is considered an argument can be a matter of perspective is illustrated by Maurice Finocchiaro’s (1986) discussion of Galileo’s (1632) *Dialogue*:

By one count there are seventeen main arguments that Galileo gives in support of conclusions he favors, and twenty-nine critiques of arguments he opposes. And I am referring here to main arguments and main subdivisions of the book, and not to the various subarguments that are parts of these; counting the latter would yield a much greater number. Moreover, it is possible to show that all these forty-six main discussions can be integrated into a single argument, since the seventeen main positive conclusions are all part of or steps toward the single cosmological thesis that the earth moves, while the twenty-nine critiques support the negative conclusions that undermine the opposite thesis that the earth stands still at the center of the universe (p. 84).

“When the text of Galileo’s *Dialogue* is studied in accordance with these principles [just specified], the forty-six main arguments mentioned earlier generate several hundred reconstructed subarguments, each of which may to some extent be examined by itself” (p. 85).

Maarten Henket (1986) distinguishes two modes of rationality as that concept pertains to argumentation – two goals, we might say, that arguments can have: that of *solving* conflicts of opinion, and that of *settling* such conflicts. The first of these goals, Henket contends, is realized when an argument ends in agreement between the protagonists. The second goal – settling a conflict – is typically the operational one for courtroom argumentation. “Given this aim, it is perfectly rational to ensure the finality of the discussion, whether the parties reach an agreement or not” (p. 129).

Citing Toulmin, Rieke and Janik (1984), Manfred Kienpointner (1986) distinguishes between *arguments* and *warrants*: “Arguments’ are propositions stated to support or attack a controversial opinion; ‘warrants’ are propositions stated – or more often presupposed implicitly – to guarantee the step from arguments to conclusion. Warrants must establish an *appropriate* sense relation between arguments and conclusion to fulfill their function as ‘step-authorizing statements’” (p. 276). (More regarding warrants in Chapter 3.)

Some writers make a distinction between an argument and an inference. Ralph Johnson (1986), borrowing an example from Karel Lambert and William Ulrich (1980), notes that from “Boston is a city and Boston is in the United States,” one may legitimately infer that Boston is a city in the

United States, but such an inference would probably not be considered an argument.

For some, the concept of argument necessarily carries the notion of conflict or controversy. Johnson (1986), for example, rejects “a set of reasons leading to a conclusion” as an appropriate definition of argument. “That which is argued about must be controversial, contentious, really in doubt, and for this to occur, there must be contrary views” (p. 48).

For present purposes, it seems appropriate to give argument a sufficiently broad connotation to include any effort to influence one’s beliefs or behavior. We argue with ourselves when we are trying to decide what to believe or do. We argue with others when it is their beliefs and behavior that we wish to affect. Underlying the use of arguments to influence the behavior of others is the assumption, sometimes referred to as the principle of consequentialism (Bonneton & Hilton, 2004), that generally people will engage in behavior if they believe that doing so will have desirable consequences; so arguments aimed at influencing behavior are likely to note the desirable consequences the proposed behavior will have.

Arguments vary greatly in complexity. At one extreme is a simple three-term syllogism – All A are B; all B are C; therefore, all A are C – at the other is a lengthy contention of why one should believe X or do Y. Often a lengthy argument can be viewed as a series of abbreviated syllogisms. “The conclusion of one syllogism becomes the premise for the next one, so that the result is a chain of reasoning. The problem is to organize the assertions into full syllogisms and to test each one separately” (Baird, 1950, p. 153).

Explicit verbal efforts to persuade are readily recognized as such. There are many other, more subtle, ways to attempt to influence beliefs or behavior, however, and while these may go unrecognized as arguments, the ability to see them for what they are and to react to them in a rational way is an immensely important one, especially in a media-rich society. A thorough assessment of reasoning ability as it pertains to argumentation would have to pay attention to the evaluation of both direct, and indirect arguments of various types.

The stereotypical argument is composed of claims, usually expressed in words. But if argument is defined as an effort to influence others’ beliefs or behavior, this can be done in ways other than by verbally laying out a set of premises in support of a stated conclusion. R. C. Manning (1986) gives compelling illustrations of how films can be used for this purpose. “[W]hen the BBC began distributing films of people starving in Ethiopia, no

arguments accompanied them. The faces told the story. One might begin at the obvious ‘conclusion,’ viz., that something ought to be done, and argue about just what that something was, but the pictures needed no supporting arguments” (p. 171). Manning contends that at least in the case of moral issues, there is more to reasoning than the construction, analysis, and critique of verbal arguments, if it is to be effective in motivating behavior. “[M]oral reasoning is more than principle applied to situation yielding conclusion. A persuasive moral case must be made personal. If the people involved are not known to us, we must come to know them in some way, through pictures or films or newspaper accounts. The faceless suffering hordes must become persons, must have names or faces” (p. 172).

The ability to reason effectively about arguments of all types is an immensely important one in daily life, simply because arguments – attempts to persuade – confront us all more or less continuously. Without the ability to evaluate arguments effectively, we would be at a loss to know which of the numerous claims that we encounter daily to accept and which to reject.

The list of comments regarding arguments at the beginning of this chapter illustrates the fact that scholars define the concept in many different ways, but it also shows that the definitions – or most of them – have much in common. In the simplest form of argument, we can identify two types of assertion: one *conclusion* or key assertion and one or more *premises* or supporting assertions. The conclusion or key assertion is what the originator of the argument really wants us to believe or do; the other assertions are offered in support of it – to implicate it in the case of formal deductive arguments, or to make it highly plausible or probable in that of informal ones. In extended arguments, the same assertion may play the role of conclusion or key assertion with respect to one part of the argument and that of premise or supporting assertion with respect to another.

Purposes That Arguments Serve

Noting that “Argumentation Theory is a relatively young scientific field,” Jérôme Jacquin (2018) describes it as “one of the verbal underpinnings of *reasoning* and *decision-making* In much the same way as classical Rhetoric, argumentation is viewed as the skeleton of democracy, where citizens are expected not only to *hold* an opinion, but also to *support* it with arguments” (p. 285).

Citing Ulrike Hahn and Michael Oaksford (2012) and Hugo Mercier and Dan Sperber (2011), Hahn and Hornikx (2016) contend that reasoning

and argumentation are essential “for humans to learn, make decisions, and interact with others” (p. 1833). In short, according to this view, without the ability to reason and argue, humans could not function as humans. Arguments serve many specific purposes, but as already suggested, effecting changes in beliefs or behavior is paramount among them. A. Craig Baird (1950) puts it this way:

The elementary principle behind all argumentative thinking and speaking is this: Whenever you make an assertion or advance any proposition which you wish others to accept, couple that idea with evidence sufficiently complete to convince “beyond a reasonable doubt.” Because people have their prejudices and individual points of view, it is often necessary to justify to others what to you seems obvious. (p. 90).

The goal of all argumentation according to Perelman and Olbrechts-Tyteca (1969) “is to create or increase the adherence of minds to the theses presented for their assent” (p. 45). This definition is sufficiently broad to include arguments that support conclusions that few people are likely to challenge – arguments that are intended to reinforce feelings of patriotism, of camaraderie, of commitment to a moral principle. Such arguments are sometimes referred to as *epideictic*. Perelman and Olbrechts-Tyteca describe their purpose as that of increasing “the intensity of adherence to values held in common by the audience and the speaker” (p. 52). The same authors describe the purpose of a theory of argumentation as “the study of the discursive techniques allowing us *to induce or to increase the mind’s adherence to the theses presented for its assent*” (p. 4).

Here we shall focus on arguments that are intended to persuade people to believe something they do not already believe or to behave in a way in which they had not been inclined to behave – which is to say arguments intended to effect some kind of change. “One of the purposes of argument, whether we like it or not, is to convince, and our criteria would be less than adequate if they had nothing to say about how well an argument may meet this purpose” (Hamblin, 1970, p. 240). Hamblin gives a pessimistic appraisal of the likelihood of arguments changing the minds of participants: “no argument, even when willful sophistry is set aside, ever *settles* a dispute once and for all, beyond the possibility of being reopened” (p. 251).

Developers of the argumentative theory of reasoning contend that the primary function of reasoning is not to form accurate beliefs, but to evaluate and produce arguments to convince others (Mercier, 2016; Mercier & Sperber, 2017, 2019). From this perspective, the prevalence of a confirmation bias is neither surprising nor objectionable because if one’s

primary purpose in reasoning is to produce compelling arguments, one should, and naturally does, seek evidence that supports that goal, and shun evidence that tells against it.

A testable implication of the theory, noted by Mercier and Sperber (2019), is that one should not be able to find any instances of the confirmation bias (or closely related my-side bias) in contexts other than human reasoning (e.g., human perception or animal cognition).

Regarding reasons for studying argumentation, Baird (1950) identifies six: “to (1) educate you for active and responsible participation in democratic government, (2) assure you more efficiency in your occupation or profession, (3) strengthen your self-confidence and enable you to make more satisfactory social adjustments, (4) provide you with defenses against ‘bad’ propaganda, and (5) widen your general influence in social movements” (p. 4). One may be dubious as to whether training in argumentation will always have all these effects, and yet still appreciate the practical value of rhetorical skill. The art of persuasive speaking or writing has been recognized for a long time: training in this art has long been considered especially important in certain fields of endeavor, such as law and politics (Hamblin, 1970), but it is of unquestioned value too for coping with the challenges of daily life.

If there is one distinction that is more important than all the others that could be made regarding purposes that arguments can serve, it is, in my view, the distinction between *consensus seeking* (or *dispute resolving*) and *competing*. In consensus seeking, an attempt is made to come to a conclusion, through argumentation, on some question for which incompatible answers have been proposed. The goal of such arguments is to arrive at a consensus as to which of the considered answers is correct or most likely to be so. In competing, the goal of each party to the argument is to “win,” to force the conclusion that one’s opponent’s position is wrong.

This distinction, or something close to it, has been recognized by many others, though not always in the same terms. Perelman and Olbrechts-Tyteca (1969), for example, describe the distinction this way:

When successfully carried out, discussion should lead to an inevitable and unaniously accepted conclusion, if the arguments, which are presumed to weigh equally with everyone, have, as it were, been distributed in the pans of a balance. In a debate, on the other hand, each interlocutor advances only arguments favorable to his own thesis, and his sole concern with arguments unfavorable to him is for the purpose of refuting them or limiting their impact. The man with a settled position is thus one-sided, and because of his bias and the consequent restriction of his effort to those pertinent arguments

which are favorable to him, the others remain frozen, as it were, and only appear in the debate if his opponent puts them forward. And as the latter is presumed to adopt the same attitude, one sees how discussion came to be considered as a sincere quest for the truth, whereas the protagonists of a debate are chiefly concerned with the triumph of their own viewpoint (p. 38).

Perelman and Olbrechts-Tyteca note that the line between the two types of argument is not a sharp one and is often hard to draw. They contend further that whether one sees an argument as a discussion or a debate is likely to depend on the intentions one ascribes to the participants, which may change as the dialog proceeds.

Blair (1986) also discusses the distinction:

[I]f argumentation to resolve disputes involves a confrontation between two sides, in which each tries to defeat the other without making concessions, it does not seem that there is really going to be any resolution of their disagreement. On the other hand, for argumentation to deliver on its promise to be morally superior to force, it must be possible for people actually to change their minds as a result of it (p. 190).

Again,

To the extent that opposing parties are determined not to change their minds, their argumentation has to be a charade if it is conceived as directed against an opponent. The intrinsic goal of the argumentation being to convince someone, if neither side has any intention of being convinced, they are either wasting their time, or else using the practice of argumentation for some ulterior purpose (p. 196).

Blair notes that among arguers' purposes may be the intention of one or both to convince some audience – not the arguers themselves – of the merits of their positions. Surely, this is descriptive of many of the arguments one sees on television between spokespersons for different positions on politically controversial issues. It is descriptive too of formal debates in which participants defend opposing views, and of courtroom arguments for which the audience is the judge and/or the jury. In none of these instances do the arguers expect, or intend, to change the minds of their opponents – or to change their own – although they undoubtedly hope to influence the beliefs of observers.

The courtroom scenario illustrates a distinction articulated by Douglas Ehninger and Wayne Brockriede (1963), who noted that the outcome of some debates is judged by witnesses to it, whereas the outcome of others is