

# THE THEORY OF ARGUMENT

MARK VOROBJ

CAMBRIDGE

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## A Theory of Argument

*A Theory of Argument* is an advanced textbook intended for students in philosophy, communication studies, and linguistics who have completed at least one course in argumentation theory, informal logic, critical thinking, or formal logic. The text contains 400 exercises.

In this book, Mark Vorobej develops a novel approach to argument interpretation and evaluation that synthesizes subjective concerns about the personal points of view of individual arguers, with objective concerns about the structural properties of arguments. One of the key themes of the book is that we cannot succeed in distinguishing good arguments from bad ones until we learn to listen carefully to others.

Part One develops a relativistic account of argument cogency that allows for rational disagreement. An argument can be cogent for one person without being cogent for someone else, provided we grant that it can be rational for individuals to hold different beliefs about the objective properties of the argument in question.

Part Two offers a comprehensive and rigorous account of argument diagramming. An argument diagram represents the evidential structure of an argument as conceived by its author. Hybrid arguments are contrasted with linked and convergent ones, and a novel technique is introduced for graphically recording disagreements with authorial claims.

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*To my mother*

*Francka Vorobej (née Rupar)*

*August 25, 1929–November 4, 1998*

Listening is the beginning of peace.

– Elise Boulding



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## Preface

This textbook is written for upper-level undergraduate students who have completed at least one prior course in argumentation theory, critical thinking, informal logic, formal logic, or some other related discipline. Part One develops a theory of argument interpretation and evaluation, according to which arguments are viewed as instruments of rational persuasion. Part Two explores how different patterns of evidential support can be identified within a body of information that has been employed argumentatively to secure rational belief.

By devoting two weeks to each chapter, the entire text can be covered, at a reasonable pace, within a single semester. There are 400 exercises within this text. Students who attempt a significant number of these exercises will be rewarded with a substantially deeper understanding of the theory and practice of argumentation.

I am grateful to two anonymous readers, commissioned by Cambridge University Press, for their favorable reviews of a manuscript entitled *Normal Arguments*.

Lyrics from “Paradise by the Dashboard Light” by James Steinman are reproduced in Exercise 4.68(b) on page 220 by permission of the Edward B. Marks Music Company – © 1977.

Most of the material within this text was first explored, in a classroom setting, in conversation with the exceptionally talented students enrolled in McMaster University’s Arts and Science program. I thank these kind souls for their insight, their enthusiasm, and their

unparalleled magnanimity. They have shaped my thoughts in ways that, I am sure, lie far beyond my comprehension. Accordingly, this text is written in a style designed to create the happy illusion of an instructor addressing a class of engaged students.

I have also been blessed with an extraordinarily supportive, patient, and forgiving family. My parents, my sister, my wife, and my three daughters sustain my spirit and are reflected in every aspect of my being – including this humble offering. I thank them for sharing a love that has endured my various abnormalities.

## PART ONE

### MACROSTRUCTURE



## Arguments

### 1.1 Authors and Audiences

An argument is a social activity, the goal of which is interpersonal rational persuasion. More precisely, we'll say that an *argument* occurs when some person – the *author* of the argument – attempts to convince certain targeted individuals – the author's *audience* – to do or believe something by an appeal to reasons, or evidence. An argument is therefore an author's attempt at rational persuasion. Arguments admit of either oral or written expression, and the statement, or public presentation of an individual argument, is typically a fairly discrete communicative act, with fairly well-defined temporal or spatial boundaries. *Argumentation*, on the other hand, is the more amorphous social practice, governed by a multitude of standing norms, conventions, habits, and expectations, that arises from and surrounds the production, presentation, interpretation, criticism, clarification, and modification of individual arguments.

We'll use the term "author" loosely to refer to any person who, within a particular context, presents an argument for consideration. An author may but need not be the individual (perhaps no longer living or identifiable) originally responsible for the construction of the argument. What matters is that the author, in some sense, endorses the argument as being worthy of consideration as an instrument of rational persuasion on some particular occasion. An individual who merely reports upon the argument of another, or who refers to an argument to

illustrate points in logical theory (a practice we will engage in repeatedly throughout this text), does not endorse the argument in this sense, and is therefore not its author. An author uses her argument as a tool with the aim of altering beliefs or influencing behavior suitably related to the argument's content. She serves as the argument's advocate. We'll allow for the possibility that arguments may have multiple authors, even within a single argumentative context.

An author's (or authors') audience is the person or persons to whom her argument is directed. An author is typically, though she need not be, in direct communication with her audience. It is possible, for example, for an author to address an argument to future generations. We'll also allow for the possibility that one person can simultaneously play the role of both author and audience member, thereby arguing with herself. An individual may construct an argument with the aim of rationally persuading only herself of some claim.

It's helpful to distinguish between two kinds of audiences, i.e., two senses in which an argument can be directed toward specific individuals. Since authors propose arguments with a certain aim in mind, we can define an author's *intentional audience* as being composed of all those individuals whom the author believes ought to be persuaded by her argument. Authors do not always have a precise sense of the membership within their intentional audience. Indeed, an author's beliefs about the identity of her intentional audience can evolve as she develops her argument, and as she struggles to articulate it within the public domain. However, since we take the view that an author is someone who employs her argument as an instrument of rational persuasion, we'll stipulate, as a matter of definition, that an author must believe that there are certain (real or hypothetical) individuals who ought to be persuaded by her argument, i.e. certain individuals for whom her argument is rationally compelling. That is, we'll stipulate that an author's intentional audience must be non-empty. An author must have some person or group of persons in mind, under some description or other, whom she believes ought to be persuaded by her argument, on the basis of the evidence cited. The description involved can be remarkably thin. For example, an author may believe simply that anyone who accepts her evidence ought to be persuaded by her argument. But if you cannot identify anyone for whom, in your judgment, your "argument" is rationally compelling, you cannot genuinely



be engaged in the practice of interpersonal rational persuasion. Whatever else you may take yourself to be doing in offering evidence, you are not, strictly speaking, the author of an argument.

Since argumentation is a social practice, arguments also exhibit a more public dimension. Accordingly, we'll define a speaker's (or writer's) *social audience* as being composed of all those individuals who are perceived, by those witnessing a particular communicative exchange, to be the persons to whom that speaker, qua author, is addressing a particular argument. (If witnesses disagree over this matter, then we'll say that the notion of a social audience is not well-defined in the situation in question.) So a speaker *S* has a social audience just in case those individuals, who are actually witnessing her behavior, perceive *S* to be the author of an argument, engaged in an exercise in rational persuasion with a particular group of individuals. A speaker's social audience is socially constructed in the following two senses: first, in that the identity of that audience depends upon the beliefs and perceptions of individuals other than the speaker herself; and second, in that those beliefs and perceptions are based upon publicly accessible information.

In presenting an argument, an author typically has a social audience, since typically an author is someone who is perceived by others to be engaged in a public attempt at rational persuasion with a certain group of individuals. But whether she is in fact so engaged is a separate matter. No claim strictly about an author's social audience ever entails (or guarantees) anything about that author's personal beliefs concerning what she takes herself to be doing within the public domain. It is possible, for example, that an author may be perceived to be addressing her argument to one individual, when in fact she considers her argument to be aimed at someone else.

It is also possible, though unusual, for a social audience to exist in the absence of an author or an argument. For example, some speaker might be perceived by others to be an author presenting an argument to a particular group of individuals, when in fact that speaker conceives of herself as being engaged merely in the non-argumentative telling of a joke or a story.

Whether someone is a social audience member will depend upon how witnesses, whose behavior will typically conform to prevailing linguistic conventions, interpret a speaker's overt (argumentative)

behavior. These witnesses may, of course, be social audience members themselves, and individuals typically have no difficulty identifying themselves as audience members by attending to a speaker's words or gestures. Authors, for example, sometimes explicitly identify their audience by name, by pointing at or speaking directly to them, by describing them, or by some combination of these and other methods – as, for example, in the familiar greeting “Friends, Romans, countrymen, lend me your ears.” Often, however, social audiences must be identified by attending to more subtle, merely suggestive contextual cues. And just as intentional audiences often have vague boundaries, often the identity of an author's social audience remains imprecise.

Clearly, it is a contingent matter whether, and if so to what extent, an author's social audience, for a specific argument, coincides with her intentional audience. However, an author who is a skilled communicator can often achieve a perfect match. An author can deliberately take steps designed to ensure that her intentional audience will understand, through explicit utterances or public gestures, that they are indeed the individuals who, she believes, ought to be persuaded by her argument.

An author, by definition, aims at rationally persuading certain individuals for whom, she believes, her argument has probative force. But an author has little hope of succeeding in rationally persuading those individuals unless she presents her argument in a way that readily leads them to recognize that a particular argument is indeed being addressed to them. Unless an author crafts her argument in such a way that it “reaches” the people for whom it is intended, she will almost certainly fail in her attempt at rational persuasion. That's why the distinction between intentional and social audiences matters.

By defining two kinds of audiences, we acknowledge the intentional aspect of argumentation while simultaneously recognizing that authors usually aim to fulfil their intentions by communicating with others within a public domain governed, in part, by widely shared linguistic norms. From a logical point of view, the author's intentional audience is the more basic notion. Every argument has a (non-empty) intentional audience, but an argument – for example, one that never appears within the public domain – may fail to have a social audience. And judgments about an author's social audience are generally also conjectures, based upon publicly accessible evidence, about the

identity of that individual's intentional audience. We generally assume that if an author is perceived to be engaged in an attempt at rational persuasion with certain individuals, then she believes that those individuals ought to be persuaded by what she has to say.

## EXERCISES

- 1.1 Identify the first argument expressed within this text.
- 1.2 According to our account, not every act of reasoning or every appeal to evidence involves the presentation of an argument. Describe a dozen different kinds of situations within which someone could engage in an act of reasoning or present a body of evidence without being, in our sense, the author of an argument.
- 1.3 Suppose that a single individual is the author of two separate arguments. Under what conditions, if any, could these arguments have different intentional audiences? Under what conditions, if any, could they have different social audiences? Justify your answers.
- 1.4 Describe two different kinds of situations in which an argument, as an attempt at rational persuasion, could exist without being publicly disseminated. In which, if either of these cases, would the argument in question have a social audience?
- 1.5 Suppose that, in a public forum, someone presents (what they take to be) an argument. Explain how it's possible that this argument could fail to have a social audience.
- 1.6 Describe a situation within which an author would very likely misidentify the members of her social audience.
- 1.7 Explain how someone could compose and publish an argumentative essay with a substantial social audience, but an empty intentional audience. Would that individual be the author of the argument expressed within that passage? Justify your answer.
- 1.8 Under what conditions, if any, could an author fail to be a member of her own intentional audience? Justify your answer.
- 1.9 Since an author must (already) believe that the members of her intentional audience ought to be persuaded by her argument, and since an argument is an author's *attempt* at rational persuasion, how can an author argue with (i.e., attempt to rationally persuade) *herself*?

## 1.2 Propositions

That arguments are offered by and directed toward persons engaged in a contextually embedded teleological exercise is a crucial pragmatic consideration. Viewed from a purely semantic point of view, however, arguments are composed of *propositions*, i.e., claims that are capable of being either true or false, and that can serve as the objects of belief. Propositions are abstract objects that are independent, in various ways, of the particular (written or oral) sentences by which they are expressed. A *sentence* is a grammatical construction that is well-formed according to the syntactic conventions of some specific language. “5 is the square root of 25” and “25 is the square of 5,” for example, are different sentences of English, because they are each well-formed, but composed of different sequences of words. The two sentences express the same thought with the same truth-conditions, however. That is, they share the same meaning. So they express the same proposition – the same bearer of truth values – which does not belong to the English language, is not composed of words, does not exist at any particular time or place, and is not dependent for its existence upon sentential constructions. That proposition is *what* we believe, when we believe that 5 multiplied by itself yields the product 25, regardless of how we express this belief to ourselves or to others. We will follow the standard convention, where sentence *S* expresses proposition *P*, of using *S* as a name for *P*, so that we have a ready means, in English, of referring to propositions.

Being composed of propositions, arguments, too, therefore are, in part, abstract objects. More precisely, arguments occur when individuals *use* certain ordered pairs of abstract objects in a particular way while engaged in an exercise in rational persuasion. The proposition that an author supports by an appeal to evidence, on a particular occasion, is the argument’s *conclusion*; the propositions she uses in offering evidence in support of that claim are the argument’s *premises*. We’ll stipulate that each argument has a single conclusion, and any finite number of premises greater than or equal to one. An argument can therefore be viewed, in part, as an ordered pair, the first member of which is a non-empty, finite set of premises, and the second member of which is a single conclusion. Also essential to an argument is the further claim that the second member of this ordered pair “follows,” in

some fashion, from the first member. An argument therefore involves an *inference* from the premises to the conclusion, based on the conviction that belief in the premises justifies belief in the conclusion.

This approach allows us to capture some basic intuitions concerning the identity conditions of arguments. For example, the following two passages

(A) 5 is a square root of 25. Therefore, 25 is not a prime number.

and

(B) 25 is the square of 5. It follows that 25 is not a prime number.

could express the same argument, even though they are composed of different sentences. The author of the first passage uses certain words in order to draw an inference involving the two propositions expressed by the two sentences she employs. The author of the second passage uses two different sentences to accomplish exactly the same end. In each case, a single inference is drawn from the same premise to the same conclusion, and neither the nature of that inference nor the semantic content of the premise or the conclusion are apparently affected in any way by the authors' choice of words or by the passages' sentential structure. That's why arguments are composed of propositions, and not sentences.

A necessary condition of two persons offering the same argument is that they infer the same conclusion from the same set of premises. A further necessary condition is that they employ the same inference. (That is, if two individuals argue that the same conclusion follows from the same set of premises, but if they disagree about *how* that conclusion follows, then they cannot be offering the same argument.) Together, these conditions are jointly sufficient. So the author of (A) offers the same argument as the author of (B) provided they agree upon how the proposition that 25 is not a prime number follows from the proposition that 25 is the square of 5.

We will be concerned exclusively with arguments that are expressed within natural (rather than formal) languages. Furthermore, all of the arguments considered in this text will be expressed within prose passages of English. It will, accordingly, often require some work to extract a clear representation of an argument from any given prose passage. First of all, it is possible to express a proposition using any kind

of grammatical construction. Interrogative, optative, or exclamatory sentences, for example, can, with appropriate contextual stage setting, be used to express propositions. In the interests of clarity, therefore, it will often be helpful to paraphrase an author's words, in expressing a premise or conclusion, into the form of a declarative sentence that transparently expresses a proposition. Second, not every proposition expressed in an argumentative prose passage occurs within that passage as either a premise or a conclusion, or as (a proper) part of a premise or a conclusion. We'll refer to these propositions, which are neither identical with nor embedded in any premise or conclusion, and to the sentences by which they are expressed, as *noise*. A noisy proposition makes a claim that is extraneous to the content of the argument in question.

Arguments, as noted above, very often have the practical aim of rationally persuading someone to perform (or forbear from performing) a certain action. It is sometimes said that the conclusion of any such practical argument is an action or, less radically, an imperative. Since actions are not propositions, however, and since imperatives often do not transparently express propositions, we will adopt the convention of "translating" the written or spoken conclusion of any such practical argument into a sentence expressing a (true or false) recommendation to perform (or forbear from performing) the action in question. So, for example, a practical conclusion such as "Get thee to a nunnery" will be transformed into some such proposition as "Ophelia ought to get to a nunnery," viewed as a truth bearer. In this manner, practical arguments continue to fall within the purview of this study.

## EXERCISES

- 1.10 Explain why we stipulate that an argument's premise set must be non-empty.
- 1.11 Explain why we stipulate that an argument's premise set must be finite.
- 1.12 Is it possible for an argument's premise set to refer to an infinite number of objects? If so, illustrate your answer with an example. If not, explain why not.
- 1.13 Explain why we stipulate that an argument must have a single conclusion.

- 1.14 Describe a context within which a non-declarative sentence can be used to express a proposition. Explain how this is possible.
- 1.15 Repeat exercise 1.14 four more times, using a different kind of non-declarative sentence in each case.
- 1.16 Multiply your age (calculated in months) by itself to obtain a number  $n$ . Describe  $n$  different ways of expressing the proposition that snow is white.
- 1.17 Explain how it's possible to present two different arguments while employing exactly the same premises and conclusion. Illustrate your answer with an example.
- 1.18 Is it a necessary condition of two authors presenting the same argument that they present it to the same intentional audience? The same social audience? Justify your answers.

### 1.3 Canonical Forms

An argument appears in *canonical form*, relative to the particular prose passage by which it is expressed, when each of the argument's constituent propositions is named separately in a list by a sequence of declarative sentences, with a sentence expressing the argument's conclusion appearing at the end of the list, separated by a solid horizontal line from the sentences expressing the argument's premises. The solid line represents the drawing of an inference from the premises to the conclusion, and can be read as "therefore." We will follow the further convention of numbering the argument's constituent propositions in the order in which they occur within the prose passage, where it is understood that noisy propositions get numbered in sequence along with the premises and the conclusion, but that no number is to be assigned to propositions embedded within premises or conclusions. (The practice of numbering noise encourages us to read texts more carefully, as we seek propositional candidates to fill the roles of premises and conclusions. The reason for the second qualification is that the semantic content of any proper part of a premise or conclusion has in effect already been incorporated into an argument's canonical form once a number has been assigned to that premise or conclusion as a whole.) In other words, only propositions are assigned a number, and every proposition is assigned a number unless it's embedded within a premise or conclusion.

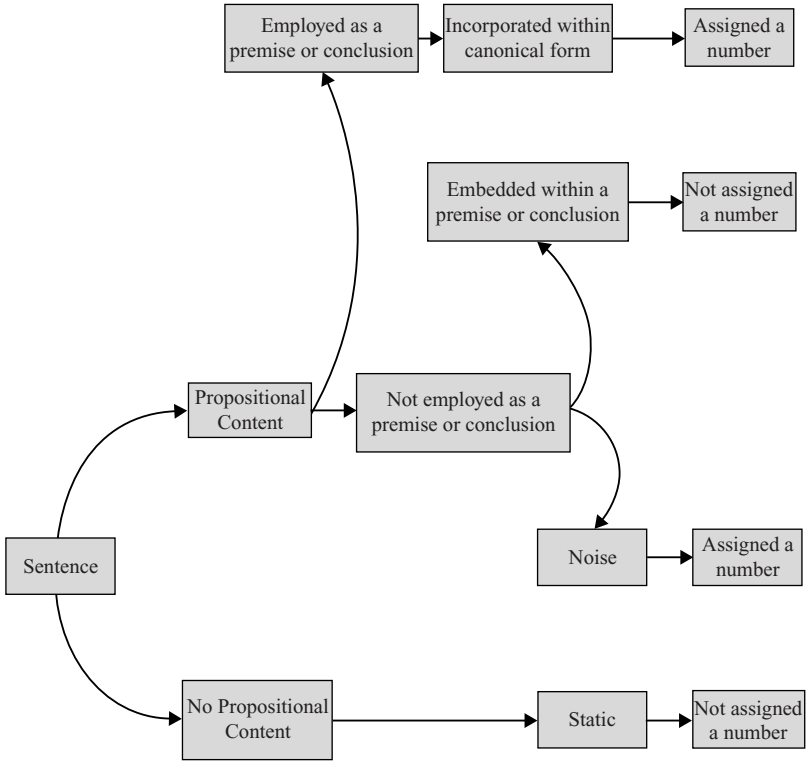


Figure 1.

So, for example, the canonical form of the argument expressed within the passage

- (C) Here's an interesting argument. Rachel has a rat. Since rats relish radishes, she must relish them too. Wow! It's incredible, but there's no way around it.

appears below as

- (D) 2. Rachel has a rat.  
3. Rats relish radishes.
- 
4. Rachel's rat relishes radishes.

The original passage contains five sentences expressing six propositions. In constructing the canonical form (D), the so-called indicator



word “since” has been discarded, the conclusion has been paraphrased to eliminate a possible ambiguity, and the first, fifth, and sixth propositions (expressed by the first and fifth sentences) have been eliminated as noise. “Noise” is not a pejorative term, and noise is not necessarily unimportant, either to the identity of the argument or to its rhetorical presentation. The sixth proposition, for example, provides important evidence concerning the nature of the inferential link that is claimed, by the author, to obtain between the premises and the conclusion. But noisy propositions are themselves neither premises nor conclusions, in those contexts in which they appear as noise. The fourth exclamatory sentence, by contrast, is not (even) noise, as it does not express a proposition. Therefore, it does not appear as a numbered entry in the canonical form either, but for a different reason: namely, because it is not assigned a number. We’ll refer to this type of material as *static*. For our purposes, static tends to be of less interest than noise.

The following shorter, single-sentence passage expresses the same argument as (C), insofar as the arguments share identical premises and an identical conclusion.

- (E) Rachel has a rat; so she must relish radishes, since rats relish radishes.

However, the canonical form of this presentation of the argument

- (F) 1. Rachel has a rat.  
       3. Rats relish radishes.
- 
2. Rachel’s rat relishes radishes.

indicates that on this occasion the argument’s conclusion appears as the second proposition asserted within the prose passage (E). More important, it also illustrates the point that an argument’s canonical form bears an essential relation to the manner in which that argument is presented on a particular occasion, above and beyond the identity of its constituent parts. Different canonical forms can exhibit different presentations of one and the same argument.

This result is an immediate byproduct of our earlier decision to number an argument’s constituent parts in the exact order in which they appear within an argumentative text. In adopting this convention, we’re not claiming that the order of propositional presentation

necessarily carries great intrinsic significance (aside from its possible effects on the argument's rhetorical, or persuasive, force). Rather, the convention imposes a uniform constraint on the transfer of information, in this case from a text to an argument's canonical form, which will prove to be especially useful later when we turn to the topic of argument diagramming.

If the same proposition is repeated within a text, then, even if expressed in different words, later occurrences of that proposition should also be assigned the number given to the proposition's first occurrence. The canonical form

(G) 3. Landon lives in Hamilton.

---

3. Lucy resides in The Hammer.

makes it clear that this argument begs the question. As "Lucy" happens to be Landon's other name, and "The Hammer" is another name for Hamilton, a single proposition, which occurs initially as the third proposition articulated within some unidentified passage, serves as both (G)'s sole premise and its conclusion.

Premises and conclusions that are not explicitly asserted by an author – the so-called "missing" components of enthymematic arguments – can be identified and included in an argument's canonical form through the use of lowercase letters from the beginning of the alphabet, beginning with "a." For example, the argument in

(H) The toast is burning. If it weren't burning, the smoke alarm wouldn't be ringing.

can be represented as

(Ha) 2. If the toast weren't burning, the smoke alarm wouldn't be ringing.  
a. The smoke alarm is ringing.

---

1. The toast is burning.

on the assumption that the argument's author is relying upon a tacit understanding, most likely shared with her audience, that the smoke alarm is ringing. The author, that is, is using (a) as a premise, without explicitly asserting (a).

Propositions of this sort can be incorporated into an enthymematic argument's canonical form at whatever point best captures the "flow" of the argument. Notice that, in (Ha), the conditional "If the toast weren't burning, the smoke alarm wouldn't be ringing" is listed as the single proposition (2). That's because (2) alone is used by the author as a premise. Although they both express propositions embedded within (2), neither the conditional's antecedent nor its consequent are presented by the author as independent claims to which she is committed, or to which she has appealed in compiling evidence in support of the further claim that the toast is burning. Each grammatical construction is a syntactic part of one of the author's premises, but neither is itself a premise. For this reason, being neither premises nor noise, neither construction is assigned a number.

Similar considerations arise in the treatment of disjunctive as well as causal claims. The author of the following argument

- (I)    1. Irrigation is either illegal or inadequate to solve our problem.  
        2. If it's illegal, it shouldn't be pursued.  
        3. If it's inadequate, it shouldn't be pursued.
- 
4. We shouldn't pursue the irrigation proposal.

is not asserting that irrigation is illegal. Nor is she asserting that it is inadequate. Therefore, neither of these propositions ought to be numbered as a premise to which the author is committed.

Causal arguments, however, require a slightly more subtle analysis. The author of

- (J)    The jet crashed on take-off on Wednesday because the engines were damaged on landing on Tuesday. Therefore, daily engine inspections would reduce the number of jet crashes.

is committed to the truth of each of the underlined propositions expressed in this passage. However, the second proposition – "the engines were damaged on landing on Tuesday" – cannot plausibly be offered as a premise in support of the first proposition, in contexts where it's obvious to all concerned that the jet did indeed crash on Wednesday. Typically, you don't argue for a claim which (you believe) everyone in your audience already believes. So "because" should not be read as a premise indicator in the first sentence. Neither can the

second (nor indeed the first) proposition plausibly be offered as evidence, on its own, for the third proposition (expressed by the second sentence); and the first and second propositions do not collectively provide much evidence in support of the third proposition unless the two events mentioned within those propositions are claimed to be causally connected. Therefore, since the second proposition is obviously not the conclusion of (J), it follows that the second proposition, although asserted by the author as a claim to which she is committed, does not function as an independent component of the argument. Nor is it noise, since (J) is most plausibly viewed as expressing a single-premise argument, with its entire first sentence expressing a causal premise, and its second sentence expressing its conclusion. Therefore, the second proposition is part of the argument's premise and, accordingly, is not assigned a number.

The careful construction of an argument's canonical form can be time-consuming, especially when dealing with lengthier and more typical argumentative passages. Fortunately, our convention of numbering a text's propositional claims in the order in which they occur can help to facilitate this process. It also allows us to significantly reduce the kind of verbiage so evident in the last paragraph, without sacrificing clarity. Because the following passage from *The Great Learning* by Confucius

- (K) (1) If there be righteousness in the heart, there will be beauty in the character. (2) If there be beauty in the character, there will be harmony in the home. (3) If there be harmony in the home, there will be order in the nation. (4) If there be order in the nation, there will be peace in the world.

is static-and noise-free, and requires no paraphrasing, it's a simple matter to incorporate our numbering system directly into the text itself, and to read off the resulting canonical form (K) without rewriting the entire passage. The one claim that we do need to add to (K), of course, is the implicit conclusion (a): If there be righteousness in the heart, there will be peace in the world. (K), therefore, is an enthymeme composed of five conditional propositions. Again, none of the conditionals' antecedents or consequents are asserted independently as a premise or conclusion.

In the following pages, we'll often number the propositions within an argumentative text in this way, even when, as above, we're quoting from an author. Students will discover that they can complete certain exercises more quickly by similarly inscribing their choice of numbers directly into the text. For ease of reference, we'll also henceforth utilize capital letters liberally to designate either canonical forms of arguments, unaltered prose passages, or, as with (K), prose passages supplemented by numerical entries.

## EXERCISES

- 1.19 Roll a fair die twice to obtain an ordered pair of numbers  $\langle m, n \rangle$ . Construct (a) a passage composed of  $m$  sentences that expresses a single argument about Halloween, and (b) an accurate canonical representation of that argument which is composed of  $n$  propositions. Identify any static or noise in your solution. (We'll say that an argument, as a whole, is *about* a certain topic just in case its *conclusion* expresses a proposition about that topic.)
- 1.20 Roll the die again and, with the resulting ordered pair, repeat exercise 1.19 by constructing a single argument about the most odoriferous camel in Rajasthan.
- 1.21 Repeat exercise 1.19, with the ordered pair  $\langle 1, 1 \rangle$ , by constructing a single argument about your birthday.
- 1.22 Roll the die again and repeat exercise 1.19 by constructing a single argument about fractions, where all  $m$  sentences are non-declarative sentences.
- 1.23 Roll the die again and repeat exercise 1.19, by constructing a single argument about the relationship between poverty and crime that employs at least one causal premise.
- 1.24 Explain why, in passage (J), the second proposition cannot plausibly be offered as evidence, on its own, for the third proposition.
- 1.25 Describe a situation in which an author might argue in support of a claim that, she believes, the members of her social audience already believe.
- 1.26 Construct two separate argumentative passages about the Mayan civilization, where the conclusion of the first passage appears as noise in the second passage.

- 1.27 Construct an argumentative passage including a noisy proposition that plays a role in establishing the identity of the argument expressed within that passage. Justify your answer.
- 1.28 Explain why no argument can be expressed entirely by noise.
- 1.29 Explain why static cannot appear as a premise in an argument.

#### 1.4 Listening to Persons

The explicit and implicit premises and conclusion of an argument together constitute that argument's propositional *macrostructure*. The purpose of constructing an argument's canonical form is to provide a perspicuous representation, free of static and noise, of that argument's macrostructure *as it is conceived by its author*. Our approach, therefore, is to give primacy to persons over texts. When presented with an argumentative passage, our primary concern, initially, will be to ascertain the specific argument that some author has in mind while she is attempting to communicate with her audience – to understand, that is, how she herself conceives of this particular exercise in rational persuasion. We're more likely to succeed in this project the more familiar we are with the author, and with her background beliefs and intentions.

Language is of course the medium through which arguments are expressed, but we will be interested in the text (or wording) of an argumentative passage, not for its own sake but only insofar as the text provides evidence of the author's beliefs and intentions. In effect, we will initially be reading argumentative texts in order to gain access to another's mind.

This can be a challenging but at the same time very familiar hermeneutical exercise, not different in kind from other common forms of written or oral communication. It is difficult enough to determine what a text is saying literally, but even more difficult to judge what message someone means to convey through that text. It's very easy to make mistakes in the latter enterprise, especially when, as is often the case, the only tangible evidence at our disposal is the text itself, left behind by some now (temporally or spatially) distant and perhaps inaccessible author. Notoriously, texts can reasonably support multiple conflicting interpretations. And problems of textual interpretation are of course compounded by the fact that, for a variety of reasons,

people often say what they don't mean, and may mean what they never explicitly say.

Nonetheless, these hermeneutical risks must be undertaken if we take seriously the role that persons play in the practice of argumentation. Suppose someone is attempting to rationally persuade you to adopt a certain belief. Their goal is not simply that you adopt just some belief or other, but that you adopt the conclusion they specifically have in mind, and that you adopt that conclusion on the basis of the evidence cited within the premises of their argument. Authors are individuals who have deliberately chosen rational over non-rational means of persuasion; and, in guiding their audience toward a specific conclusion, they have a specific evidential path in mind. Their end, therefore, is partly constituted by their means. Authors do not aim to create situations in which audience members believe conclusions either for no reason or for the wrong reasons. A precondition of an author's achieving her goal, therefore, is that you understand the argument that she understands herself to have presented to you.

This is not to say that you should be persuaded by every argument that is presented to you. Nor is it to deny that an author's words may sometimes suggest, to an audience member, further arguments that depart, more or less significantly, from the author's intentions. Nor that these further arguments may be worthy of consideration in their own right, and perhaps eventually even of great interest to us, in our pursuit of truth, rational belief, and judicious behavior. It does mean, however, that the integrity of any particular argumentative exchange presupposes that audiences are willing and able to engage with another mind, and are prepared to attend carefully to the words of another as a vehicle toward understanding that person's goals, beliefs, and intentions.

Since an argument is an *attempt* at rational persuasion, authors enjoy certain privileges over audience members. Authors can unilaterally select their intentional audiences – the interested or disinterested, receptive or unreceptive, cooperative or hostile individuals to whom their arguments are directed. While audiences can examine the writings of any author, they cannot select the targets of an author's argument; in particular, they cannot unilaterally transform themselves into intended targets. But audience members in turn are of course at liberty to ignore an author's argument. They can ignore

the argumentative setting in its entirety, or they can choose to pay heed just to the argumentative text while ignoring the text's author. Either option, however, defeats the original argumentative proposal. It is not possible, that is, for an audience member to participate fully in the practice of *interpersonal* rational persuasion without acknowledging the role played by the authorial mind in creating the conditions for the very possibility of that exercise. Listening, therefore, is a central and constitutive feature of the practice of argumentation.

In this text, we will concentrate our efforts, initially, on listening, and on attempting to understand the personal point of view of another, as expressed while acting in her capacity as the author of some argument. This requires patience, and at least a touch of humility – characteristics not greatly encouraged by our culture, and for which we humans are not particularly well programmed. Listening is a skill that, no less than other more widely appreciated communicative skills, requires practice. It's remarkably difficult to understand clearly what another person is saying, whether in speech or in writing. This is shown by the remarkable frequency with which we misunderstand one another.

Our view, nonetheless, is that persons are worth listening to, even though listening is often slow and difficult work. Each of us desperately needs the assistance of others for there to be any reasonable prospect of arriving at truth, or at least rational belief, on any of a wide spectrum of issues that deeply concern us. Admittedly, much of this assistance can and should occur outside of argumentative contexts. But the practice of argumentation is designed specifically to yield rational belief, especially on complex or controversial matters, and so argumentation provides an ideal forum within which individuals can offer mutual assistance in realizing this end. Insofar as we are interested in the promotion of rational belief, each of us has an interest in participating in the practice of argumentation. Indeed, our ability to acquire rational beliefs would be very seriously compromised were we, as individuals, to lose access to this practice.

Cultures that fail to promote the practice of argumentation – perhaps by actively discouraging individuals from listening carefully and responding critically to what others have to say about what they believe, and why they believe it – help to undermine their members' capacity for critical judgment. These individuals are likely to hold fewer rational



beliefs and to be less capable of defending those beliefs against challenges. There are likely to be non-epistemic ramifications as well. The lives of these individuals will almost certainly be harmed or disadvantaged in numerous other ways. A great many goods that contribute to sentient well-being are dependent upon the flourishing of rational belief and the public practice of critically scrutinizing one another's convictions. Arguably, therefore, the more that argumentation flourishes as a social practice, the better off we all are.

We have argued, over the last few paragraphs, that listening is a constitutive feature of the practice of argumentation, and that our lives will likely go better if we listen to and argue with others within the context of a healthy social practice of argumentation. Happily, it is also true that the practice of listening itself promotes the practice of argumentation.

Argumentation is an essentially cooperative enterprise. Arguers play certain functional roles within an argumentative context, and there are distinct goods associated with each of these roles. Authors are committed to the inculcation of rational belief in audience members, who in turn, when engaged by an argument, are receptive to the possibility of being persuaded to alter their beliefs through an appeal to evidence. By achieving these goals, each can benefit, in different ways, from the practice of rational persuasion. But each party genuinely needs the participation of the other in order to realize these benefits. In fact, certain goods are achievable only if everyone benefits. For example, an audience member can be rationally persuaded by an author's argument only if the author's attempt at rational persuasion is successful. So each party has an interest in working cooperatively with the other.

Furthermore, the practice of argumentation is likely to yield greater benefits, in the long run, if the individuals involved regularly alternate playing the roles of author and audience member – acknowledging, in effect, their willingness to listen to and learn from the point of view of another person. This switching of roles, too, requires coordination.

Cooperation is more likely to occur and to be more sustainable within an environment of mutual respect. In helping to create such a climate, listening promotes cooperation and the flourishing of the

practice of argumentation. Listening provides us with an opportunity to show respect toward others, in a very tangible manner, by giving their views and their arguments a fair and considered hearing. We can respect someone by demonstrating a genuine interest in hearing precisely what they have to say, especially if they appreciate that this may take some time and effort on our part, and that we are willing to make that commitment.

Furthermore, conflicts inevitably arise within any collective undertaking, and arguers may find themselves in conflict over issues which transcend, though they may be related to, the particular argument under consideration. It is more likely that a cooperative spirit will be maintained throughout and beyond any such conflict if that conflict occurs within a climate of mutual respect. There is little hope of successfully resolving a conflict, without damaging interpersonal relations, unless serious attention is paid to understanding how the individuals in conflict themselves perceive their own situation. So arguers who are skilled and interested in listening to each other, and not just to each other's arguments, will more likely establish a cooperative relationship of mutual respect, and their strictly argumentative relationship will more likely survive as a result.

To be sure, practical considerations, such as time constraints, may interfere with our interest in giving primacy to persons over texts. Sometimes our interest in listening will and ought to be overridden by other more pressing or more significant concerns. Nonetheless, this text will explore what it means, in an argumentative context, to listen to persons – both when the exigencies of our lives merely allow for this, as well as when they demand it.

## EXERCISES

- 1.30 Explain why the author of an argument cannot unilaterally select her own social audience.
- 1.31 Is it possible that rational belief can flourish within an authoritarian culture that strongly discourages individuals from critically reflecting upon the content and credibility of their beliefs? In answering this question, be sure to clarify your understanding of the notion of rational belief.