

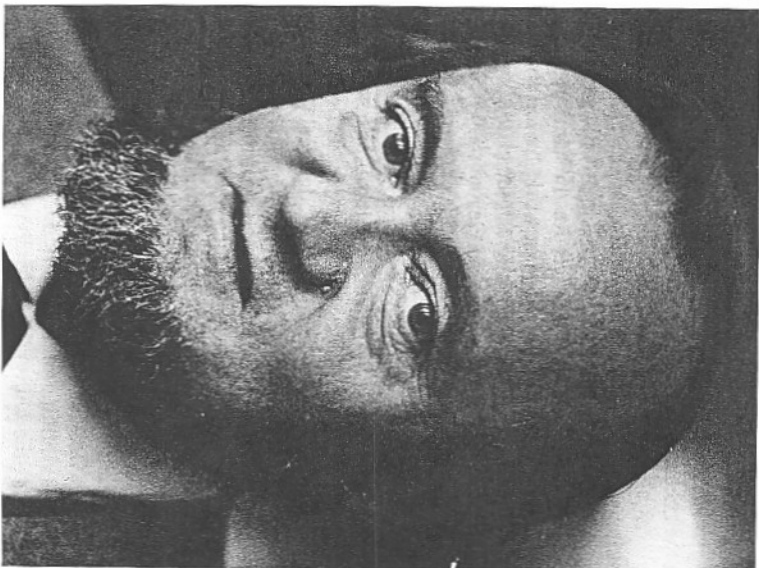
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STEPHEN Toulmin



In Stephen Edelson Toulmin's early works, the term *rhetoric* appears rarely; when it does, it is never a central feature of his writing. However, his work has so many implications for the field of rhetoric that many scholars view Toulmin as one of the influential thinkers in the field, and he himself has come to see the importance of rhetoric to philosophy.

Toulmin's recent works have taken a clear rhetorical turn. In *The Abuse of Casuistry: A History of Moral Reasoning* (1988), Toulmin and his colleague Albert R. Jonsen discuss practical argument as a rhetorical rather than a theoretical enterprise.¹ In *Cosmopolis: The Hidden Agenda of Modernity* (1990), Toulmin notes the resurgence of rhetorical studies: "Since the mid-1960s, rhetoric has begun to regain its respectability as a topic of literary and linguistic analysis."² The resurgence, he suggests, was due to the fact that a number of "American colleges and universities have departments devoted to 'communication studies,' or 'speech.' These departments are responsible for college debating teams, but their faculty members do serious research on different aspects of oral communication and argumentation."³ His work *Return to Reason* (2001) shows how the theoretical concepts of rationality and certainty suppressed the rhetorical idea of reasonability.⁴

Stephen Toulmin was born in London, England, on March 25, 1922, to Geoffrey Edelson Toulmin and Doris Holman Toulmin.⁵ He received a bachelor of arts degree in mathematics and physics from King's College in 1942. From 1942 to 1945, he was a junior scientific officer for the Ministry of Aircraft Production, where he did technical intelligence work, first at the Malvern Radar Research and Development Station and later at the Supreme Headquarters of the Allied Expeditionary Force in Germany. When World War II ended, he returned to England to earn a master's degree in 1947 and a doctorate in 1948 from Cambridge University, where one of his professors was Ludwig Wittgenstein.

Toulmin's central interest during his graduate education involved the nature of rationality. "From the start," he wrote, "my curiosity drew me toward the subject of 'rationality.'" Wondering if knowledge really were certain and enduring, he asked himself if "intelligent fish learned to do science, . . . must they in the long run end up with the same body of ideas as human beings?"⁶ His first major attempt to deal with issues of rationality was his doctoral thesis, "Reason in Ethics," in which he compared and contrasted the ways humans reason about moral and scientific issues.

In 1949, after completing his doctorate, Toulmin was appointed university lecturer in the Department of Philosophy at Oxford University. He published *The Philosophy of Science: An Introduction* in 1953. In 1954, he was appointed to the position of visiting professor in the Department of History and Philosophy of Science at the University of Melbourne in Australia. He returned to England to assume the position of professor and chair of the Department of Philosophy at the University of Leeds from 1955 to 1959.

While at the University of Leeds, Toulmin pursued his belief that traditional logic is incomplete as a tool of rationality and published *The Uses of Argument* in 1958. His primary purpose in writing the book "was to relate traditional philosophical paradoxes to the standing contrast between 'substantive' and 'formal' aspects of reasoning and argument."⁷ Because *The Uses of Argument* ran against mainstream thought in analytic philosophy, the book was received poorly in England. Toulmin lamented that Richard

Braithwaite, his graduate advisor at Cambridge, "was deeply pained by the book, and barely spoke to me for twenty years; while one of my colleagues at Leeds, Peter Alexander, described it as 'Toulmin's anti-logic book.'" In fact, wrote Toulmin, "a great hush fell upon my colleagues in England. After that, I assumed that the book would (in Hume's words) 'fall stillborn from the press,' so I was a little surprised when it continued to sell in worthwhile numbers: it took me some time to find out why."⁸ In fact, he was not to learn the reason until he went to the United States as a visiting professor at New York University, Stanford University, and Columbia University in 1959. At approximately this time, Wayne Brockriede and Douglas Ehninger introduced Toulmin's work to communication scholars in the United States.⁹ They interpreted Toulmin's work as useful to scholars of rhetoric and argumentation because it provided "an appropriate structural model by means of which rhetorical arguments may be laid out for analysis and criticism" as well as "a system for classifying artistic proofs which employs arguments as a central and unifying construct."¹⁰

Since the introduction of Toulmin's work in the United States, rhetoricians have found his ideas about rationality relevant to their thinking about rhetoric. The success of *The Uses of Argument* was due not to professional philosophers but to rhetoricians. In fact, Toulmin learned that people in the United States who had been purchasing his book were the same people who had been keeping the study of practical argumentation and rhetoric alive at the time he was lamenting its death. In his early writings, Toulmin claimed that the study of practical argumentation was dead; he later admitted: "I met people from Departments of Speech and Communication up and down the country, who told me that they used it as a text on rhetoric and argumentation. So, the study of practical reasoning was kept alive after all; but this was done only *outside* the Departments of Philosophy, under the wing of Speech or English, or at Schools of Law."¹¹

In 1960, Toulmin returned briefly to London, where he was the director of the Unit for History of Ideas of the Nuffield Foundation. He returned to the United States in 1965 to become a professor of the history of ideas and philosophy at Brandeis University (1965–1969) and later a professor of philosophy at Michigan State University (1969–1972). He then accepted a position as a professor of humanities at the University of California at Santa Cruz (1972–1973), during which time he published *Human Understanding: The Collective Use and Evolution of Concepts*.

In 1973, Toulmin published *Wittgenstein's Vienna* with Alan Janik and joined the faculty at the University of Chicago. From 1975 until 1978, he worked with the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research established by the United States Congress, collaborating with Jonsen to write *The Abuse of Casuistry: A History of Moral Reasoning*.¹² When he left the University of Chicago, he moved to Northwestern University as the Avalon Foundation Professor of the Humanities (1986–1992). He published *Cosmopolis: The Hidden Agenda of Modernity*

in 1990, a work about the modern era in which he proposes a radical revision of ideas about modernity. Toulmin's next position was as the Henry Luce Professor at the Center for Multiethnic and Transnational Studies at the University of Southern California, where he also served as a faculty master with his wife Donna Toulmin in the North Residential College of the university. They lived and ate with students in the dorms "with blaring stereos, errant fire alarms and visitors at odd hours."¹³

In 1998, the National Endowment for the Humanities named Toulmin a Jefferson Lecturer. This appointment, named in honor of Thomas Jefferson, has been described as "the highest honor the federal government bestows for distinguished intellectual achievement in the humanities."¹⁴ Interspersed with his permanent positions, Toulmin has held visiting professorships and lectureships at schools such as Dartmouth College, Southern Methodist University, and Bryn Mawr College. He also has been a Phi Beta Kappa national lecturer, a senior visiting scholar at the Hastings Center, and a Guggenheim Fellow. Published in 2001, *Return to Reason* carries forward Toulmin's previous arguments about rhetoric, its relations with formal logic, and the ways in which those two ways of analyzing the different forms of argument and/or argumentation can be reconciled. Two chapters on the virtues and defects of disciplines present novel points on the general theme of the book—the need for a philosophical account of reason to strike a proper balance between its rational (calculative) and reasonable (humanistic) aspects.

Theoretical and Practical Argument

The foundation of Toulmin's contribution to rhetoric rests on his classification of two types of arguments. Beginning in *The Uses of Argument*, he distinguishes between what he terms *substantial* and *analytic* arguments; the former are evaluated according to content and the latter according to form. A substantial argument involves an inferential leap from some data or evidence to the conclusion of the argument. In contrast, the conclusion of an analytic argument requires no inferential leap because the conclusion goes no further than the data contained in the argument's premises. Individuals using analytic arguments base their claims on unchanging and universal principles. Those who use substantial arguments, on the other hand, ground their claims in the context of a particular situation rather than in abstract, universal principles.

In their book, Jonsen and Toulmin describe a similar distinction between theoretical and practical arguments: *theoretical* is their term for analytic arguments and *practical* is their term for substantial arguments. The distinction between these two types of arguments lies at the base of "two very different accounts of ethics and morality: one that seeks eternal, invariable principles, the practical implications of which can be free of exception or qualifications, and another that pays closest attention to the specific details of particular moral cases and circumstances."¹⁵ Thus, an analytic argument is based on unchanging, absolute, and invariant principles, while a

practical or substantial argument is based on probability and attends to the circumstances of particular cases.

In summary, theoretical and practical arguments represent idealized formal logic and practical, everyday reasoning respectively. Theoretical or analytic argument is consistent with Plato's ideal of formal, deductive logic that leads to absolute truths regardless of context. Practical argument, on the other hand, conforms more closely to the ideas that Aristotle developed in the *Topics* and the *Rhetoric*. Practical argument is judged not by its correspondence to deductive form but by its substance. It deals with matters of probability rather than with universal truths, and it varies according to context.

Part of Toulmin's life work has been developing an account of theoretical and practical argument that emphasizes the poor fit that follows from using theoretical argument in all commonplace situations. These situations range from how individuals consider and decide upon political issues to how they deal with personal moral dilemmas to how scientists describe their concepts. Even though he claims it largely is irrelevant, Toulmin says that theoretical argument has been the dominant mode since the end of the Renaissance. He also claims that too much reliance on theoretical argument has limited the range of methods for appropriate decision making and has created its own sort of tyranny.¹⁶ Toulmin sees his program as an attempt to emancipate people from the domination of theoretical argument.

Domination of Theoretical Argument

If theoretical argument is hegemonic, as Toulmin suggests, it raises the question of why it has been allowed to dominate rationality for so long. Toulmin pursues a historical account of this question in *Cosmopolis: The Hidden Agenda of Modernity* and begins by returning to Aristotle's distinction between theoretical and practical reasoning. Aristotle saw uses for theoretical argument, but he also supported the use of practical argument, particularly in terms of ethics.¹⁷ In fact, prior to 1600, "no one questioned the right of rhetoric to stand alongside logic in the canon of philosophy; nor was rhetoric treated as a second-class—and necessarily inferior field."¹⁸ During the Renaissance, both the theoretical and the practical were regarded as legitimate. According to Toulmin, "theoretical inquiries were balanced against discussions of concrete practical issues, such as the specific conditions on which it is morally acceptable for a sovereign to launch a war, or for a subject to kill a tyrant."¹⁹ These discussions legitimated the place of rhetoric in human affairs during the Renaissance.

Since the end of the Renaissance, most philosophers have been committed to abstract, universal theory to the exclusion of practical issues. A shift occurred "from a style of philosophy that keeps equally in view issues of local, timebound practice, and universal, timeless theory, to one that accepts matters of universal, timeless theory as being entitled to an exclusive place in the agenda of 'philosophy.'"²⁰ Toulmin's thesis is that the doctrine

of absolutism dominated Western civilization throughout the entirety of the modern period (approximately 1650–1950), beginning with the assassination of Henri IV of France in 1610. During his reign, the conflict between the French Catholics and Protestants became intolerable. Because Henri IV wanted to build a kingdom that balanced Catholicism and Protestantism, he “raised toleration to the level of policy, by his Edict of Nantes. This edict called on loyal Catholic subjects to respect the rights of loyal Protestant subjects.”²¹ Toulmin suggests that “Henri’s murder came as the final confirmation of people’s worst fears. His disappearance from the scene dashed the last hope of escaping from irresolvable conflicts.”²²

Under Henri’s successor Louis XIII and his advisor Cardinal Richelieu, religious “toleration was progressively eroded.”²³ Matters then “took a turn for the worse. The toleration for which Montaigne and Henri both worked in different ways no longer had wide appeal: once ideological conflict developed into general war [The Thirty Years’ War], the voices of the dogmatists shouted down those of more reasonable people.”²⁴ The Thirty Years’ War created so much uncertainty in Europe that an escape was needed. Toulmin noted that “if uncertainty, ambiguity, and the acceptance of pluralism led, in practice, only to an intensification of the religious war, the time had come to discover some *rational method* for demonstrating the essential correctness or incorrectness of philosophical, scientific, or theological doctrines.”²⁵ René Descartes would provide that method.

Descartes’s ideas resulted in part from the historical context in which he lived. The Thirty Years’ War began when Descartes was in his early twenties and ended only two years before his death. His attempt to avoid relativism and skepticism involved finding a “single certain thing,” the *cogito*, that made certainty possible. Toulmin notes that “fifty years later, for a generation whose central experience was the Thirty Years’ War, and a social destruction that had apparently become entirely out of hand, the joint appeal of geometric certainty and ‘clear and distinct’ ideas helped Descartes’s program to carry a new conviction.”²⁶

The position of Descartes affected society’s views on everything from the nature of the physical world to the nature of the human being to the role of the nation-state. In terms of the nature of the physical world, “the standard trope was to compare God the Creator to a clock-maker. The phenomena of nature were seen as similar to the movements of the hands of an elaborate clock mechanism, and the unchanging precision with which this operated was evidence of the Creator’s omnipotence.”²⁷ In accordance with this mechanistic view of the physical world, humans were viewed mechanistically as well: “If humans must behave in conformity with the natural world, and the natural world is a mechanistic, causally determined system, it follows that humans too are mechanistic, causally determined systems.”²⁸ The absolute certainty that dominated views of the physical world and the human being were transferred to the role of the nation-state. “Historians refer to these claims [of national sovereignty] as a form of ‘absolutism.’ By this they

simply mean that each sovereign nation-state was entitled to run its own affairs as it thought best.” The individual nation-state “was no longer morally and politically accountable to a larger community beyond its borders.”²⁹ Descartes’s position had such influence on intellectual thought in Europe that it lasted well into the twentieth century.

By 1910, the authority of the modern period “was weakening, but its grip outlasted another thirty years of warfare among the nations of Europe, and people were ready to suspend the Quest for Certainty, acknowledge the demolition of modern cosmopolis, and return belatedly to the humane and liberal standpoint of the late Renaissance, only when the Second World War was well behind them.”³⁰ Between the 1920s and the 1970s, Europe and North America were transformed intellectually and culturally by the change from modernity to postmodernity. This transformation was as deep as the transformation that occurred in Europe between the 1590s and the 1640s.

Toulmin draws numerous parallels between the beginning and end of the modern period. Just as the Renaissance was ushered out by the Thirty Years’ War, so the modern period ended after another 30 years of warfare in Europe. In fact, changes were conceptualized at the time of World War I but could not be implemented until later. For example, “at the time of the First World War, Norman Angell and Woodrow Wilson dreamed of a new transnational League of Nations; but it was really only after 1945 that the limits to the autonomy of sovereign nation-states were truly acknowledged, and only from the 1960s on that the force of transnational interdependence imposed itself on states.”³¹ Similarly, just as the assassination of Henri IV ushered in modernity, Toulmin claims that the undoing of modernity “was framed by a new emblematic assassination”³²—the assassination of John F. Kennedy.

One result of the ideas that dominated the 300 years of the modern period, according to Toulmin, was that philosophy made very little progress, settling on an absolutist, theoretical approach. Rhetoric was banished from much of the intellectual life of modernity. Presently, however, “the formal doctrines that underpinned human thought and practice from 1700 on followed a trajectory with the shape of an omega [Ω]. After 300 years we are back close to our starting point.”³³ Science no longer maintains an absolute separation between the observer and observed, independent nation-states are finding the limits of their independence, the certainty of Descartes is being replaced with skepticism, and there is an interest in reviving rhetoric from the rejection of its significance throughout the modern era.

The Irrelevance of Theoretical Argument

Toulmin’s approach to argumentation is rooted in an assumption of the irrelevance of theoretical argument to the assessment of everyday life. The prototypical example of theoretical argument is the syllogism, a method of reasoning that produces absolute knowledge from the combination of two premises. A classic syllogism is the one that combines the major premise *All*

people are mortal with the minor premise *Socrates is a person* to arrive at the conclusion *Socrates is bound to die*. Through a complex analysis of logic, Toulmin shows that what formal logicians call *premises* actually serve different functions and thus cannot be grouped together satisfactorily.³⁴

The ideal of formal logic assumes that arguments never vary regardless of their subject matters (Toulmin calls subject matter a *field*). For example, formal logic assumes that the standards for judging an argument in the field of art are the same as those for judging an argument in the field of physics. Formal logic assumes that mathematics (particularly geometry) is the standard by which arguments in all fields can be judged. Arguments constructed according to the standards of mathematics are considered by logicians to be the “first chosen class of arguments” and are displayed “as signs of special merit; other classes of argument, they have felt, are deficient in so far as they fail to display all the characteristic merits of the paradigm class.”³⁵ In other words, formal logicians consider all arguments to be deficient unless they follow the form of deductive logic. But because all fields of human activity are not based on assumptions identical to those of mathematics and geometry, logical arguments are largely irrelevant to the practical world of rationality.

Because they derive from mathematical fields, theoretical arguments are highly impersonal. For example, the person “doing” logic is no more important to formal logic than the person “doing” mathematics is to the formula for determining the circumference of a circle. In contrast, the person engaging in argument is extremely important in rational assessment in the practical world. Rational procedures, according to Toulmin, “do not exist in the air, apart from actual reasoners: they are things which are learned, employed, sometimes modified, on occasion even abandoned, by the people doing the reasoning.”³⁶

Toulmin claims that theoretical or analytic arguments are not relevant to the world of practical affairs for a variety of reasons. One reason is that practical concerns are rarely—if ever—governed by a single overriding principle. A vast number of the situations individuals face on a day-to-day basis are too complex to yield to a single universal principle. The problems of everyday life are not simple because they vary according to the details of the situation. For example:

If I go next door and borrow a silver soup tureen, it goes without saying that I am expected to return it as soon as my immediate need for it is over: that is not an issue and gives rise to no problem.

If, however, it is a pistol that I borrow and if, while it is in my possession, the owner becomes violently enraged and threatens to kill one of his neighbors as soon as he gets back the pistol, I shall find myself in a genuinely problematic situation. I cannot escape from it by lamely invoking the general maxim that borrowed property ought to be returned promptly.³⁷

In the first example, the principle requiring return of borrowed goods can be applied without problem. The second situation is more problematic because the principle of requiring the return of borrowed items conflicts with a duty not to harm another person. An analytic argument will not solve this problem

because no single, absolute principle exists that does not come into conflict with another equally important principle.

Another reason Toulmin considers formal logic to be largely irrelevant to practical argument is that formal logic assumes concepts do not change with time. For an argument to be considered valid in formal logic, “it must surely be good once and for all.”³⁸ Toulmin believes, however, that most argument fields cannot accommodate timeless claims to knowledge. He phrases this claim as a question to which he provides the answer: “Can one cast into a timeless mathematical mould the relations upon which the soundness and acceptability of our arguments depend, without distorting them beyond recognition? I shall argue that this cannot be done.”³⁹

Another difficulty with the application of absolutism to practical problems is that answers to many everyday problems are either “probably correct” or “probably incorrect” instead of “absolutely correct” or “absolutely incorrect.” Many of the questions that rational procedures are designed to answer cannot be answered with certainty. Did Richard Nixon lie to the American public when he proclaimed, “I am not a crook”? Did George Bush lie to the American public when he said, “Read my lips: No new taxes”? Did Bill Clinton lie when he said, “I did not have sexual relations with that woman—Ms. Lewinsky”? These answers are probably—but not certainly—yes.

As an example of the lack of relevance of theoretical argument to practical problems, Toulmin recalls his service on the National Commission for Protection of Human Subjects of Biomedical and Behavioral Research. The commission, consisting of five members who were scientists and six who were not, was charged with the task of making policies about publicly financed research involving human experimentation. Before the commission began its deliberations, many onlookers believed their discussions would end in deadlock. The commission members, however, came to agreement or very close to agreement on almost all issues. They did so by “taking one difficult class of cases at a time and comparing it in detail with other clearer and easier classes of cases.”⁴⁰ Serious disagreements occurred only after the commission’s members attempted to agree on the underlying principles that justified their conclusions. In other words, “they could agree; they could agree what they were agreeing about; but, apparently, they could not agree why they agreed about it.”⁴¹ The failure of their attempt to appeal to principles reflects the difficulty of constructing arguments around single, invariant principles. Although the arguments about certain classes of cases resulted in agreement, their attempts to move to overriding principles “did not add any weight or certitude to the Commissioners’ specific ethical findings.”⁴² The attempt to use absolute principles proved to be irrelevant to the success of the commission.

Theoretical Arguments and the Tyranny of Principles

Argument proceeding from absolute principles is irrelevant to many of the tasks it is designed to accomplish because practical concerns rarely are

governed by a single set of principles. Knowledge changes over time, and human affairs are governed more by probabilities than by certainties. In addition to its irrelevance to the success of practical argument, Toulmin believes that appeals to absolute principles can be counterproductive. Reliance on absolute standards of judgment can lead to argumentative deadlocks.

Toulmin uses the abortion issue as an example of a controversy that cannot be resolved by analytic argument. He claims that when people are willing to accept a variety of rights and responsibilities about this issue, they are able to argue temperately and productively. When they proceed in this manner, they balance the issue differently depending on the individual circumstances in which a woman finds herself.⁴³ When focused on universal laws and absolute principles, however, the abortion debate becomes “less temperate, less discriminating, and above all, less resolvable.”⁴⁴ Jonsen and Toulmin claim that the activists in the abortion controversy focus their public rhetoric on “*universal* laws and principles, which they could then nail to their respective masts”⁴⁵—a focus that has made the abortion debate unresolvable. In Toulmin’s words, “those who have insisted on dealing with the issue at the level of high theory thus guarantee that the only possible outcome is deadlock.”⁴⁶ Because analytic arguments are used to analyze situations that are properly the domain of substantial arguments, many social debates, such as the abortion controversy, are not resolvable. Jonsen and Toulmin claim that “the zealot’s concentration on universal and invariable principles” has created a “practical deadlock” from which there is no escape.⁴⁷

In some cases, the importance of absolute moral standards leads to a tyranny of principles. Toulmin has noticed a “cult of absolute principles” in the argumentative strategies privileged in contemporary society. In this cult of absolutism, one group uses its supposed absolute principle in an attempt to impose these principles tyrannically on all other groups and individuals. Toulmin warns his fellow citizens to “remain on guard against these moral enthusiasts” whom he believes “succeed only in blinding themselves to the equities embodied in real-life situations and problems.”⁴⁸ A large part of Toulmin’s research program is aimed at the emancipation of practical argument from the tyranny of principles.

Toulmin does not conclude that analytic logic needs to be abandoned completely. He simply sees its range of applicability as much narrower than many philosophers have claimed: “This is not to say that the elaborate mathematical systems which constitute ‘symbolic logic’ must now be thrown away; but only that people with intellectual capital invested in them should retain no illusions about the extent of their relevance to practical arguments.”⁴⁹ One alternative to theoretical argument is relativism, which, according to Toulmin, has become “extremely popular” in recent decades.⁵⁰ Relativism denies the existence of objective standards to evaluate concepts. The only relevant standards are ones shared by groups or communities, and standards vary across these communities. For example, Toulmin explains that, in the field of ethics, relativism involves “the recognition of multiple moral authority, each

claiming its own local validity.”⁵¹ The work of R. G. Collingwood is representative of relativistic attempts to deal with the problems of theoretical argument. Collingwood was forced into relativism in his attempt to avoid the problem of absolute standards. According to Toulmin, the relativistic reaction of Collingwood “takes good care to avoid the defects of historical irrelevance, but in doing so . . . it ends in equal difficulties by denying itself any impartial standpoint for rational judgement.”⁵²

The choice, then, is seen as limited either to a completely absolutist or a completely relativistic position—both of which Toulmin views as untenable and unnecessary. Toulmin believes this choice is based on “the very dilemma we first set out to escape: the invidious choice between the arbitrariness of the absolutist and the defeatism of the relativist.”⁵³ Because Toulmin believes that absolutism characterizes mainstream modern thinking, he voices greater objections to it than he does to relativism. Although he sees absolute standards of argument as so strict that they are irrelevant to the practice of rational criticism, he objects to relativistic standards of argument because they are so imprecise that they constitute no standards at all.

The field of anthropology is one in which practitioners have moved in the direction of relativism because anthropologists recognize that rational arguments vary from culture to culture. According to Toulmin, these relativistic standards preclude anthropologists from developing adequate standards of judgment. He uses the example of an anthropologist who comes across “a tribe with a long tradition of sympathetic magic” that “insists on using homeopathic medicines in preference to antidotes.”⁵⁴ The members of the tribe undoubtedly would be able to give their reasons for this choice. The question raised by the tribe is whether the anthropologist should consider its choice of medicine to be rational: “Confronted by this question, anthropologists frequently took the relativist way out: they considered only what was regarded as rational by any particular tribe and avoided the question of whether that attitude was sound or unsound, well founded or groundless.”⁵⁵ Toulmin’s concern, then, is that a completely relativist point of view provides no basis for distinguishing between a good and a poor argument. To avoid the dilemma of absolutism versus relativism, Toulmin analyzes practical arguments in various disciplines, ranging from the physical sciences to ethics. Because he believes the very dilemma was created by an identification of rationality with formal logic, he sees the solution in the realm of practical rather than theoretical argument. In other words, he seeks a middle ground between the two extremes.

Emancipation of Practical Argument

Between 1950 and 1990, Toulmin authored or coauthored five books that develop the notion that practical argument can and should be emancipated from the hegemony of theoretical argument.⁵⁶ Using a good reasons approach to ethics, a layout of practical argument, an evolutionary view of

science, a revival of the methods of casuistry, and a view of the humanization of modernity, Toulmin aims to emancipate practical argument—to free argumentation from the extremes of absolutism without falling into the abyss of relativism.

Good Reasons Approach to Ethics

In 1950, Toulmin published his doctoral dissertation under the title *An Examination of the Place of Reason in Ethics*. In this work, he begins his exploration of the emancipation of practical argumentation from theoretical argumentation by focusing on arguments over matters of ethics. He intends to provide an alternative to what he believes are the three most influential approaches to ethics: the objective, subjective, and imperative approaches. The objective approach, most centrally located in the work of George Edward Moore,⁵⁷ considers the idea of good or right to be “a property of some kind or other.”⁵⁸ Toulmin identifies three kinds of properties. Simple properties, such as the colors red or yellow, are “directly perceived by the senses.”⁵⁹ Complex properties are the kind for which criteria are required that can be “detected by means of a more or less complex routine and the properties can be defined in terms of this routine.”⁶⁰ For example, the 259 sides of a type of polygon are detected by the routine of counting the sides. A third type of property, scientific qualities, is “detected by means of routines, in the way complex qualities are, but which are not directly perceived—in fact we might say not perceived at all.”⁶¹ Accordingly, ethical terms like *goodness* or *right* or *justice* refer to these kinds of properties.

Toulmin argues that values are not directly perceived properties, which is how they are conceptualized in the objective approach. If rightness or goodness could be directly perceived, the extent of disagreement that exists over matters of ethics would not be possible, just as people do not disagree over the fact that the color of a rose is red and a daffodil is yellow. Thus, if the objectivist approach were a sound one, settling a debate about whether capital punishment is good or evil would be just as easy as settling a debate about whether some particular rose is red or white.

The subjective approach, in contrast, is rooted in the belief that in “saying that anything is good or right, we are reporting on the feelings which we (or the members of our social group) have towards it.”⁶² The evidence produced in favor of the subjective approach is “the variation in ethical judgments and standards, both between individuals within a community and between members of different communities.”⁶³ Toulmin objects to this approach because it cannot provide an “account of what is a good reason for an ethical judgement, or provide any standard for criticising ethical reasoning.”⁶⁴ If the subjective approach were accepted, no response would be possible when any two people asserted opposite views about a particular value.

A third approach, the imperative approach, “is the doctrine that, in calling anything good or right, we are only evincing (displaying) our feelings

towards it.”⁶⁵ According to this approach, saying something like “X is bad” is the same as saying “do not do X.” For example, to say “lying is a bad thing” is the same as commanding someone not to lie. This approach fails because it cannot explain how ethical judgments can be right or wrong, true or false: “there is no disputing about exclamations in the way in which we dispute about questions of fact.”⁶⁶ Thus, the imperative approach does not allow for argumentation about ethical matters: “When we say that so-and-so is good, or that I ought to do such-and-such, we do so sometimes for good reasons and sometimes for bad ones. The imperative approach does not help us in the slightest to distinguish the one from the other.”⁶⁷

As an alternative to these three approaches, Toulmin offers a good reasons approach to ethics. Rather than beginning with questions such as “what is good?” or “what is right?” Toulmin begins with the question, “What kinds of reasons are good reasons in ethics?” He attempts to answer that question based on the function of ethics. Toulmin argues that ethics arise functionally only out of community life. Except for the fact that humans live together in social groups and communities, they would have no reason to think about questions of ethics. In this regard, two types of considerations are relevant to questions of ethics—those about duty and those about a community’s moral codes. According to the good reasons approach, one might appeal to duty or to the community’s moral code in situations where there is conflict between duties or codes. When a conflict appears, “one has to weigh up, as well as one can, the risks involved in ignoring either, and choose ‘the lesser of the two evils.’”⁶⁸ In these cases of conflict, the ethics of any action are argued according to its consequences. With his good reasons approach to ethics, Toulmin attempts to steer the middle course between absolutism and relativism.

Layout of Argument

The aspect of Toulmin’s theory that is best known is his model of practical argument.⁶⁹ This layout of argument was developed from his idea that justification is the primary function of practical argumentation.⁷⁰ Practical arguments justify claims rather than infer claims from evidence. Justification is a retrospective activity, while inference is a prospective one. In other words, justification of a claim involves producing reasons for a claim after the fact of mentally arriving at that claim. Inference, on the other hand, refers to the use of reasons to arrive at a claim and is the province of analytic argumentation. Justification involves “*testing and sifting ideas critically*.” It is concerned with how people share their ideas and thoughts in situations that raise the question of whether those ideas are worth sharing. It is a collective and continuing human transaction.⁷¹ Even in the sciences, where one facet of the scientist’s professional work is discovery, Toulmin claims, “the justifying of his discoveries—by the presentation of ‘acceptable’ supporting arguments—is another, complementary facet of this same work.”⁷²

The idea that argument involves justification leads Toulmin to discuss the standards by which arguments succeed or fail to justify claims. An argument is sound if it is able to survive the criticism offered by those who participate in the rational enterprises of various fields. In his words, a “sound argument, a well-grounded or firmly-backed claim, is one which will stand up to criticism, one for which a case can be presented coming up to the standard required if it is to deserve a favourable verdict.”⁷³

Because Toulmin perceives justification to be critical in argument, a prerequisite to comprehending Toulmin’s approach to the layout of argument is his consideration of modal terms. Modal terms are terms that frequently occur in arguments, such as *possible*, *probable*, *impossible*, *certainly*, *presumably*, *as far as the evidence goes*, and *necessarily*. Toulmin claims that modal terms are characterized by two different aspects—force and criteria. The force of an argument refers to the strength or power of the claim. The claim that a person who jumps from a tall building certainly will hit the ground has a greater degree of force than the claim that a person taking an airline trip from New York to Los Angeles probably will arrive in Los Angeles on time or that a person reading this book possibly will find it interesting. The first claim has a higher degree of probability than the last two claims.

Criteria for an argument refer to the standards used to justify the adequacy of the claim. The standards used to judge the adequacy of a work of abstract art are not the same standards as those used to judge the adequacy of a scientific theory or the wisdom of a president’s speech. According to Toulmin, a modal term’s force is field invariant, while its criteria are field dependent.⁷⁴ Arguments from various fields may carry similar force, but the criteria for assessing them differ.

Toulmin’s notion of argument fields⁷⁵ helps explain what he means by *field invariant* and *field dependent*. Although other perspectives assume that arguments are the same regardless of the field, Toulmin argues that some elements of argument differ from one field to another. In what ways, for example, is an argument designed to justify the conclusion that Picasso was a great artist similar to an argument designed to justify the claim that liberty is a more important value than life or that Darwin’s theory of evolution is a useful explanation for the existence of human life on the planet Earth? In other words, Toulmin is searching for ways to explain how some portions of arguments, as well as the criteria for judging their adequacy, remain the same regardless of field, while other portions of arguments vary from field to field. He believes that “as we move from the lunch counter to the executive conference table, from the science laboratory to the law courts, the ‘forum’ of discussion changes profoundly.”⁷⁶ The kinds of arguments that occur in these various forums will be “entirely different in the different situations and so also will be the ways in which possible outcomes of the argument are tested and judged.”⁷⁷

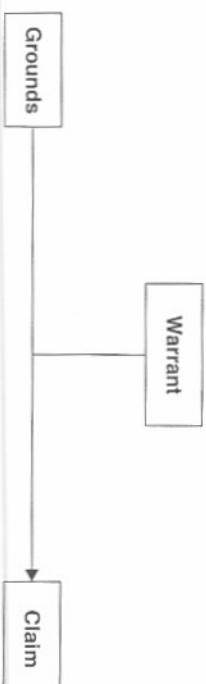
Arguments vary from field to field in myriad ways.⁷⁸ Some arguments vary according to the degree of formality required in different fields. The

degree of formality in an argument between two film critics about the quality of *Erin Brockovich* is much less than that of an argument between defense attorney Johnnie Cochran and prosecuting attorney Marcia Clark about the quality of DNA evidence in the O. J. Simpson case. Arguments also differ according to the degree of precision required in different fields. The amount of precision in an argument about theoretical physics is much greater than that in an argument concerning which applicant for a job is more qualified. Fields of arguments also differ with regard to the modes of resolution that are required. The judicial system of the United States, for example, functions with an adversarial mode of resolution, where one party wins and the other loses. Some forms of negotiation, on the other hand, rely on a compromise or consensus mode of resolution. These are a few of the ways in which practical argument differs from one field to another.

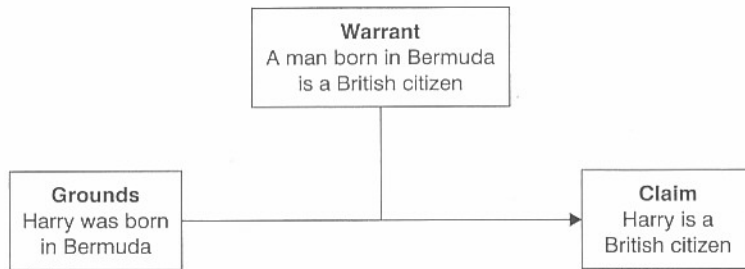
According to Toulmin, one of the ways in which arguments do not vary from field to field is that they all may be analyzed according to his layout of argument.⁷⁹ This layout is based on an analog of motion: “an argument is *movement* from accepted *data*, through a *warrant*, to a *claim*.”⁸⁰ Making an argument is, therefore, analogous to taking a trip, with the traveler trying to get someplace from someplace else.

Toulmin’s layout of an argument involves six interrelated components. The first three and most basic elements are claim, grounds, and warrant. The next three components—backing, modal qualifier, and rebuttal—modify the first three. The first component is called a *claim*. The claim is the conclusion of the argument that a person is seeking to justify. It is the answer to the question, “Where are we going?” The claim is the destination of the trip. Toulmin calls the second component of an argument *grounds*—the facts or other information on which the argument is based. Grounds provide the answer to the question, “What do we have to go on?” The grounds constitute the vehicle by which the destination is reached. The third component of an argument is called the *warrant*. This portion of the argument authorizes movement from the grounds to the claim and answers the question, “How do you justify the move from these grounds to that claim? What road do you take to get from this starting point to that destination?”⁸¹ The warrant assesses whether or not the trip from grounds to claim is a legitimate one. These three components are the primary elements of an argument and, in simple arguments, they may be the only components visible.

The three elements of Toulmin’s layout can be depicted as follows:



One of the examples Toulmin uses to illustrate his layout concerns a man named Harry and a claim that Harry is a British citizen.⁸²



Alone, these three primary elements fail to distinguish analytic from practical arguments. Toulmin's example easily can be transformed into a formal syllogism:

Major premise: A man born in Bermuda is a British citizen.

Minor premise: Harry was born in Bermuda.

Conclusion: Harry is a British citizen.

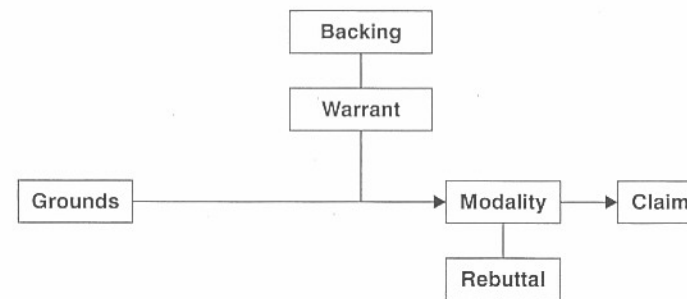
Three additional elements complete the layout of an argument by showing how practical arguments are contextualized and thus are different from analytic arguments. The first of these is called *backing*. In formal logic, the major premise requires no support because it is seen as a universal principle. In practical argument, sometimes the movement called for in the warrant is not obvious, and backing or additional support for the warrant may be required. While the warrant answers the question, "What road should be taken?," the backing answers the question, "Why is this road a good one?"

Another element in Toulmin's layout of an argument is called a *modal qualifier*. Modal qualifiers indicate the strength of the step taken from data to warrant. Some arguments include qualifiers like *probably* or *certainly*, indicating the strength of the relationship between the data and the warrant. Strength also is indicated when, for example, the weather reporter predicts that the chances of rain are 70%, or a scientist claims results that are significant at the .05 level of confidence. Modal qualifiers answer the question, "How certain are we of arriving at our destination?"

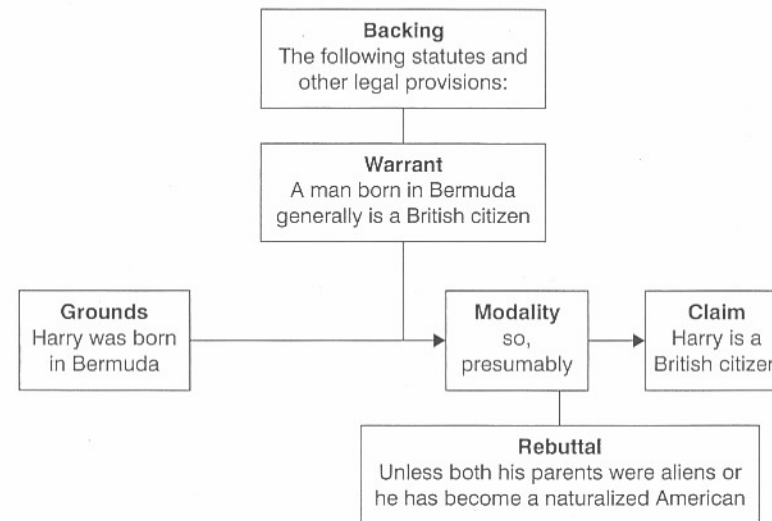
The final element of an argument is called the *rebuttal*, a term that refers to specific circumstances when the warrant does not justify the claim. When using rebuttal, an arguer is presenting claims with a degree of caution. For example, the weather reporter might say that tomorrow will bring rain unless the Pacific front gets stalled over the Rocky Mountains. Using an example from the realm of ethics, a person might argue that suicide is immoral except in cases when a person is in extreme pain and has a disease that has no possible outcome other than a painful and lingering death. The rebuttal answers the question, "Under what circumstances are we unable to take this trip?"

This element emphasizes how practical argument, as opposed to analytic argument, is contextualized—how it is grounded in the specifics of the situation.

The complete diagram of Toulmin's layout of argument is as follows:



Toulmin's example of Harry, presented earlier, is completed in the following layout:



These six elements, considered as parts of an interdependent whole, constitute Toulmin's layout of an argument. Based on legal argument rather than formal logic, Toulmin's layout is modeled on the kind of arguments that typically occur in the courtroom.

When Toulmin first described the layout in *The Uses of Argument*, he did not emphasize and, in fact, did not realize its implications for the field of rhetoric. He did not recognize, for example, that his layout could be adapted to

provide a model of how people communicate arguments. Only after he moved to the United States, was introduced to rhetoricians by Brockriede and Ehninger, and had published *Introduction to Reasoning* with Rieke and Janik were the rhetorical implications of his layout of argument stated explicitly.

Evolutionary Model of Conceptual Change

Like his layout of argument, the rhetorical implications of Toulmin's evolutionary model of conceptual change were not readily apparent until scholars began to realize that rhetoric was central to the process of conceptual change. His model of conceptual change provides yet another challenge to the tyranny of theoretical argument. Concepts in all fields, Toulmin claims, are constantly in a process of evolution, and argument is a part of the process of evolutionary change. Prior to discussing his own perspective on conceptual change, Toulmin criticizes the approach of Thomas S. Kuhn, who attempts to account for conceptual change in his seminal work *The Structure of Scientific Revolutions*.⁸³ Kuhn's thesis is that concepts change when the current scientific paradigm no longer provides useful answers. At such a time, Kuhn claims, a scientific revolution occurs, and new paradigms compete to replace the old. The actors in the competing paradigms are so different that they are unable to communicate clearly with one another.

Toulmin believes that Kuhn's notion of the scientific revolution suffers from the earlier problems of relativism because, in Kuhn's scheme, concepts are not comparable from one paradigm to another. In contrast to Kuhn, Toulmin believes that conceptual change is evolutionary, not revolutionary, and that scientists from competing paradigms are able to—and, in fact, do—argue about the merits of the competing ideas. Toulmin claims that the Copernican Revolution actually took about 150 years to complete “and was argued out every step of the way.”⁸⁴ The changes in physics and astronomy that resulted were “the outcome of a continuing rational discussion.”⁸⁵ Once the so-called revolution was complete, the new worldview shared little with the old.

In Toulmin's view, concepts develop according to a pattern of evolution in much the same way that organisms evolve biologically. In fact, he uses Darwin's model of biological evolution to explain conceptual evolution. The development of concepts involves two processes: innovation and selection. Innovative factors account for the appearance of variations in populations of plants and animals as well as for the appearance of variations in scientific theories, while selective factors account for the perpetuation of the healthiest plants and animals and the soundest scientific theories. Innovation occurs when professionals in a particular discipline come to view their concepts in ways that differ from those in which concepts traditionally have been viewed. These innovative concepts then are subjected to a process of debate and inquiry in a forum of competition that involves the process of selection. The ideas that survive the competition are selected as replacements for or revisions of the traditional concepts. As Toulmin explains, “suitable ‘forums of competition’” must exist

“within which intellectual novelties can survive for long enough to show their merits or defects; but in which they are also criticized and weeded out with enough severity to maintain the coherence of the discipline.”⁸⁶

In science, the selection process includes both disciplinary and professional aspects. The disciplinary aspects of a science—the ideas and objects of the science—insure evolution by replacing old theories that no longer offer adequate explanations for the objects of that science. These disciplinary concerns, however, do not comprise all of the factors involved in the evolution of ideas. Professional factors that influence evolution include such things as the political nature of professional organizations, the needs of society for the “products” of the particular science, and the organization and editorship of journals for publishing scholarly work. Toulmin explains that people and organizations “exercise as real a power and influence over the development of science as they do in any other sphere of human life.”⁸⁷ Thus, an event like the nature of the person elected to office in a professional organization can affect the development of concepts in that scientific discipline.

Toulmin claims that selection processes are rational when “rational enterprises” provide forums of criticism for ideas that are neither absolute nor completely relative. In the court of rationality, clear-headed people with the proper experience assume roles analogous to judges and jurors. He says that from culture to culture, from epoch to epoch, “reasoning may operate according to different methods and principles, so that different milieus represent (so to say) the parallel ‘jurisdictions’ of rationality. But they do so out of a shared concern with common ‘rational enterprises.’”⁸⁸

As concepts change from one period of time to another or from one culture to another, they are either valid or invalid from an absolutist point of view. From a relativistic approach, one concept is neither better nor worse than a competing concept from a different culture or milieu. From Toulmin's perspective, such “evaluations are always a matter of comparison. The operative questions are never of the form, ‘Is this concept uniquely “valid” or “invalid”?’ . . . Instead, the operative form is ‘Given the current repertory of concepts and available variants, would this particular conceptual variant *improve* our explanatory power *more than* its rivals?’”⁸⁹

The fact that Toulmin's approach to argumentation does not distinguish absolutely between the valid and invalid might lead some to the conclusion that he believes that the rational evaluation of ideas is purely subjective and thus not rational at all. Toulmin disputes this view by introducing a concept he calls the *impartial rational standpoint*. The impartial rational standpoint is a significant part of Toulmin's attempt to explain how concept evaluation can be objective without falling prey to the criticisms of absolutism. The impartial rational standpoint is “an ‘objective one,’ in the sense of being neutral as between the local and temporary views of different historico-cultural milieus; but its conclusions are always subject to reconsideration, and it does not divorce itself from the actual testimony of history and anthropology.”⁹⁰ It is simultaneously objective and contextual; it is objective in the sense of

being neutral and contextual in the sense of considering the relevant facets of history and anthropology. The evolutionary model of argument, then, is Toulmin's attempt to explain how individuals are able to achieve an impartial standpoint of rationality through a process of criticism and evaluation.⁹¹

Revival of Casuistry

Building on Toulmin's description of an impartial standpoint of rationality as a place between relativism and absolutism in science, Toulmin and his colleague Jonsen describe a similar place for the discussion of ethics in moral controversy. By reviving casuistry, or case ethics, Toulmin believes a path can be found between the extremes of absolutism and relativism in ethical discussions. Casuistry, widely used in the Middle Ages and the Renaissance, fell into disrepute during the modern period but once again is being revived in the postmodern period.⁹² In *The Abuse of Casuistry*, Jonsen and Toulmin show how the process of casuistry has been an effective form of practical argumentation: "Human experience long ago developed a reasonable and effective set of practical procedures for resolving the moral problems that arise in particular real-life situations. These procedures came to be known as 'casuistry' and those who employed these procedures were 'casuists.'"⁹³

As defined by Jonsen and Toulmin, casuistry is a procedure used to resolve moral problems without resorting to theoretical argument. A theoretical approach to moral problems begins by specifying absolute moral principles and then applying the principle to a specific case. If the sanctity of life is an absolute moral principle and if abortion involves the taking of a life, then abortion is immoral. The approach of casuistry is different, however, and begins with type cases or paradigm cases as objects of reference in moral arguments. These type cases create an initial presumption of moral action for cases that do not contain exceptional circumstances. An individual case then is compared and contrasted with the type case in an attempt to determine whether the specifics of the individual case are comparable to the type case.

Type cases serve as objects of reference. For instance, "willfully using violence against innocent and defenseless human beings, taking unfair advantage of other people's misfortunes, deceiving others by lying to them, damaging the community by your disloyalty, and acting—in general—inconsiderately toward your fellows" were type cases in the classical period of Greece and Rome and are so today. In casuistry, "these type cases are the markers or boundary stones that delimit the territory of 'moral' considerations in practice."⁹⁴ Thus, the type case is the starting point for a moral discussion.

In some cases, additional facts surrounding the context may refute the presumption of the rules embedded in the type case. Jonsen and Toulmin discuss three types of problematic situations: a situation in which the type

case fits the individual case ambiguously, a situation in which two or more type cases apply to the same individual case in conflicting ways, and a situation in which an individual case is so unprecedented that it defies resolution in terms of existing type cases. In none of these cases is analytic argument helpful because the universal moral principle, like the type case, fits the situation only ambiguously, clashes with another universal moral principle, or does not apply at all to the situation.

The first and second situations that Jonsen and Toulmin discuss can be illustrated by the example of a specific situation occasionally faced by a doctor in a neonatal intensive care unit. Medical science has developed to the point that physicians now have the technical capacity to maintain the breathing of very small, premature infants who, a few years ago, certainly would have died. The doctor is faced with deciding whether Nancy, a very premature infant, should be treated or should be allowed to die without treatment. The procedures the doctor will have to follow may have certain serious side effects; even if Nancy survives, she may live a lifetime of physical pain, or she may be seriously handicapped.

Terminally ill patients who have asked to have their treatments discontinued might be considered a type case relevant to the decision about Nancy. The comparison of this type case to the specific case of Nancy illustrates Jonsen and Toulmin's first example of a problematic moral case because it fits the type case ambiguously. Certainly, the question faced in Nancy's case is similar to the one doctors face in the cases of these terminally ill patients. Should Nancy be treated or should she be allowed to die? Should these terminally ill patients be forced to endure weeks of pain and suffering associated with being tied to mechanical life-support systems or should they be allowed to die?

Because the type case selected to resolve this dispute involves the presumptive rule that a physician should "mercifully refrain" from saving the life of a terminally ill patient who has asked to die, the type case fits Nancy's case ambiguously. The primary difference is that Nancy, unlike terminally ill patients, has no way of telling the doctor whether she would prefer to have her life prolonged or would prefer to be allowed to die. Many other ambiguities exist, such as the fact that, as an infant, Nancy neither can reflect on her physical pain nor anticipate the duration of suffering ahead of her. Terminally ill patients, on the other hand, may be fully cognizant and reflective about their painful physical circumstances.

Nancy's case also can be used to illustrate Jonsen and Toulmin's second example of a problematic moral case in which two different type cases apply to the specific case in conflicting ways. The first type case—the type case just discussed—involves the presumptive rule that a doctor should not take extraordinary measures to save the lives of those patients who choose death over further pain and suffering. The second type case involves a contrary presumptive rule stated in the doctor's oath to "act to preserve life." These two paradigm or type cases apply to Nancy's example in competing ways. The first suggests that the doctor should let Nancy die; the second suggests

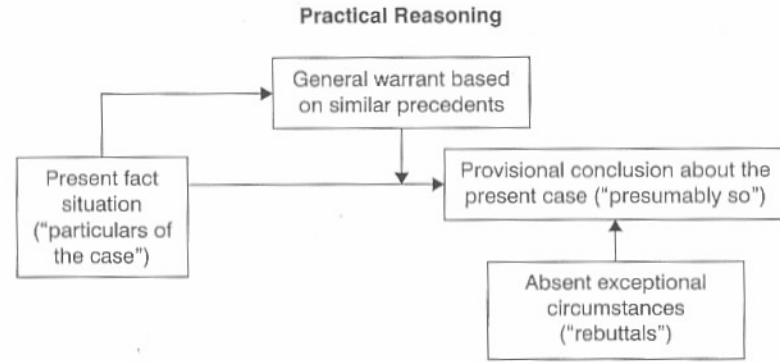
the doctor should attempt to save Nancy's life. If Congress were to pass legislation that categorizes withholding care from the newborn as child abuse, the situation would be even more difficult to resolve. Thus, a third consideration—that of the law—would be introduced into Nancy's situation. The dilemma posed when two or more type cases apply to a specific case in conflicting ways is solved not by analytic argument but by personal decision: which type case best fits the specific situation and under what circumstances would the rules of the type case be set aside?

The third problematic situation involves a moral discussion that is so unprecedented that no paradigm exists to resolve it. Jonsen and Toulmin's simple concerns a man who has been married for eight years and has three children. He decides to have hormone therapy and a sex-change operation. This case raises many interesting and unprecedented issues, not the least of which is whether or not this man and his wife still have mutual sex-obligations.

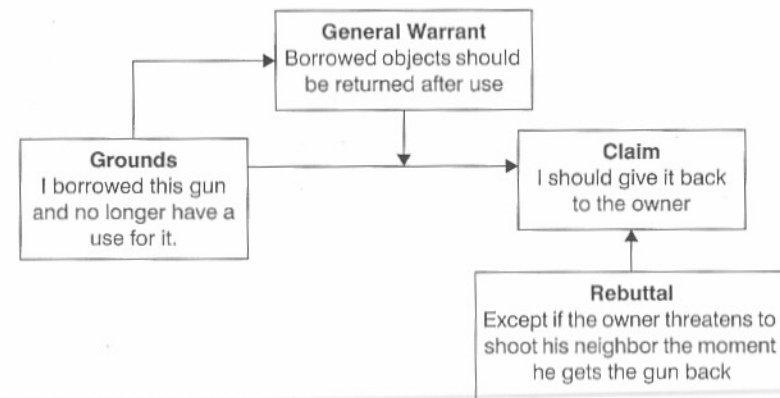
Each of these problematic situations must be resolved by practical argument rather than by analytic argument. In Jonsen and Toulmin's words, moral experience does not lie in a mastery of general rules and theoretical principles, however sound and well reasoned those principles may appear.⁹⁵ Instead of being grounded in rules, moral experience "comes from seeing how the ideas behind those rules work out in the course of people's lives: in particular, seeing more exactly what is involved in insisting on (or waiving) or that rule in one or another set of circumstances."⁹⁶

A poignant example of the proper place of rules in moral argument was cited by Toulmin as the result of a televised report of some difficulties a young handicapped woman was experiencing with the local Social Security office. Because her Social Security payments were not sufficient to cover her medical expenses, she started a telephone-answering service that she operated from her bedside. When the Social Security office discovered that she was deriving income from this service, it lowered her benefits and asked her for payment of past benefits. In despair, the woman took her own life. The reaction of the television reporter was "there ought to be a rule to prevent this kind of thing from happening." For Toulmin, the reporter's reaction reflected an absolutist response to the place of rules in moral deliberation. A more proper reaction—one more consistent with casuistry—would have been that "the local office should be given discretion to waive, or at least modify, the existing rules in hard cases."⁹⁷

Jonsen and Toulmin offer a model of practical argument that explains the procedures of casuistry.⁹⁸ This model, similar to the one developed in *Uses of Argument*, is presented below. It is similar to Toulmin's original but of argument in many respects, although it has four elements rather than the original six. In this model, grounds apply to the general warrant as well as to the claim, thus eliminating the backing. Modality, or the degree of uncertainty, has been incorporated into the claim with the phrase *presumably so*.



The procedure of casuistry can be illustrated by Jonsen and Toulmin's example, cited earlier, involving whether a person has a moral obligation to return a borrowed pistol to a man who claims that he will shoot his neighbor as soon as he gets the pistol back. The grounds in this case involve data from the context of the particular situation. In this example, the warrant is a general maxim developed from type cases or paradigm cases—that borrowed property ought to be returned. The claim, a provisional conclusion about the present case, is that he ought to return the pistol. But this argument hinges on the rebuttal, where the differences in the specific case and the paradigm case are considered. Thus, the procedures of casuistry involve the interaction of a general warrant developed from a paradigm case, data based on the particulars of the present case, and rebuttals concerning exceptional circumstances that exist in the present case. The conclusion of the argument serves as a guide to future action.⁹⁹



Jonsen and Toulmin claim that, since the 1960s, casuistry has been revived. They provide examples of practical dilemmas where case analysis is used routinely: "Friends and colleagues, psychotherapists and agony columnists, parents and children, priests and ministers: anyone who has occasion to consider moral issues in actual detail knows that morally significant *differences* between cases are as vital as their *likenesses*."¹⁰⁰ They claim that discussion of issues of professional ethics in fields such as medicine, business, and law have begun using the methods of casuistry. In addition, "the 1960s and 1970s saw people enter the moral debates about medicine, legal practice, social policy, nuclear war, and a half a dozen such problems."¹⁰¹ These debates, Jonsen and Toulmin maintain, always return to the particular situation in which a person faces a moral problem rather than to universal moral principles. In summary, their claim is that "our inquiry confirms what Aristotle taught long ago: that ethical arguments have less in common with formal analytic arguments than they do with topical or rhetorical ones."¹⁰²

Humanizing Modernity

Toulmin not only describes various ways in which society can be emancipated from the tyranny of absolute moral principles but also describes that emancipation in historical terms that he hopes will lead to a humanization of modernity. To succeed in this quest, Toulmin believes that "the hope for certainty and clarity in theory" needs to be balanced "with the impossibility of avoiding uncertainty and ambiguity in practice."¹⁰³ This process, already well underway in science and beginning in philosophy, does not involve tossing out all of the progress made during the modern period; rather, it involves reconciling these advances with humanism. As Toulmin states: "We are not compelled to *choose between* sixteenth-century humanism and seventeenth-century exact science: rather, we need to hang on to the positive achievements of them both."¹⁰⁴ The task, therefore, is neither to reject modernity nor to cling to it in its historic form; it is "rather, to reform, and even reclaim, our inherited modernity, by *humanizing* it."¹⁰⁵

Toulmin believes that the process of humanizing modernity is well underway in the sciences. Today's sciences, Toulmin believes, "are deeply grounded in experience; while, increasingly, their practical use is subject to criticism, in terms of their human impact."¹⁰⁶ The lines dividing the moral from the technical and the applied from the pure have become less and less distinct. As evidence, he cites the concerns of the physicists who worked to produce the atom bomb at White Sands Missile Base in New Mexico about the dangers their work had for humanity: "The immediate consequence of this change was the founding of *The Bulletin of the Atomic Scientists*, which still provides a monthly, transnational nongovernmental commentary on the politics of nuclear weapons and related topics."¹⁰⁷ The humanization of the sciences is, he suggests, responsible for bringing questions about ecology to center stage. If science can be humanized, then so can philosophy. Today, matters of life and death challenge

philosophers—specifically, problems of nuclear war, medical technology, and the claims of environment that cannot "be addressed without bringing to the surface questions about the value of human life, and our responsibility for protecting the world of nature, as well as that of 'humanity.'"¹⁰⁸

Toulmin claims that postmodernity focuses on four elements that were areas of emphasis prior to the seventeenth century's turn from humanism to rationalism. These elements, which largely were considered unimportant during the modern period, are the oral, the particular, the local, and the timely. The oral is the most important of these four elements for the study of rhetoric. Modern philosophers rejected the oral because their scholarly focus was the printed page; they were interested in isolating "literary works, as products, from facts about historical situations and personal lives of their authors, as producers—i.e., to decontextualize the text."¹⁰⁹ In addition, prior to the 1950s, philosophical analysis involved an implicit rejection of the oral for the written because logical propositions—and thus rationality—were analyzed more easily in written form. Since the 1950s, however, Toulmin claims, "questions about oral *utterances* have displaced questions about written *propositions*."¹¹⁰ The return to the oral is, according to Toulmin, one of the reasons for the resurgence of rhetoric as an academic field since the 1950s.

Accompanying a return to the oral is a return to the particular, the local, and the timely. The return to the particular is signaled by the revival of casuistry. The return to the local has caused a rejection of "Descartes' belief that factual realms of human study like history and ethnography lack intellectual depth, and can teach us nothing of intellectual importance."¹¹¹ The return to the timely has meant that, in addition to addressing questions that are timeless, philosophers are concerned with questions of the here and now. In addition, the humanization of modernity brings with it "a renewed acceptance of practice, which requires us to *adapt* action to the special demands of particular occasions."¹¹²

Toulmin's perspective, then, is that during the modern period, analytic argument replaced practical argument and absolutism replaced relativism. Toulmin argues for an emancipation of practical argument that rejects complete absolutism while avoiding total relativism. Since 1958, he pursued the goal of describing how such an emancipation could be attained. To date, he has argued that good reasons in ethics, practical argument, an evolutionary view of science, the revival of casuistry, and the humanization of modernity demonstrate the possibility of emancipation.¹¹³

Commentary

Toulmin's works have been the subject of much discussion and critique. Because each of his major ideas for emancipating arguments tends to draw different reactions, this discussion of responses to Toulmin is organized around his works, beginning with his dissertation. Not long after publication of the dissertation under the title of *The Place of Reason in Ethics* in 1950,

ard Mervyn Hare presented a critique of Toulmin's good reasons approach to ethics.¹¹⁴ Toulmin claims to be replacing a discussion of moral principles with a discussion of the process of giving good reasons in ethics. He believes that Toulmin's argument that reasons are good if they involve least conflict of interest attainable under the circumstances¹¹⁵ is itself a judgment of the kind Toulmin claims not to be making. Kai Nielsen took Toulmin's side in this debate, claiming that "one need not make any error 'moral decision' to accept Toulmin's criteria for good reasons."¹¹⁶ Another critic of Toulmin's good reasons approach to ethics is Patrick Radden. He argues against what Toulmin claims to be the relationship between ethics and community, objecting to Toulmin's idea that "the scope of one's moral principles is bounded by the limits of one's community." Radden claims that this idea is clearly incorrect because moral principles should have "equal validity for all. To interpret the principle: 'Promises ought to be kept,' as meaning: 'Promises made to members of one's community ought to be kept,' is obviously absurd."¹¹⁸ Although controversial, Toulmin's good reasons approach to ethics neither had the influence nor attracted the response that the ideas he developed in *The Uses of Argument* did. Initially, Toulmin's ideas in *The Uses of Argument*, especially his layout of argument, were not well accepted by philosophers because many of them were concerned with arguments concerning the nature of formal logic rather than rhetoric or practical logic.¹¹⁹ J. L. Cowan argues, for example, that formal deductive logic is a useful tool for the criticism of actual discourse, and he denies the distinction Toulmin makes between data and warrants.¹²⁰ In general, however, philosophers believe that Toulmin has defined logic too narrowly. What, if defined more broadly, it is more relevant to everyday discourse than Toulmin claims. Albert L. Lewis summarizes this response: "(1) Toulmin's logic in his interpretation of traditional logic, (2) his logic was not new since previous logicians had dealt with the problem and, (3) some of the concepts of his new logic were erroneous."¹²¹ James B. Freeman, in his book *Dialectics and the Macrostructure of Argument*,¹²² provides the most comprehensive review of Toulmin's layout of argument. His critique has been called "the most sustained critique of Toulmin's notion of 'warrant' which I know in the literature."¹²³ Freeman rejects the distinctions Toulmin makes among the concepts of data, warrant, and back-story. Still, Freeman accepts the broad outline of Toulmin's idea about practical logic partly because, according to Fisher, Toulmin's work "is the inspiration for Freeman's whole approach."¹²⁴ Despite the negative reading of *The Uses of Argument* by philosophers, the book generally is applauded by teachers of rhetoric. One sign of Toulmin's acceptance among rhetoricians in the United States is the number of argumentation textbooks that include the Toulmin layout in part or in whole.¹²⁵ Toulmin's layout has gained approval not only for those interested in argumentation and debate but from those who teach communication. For example, James C. McCroskey shows how the Toulmin layout can be used in the

basic speech course as an aid to audience analysis and speech organization.¹²⁶ Erwin P. Bettinghaus, searching for an adequate model for argumentative speeches, claims that Toulmin's is the "most adequate available model."¹²⁷

Others have used the Toulmin layout of argument as a way to explain the process of persuasion and attitude change. Gary D'Angelo demonstrates that attitude theories, particularly the theory of Carolyn W. Sherif, Muzafer Sherif, and Roger E. Nebergall,¹²⁸ can be incorporated within the Toulmin layout of argument to provide a more adequate approach to the study of persuasion.¹²⁹ Another attempt to integrate the Toulmin layout of argument into a theory of attitude change can be seen in Gary Cronkhite's paradigm of persuasion.¹³⁰ Toulmin's approach also has been shown to be relevant to argumentation in interpersonal communication. For example, Brant R. Burleson extends Toulmin's conception of warrants to show how they are applicable to social reasoning processes evident in argumentation in interpersonal interaction.¹³¹ His model of practical argument from *The Uses of Argument* even has been used to analyze an example of an ethical problem in sports and physical education.¹³²

Just as Toulmin has critics among philosophers, he also has them among communication professionals. Jimmie D. Trent, for example, asserts that logic still has some relevance to argument and that Toulmin's ideas should not be allowed to divorce formal logic and practical argument completely.¹³³ Ray Lynn Anderson and C. David Mortensen, on the other hand, applaud and extend Toulmin's idea that context-invariant forms of logic are not relevant to argument in the "marketplace."¹³⁴

Toulmin's most vocal critic in the field of rhetoric is Charles Arthur Willard, who claims that Toulmin's layout of argument is inadequate for building a descriptive model of argument. Willard claims that the layout contains three sources of distortion: "(1) the process of translation—translating the message into analytic premises; (2) the linguistic bias of argument models; and (3) the model's intrinsic isolation of context—both linguistic and sociopolitical."¹³⁵ Willard's claim initiated a debate among Charles W. Kneupper, Burleson, and Willard that extended over a series of convention papers and articles.¹³⁶ Willard claims that the study of argument ought to begin with a description of argument as a social phenomenon rather than as a prescription of ways to produce "good arguments." Without denying that prescriptions have their place, he argues that they should flow from carefully constructed descriptions of arguments. He believes that a substantial error in Toulmin's entire project may be that he begins with an attempt to distinguish good reasons from bad ones without first describing the nature of reason giving as a social process.¹³⁷

Although *The Uses of Argument* and *Human Understanding* both make Toulmin's argument about the need to separate logic from rationality, the later work focuses largely on the philosophy of science and, for that reason, draws reactions from philosophers and historians of science. Even his critics speak highly of *Human Understanding*. For instance, R. S. Westfall maintains

"historians of science today will recognize the force of Toulmin's argument."¹³⁸ He claims that "Toulmin's *Human Understanding* is a work conceived on a heroic scale. It confronts major philosophical questions, and it confronts them in a serious way."¹³⁹ Richard J. Blackwell believes that *Human Understanding* represents "a long, and in our opinion overdue and decisive, critique of the identification of rationality with logicity."¹⁴⁰ Still, Blackwell believes Toulmin is unclear about the nature of conceptual selection and variation, with one interpretation placing him "perilously close to the camp of the historical relativists who are sworn enemies" and another interpretation seeing him "captured in the formalist camp, the other group of sworn enemies."¹⁴¹

Another of his critics, Struan Jacobs, accepts much about Toulmin's notion of conceptual evolution as presented in *Human Understanding* but rejects his attempt to show specifics about how the process works: "It is easy enough to agree with Toulmin that in scientific *professions* major developments are apt to occur slowly. . . . Yet when we turn to intellectual ideas, there is no attempt by Toulmin to show they are modified by variation and selection, and lead by gradual transitions into new ideals."¹⁴² In particular, some critics question Toulmin's idea of an impartial standpoint of rationality. Burleson, in an article comparing Toulmin's approach to rationality with that of Habermas, finds Toulmin's "impartial standpoint of rationality" unable to accomplish the goal of avoiding the perils of both absolutism and relativism. In Burleson's analysis, Toulmin's system lapses into the relativism it was intended to avoid.¹⁴³ Similarly, Jacobs claims that because the concept of impartial rational standpoint is so vague, "Toulmin has failed in his attempt to chart an epistemological middle way between the extremes of cognitive relativism and absolutism."¹⁴⁴

Jonsen and Toulmin's ideas about casuistry have been the subject of varied responses. Keenan credits Jonsen and Toulmin with "the first methodological study of casuistry."¹⁴⁵ Although Keenan finds casuistry "attractive because of its attention to circumstances and to the uniqueness of the situation,"¹⁴⁶ he is concerned because "why something is right or wrong seems more *displayed* than *explained*. . . . Reasons are lacking."¹⁴⁷ He believes that casuistry as a form of moral reasoning must be able to "determine why certain forms of conduct are correct and others are not" and that "a principle-based ethics could not profitably accommodate the taxonomic method of casuistry."¹⁴⁸

Another critic of Jonsen and Toulmin's perspective on casuistry, Kevin W. Wildes, believes that the "model of casuistry proposed by Jonsen and Toulmin is ill-suited to secular moral contexts" that exist within a morally pluralistic society that "does not admit a single standard of moral goods and judgment."¹⁴⁹ Wildes claims that Jonsen and Toulmin "assume that there are paradigmatic examples of right and wrong as well as widespread commonalities to be found in the cultural views of right and wrong."¹⁵⁰ In spite of his criticisms, Wildes believes that "a case based reasoning is still possible for clinical ethics" even if its shape is different from "the Catholic casuistry of Jonsen and Toulmin."¹⁵¹

James F. Tallmon defends Jonsen and Toulmin's ideas about casuistry in light of the arguments made by Wildes. Tallmon notes that "casuistry is not tied exclusively to Roman Catholic theology [as Wildes asserts]; casuistry also has deep roots in classical thought, roots that Jonsen and Toulmin underscore."¹⁵² Tallmon believes that "the context of Roman Catholic theology can be distinguished from the method of casuistry, permitting that method to be deployed successfully in morally pluralistic contexts."¹⁵³ Another of Jonsen and Toulmin's supporters with respect to the issue of casuistry is John D. Arras, who welcomes the development of casuistry in the field of bioethics, claiming that "its account of moral reasoning . . . is far superior, both as a description of how we actually think and as a prescription of how we ought to think, to the tiresome invocation of the applied ethics mantra."¹⁵⁴

Toulmin's work is important to the study of rhetoric in the last part of the twentieth century. Despite the varied responses to his ideas, they have stimulated a great deal of new work in argumentation, broadening both its concerns and its scope. In Willard's words, Toulmin's work has created "a renegade movement (Informal Logic), a new field (Critical Thinking), and the reinvigoration of an old one (Argumentation)."¹⁵⁵

Bibliography

Books

- The Abuse of Casuistry*. Berkeley: University of California Press, 1988. (With Albert R. Jonsen.)
- The Architecture of Matter*. New York: Harper and Row, 1962. (With June Goodfield.)
- Beyond Theory: Changing Organizations Through Participation*. Philadelphia, PA: John Benjamins, 1996. (With Bjørn Gustavsen.)
- Cosmopolis: The Hidden Agenda of Modernity*. New York: Free, 1990.
- The Discovery of Time*. New York: Harper and Row, 1962. (With June Goodfield.)
- An Examination of the Place of Reason in Ethics*. Cambridge, UK: Cambridge University Press, 1950.
- The Fabric of the Heavens: The Development of Astronomy and Dynamics*. New York: Harper and Row, 1961.
- Foresight and Understanding: An Enquiry Into the Aims of Science*. Bloomington: Indiana University Press, 1961. (With June Goodfield.)
- Human Understanding, Volume I: The Collective Use and Evolution of Concepts*. Princeton, NJ: Princeton University Press, 1972.
- An Introduction to Reasoning*. New York: Macmillan, 1979. (With Richard Rieke and Allan Janik.)
- Knowing and Acting: An Invitation to Philosophy*. New York: Macmillan, 1976.
- Metaphysical Beliefs*. Ed. Alasdair MacIntyre. New York: Schocken, 1970. (With Ronald W. Hepburn and Alasdair MacIntyre.)
- Night Sky at Rhodes*. New York: Harcourt, Brace and World, 1964.
- Norwood Russell Hanson: What I Do Not Believe and Other Essays*. Dordrecht, Neth.: D. Reidel, 1972. (With Harry Wolf.)

- The Philosophy of Science: An Introduction*. London, UK: Hutchinson University Library, 1953.
- Physical Reality: Philosophical Essays on 20th Century Physics*. New York: Harper and Row, 1970.
- Return to Cosmology: Postmodern Science and the Theology of Nature*. Berkeley: University of California Press, 1982.
- Return to Reason*. Cambridge, MA: Harvard University Press, 2001.
- Uses of Argument*. Cambridge, UK: Cambridge University Press, 1958.
- Wittgenstein's Vienna*. New York: Simon and Schuster, 1973. (With Allan Janik.)

Articles

- John Donagan and Melborne Philosophy." *Ethics*, 104 (October 1993), 143–47.
- Alexandra Trap: "Thoughts on the Eternal Scientist." *Encounter*, 42 (January 1974), 61–72.
- Strophysics of Berossos the Chaldean." *Isis*, 58 (Spring 1967), 65–76.
- Brain and Language: A Commentary." *Synthese*, 22 (May 1971), 369–95.
- Can Science and Ethics be Connected?" *Hastings Center Report*, 9 (June 1979), 27–34.
- The Case for Cosmic Prudence." *Tennessee Law Review*, 56 (Fall 1988), 29–41.
- Common Law Tradition." *Hastings Center Report*, 11 (August 1981), 12–13.
- The Complexity of Scientific Choice: A Stocktaking." *Minerva*, 3 (Autumn 1964), 343–59.
- The Complexity of Scientific Choice II: Culture, Overheads or Tertiary Industry?" *Minerva*, 4 (Winter 1964), 155–69.
- Concepts and the Explanation of Human Behavior." In *Human Action*. Ed. Theodore Mischel. New York: Academic, 1969, pp. 71–104.
- Concepts of Function and Mechanism in Medicine and Medical Science." In *Evaluation and Explanation in the Biomedical Sciences*. Ed. H. T. Engelhardt, Jr., and S. F. Spiker. Dordrecht, Neth: Foris, 1975, 51–66.
- Concept-Formation in Philosophy and Psychology." In *Dimensions of Mind*. Ed. S. Hook. New York: New York University Press, 1960, pp. 211–25.
- Conceptual Revolutions in Science." *Synthese*, 17 (March 1967), 75–91.
- The Construal of Reality: Criticism in Modern and Post Modern Science." *Critical Inquiry*, 9 (September 1982), 93–111.
- Creativity: Is Science Really a Special Case?" *Comparative Literature Studies*, 17 (June 1980), 190–201.
- Critical Notice of R. Carnap, 'Logical Foundations of Probability.'" *Mind*, 62 (January 1952), 86–99.
- Criticism in the History of Science: Newton on Absolute Space, Time and Motion II." *Philosophical Review*, 68 (April 1959), 203–27.
- Crucial Experiments: Priestley and Lavoisier." *Journal of the History of Ideas*, 18 (April 1957), 205–20.
- Defense of 'Synthetic Necessary Truth.'" *Mind*, 58 (April 1949), 164–77.
- Descartes in His Time." In *Discourse on the Method and Meditations on First Philosophy*. Ed. David Weissman. New Haven: Yale University Press, 1996, pp. 121–46.
- The Language of Morals." *Philosophy: The Journal of the British Institute of Philosophical Studies*, 29 (January 1954), 65–69.
- Ethical Safeguards in Research." *Center Magazine*, 9 (July 1976), 23–26.
- Ethics and Equity: The Tyranny of Principles." *Law Society of Upper Canada Gazette*, 15 (1981), 240–56.

- "The Evolutionary Development of Natural Science." *American Scientist*, 55 (December 1967), 456–71.
- "Exchange of Letters Between Stephen Toulmin and Ernest Nagel." *Scientific American*, 214 (April 1966), 9–11.
- "Exploring the Moderate Consensus." *Hastings Center Report*, 5 (June 1975), 31–35.
- "Financing the Universities." *Spectator*, 208 (March 1962), 394.
- "From Form to Function: Philosophy and History of Science in the 1950s and Now." *Daedalus*, 106 (Summer 1977), 143–62.
- "From Leviathan to Lilliput." In *Celebrating Peace*. Ed. Leroy S. Rouner. Notre Dame, IN: University of Notre Dame Press, 1990, pp. 73–86.
- "From Logical Analysis to Conceptual History." In *The Legacy of Logical Positivism*. Ed. Peter Achinstein and Stephen F. Barker. Baltimore, MD: Johns Hopkins University Press, 1969, pp. 25–53.
- "From Logical Systems to Conceptual Populations." In *Boston Studies in Philosophy of Science*. Vol. 8. Ed. Robert S. Buck and Roger C. Cohen. Dordrecht, Neth.: D. Reidel, 1971, pp. 552–64.
- "Historical Inference in Science: Geology as a Model for Cosmology." *Monist*, 47 (Fall 1962), 142–58.
- "How Can We Reconnect Sciences With Ethics?" In *Knowing and Valuing: The Search for Common Roots*. Ed. H. Tristram Engelhardt. Hastings on the Hudson: Hastings Center, 1980, pp. 44–64.
- "How Can We Reconnect the Sciences with the Foundations of Ethics?" *Hastings Center Series on Ethics*, 1981, pp. 403–23.
- "How Was the Tunnel of Eupalinus Aligned?" *Isis*, 56 (Spring 1965), 46–55. (With June Goodfield.)
- "Human Adaptation." In *The Philosophy of Evolution*. Ed. Uffe J. Jensen. New York: St. Martin's, 1981, pp. 176–95.
- "In Vitro Fertilization: Answering the Ethical Objections." *Hastings Center Report*, 8 (October 1978), 9–11.
- "Inwardness of Mental Life." *Critical Inquiry*, 6 (Autumn 1979), 1–16.
- "Koestler's Theodicy: On Sin, Science, and Politics." *Encounter*, 52 (February 1979), 46–57.
- "The Language of Morals." *Philosophy*, 29 (1954), 65–69.
- "The Layout of Arguments." In *Professing the New Rhetorics: A Sourcebook*. Ed. Theresa Enos and Stuart C. Brown. Englewood Cliffs, NJ: Prentice Hall, 1994, pp. 105–25.
- "Logic and the Criticism of Arguments." In *The Rhetoric of Western Thought*. 6th ed. Ed. James L. Golden, Goodwin F. Berquist, and William E. Coleman. Dubuque, IA: Kendall-Hunt, 1997, pp. 221–30.
- "Logic and the Theory of Mind." In *Nebraska Symposium of Motivation*. Ed. W. J. Arnold. Lincoln: University of Nebraska Press, 1975, pp. 409–76. (With C. F. Feldman.)
- "Ludwig Wittgenstein." *Encounter*, 32 (January 1969), 58–71.
- "Ludwig Wittgenstein." *General Semantics Bulletin*, 37 (1970), 19–32.
- "Medical Institutions and Their Moral Constraints." In *Integrity in Health Care Institutions*. Ed. Ruth Ellen Bulger and Stanley Joel Reiser. Iowa City: University of Iowa Press, 1990, pp. 21–32.
- "The Moral Admissibility or Inadmissibility of Nontherapeutic Fetal Experiments." In *Medical Responsibility: Paternalism, Informed Consent, and Euthanasia*. Ed. Wade L. Robinson. Clifton, NJ: Humana, 1979, pp. 113–39.

- "The Moral Psychology of Science." *Hastings Center Series on Ethics*, 1981, pp. 223–42.
- "On the Nature of the Physician's Understanding." *Journal of Medical Philosophy*, 1 (March 1976), 32–50.
- "Plausibility of Theories." *Journal of Philosophy*, 63 (October 1966), 624–66.
- "Pluralism and Responsibility in Post-Modern Science." *Science, Technology, and Human Values*, 10 (Winter 1985), 28–37.
- "Principles of Morality." *Philosophy*, 31 (1956), 142–53.
- "Problem Statement and Tentative Agenda." In *Argumentation as a Way of Knowing*. Ed. David A. Thomas. Annandale, VA: Speech Communication Association, pp. 1–7. (With Richard Rieke.)
- "Qattara: A Primitive Distillation and Extraction Apparatus Still in Use." *Isis*, 55 (September 1964), 339–42.
- "Rationality and Reasonableness: From Propositions to Utterances." *Revue Internationale de Philosophie*, 50 (1996), 297–305.
- "Reasons and Causes." In *Explanation in the Behavioral Sciences*. Ed. R. E. Borger and F. Cioffi. Cambridge, UK: Cambridge University Press, 1970, pp. 1–41.
- "Recovery of Practical Philosophy." *American Scholar*, 57 (Summer 1988), 337–52.
- "Rediscovering History." *Encounter*, 36 (January 1971), 53–64.
- "Regaining the Ethics of Discretion: The Tyranny of Principles." *Hastings Center Report*, 11 (1981), 31–39.
- "Reply." *Synthese*, 23 (March 1972), 487–90.
- "Reply, On Prescribing Description." *Synthese*, 18 (October 1968), 462–63.
- "Review Essay: A Sociologist Looks at Wittgenstein." *American Journal of Sociology*, 84 (January 1979), 996–99.
- "Rules and Their Relevance for Understanding Human Behavior." In *Understanding Other Persons*. Ed. T. Mischel. Totowa, NJ: Littlefield and Rowman, 1974, pp. 25–60.
- "Scientific Strategies and Historical Change." In *Philosophical Foundations of Science*. Ed. R. J. Siegel and Robert S. Cohen. Dordrecht, Neth.: D. Reidel, 1974, pp. 401–14.
- "Scientist-Overlord." *Spectator*, 209 (July 1962), 104–05.
- "Steering a Way Between Constructivism and Innatism." In *Language and Learning: The Debate Between Jean Piaget and Noam Chomsky*. Ed. Massimo Paitelli-Palmarini. Cambridge, MA: Harvard University Press, 1980, pp. 276–78.
- "Teleology in Contemporary Science and Philosophy." *Neue Hefte für Philosophie*, 20 (1981), 140–52.
- "On Teilhard de Chardin." *Commentary*, 39 (March 1965), 50–55.
- "Tyranny of Principles." *Hastings Center Report*, 11 (December 1981), 31–39.
- "You Norman, Me Saxon (Hamburg, Corsica, Stratford-Upon-Avon and Vermont)." *Encounter*, 51 (September 1978), 89–93.
- "You Norman, Me Saxon: Reply." *Encounter*, 53 (August 1979), 80–81.

Endnotes

- ¹ Albert R. Jonsen and Stephen Toulmin, *The Abuse of Casuistry: A History of Moral Reasoning* (Berkeley: University of California Press, 1988).
- ² Stephen Toulmin, *Cosmopolis: The Hidden Agenda of Modernity* (New York: Free, 1990), p. 187. Excerpts from *Cosmopolis* reprinted with the permission of The Free Press, a Division of Simon & Schuster, Inc.

- ³ Toulmin, *Cosmopolis*, p. 187.
- ⁴ Stephen Toulmin, *Return to Reason* (Cambridge, MA: Harvard University Press, 2001).
- ⁵ Unless otherwise noted, biographic information on Toulmin was obtained from the following sources: Ann Avory, ed., *Contemporary Authors* (Detroit, MI: Gale Research, 1982), p. 533; *Who's Who in America*, vol. 2, 42nd ed. (Chicago: Marquis Who's Who, 1982), p. 3354; and Jacques Cattell Pres, ed., *Directory of American Scholars*, vol. 4, 8th ed. (New York: R. R. Bowker, 1982), p. 541; Stephen Toulmin, "Logic and the Criticism of Arguments," in *The Rhetoric of Western Thought*, 6th ed., by James L. Golden, Goodwin F. Berquist, and William E. Coleman (Dubuque, IA: Kendall-Hunt, 1997), pp. 221–22.
- ⁶ Stephen Toulmin, "Logic and the Criticism of Arguments," p. 221.
- ⁷ Stephen Toulmin, "Logic and the Criticism of Arguments," pp. 221–22.
- ⁸ Toulmin, "Logic and the Criticism of Arguments," p. 225.
- ⁹ Wayne Brockriede and Douglas Ehninger, "Toulmin on Argument: An Interpretation and Application," *Quarterly Journal of Speech*, 46 (February 1960), 44–53; and Douglas Ehninger and Wayne Brockriede, *Decision by Debate* (New York: Dodd, Mead, 1963), especially chapter 8.
- ¹⁰ Brockriede and Ehninger, p. 44.
- ¹¹ Toulmin, "Logic and the Criticism of Arguments," p. 225.
- ¹² Jonsen and Toulmin.
- ¹³ Meg Sullivan, "Sharing an Academic Life With Students," *University of Southern California Chronicle*, available at http://www.usc.edu/ext-relations/news_se...2.24.html/Sharing_an_Academic_life_.htm. Accessed November 29, 2000.
- ¹⁴ "Playwright Arthur Miller Named the 2001 NEH Jefferson Lecturer in the Humanities." See <http://www.neh.fed.us/news/archive/20010104.html>. Accessed April 29, 2000.
- ¹⁵ Jonsen and Toulmin, p. 2.
- ¹⁶ Stephen Toulmin, "Regaining the Ethics of Discretion: The Tyranny of Principles," *Hastings Center Report*, 11 (1981), 31–39.
- ¹⁷ Toulmin, *Cosmopolis*, p. 75–76.
- ¹⁸ Toulmin, *Cosmopolis*, p. 30.
- ¹⁹ Toulmin, *Cosmopolis*, p. 24.
- ²⁰ Toulmin, *Cosmopolis*, p. 24.
- ²¹ Stephen Toulmin, "Descartes in His Time," in *Discourse on the Method and Meditations on First Philosophy*, ed. David Weissman (New Haven, CT: Yale University Press, 1996), p. 124.
- ²² Toulmin, *Cosmopolis*, p. 48.
- ²³ Toulmin, "Descartes in His Times," p. 127.
- ²⁴ Toulmin, "Descartes in His Times," p. 143.
- ²⁵ Toulmin, *Cosmopolis*, p. 55.
- ²⁶ Toulmin, *Cosmopolis*, p. 62.
- ²⁷ Toulmin, "Descartes in His Times," p. 133.
- ²⁸ Toulmin, "Descartes in His Times," p. 135.
- ²⁹ Stephen Toulmin, "From Leviathan to Lilliput," in *Celebrating Peace*, ed. Leroy S. Rouner (Notre Dame, IN: University of Notre Dame Press, 1990), p. 73.
- ³⁰ Toulmin, *Cosmopolis*, pp. 160–61.
- ³¹ Toulmin, "From Leviathan to Lilliput," p. 81.
- ³² Toulmin, *Cosmopolis*, p. 161.
- ³³ Toulmin, *Cosmopolis*, p. 167.
- ³⁴ Stephen Toulmin, *The Uses of Argument* (Cambridge, UK: Cambridge University Press, 1958), pp. 107–22.
- ³⁵ Toulmin, *The Uses of Argument*, p. 145.
- ³⁶ Toulmin, *The Uses of Argument*, p. 212.
- ³⁷ Jonsen and Toulmin, p. 7.
- ³⁸ Toulmin, *The Uses of Argument*, p. 184.
- ³⁹ Toulmin, *The Uses of Argument*, p. 182.
- ⁴⁰ Toulmin, "Regaining the Ethics of Discretion," pp. 31–39.
- ⁴¹ Toulmin, "Regaining the Ethics of Discretion," p. 32.

- ⁴² Toulmin, "Regaining the Ethics of Discretion," p. 32.
- ⁴³ Toulmin, "Regaining the Ethics of Discretion," p. 32.
- ⁴⁴ Toulmin, "Regaining the Ethics of Discretion," p. 32.
- ⁴⁵ Jonsen and Toulmin, p. 3.
- ⁴⁶ Toulmin, "Regaining the Ethics of Discretion," p. 32.
- ⁴⁷ Jonsen and Toulmin, p. 5.
- ⁴⁸ Toulmin, "Regaining the Ethics of Discretion," p. 38.
- ⁴⁹ Toulmin, *The Uses of Argument*, p. 185.
- ⁵⁰ Stephen Toulmin, *Human Understanding, Volume I: The Collective Use and Evolution of Concepts* (Princeton, NJ: Princeton University Press, 1972), p. 66.
- ⁵¹ Toulmin, *Human Understanding*, p. 66.
- ⁵² Toulmin, *Human Understanding*, p. 65–66.
- ⁵³ Toulmin, *Human Understanding*, p. 495.
- ⁵⁴ Toulmin, *Human Understanding*, p. 92.
- ⁵⁵ Toulmin, *Human Understanding*, p. 92.
- ⁵⁶ Stephen Toulmin, *An Examination of the Place of Reason in Ethics* (Cambridge, UK: Cambridge University Press, 1950); Toulmin, *The Uses of Argument*; Toulmin, *Human Understanding*; Jonsen and Toulmin; and Toulmin, *Cosmopolis*. The ideas Toulmin developed in these five books constitute his emancipatory approach to practical argument. To represent his work as authentically as possible, these ideas are presented in the same chronological order in which he developed them.
- ⁵⁷ George Edward Moore, *Ethics* (New York: Henry Holt, 1912).
- ⁵⁸ Toulmin, *The Place of Reason in Ethics*, p. 5.
- ⁵⁹ Toulmin, *The Place of Reason in Ethics*, p. 10.
- ⁶⁰ Toulmin, *The Place of Reason in Ethics*, p. 11.
- ⁶¹ Toulmin, *The Place of Reason in Ethics*, p. 11.
- ⁶² Toulmin, *The Place of Reason in Ethics*, p. 29.
- ⁶³ Toulmin, *The Place of Reason in Ethics*, p. 33.
- ⁶⁴ Toulmin, *The Place of Reason in Ethics*, p. 29.
- ⁶⁵ Toulmin, *The Place of Reason in Ethics*, p. 46.
- ⁶⁶ Toulmin, *The Place of Reason in Ethics*, p. 50.
- ⁶⁷ Toulmin, *The Place of Reason in Ethics*, p. 60.
- ⁶⁸ Toulmin, *The Place of Reason in Ethics*, p. 147.
- ⁶⁹ The information for this section is taken from Toulmin, *The Uses of Argument*, chapter 3; and Stephen Toulmin, Richard Rieke, and Alan Janik, *An Introduction to Reasoning* (New York: Macmillan, 1984), chapters 2–7. The information in both sources is similar, although a few terms have been changed. For example, the term *data* in *The Uses of Argument* is grounds in *Introduction to Reasoning*. Because *Introduction to Reasoning* is the most recent of Toulmin's writings on the subject, we have used the language of *Introduction to Reasoning* here. This decision was not an easy one because the older source, *The Uses of Argument*, was authored by Toulmin alone, while the more recent source was co-authored with Rieke and Janik. The increased emphasis on communication in *Introduction to Reasoning* is probably more than coincidental.
- ⁷⁰ Toulmin, *The Uses of Argument*, p. 6.
- ⁷¹ Toulmin, Rieke, and Janik, p. 10.
- ⁷² Toulmin, *Human Understanding*, p. 313.
- ⁷³ Toulmin, *The Uses of Argument*, p. 8.
- ⁷⁴ Toulmin, *The Uses of Argument*, p. 36.
- ⁷⁵ Toulmin, *The Uses of Argument*, chapter 1.
- ⁷⁶ Toulmin, Rieke, and Janik, p. 8.
- ⁷⁷ Toulmin, Rieke, and Janik, p. 8.
- ⁷⁸ Toulmin, Rieke, and Janik, chapter 25.
- ⁷⁹ Toulmin, *The Uses of Argument*, p. 175.
- ⁸⁰ Brockriede and Ehninger, p. 544.

- ⁸¹ Toulmin, Rieke, and Janik, p. 26.
- ⁸² The content of this and all other examples of the layout of argument are from Toulmin, *The Uses of Argument*, while the form is consistent with Toulmin, Rieke, and Janik.
- ⁸³ Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962); and Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd ed. (Chicago: University of Chicago Press, 1970).
- ⁸⁴ Toulmin, *Human Understanding*, p. 105.
- ⁸⁵ Toulmin, *Human Understanding*, p. 105.
- ⁸⁶ Toulmin, *Human Understanding*, p. 140.
- ⁸⁷ Toulmin, *Human Understanding*, p. 267.
- ⁸⁸ Toulmin, *Human Understanding*, p. 95.
- ⁸⁹ Toulmin, *Human Understanding*, p. 225.
- ⁹⁰ Toulmin, *Human Understanding*, p. 50.
- ⁹¹ The impartial standpoint of rationality is discussed in Toulmin, *Human Understanding*, pp. 484–85.
- ⁹² The revival of casuistry is discussed in Jonsen and Toulmin, pp. 304–32.
- ⁹³ Jonsen and Toulmin, p. 10.
- ⁹⁴ Jonsen and Toulmin, p. 307.
- ⁹⁵ Jonsen and Toulmin, p. 314.
- ⁹⁶ Jonsen and Toulmin, p. 314.
- ⁹⁷ Toulmin, "Regaining the Ethics of Discretion," p. 32.
- ⁹⁸ Jonsen and Toulmin, p. 35.
- ⁹⁹ Jonsen and Toulmin, p. 324.
- ¹⁰⁰ Jonsen and Toulmin, p. 14.
- ¹⁰¹ Jonsen and Toulmin, p. 305.
- ¹⁰² Jonsen and Toulmin, p. 327.
- ¹⁰³ Toulmin, *Cosmopolis*, p. 175.
- ¹⁰⁴ Toulmin, *Cosmopolis*, p. 180.
- ¹⁰⁵ Toulmin, *Cosmopolis*, p. 180.
- ¹⁰⁶ Toulmin, *Cosmopolis*, p. 181.
- ¹⁰⁷ Toulmin, *Cosmopolis*, p. 182.
- ¹⁰⁸ Toulmin, *Cosmopolis*, p. 186.
- ¹⁰⁹ Toulmin, *Cosmopolis*, p. 187.
- ¹¹⁰ Toulmin, *Cosmopolis*, p. 187.
- ¹¹¹ Toulmin, *Cosmopolis*, p. 188.
- ¹¹² Toulmin, *Cosmopolis*, p. 192.
- ¹¹³ Toulmin's latest book, *Return to Reason*, continues the development of his theory of argumentation. Regrettably, this book could not be included in any substantial way in this chapter since *Return to Reason* was published while this chapter was in press.
- ¹¹⁴ Richard Mervyn Hare, rev. of *An Examination of the Place of Reason in Ethics*, by Stephen Toulmin, *Philosophical Quarterly*, 1 (1951), 372–75. See also Richard Mervyn Hare, *The Language of Morals* (Oxford, UK: Clarendon, 1952).
- ¹¹⁵ Toulmin, *The Place of Reason in Ethics*, p. 224.
- ¹¹⁶ Kai Nielsen, "Good Reasons in Ethics: An Examination of the Toulmin-Hare Controversy," *Theoria*, 24 (1958), 28.
- ¹¹⁷ Patrick McGrath, *The Nature of Moral Judgement: A Study in Contemporary Moral Philosophy* (London, UK: Sheed and Ward, 1967).
- ¹¹⁸ McGrath, p. 214.
- ¹¹⁹ For a summary of the responses of logicians, see Albert L. Lewis, "Stephen Toulmin: A Reappraisal," *Central States Speech Journal*, 23 (Spring 1972), 48–55.
- ¹²⁰ J. L. Cowan, "The Uses of Argument: An Apology For Logic," *Mind*, 73 (1964), 27–45.
- ¹²¹ Lewis, p. 50.
- ¹²² James B. Freeman, *Dialectics and the Macrostructure of Argument* (New York: Foris, 1991).
- ¹²³ Alec Fisher, rev. of *Dialectics and the Macrostructure of Argument*, by James B. Freeman, *Informal Logic*, 14 (1992), 196.

- ¹²⁴ Fisher, p. 196.
- ¹²⁵ For example, see Ehninger and Brockriede, chapters 8–15; Austin J. Freeley and David L. Steinberg, *Argumentation and Debate: Critical Thinking for Reasoned Decision Making* (Belmont, CA: Wadsworth, 2000); Halbert E. Gulley, *Discussion, Conference and Group Process* (New York: Holt, Rinehart and Winston, 1960), pp. 146–54; Gerald R. Miller and Thomas R. Nilsen, *Perspectives on Argumentation* (Chicago: Scott, Foresman, 1966); Glen E. Mills, *Reason in Controversy: On General Argumentation* (Boston: Allyn and Bacon, 1968), pp. 110–11; John F. Wilson and Carroll C. Arnold, *Public Speaking as a Liberal Art* (Boston: Allyn and Bacon, 1964), pp. 139–42; Russell R. Windes and Arthur Hastings, *Argumentation and Advocacy* (New York: Random, 1965), pp. 157–86; Richard D. Rieke and Malcolm O. Sillars, *Argumentation and the Decision-Making Process* (New York: Longman, 1997); Richard E. Crable, *Argumentation as Communication: Reasoning with Receivers* (Columbus, OH: Merrill, 1976); Karen C. Rybacki and Donald J. Rybacki, *Advocacy and Opposition: An Introduction to Argumentation* (Boston: Allyn and Bacon, 2000).
- ¹²⁶ James C. McCroskey, "Toulmin and the Basic Course," *Speech Teacher*, 14 (March 1965), 91–100.
- ¹²⁷ Erwin P. Bettinghaus, "Structure and Argument," in *Perspectives on Argumentation*, by Gerald R. Miller and Thomas R. Nilsen (Chicago: Scott, Foresman, 1966), pp. 130–55.
- ¹²⁸ Carolyn W. Sherif, Muzafer Sherif, and Roger E. Nebergall, *Attitude and Attitude Change: The Social Judgement-Involvement Approach* (Philadelphia, PA: W. B. Saunders, 1965).
- ¹²⁹ Gary D'Angelo, "A Schema for the Utilization of Attitude Theory within the Toulmin Model of Argument," *Central States Speech Journal*, 22 (Summer 1971), 100–09.
- ¹³⁰ Gary Cronkhite, *Persuasion: Speech and Behavioral Change* (Indianapolis: Bobbs-Merrill, 1969).
- ¹³¹ Brant R. Burleson, "A Cognitive-Developmental Perspective on Social Reasoning Processes," *Western Journal of Speech Communication*, 45 (Spring 1981), 133–47. See also Marcus L. Ambrester and Glynis Holm Strause, *A Rhetoric of Interpersonal Communication* (Prospect Heights, IL: Waveland, 1984), pp. 310–15.
- ¹³² Earle F. Zeigler, "Applied Ethics in Sport and Physical Education," *Philosophy in Context*, 13 (1983), 52–64.
- ¹³³ Jimmie D. Trent, "Toulmin's Model of an Argument: An Examination and Extension," *Quarterly Journal of Speech*, 54 (1968), 252–59.
- ¹³⁴ Ray Lynn Anderson and C. David Mortensen, "Logic and Marketplace Argumentation," *Quarterly Journal of Speech*, 53 (April 1967), 143–50.
- ¹³⁵ Charles Arthur Willard, "On the Utility of Descriptive Diagrams for the Analysis and Criticism of Arguments," *Communication Monographs*, 43 (November 1976), 314.
- ¹³⁶ See, for example, Charles W. Kneupper, "On Argument and Diagrams," *Journal of the American Forensic Association*, 14 (Spring 1978), 181–86; Brant R. Burleson, "On the Analysis and Criticism of Arguments: Some Theoretical and Methodological Considerations," *Journal of the American Forensic Association*, 15 (Winter 1979), 137–47; and Charles Arthur Willard, "The Status of the Non-Discursiveness Thesis," *Journal of the American Forensic Association*, 17 (Spring 1981), 190–214.
- ¹³⁷ Charles Arthur Willard, *Argumentation and the Social Grounds of Knowledge* (Tuscaloosa: University of Alabama Press, 1983), especially chapter 3; and Charles Arthur Willard, *A Theory of Argumentation* (Tuscaloosa: University of Alabama Press, 1989).
- ¹³⁸ R. S. Westfall, "Toulmin and Human Understanding," *Journal of Modern History*, 47 (1975), 69.
- ¹³⁹ Westfall, p. 693.
- ¹⁴⁰ Richard J. Blackwell, "Toulmin's Model of an Evolutionary Epistemology," *Modern Scholasticism*, 51 (1973), 63.
- ¹⁴¹ Blackwell, p. 67.
- ¹⁴² Struan Jacobs, "Stephen Toulmin's Theory of Conceptual Evolution," in *Issues in Evolutionary Epistemology*, ed. Kai Hahlweg and C. A. Hooker (Albany: State University of New York Press, 1989), p. 521.
- ¹⁴³ Brant R. Burleson, "On the Foundations of Rationality: Toulmin, Habermas, and the *A Priori* of Reason," *Journal of the American Forensic Association*, 16 (Fall 1979), 112–27.
- ¹⁴⁴ Jacobs, p. 522.
- ¹⁴⁵ James F. Keenan, "The Casuistry of John Major: Nominalist Professor of Paris (1506–1531)," *Annual of the Society of Christian Ethics*, (1993), p. 205.
- ¹⁴⁶ Keenan, p. 219.
- ¹⁴⁷ Keenan, p. 220.
- ¹⁴⁸ Keenan, p. 220.
- ¹⁴⁹ Kevin W. Wildes, "The Priesthood of Bioethics and the Return of Casuistry," *Journal of Medicine and Philosophy*, 18 (1993), 34.
- ¹⁵⁰ Wildes, pp. 34–35.
- ¹⁵¹ Wildes, p. 45.
- ¹⁵² James M. Tallmon, "How Jonsen Really Views Casuistry: A Note on the Abuse of Father Wildes," *Journal of Medicine and Philosophy*, 19 (1994), 103.
- ¹⁵³ Tallmon, p. 103.
- ¹⁵⁴ John D. Arras, "Getting Down to Cases: The Revival of Casuistry in Bioethics," *Journal of Medicine and Philosophy*, 16 (1991), 47.
- ¹⁵⁵ Willard, *A Theory of Argument*, p. 14.