

# The Assault On Logic

by Steven Yates

*Author's note: this is Chapter One of a projected book tentatively entitled In Defense of Logic. The projected Table of Contents of this book can be found below following the text and endnotes. The author is Rowley Fellow at the Ludwig Von Mises Institute in Auburn, Ala., and is the author of one previous book, Civil Wrongs: What Went Wrong With Affirmative Action (San Francisco: ICS Press, 1994) and numerous articles in academic journals, nonacademic periodicals and on the World Wide Web. His email address is [syates2@earthlink.net](mailto:syates2@earthlink.net).*

## Logic Under Attack.

Today, logic is under sustained attack. The attack is usually indirect, and often quite sophisticated. Much of it is coming from within institutions entrusted to impart logical as well as other forms of instruction to the next generation: colleges and universities. It usually takes the form of fashionable doctrines holding that universal standards of rationality, or of objectivity, or for deciding what counts as knowledge, are *passé*, and have been “unmasked” as self-deceptive social constructs that serve to protect privileges. Different groups, so that attack goes, have different experiences of the world and bring different standards, different methods and different kinds of knowledge to the arena. In the end, those I will label new scholars have concluded, there is no such thing as objectively knowable truth, no set of universal standards, i.e., no single “logic” common to all proper human thought. It is, moreover, intolerant and oppressive to assume that there is a common “logic” that can or should be “imposed” on others.

A kind of anti-intellectualism now pervades our culture—what amounts to a refusal to employ one's mind. This is reflected in, for example, passive responses such as “Whatever” to efforts to challenge young people intellectually. Nobody has a monopoly on truth, so it is said; therefore no one should “judge” anyone else. Everybody has their own opinion, it is also said (complete with grammar mistake). The question comes up: can a person really function indefinitely on this basis? Can institutions? After all, we constantly confront problems. Decisions have to be made. In institutions, those making them usually have to justify them to others. “Whatever” will not cut it in business. It won't work with a new technology. Nor will it work with the multitude of dilemmas facing today's culture: abortion, affirmative action, cloning, education, environmental issues, euthanasia, free speech, global warming, gun ownership by individuals, health care, homosexuality, immigration, internationalism, privacy, profiling, property rights, sex education, social security, sustainable development, terrorism, war, welfare, and so on. Are there ways of approaching these issues so that they do not reduce to shouting matches or power struggles? The prevailing anti-intellectual ethos implies a loud *No*.

The result is that a kind of cognitive authoritarianism has settled down on us. Many of the above issues cannot even be discussed openly in public universities or work places any longer. This is usually because of the dominance of a single point of view whose proponents refuse to allow examination, much less challenge, with logical considerations.

One of the major sources of the attack on logic is none other than the multiculturalist and diversity movements that have become the central preoccupations of universities over the past decade and a half or so, and which have now spread to corporations—ostensibly in the name of an increasingly diverse population. What began as a political movement with a set of policy objectives imposed on institutions from the top down has precipitated a revolution of major proportions in many academic disciplines. This revolution dovetailed nicely with movements that had already been afoot on continental Europe and were imported to the United States. The term *postmodernism* has been bandied about in the humanities and social sciences quite a bit. The term is difficult to define, although the sentiments behind it go back to Nietzsche's call for a "revaluation of all values." Suffice it to say, the younger generation of new scholars (with the full approval of their elders) is now preoccupied with race, gender, class, and sexual orientation. Their working assumption is that one's group identity and that group's history is the key to the structure of one's cognition and experience, and one's personal identity. A brand of cognitive determinism is at work here: one's gender, race, etc., sets the determinants on one's cognitive life no less that it sets the parameters on one's opportunities in a society regarded as institutionally racist, sexist, classist, heterosexist and repressive. They have jettisoned traditional concerns to find and communicate objectively knowable truth as a superstition of modernity. Even were this available, would it be desirable. Part of the postmodernist anxiety is uncertainty about the very value of truth. In his lucid explanation of the postmodern mood Stanley Grenz observes:

In the postmodern world, people are no longer convinced that knowledge is inherently good. In eschewing the Enlightenment myth of inevitable progress, postmodernism replaces the optimism of the last century with a gnawing pessimism. Gone is the belief that every day, in every way, we are getting better and better. Members of the emerging generation are no longer confident that humanity will be able to solve the world's great problems or even that their economic situation will surpass that of their parents. They view life on earth as fragile and believe that the continued existence of humankind is dependent on a new attitude of cooperation rather than conquest.<sup>1</sup>

This heralds a new universe quite different from that of earlier generations, who took intellectual, scientific and technological progress for granted, within the institutions provided by a liberal democratic order. Born of a combination of European-derived postmodernism, post-Freudian psychoanalysis, and American identity politics, it embraces Marx's edict that hitherto philosophers have only wanted to understand the world; the point is, however, to change it. However, at least some strains of

postmodernism express hesitation even about this. Many are, with Nietzsche, philosophers with hammers. Writes Zygmunt Bauman:

Postmodernity ... does not seek to substitute one truth for another, one standard of beauty for another, one ideal life for another. Instead it splits the truth, the standards and the ideal into already deconstructed and about to be deconstructed. It denies in advance the right of all and any revelation to slip into the place vacated by the deconstructed / discredited rules. It braces itself for a life without truths, standards and ideals.<sup>2</sup>

There is no room in this new universe for logic traditionally conceived, which is that there is at most one logic, that it is the same for everybody, because we all live in a common world however different our immediate personal environments might be or have been (something no one denies). Instead, we have a plurality of sometimes overlapping logics, with different but always contingent rules. Some of these logics are specific to gender—taken as a “social construct” and not to be confused with physiological sexuality. Some are specific to ethnicity and/or culture. In these days of “queer theory,” some are specific to sexual preference (“orientation”). Each has the status of what Wittgenstein and Lyotard called language games. None has any necessary connection or association with anything beyond itself—the mistake of modernity was the mistake of the West going back to Plato and Aristotle, of “privileging” certain interpretive communities (be they those of the church or of science) and their linguistic structures by calling their referents “real.” Metaphysical “truth” is a pat on the back we pay to those linguistic structures we favor affectively, or which help us achieve our ends, or find our way through the passing show of life.

A prevailing doctrine among new scholars is what we will come to call, following Ludwig Von Mises, polylogism. Polylogism is the thesis that in some versions holds that there are two logics, one for Western culture’s victims and one for Western cultural oppressors (its Marxist variety), and in others, that there are many logics, one for each culture (its relativist variety). New scholars assert that any educational system that is pluralistic in the sense of involving a multiplicity of races and ethnic groups but in which members of one race or ethnic group, one gender, one economic class, etc., are statistically overrepresented, tells just a one-sided fraction of the human story. At this point we are to infer that because the vast majority of philosophers and other major intellectuals whose views are presented in traditional texts are white males of European descent, scholarship and education needs too be extensively revised to include a greater representation of women, blacks, Hispanics, Asians and so on. This has led to the creation of new academic departments on campus from women’s studies—now present on nearly all campuses—to “queer theory,” and to recruit and hire representatives of each of the above groups. It follows from the race / ethnicity / gender based cognitive determinism described above that each group has its own unique perspective. Thus only a member of that group is qualified to teach that perspective.

One of the first things to note is that in approaching such claims for the purposes of evaluation we hit a roadblock. The positions are often ambiguous. To some extent,

this is because many of their practitioners are not trained philosophers who have learned to avail themselves of professional philosophers' standards of clarity and precision (although some *are* trained philosophers). Thus it is often unclear what a given postmodernist or feminist or multiculturalist thesis really says, or what follows from it. Some would not consider themselves relativists, for example. In keeping with their roughly postmodernist premises, advocates of these views don't necessarily consider ambiguity a failing. They might see a demand for clarity as nothing more than the retrogressive appeal back to the sort of logical standards that their ambiguity tries to subvert. Many new scholars see logic and its standards as fundamentally "oppressive"—their writing often reflects an effort to break free of its strictures in favor of something more discursive or "free spirited." This makes determining its logical properties difficult—and in some cases, almost impossible.

On the other hand, a few authors are reasonably clear about their target, which is "masculinist" or "Caucasian" logic. Aristotle, of course, developed the original "canon" that became classical logic. He certainly did not see himself as having invented a set of conventions. He saw himself as describing laws of proper thought that hold for all rational beings. He would have been baffled by the charge that a canonization of these laws is, in some sense, oppressive or alienating. Relativistic and sophistical doctrines abounded in Aristotle's time—associated with the ancient Sophists who figured prominently in the dialogues of his teacher Plato. He saw the careful, logical systematization of thought as supplying a full rebuttal to relativism and sophism.

Philosophy has its periods of enthusiastic optimism and abject pessimism. The Enlightenment, whatever its advantages or disadvantages, was a period of optimism. The scientific revolution was underway, and the steady growth and improvement of human knowledge and life was assumed. The rest was details. Today we are in a period of pessimism. No longer is it assumed that any single context or set of principles can be prescribed for all human thought. The myth of progress has been seen as just that. There seem to be many diverse, incommensurable candidates for knowledge and standards for what counts as knowledge. What, after all, was so great about Aristotle? After all, didn't his culture practice slavery?

We may think of a contrast between those I will call constructive philosophers and those I will call subversive philosophers (using the term *philosopher* in a broad sense, and acknowledging that many thinkers provide some combination of the two). The former's projects set out to create edifices of thought that lead to genuine knowledge. Among the constructive philosophers the main figures are Plato, Aristotle, Aquinas, Descartes, Kant, Hegel, and Whitehead. Other constructive thinkers include natural scientists such as Newton and Einstein, and nonpositivist economists such as Carl Menger and Ludwig Von Mises. Subversive philosophers see their projects as setting out to exhibit the edifices of constructive philosophers not just as impossible but actually self-deceptive. Among the subversive philosophers are the ancient Sophists, Machiavelli, Hume (at least some of the time), Nietzsche, logical positivists when attacking traditional metaphysics, and, of course, postmodernists such as Richard Rorty and Stanley Fish. Constructive thinkers see logic as an important tool, at the very least (not all would agree,

obviously, that it yields general factual knowledge). Subversive thinkers see it as an enemy, figuratively speaking. It is one of their primary targets, directly or not.

Today, the subversives are winning, not just in fields like academic philosophy but in the culture at large. Obviously, the assault on logic is not new, but today it is probably more pervasive than ever before, particularly given the amount and variety of information in circulation. Today's assault on logic began in the humanities, social sciences and legal studies, and has spread through the culture like wildfire. The assumption is now widespread of a kind of cosmopolitan relativism, more understood intuitively than articulated clearly, informed by postmodernism and multiculturalism, that logic is only a set of social conventions restricted to a narrow domain. It is too white, too masculine, too exacting, too demanding. It does not stress what many educators call the "affective domain." Life, and the world, so the cosmopolitan relativists might contend, are not logical. Logic is oppressive. It is alienating. It is inhuman, in contrast with the rich life presumably offered by the passions. (Think of Mr. Spock on the original *Star Trek*, or his successor, Data, on *ST: The Next Generation*, whose struggle to understand humanity includes a struggle to understand the human emotions he cannot experience because he is a machine who operates on the basis of the logical algorithms of cold, unfeeling logic.) It leads not just to the intellectual but also to the political domination of some over others rather than to equality, even to a culture of rape<sup>3</sup>; unfettered, it might even lead to nuclear annihilation!<sup>4</sup>

Among the questions we will raise is how much of this makes sense, much less explains the rise of the most prosperous civilization in history. We are not supposed to say it: women are better off in American society than they are anywhere else on the planet. The same can be said for ethnic minorities. But these matters aside, many of the assaults on logic betray a paradox: the authors are surely reasoning and aiming to persuade the reader to accept their conclusions. They thus use logic to subvert logic. A discursive approach would seem, on its face, to be more honest. But before going further, let us consider some examples of direct assaults on logic in one way or another, so that we can see more clearly what we are confronting.

### **Academic Feminists Against Logic.**

Academic feminism grew out of the women's movement dating back to the 1960s and before. By the early 1980s it had started to become a major growth industry in the academy. By the early 1990s practically every college or university of any size had its women's studies department, with many of its faculty having joint appointments in departments from philosophy and comparative literature to the social sciences. While initially confining their attention to fields like ethics, public policy and law, soon an increasing number of very energetic and enthusiastic writers were turning out "critiques" of a variety of enterprises. Among these were science and logic. The idea of a "feminist epistemology" and a "feminist philosophy of science" emerged, embodying the idea that men and women employ different modes of thought and interaction with their

surroundings. Embedded throughout these writings is an assault on logic—sometimes direct, sometimes not.

The direct attacks began with a book by Carol Gilligan entitled *In a Different Voice*.<sup>5</sup> Focusing on developmental psychology, Gilligan suggested that logic was something masculine. Comparing the development of two older children, a boy and a girl, she sees the boy as “fascinated by the power of logic” and “locat[ing] truth in math ... he assumes that anyone following reason would arrive at the same conclusion...” The girl sees “not a math problem with humans but a narrative of relationships ... a world comprised of relationships rather than of people standing alone, a world that coheres through human connections rather than through systems of rules ...”<sup>6</sup> In the discussion that emerges, logic is presented as impersonal, hierarchical and dominating—with a potential for violence! The alternative is that inclusive web of relationships brought out by the feminine way of knowing and interacting with others, one stress empathy, the affective and nurturing instead of abstract rules and objective truth.

The idea either that men and women have different “logics” or that logic is in some sense “masculine” and therefore in some sense alienating to women has become a common theme among academic feminists. In a book that was widely discussed as a paradigm statement of feminist philosophy of science when it first appeared in the late 1980s, feminist philosopher Sandra Harding advocated moving from “the woman question in science” to “the science question in feminism.”<sup>7</sup> What she was driving at was the need not merely to recruit more women into the study and practice of science (the institutional agenda that had been around for a couple of decades) but to uncover those features of Western science itself that exhibited what recent feminists call masculine bias that fundamentally alienates women (the intellectual product of this agenda that was then new).

Behind this view is the view that “concepts, theories, objective methodologies, and transcendental truths ... bear the mark of their collective and individual creators, and *the creators in turn have been distinctively marked as to gender, class, race, and culture.*”<sup>8</sup> Academic feminists had begun to hold not merely that women were underrepresented in science, the university, corporate boards, etc., but took the position best expressed by the phrase, *all knowledge and cognition is gendered*. This is a stronger claim than the one that was then familiar, that Western science had been institutionally sexist by having excluded women (although Marie Curie is a notable exception). Harding and her colleagues were making a stronger claim with a distinct epistemological dimension, to wit, that women have a different way of seeing, interacting with and knowing nature than men. Since Western science is nearly exclusively the product of men, it exhibits a masculine bias. The Baconian idea of Western science “penetrating” nature’s secrets is suggestive in the readings of these feminists of something inherently masculine interacting in a sexual way with something inherently feminine—possibly against the “wishes” of the feminine entity, whatever that could mean in the case of the natural universe scientists wish to understand. Academic feminists distinguish sex from gender. The former is a biological category: male or female. The latter is cultural, and in these contexts, epistemological: masculine or feminine. What academic feminists

have asserted, or implied, is that there is a masculine way of seeing, interacting with and knowing the world and that there is a feminine way of seeing, interacting with and knowing the world. This implies a transcendental “masculine logic” to be contrasted with a “feminine logic,” for although feminists don’t use these particular terms, their positions appear to imply different “logics” for the different genders. There is no uniform logical structure of the human mind. This is certainly in contrast with the main assumption of traditional Aristotelian logic as well as modern symbolic logic, which is there is at most one set of valid logical principles which are the same for everybody—that there is one uniform logical structure for the human mind.

According to what Mary E. Hawkesworth calls “feminist standpoint theories,”

knowledge is always mediated by a host of factors related to an individual’s particular position in a determinate sociopolitical formation at a specific point in history. *Class, race and gender necessarily structure the individual’s understanding of reality* and hence inform all knowledge claims.<sup>9</sup>

This state of affairs results in the rejection of

The very possibility of a truth about reality. Feminist postmodernists use the “situatedness” of each finite observer in a particular sociopolitical, historical context to challenge the plausibility of claims that any perspective on the world could escape partiality. Extrapolating from the disparate conditions that shape individual identities, they raise grave suspicions about the very notion of a putative unitary consciousness of the species. In addition, the argument that knowledge is the result of invention, the imposition of form on the world rather than the result of discovery, undermines any belief that the Order of Being could be known even if it exists. As an alternative to the futile quest for an authoritative truth to ground feminist theory, feminist postmodernists advocate a profound skepticism regarding universal (or universalizing) claims about the existence, nature, and powers of reason.<sup>10</sup>

This leads to the view that “only to the extent that one person or group can dominate the whole, can ‘reality’ appear to be governed by one set of rules or be constituted by one privileged set of social relations.”<sup>11</sup>

The most specific attack on logic as inherently masculine and therefore alienating to women, however, comes from Andrea Nye:

Logic proclaims itself the unreadable language, the language which has detached itself from confusion and passion, the language which has transcended natural language embedded in sensual lives, mutably imprinted with social, economic, or personal concerns. The logician does not speak; he does not tell the truth; he exhibits it. All vestiges of his

speaking voice are transcended, all reference to his situation, to his sex, his place in time or space.<sup>12</sup>

Nye is here reporting on the claims of logic to complete generality as self-deceptive, in accordance with the program of subversive philosophers noted above. She reads out of the history of logic a discipline in deception about itself and its possibilities. There is no absolute truth either in or about logic, only different narratives written by different logicians in different situations. What these logicians all had in common was their masculinity, something different from women's way of experiencing and knowing:

Is logic masculine?... One thing is clear enough: those who have made the history of logic have been men. Different kinds of explanations have been given of that fact. The simplest is to blame it on exclusion. If women had been permitted they would have been logicians.... But feminist experience would indicate that it is not so simple. Even when admitted ... to those disciplines in which logic rules, women have not felt comfortable. They have had an agonizing sense that the terms of success still escape them, that what they care about is lost in following the rules, that their experience must either be ignored or distorted to fit the conceptual scheme within which they are to think.<sup>13</sup>

The explanation?

Logicians have been men. As men, they have spoken from a men's experience.... The arena of logic was made by men for men; it was expressly founded on the exclusion of what is not male, as well as what is not Greek, not Christian, nor Western, not Aryan.<sup>14</sup>

Logic is inherently alienating to women:

The relations between speakers that logic structures are alien to feminist aims. Nor is it possible to argue that these are misuses of logic which a feminist logic can correct.... [T]he alternative cannot be ... a woman's language. Such a language spoken between women for women cannot have the power that can challenge the authority of logic. But its very terms it does not engage logic. It is outside logic, different from logic, other than logic, an expressive alternative that leaves thinking to the men, while women continue to speak and write for each other.<sup>15</sup>

This sounds very much as if according to Nye, women cannot be logical (think masculine logic) and should not try. But in this case, what is the alternative? Nye tells us:

An alternative is the one I have tried: to answer to the desire that motivates the claim of logicians to prescribe the rules of thought, even though the desire of logic is that there should be no answer possible; to respond that, understood in this way, logic is not thought at all but the

denial of any challenge that might stimulate thought. It is only when the claim of logic to be reason and truth and knowledge is accepted that the anarchical chaos of purely personal expression is the only alternative to masculine rationality. With that claim exposed as a particular project of domination, it becomes possible to undertake a new feminist study of thought and language free from the logicist assumptions that dominate contemporary linguistics and epistemology.<sup>16</sup>

In sum: there is, in Nye's view, not one logic but many—one for each male logician of significance! The thesis of a single, supervening logic is self-deceptive. Stepping outside of logic, then, means stepping outside of this. It means women freeing themselves from masculine domination—for “women's ways of knowing” are different from masculine logics.

### **Afrocentricity.**

Academic feminists are not alone in expressing such sentiments. They are joined by Afrocentrists—a term used by certain black intellectuals to contrast themselves with a despised Eurocentrism. According to Molefi Kete Asante, one of Afrocentricity's leading advocates, the term means “placing African ideals at the center of any analysis that involves African culture and behavior.”<sup>17</sup> The locus of difference is race / ethnicity instead of gender. The two are intended to be compatible, though, as Harding's and Hawkesworth's remarks above are intended to make clear; Asante notes, too, that “some feminist critics have addressed the same conceptual issue, though from a different point of view.”<sup>18</sup> Afrocentricity, like academic feminism and postmodernism, rejects claims of logical uniformity, universality and objectivity as integral parts of Eurocentrism:

Without severe criticism, the preponderant Eurocentric myths of universalism, objectivity, and classical traditions retain a provincial European cast. Scholarship rooted in such a tradition obviously lacks either historical or conceptual authenticity. The aggressive seizure of intellectual space, like the seizure of land, amounts to the aggressor occupying someone else's territory while claiming it as his own.<sup>19</sup>

And “[t]he protectors of the basest Eurocentric theory, with its racist focus, describe their ethos as the universal ethos, encompassing the only correct view.”<sup>20</sup>

This kind of perspective has received enthusiastic support from a variety of quarters. An article by John H. Stanfield, for example, develops a form of what he calls *ethnocentrism* holding that science is not only not an objective study but rather a “Euro-American” system of knowledge that reinforces “hegemonial racial domination.” Stanfield describes his version of ethnocentrism as resting on the “group-centeredness of human populations, whether classified as institutions, communities, societies, races, ethnic groups or sexes.” It “creates the collective pride needed to legitimate biological

and cultural reproduction, and gives cohesion to collective consciousness.”<sup>21</sup>  
 Ethnocentrism and social knowledge:

Are inseparable: a human population’s ethnocentrism is rooted in its social knowledge base; and social knowledge cannot be emptied of or divorced from ethnocentrism, since it produces and reinforces ethnocentrism. Claims to the contrary point out that certain types of knowledge—empirical science, for example—are objective and value-free; but this is to reify knowledge and separate it from human experience....

Since ethnocentrism is based on social knowledge, it follows that social knowledge is culturally linked to a specific human population....

The fact that ethnocentrism has a knowledge base and thus has culture-bound parameters challenges ideas about the universality of social knowledge. Not all people “know” in the same way. What greatly determines whether the cognitive style of one population is to dominate another’s is its ability to monopolize essential resources and institutions. That ability does not come from “better means of reasoning.”<sup>22</sup>

In other words, again no particular perspective or social knowledge type thus created is “objective”; objectivity is a myth deriving its force from the fact that some have the “ability to monopolize essential resources and institutions.”

The objectification of knowledge is a matter of power and privilege. Knowledge becomes the official way of interpreting realities through the ability of a privileged subset of the population to exert its will on others through its control of such major institutions and resources as the media, legislation, and compulsory schooling.<sup>23</sup>

And: “Cognitive styles which appear to be universal in society (science, for example) are really the cognitive styles of the ruling classes and the elite members of dominant groups.”<sup>24</sup> There is, on these terms, no actual basis for the claim that scientific methods are superior to those of astrology, magic or witchcraft; all we may say is that in our society science dominates our institutions (if indeed it does), while astrology, magic and witchcraft are all excluded. Neither is epistemically superior or inferior to the other; they are just different modes of knowing and doing. The idea of an “objective” basis for choosing is a Eurocentric prejudice. Logic is, in this case, Eurocentric—rather than just masculine.

Let us summarize our results so far. In the mode of thought that has risen to dominate much of the academy over the past couple of decades, doubts are raised about logic and its applications (to science, etc.) as conceivably being more than an inherently social and culture-bound (ethnicity-bound, gender-bound) endeavor; neither science nor philosophy can discover more, because both science and philosophy are themselves products of a certain cultural type (masculine, white, and European). There is thus no

such thing as a “logic” or a “reason” or a “knowledge” (scientific or otherwise) that can transcend group-derived, contingent, or historical features of the finite collective consciousness that produces social knowledge. Language in particular is not a transparent medium between “us” and “the world.” The idea of a universal or transcultural epistemic authority (be it science or logic or God) is itself a Eurocentric myth used to repress; no such authority can be “grounded” in anything other than a politically or institutionally derived structure characterized by power relations and the actions of a privileged elite—white, male, and European.

### **Postmodernism: Logic and Power.**

Hawkesworth used the term postmodernist to describe the brand of feminism she was defending. If any single term characterizes the “temper of our time,” it is this one. What, however, does it mean? Unfortunately, clear expositions of what “postmodern” means are not easy to come by; if anything, it means different things to different writers, and this in itself can be problematic. Long ago, in the essay, “What Is the Postmodern?” Jean-François Lyotard wrote:

The postmodernist artist or writer is in the position of a philosopher: the text he writes or the work he creates is not in principle governed by pre-established rules and cannot be judged according to a determinant judgment, by the application of given categories to this text or work. Such rules and categories are what the work or text is investigating. The artist and writer therefore work without rules and in order to establish the rules for what *will have been made*.<sup>25</sup>

Postmodernism is thus subversive in the above sense; it presents itself as an emancipation from rules and categories it regards as optional. It leaves one with a sense that nothing is legitimate or determinate except to the extent that *we make it so*. Its advocates would concur with Nietzsche’s remark that we are all greater artists than we think. We have invented conceptual frameworks from Aristotelian cosmology and Newtonian mechanics down through Adam Smith’s and Ludwig Von Mises’s economics. The mistake is to give these frameworks a privileged status by objectifying them, by coming to regard them as the One True Theory or having the One Correct Method. Thus postmodernism presents itself to the philosopher in the form of a scathing attack on both metaphysics and methodology—the “theory of reality” as it is in itself, as opposed to what we say about. Above all, it rejects the idea of a single, binding set of logical rules. All is contingent, nothing necessary. Legitimacy—of ideas, rules, names, actions—comes about through convention and practice, *and nothing else*.

Names ... define a world, a world of names—the cultural world.... Each human comes into this world with a place, that is, with a name that will determine his or her relationship to other names. This place in effect controls the sexual, economic, social, and linguistic exchanges that one has the right or the duty to have (or not to have) with others who bear

names. An event (there we are) can only be introduced into the tradition when it is framed within a story—a story subject to the rules of naming as much in what it tells (its referents: heroes, places, times) as in the manner of its telling (its narrator, its audience).<sup>26</sup>

So this is not to say we proceed without rules. We proceed with *contingent* rules deriving their force and legitimacy from use, and from this alone. It is therefore possible to exhibit rules openly and question them—perhaps imagine alternatives to them. Some of these alternatives may be shocking and unexpected, accounting at least in part for the unsettling nature of postmodernism. Postmodernists are skeptical about any notion of universality that applies to all humanity. Among the tenets of modernity postmodernism questions is progress: “With this annihilation [of the project of modernity], an irreparable suspicion is engraved in European, if not Western, consciousness: that universal history does not move inevitably ‘toward the better’ ... that history does not necessarily have a universal finality.”<sup>27</sup> And it questions science. In *The Postmodern Condition* Lyotard had earlier written:

The question of the legitimacy of science has been indissociably linked to that of the legitimation of the legislator since the time of Plato. From this point of view, the right to decide what is true is not independent of the right to decide what is just.... The point is that there is a strict interlinkage between the kind of language called science and the kind called ethics and politics.... [K]nowledge and power are simply two sides of the same question: who decides what knowledge is, and who knows what needs to be decided? In the computer age, the question of knowledge is now more than ever a question of government.<sup>28</sup>

The focus is on language (terms like *narrative*, *metanarrative*, *discourse*, etc., characterize postmodernist writing), and on the idea that truth is something decided rather than discovered. That it is decided implies having been decided by someone—or perhaps, was arrived at by consensus. If that someone or aggregate of “someones” is positioned to call the decision true, then truth implies authority—it may be the authority of a community. This community may have conferred upon itself a special status, that of expert, where the term *expert* is employed to convey legitimacy to those outside the community. This suggests that the truth claim is inherently political, translatable into an authority claim, and that its dissemination throughout (the relevant parts of) a culture is administrative. Truth *claims* are never immune from challenge, and from “falsification,” i.e., being overturned by the claims of speakers in contrary communities. All knowledge claims are contingent, and “The grand narrative has lost its credibility...”<sup>29</sup>

The desire to maintain power is what has been unmasked. Michel Foucault as poststructuralist cast the political dimension of truth claims as implicit power claims; every statement purported to be true or every interpretation of reality purported to be correct is an implicit assertion of power. “Knowledge” is therefore a successful imposition of power. Foucault stated: “truth isn’t outside power, or lacking in power.... [I]t is produced and transmitted under the control, dominant if not exclusive, of a few

great political and economic apparatuses (university, army, writing, media);...<sup>30</sup>  
 Foucault's ensuing discussion, especially his stressing of the use of military metaphors (the "battle for truth") suggests a view that there is an element of violence in the assertion of truth claims and that the very idea of knowledge signifies repression.

Among American philosophers, Richard Rorty has become the primary exponent of the postmodernist stance. Rorty gave voice to a mostly independent tendency that had been building in professional philosophy since the critiques of logical empiricism at the hands of major philosophers such as W.V. Quine: an attack on what he called *foundationalism*.<sup>31</sup> This term, for Rorty, encompassed a wide variety of views, all having in common the belief in a special endeavor called *philosophy* with a special capacity to capture something standing above, or outside of, the historical, the acculturated or the situated. After identifying his three favorite twentieth century philosophers, Wittgenstein, Dewey and Heidegger, Rorty explains why he approves of them:

Each tried, in his early years, to find a new way of making philosophy "foundational"—a new way of formulating an ultimate context for thought. Wittgenstein tried to construct a new theory of representation which would have nothing to do with mentalism, Heidegger to construct a new set of philosophical categories which would have nothing to do with science, epistemology or the Cartesian quest for certainty, and Dewey to construct a naturalized version of Hegel's vision of history. Each of the three came to see his earlier effort as self-deceptive, as an attempt to retain a certain conception of philosophy after the notions needed to flesh out that conception (the seventeenth century notions of knowledge and mind) had been discarded. Each of the three, in his later work, broke free of the Kantian conception of philosophy as foundational, and spent his time warning us against those very temptations to which he himself had once succumbed. Thus their later work is therapeutic rather than constructive, edifying rather than systematic, designed to make the reader question his own motives for philosophizing rather than to supply him with a new philosophical program.<sup>32</sup>

In Rorty's hands, our distinction between constructive philosophers and subversive philosophers becomes that between systematic and edifying discourse. His foundationalists are all constructive thinkers, as he says. All failed, in his judgment. Their efforts were self-deceptive. Rorty proposed replacing the effort to make philosophy foundational (to discover special theories of truth as correspondence with reality or, to employ his metaphor, "mirroring nature," or methodologies capable of making contact with something outside of history and culture). He proposed abandoning "systematic philosophy," that is, and replacing it with "edifying philosophy" or "edifying discourse" which "aims at continuing a conversation rather than at discovering truth."<sup>33</sup> He proposes replacing "objectivity" with "solidarity."<sup>34</sup> Among Rorty's hopes, he has said more recently, is that all of us can leave the world a somewhat better place than we found it. No person of good will would quarrel with that. The question to be raised is

whether his means—or those of the philosophers of whom he approves or the other authors we have considered—are appropriate to that end.

Rorty identifies with the Enlightenment project somewhat more than the other authors we have been considering; however, he sees its value only in the value of certain institutions to which it gave rise and not in its having given us a transhistorical vantage point. These institutions (those embodying modern science, for example) haven't given us "truth" or "knowledge" as philosophers have traditionally understood these, only certain practices that seem to work, or to achieve certain results. They have had their dark side (e.g., the use of science and technology for the production of instruments of war). They are not outside of history, therefore. One does not find an explicit critique of logic in Rorty's writings; his commentary on the subject is indirect, more aimed at epistemology than logic, and confined to discussions such as the following:

...I want to make clear at the outset that I am not putting hermeneutics forward as a "successor subject" to epistemology, as an activity which fills the cultural vacancy once filled by epistemologically centered philosophy.... [H]ermeneutics is an expression of hope that the cultural space left by the demise of epistemology will not be filled—that our culture should become one in which the demand for constraint and confrontation is no longer felt. The notion that there is a permanent neutral framework whose "structure" philosophy can display is the notion that the objects to be confronted by the mind, or the rules which constrain inquiry, are common to all discourse, or at least to every discourse on a given topic. Thus epistemology proceeds on the assumption that all contributions to a given discourse are commensurable. Hermeneutics is largely a struggle against this assumption. By "commensurable" I mean able to be brought under a set of rules which will tell us how rational agreement can be reached on what would settle the issue on every point where statements seem to conflict.<sup>35</sup>

The ensuing discussion eschews the finding of common rules as a basis for agreement, these rules being outside of us. Logic has been one of the key disciplines purporting to supply such rules, their embodiments being in language, etc. Logic in this view ceases to offer an Archimedean standpoint above or outside of specific languages and becomes a special language itself, with no intrinsic authority over the others. In later Wittgensteinian terms, it becomes one language game among many.

Rorty doesn't stress the political consequences of this result except to try and alleviate the fears of those who raise a specter of intellectual anarchy as a consequence of the abandonment of the quest for universal commensuration. Stanley Fish does. Fish, the literary and legal theorist who was for a number of years at Duke University's celebrated English Department, takes on "Reason" more directly and openly charges it with self-deception, writing:

“Reason,” the most popular and prestigious of the names given to the nonexistent center of liberal thought.... Reason ... privileges no ideology, sanctifies no point of view, but invites all positions to the seminar table, which each will be given the change to be heard and assessed.... [Reason] promises release from ideological gridlock by providing a means of adjudication—the law of Reason—which, because it is hostage to no ideology, enables us to test the coherence of any ideology. It all sounds fine as long as you remain on the level of abstraction and do not descend to particular cases. Reason is a political entity, and never more so than when its claim is to have transcended politics. The liberal dream of a purely formal mechanism of adjudication, one whose authority rests on a pedigree of procedure rather than content, will always have more content than it can acknowledge, even to itself, especially to itself.

The focus, with these writers, is always on the historical, the situational, the particular. And on language. Fish cites Rorty approvingly when the latter says, “There is no way to think about the world ... except by using language.” We are imprisoned, as it were, by our language and whatever assumptions govern its use—assumptions we might not always be aware of. Fish, by far a clearer writer than the majority of postmodernists, explains what is called the *interpretive turn* to language. The interpretive turn

involves a reversal of the relationship that was traditionally held to obtain between descriptive vocabularies and their objects. The usual and common sense assumption is that objects are prior and therefore at once constrain and judge the descriptions made of them. Language is said to be subordinate to and in the service of the world of fact. But in recent years language has been promoted to a constitutive role and declared by theories of various stripes (poststructuralists, postmodernists, feminists, Bakhtinians, New Historicists, Lacanians, among others) to bring facts into being rather than simply report on them. No longer is it taken for granted that poems come first and interpretations of them second, or that historical events come first and historical accounts of those events come second, or that molecules and quarks come first and scientists’ models of molecules and quarks come second; in discipline after discipline the reverse argument has been powerfully made, the argument that the vocabulary a practitioner finds ready to hand—the vocabulary that precedes his or her entrance into the practice and constitutes its prism—limits, and by limiting, shapes what can be seen.<sup>36</sup>

There is an important philosophical view here about the nature of language, and by extension, of experience, that we shall have to confront during the course of this essay. Perhaps it is best expressed as follows: language serves as the constructing medium yielding a world that differs for different languages. It does not provide a window of sorts that opens onto a single world available to all who choose to look out of it. It invariably yields a particular point of view, and has no means of establishing contact with anything outside it. This makes the universalism of logic impossible.

This way of viewing scholarship suggests very strongly that not just logic but that what has been the mainstream of Western thought has come to a dead end. Reason has been shown as self-deceptive: there is no truth, only authority; there is no “ultimate context for thought,” only politics. This has invited a diffuse sense of pessimism. There is no objectivity, as Rorty puts it, only solidarity—what Walter T. Stace called our “stand against darkness.” Nothing is to be gained by hoping for the One Correct Method of making contact with something ultimate, something outside our familiar patterns of language and institution-bound thought. And in this new intellectual order, all is political. To be sure, its spokespersons would insist that all was political all along, we just didn’t know it or realize it.

This brand of thought now almost completely dominates faculties in the humanities and the social sciences—what some might call a curious inversion of their contention that it is the white, European-derived males who have dominated. Stanley Fish can conclude that “the revolution, if that is the word, has succeeded and passed through several stages of revision.” And earlier:

Merely to state this view is to see the problems it presents to ‘traditional’ thinking: notions of objectivity, accuracy, verisimilitude no longer provide the comfort and guidance they once did, for they are now not absolute judgments, but judgments relative to differing and competing vocabularies or paradigms; and a whole host of distinctions—between fact and value, norm and deviation, reason and rhetoric, center and periphery, truth and politics—become, if not untenable, at least disputable in any of their proffered forms.<sup>37</sup>

Everyone who works in these disciplines or even tangential to them must confront these kinds of claims, whether through agreement or by disagreement. One cannot get through a graduate program without coming to terms with them. Should they be taken seriously? Can they be? These questions might seem strange. Surely they have intellectual content on their own terms and can be—have been, at times—evaluated as such. Moreover, if a movement (or, more exactly, series and sequence of movements) has become dominant throughout universities as significant as Duke, Harvard, Princeton and so on, surely it must be on solid intellectual footing, its credentials firmly established. That means regarding it as intellectually serious. An intellectual would be behaving irresponsibly and succeed only in marginalizing himself if he refused to engage it.

There have been disturbing particular events, however, suggesting that *something* is seriously amiss.

### **The Sokal Affair and Its Implications: Does the Emperor (or Empress) Have No Clothes?**

It is surely conceivable that there has been more to the rise and triumph of these movements in the university than sheer intellectual prowess. Isn't this exactly what the postmodernists and deconstructionists are denying really exists in constructive masculine science and logic? Don't they themselves warn us against institution-bound authority? Simply to assume that an idea is on firm ground because the majority of professors taut it or all the experts are enthusiastic about it might be premature. After all, the experts have been wrong before. Entire disciplines have been thrown off course because they adopted what turned out to be a phantom (look at the phlogiston theory of combustion). How would we go about finding out, in this case, if something is indeed amiss with the new scholarship.

In 1996, New York University physicist Alan Sokal published an article with an impressive-sounding title—"Transgressing the Boundaries: Toward A Transformative Hermeneutics of Quantum Gravity"—in the journal *Social Text*.<sup>38</sup> Edited by none other than Stanley Fish, *Social Text* had become one of the most important mouthpieces for the new scholarship. In his paper Sokal argued in great detail that recent developments in quantum gravity theory showed a surprising consonance with the latest trends in postmodernism. He drew in Lacan's psychoanalytic speculations, the homonymous concept in feminist politics, and so on. The article contained 55 endnotes, some long and extremely detailed. It featured a bibliography with over 100 references to both physicists and postmodernists. There can be no doubt that Sokal put enormous effort into it. He submitted it to *Social Text*, and the journal's editorial collective accepted it for publication. The fact that it was written by a scientist must have made it seem particularly laudable. Few scientists had any interest in, much less ideas about what went on in the arcane and esoteric world of literary theory, much less finding their own research leading them down similar paths. So the article was well-received, and appeared in the Spring 1996 double issue (#46-47) devoted to responses by advocates of "social / cultural studies of science" to criticism.

There was only one problem: *the article was utter nonsense, and never intended to be anything else*. Alan Sokal blew the whistle in the magazine *Lingua Franca* almost immediately after the issue of *Social Text* containing "Transgressing the Boundaries" appeared in university libraries all over the country.<sup>39</sup> He reported that his article had been an experiment, an attempt to answer questions like: how much knowledge of science do postmodernists doing "cultural studies of science" really have? How much should they have? Is it possible to sneak an article with no serious intellectual content past referees of a leading humanities journal if the article pushes certain political buttons? What does this imply for standards of rigor in fields where political ideology has become a driving force?

The answer to the first question was: not much. Sokal shows how anyone with any knowledge of the physics could have read the article and recognized it to be a hoax. Among the impressive array of endnotes, for example, were serious references to New Age gurus such as Rupert Sheldrake, treating them as if they were on the cutting edge of theoretical physics. The answer to the second question is, therefore: much, *much* more—if they are to be taken seriously as scholars discussing science. In a phrase: those

issuing commentaries on science *ought to know some science*. As for the third question, the answer is clearly, Yes—suggesting that the everything-is-political school might itself be embedded in self-deception and rationalization. The answer to the fourth seems to be: standards of intellectual rigor plummet. That Sokal’s article got through a committee of referees and published in *Social Text* suggested lack of quality control—a compromising of the kinds of *objective* standards Fish says can’t exist. Indeed, Sokal seemed to have shown that articles could indeed get published in trendy journals (1) if they employed the right neologisms and dropped the right names, and (2) if they flattered the political leanings of the editors and referees. In fact, a person with no formal training in the humanities could teach himself to throw around the latest jargon in those disciplines, put together a compelling-appearing article stringing this jargon into *non sequiturs*, and *get it published in a cutting-edge journal*. Now frauds do sometimes occur in what was thought to be legitimate research—even in the sciences. But rarely do we encounter something this embarrassing! Rarely have we encountered such direct evidence that the emperors (and empresses) of the new regime in the universities may very well have no clothes.

Sokal did not express glee at his own performance. He said, “I’m a leftist, too.” He believes leftist arguments are supported by, and not overturned by, logic and evidence—a point we shall take up later. He expressed his desire to save the academic left from tendencies involving the denial of an objectively-knowable world, punctuating his whistle-blowing article with remarks, like, “anyone who believes that the laws of physics are mere social conventions is invited to try transgressing those conventions from the windows of my apartment. (I live on the twenty-first floor.)”<sup>40</sup> Stanley Fish, unsurprisingly, was furious. He penned a scathing article in the *New York Times* that concluded with an allegation of fraud:

[I]t is Alan Sokal, not his targets, who threatens to undermine the intellectual standards he vows to protect. Remember, science is above all a communal effort. No scientist (and for that matter, no sociologist or literary critic) begins his task by inventing anew the facts he will assume, the models he will regard as exemplary and the standards he tries to be faithful to. They are all given by the tradition of inquiry he has joined, and for the most part he must take them on faith. And he must take on faith, too, the reports offered to him by colleagues, all of whom are in the same position, unable to start from scratch and therefore dependent on the information they receive from fellow researchers.... The large word for all this is “trust”... Alan Sokal put forward his own undertakings as reliable, and he took care, as he boasts, to surround his deception with all the marks of authenticity, including dozens of “real” footnotes and an introductory section that enlists a roster of the century’s greatest scientists in support of a line of argument he says he never believed in. He carefully packaged his deception so as not to be detected except by someone who began with a deep and corrosive attitude of suspicion that may now be in full flower in the offices of learned journals because of what he has done. In a 1989 report published in *The Proceedings of the National Academy of*

Science, fraud is said to go "beyond error to erode the foundation of trust on which science is built." That is Professor Sokal's legacy, one likely to be longer lasting than the brief fame he now enjoys for having successfully pretended to be himself.<sup>41</sup>

Fish went on to explain what he alleges is the misunderstanding of postmodernism: it does not assert that there is no real world:

What sociologists of science say is that of course the world is real and independent of our observations but that accounts of the world are produced by observers and are therefore relative to their capacities, education, training, etc. It is not the world or its properties but the vocabularies in whose terms we know them that are socially constructed—fashioned by human beings—which is why our understanding of those properties is continually changing. Distinguishing fact from fiction is surely the business of science, but the means of doing so are not perspicuous in nature—for if they were, there would be no work to be done. Consequently, the history of science is a record of controversies about what counts as evidence and how facts are to be established. Those who concern themselves with this history neither dispute the accomplishments of science nor deny the existence or power of scientific procedure. They just maintain and demonstrate that the nature of scientific procedure is a question continually debated in its own precincts. What results is an incredibly complex and rich story, full of honor for scientists, and this is the story sociologists of science are trying to tell and get right. Why then does Professor Sokal attack them?... Professor Sokal takes “socially constructed” to mean “not real,” whereas for workers in the field “socially constructed” is a compliment paid to a fact or a procedure that has emerged from the welter of disciplinary competition into a real and productive life where it can be cited, invoked and perhaps challenged. It is no contradiction to say that something is socially constructed and also real.

Fish has conceded quite a bit here. He has asserted that it is not *reality* but our *vocabularies*, *instruments*, and *procedures* that have been “socially constructed,” i.e., developed in the context of various institutions involved in science. If this were all that was going on, however, positions such as Fish’s would be utterly uncontroversial; who, that is, would question that for science to develop as it has requires an institutional superstructure and a set of specific, technical vocabularies? This is entirely compatible with the scientific realism that most feminists and postmodernists abhor. It is compatible with philosophical foundationalism, for it opens anew the question of why we must regard these vocabularies as epistemically imprisoning our cognitive faculties. Why is it not, that is, a triviality that we must employ a vocabulary and work in institutions in our endeavors to uncover, slowly but surely, how a real, objectively-knowable world works?

The point is, Sokal had bested the subversive philosophers at their own game. He had revealed indirectly the implicit abandonment of logic inherent in the ideology

dominant on the editorial board at *Social Text* by writing a purposefully illogical, scientifically incompetent article and getting it published. He had illustrated a likely effect of the postmodern assault on logic: a diminishing of quality control at so-called prestigious journals. He had suggested that the “emperors (and empresses)” of the new academic regime have no clothes. At the very least, the Sokal affair casts a baleful shadow over the new regime’s supposed accomplishments and many of its assumptions. There are plenty of other indications of a troubled academy—of an academy based more on the control of thought, directing it down specifiable paths, than an encouragement of thought. Everyone today knows that subjects having to do with race, gender, homosexuality, etc., simply cannot be debated in the university in any way that challenges, for example, egalitarian assumptions or programs of affirmative action for certain groups at the expense of others. The cases of silencings and even expulsions from, e.g., campus newspapers, of students expressing “conservative” points of view are so numerous as to defy comprehensive listing. The same applies to faculty members, hundreds of whom have now had horrible experiences for running afoul the thought codes imposed by radical feminists, multiculturalists and homosexual activists. College and university administrators are routinely intimidated by radical groups of faculty and students on their campuses.<sup>42</sup>

We must therefore ask again what we did at the conclusion of the last section: how intellectually serious is the new scholarship? What explains its dominance? After all, one can look back to the nineteenth century and find many of the same ideas in Nietzsche, who expressed them in a far more interesting way. Where in postmodernism do we find anything new besides an opaque vocabulary, and do its twists and turns, efforts to subvert or transgress the boundaries, mask a diminution of academic standards that is further revealed by comparing a logic text of, say, 1934, with texts available today?<sup>43</sup> Could the diminution of standards be the long-term result of the onslaught of affirmative-action hiring practices that began in the 1970s and 1980s, as I have suggested elsewhere?<sup>44</sup> If Sokal’s hoax got past the gatekeepers, then perhaps other, seriously-intended articles have gotten through with identical forms of illogic? There is no reason to presume that Sokal’s article is a complete anomaly.

Perhaps this is all an indication that the assault on logic is misguided, and that an abandonment of standards, whether out of concern to increase “diversity” or from some other reason, has resulted in an era in which the ability to distinguish good reasoning from bad reasoning has been severely compromised. This seems plausible, if motives other than intellectual ones have been allowed on stage and then rationalized with slogans such as, “The personal is the political” or “everything is political.” Rorty, Fish, and many others, would have us believe we can never escape language, history, culture, or other forms of particularity to establish contact with anything universal: this is the core of the postmodernist assault on logic. Fish and feminists would have us believe all this, and that everything is political—that we cannot escape the political or the ideological. Such assumptions are literally built into education today; graduate training in the affected disciplines now tends to attract individuals drawn to this kind of view.<sup>45</sup> Maybe this view is just wrong. Maybe the everything-is-political mantra is nothing more than a rationalization for one’s own leftist politics—the exact inversion of what the everything-

is-political crowd is saying. Perhaps we can show how to get outside the political—if we go about it in the right way.

### **Dangers of the Assault on Logic.**

There is every reason for attempting to resuscitate interest in logic. One we just saw: the strong suggestion of a gradual diminishing of standards for evaluating what ought to count as a contribution to scholarship. Alan Sokal was able to pen an article of complete nonsense from a logical and scientific standpoint and have it published in one of the leading journals in the humanities. This alone suggests something seriously amiss with those fields of inquiry that have led the attack on such notions as rationality, objectivity, merit, and so on, in order to inflate academic space for political forms of life—radical feminism, gay / lesbian studies, and so on. This diminishing of standards can only harm to the academic disciplines affected by damaging their overall credibility from the standpoint of the larger society. A number of “academic disciplines” (women’s studies, Afro-American studies, gay and lesbian studies, etc.) clearly have become incubators for political activity posing as scholarship—dissent from which is not tolerated!

There are definite risks to both students at major universities and, by extension, to the public, of forcing students to conform to canons of political correctness on matters of race, homosexuality and gender but not teaching them logic. Instruction in logic, as we will see below, provides students with a number of very specific skills which can be applied to other subject matters, to practical problems of a variety of sorts, and more generally, toward learning to see the “larger picture” in any situation, including evaluating various political points of view, dominant or otherwise. In other words, a firm grasp of logical principles and their possibilities enables people to think, and the firmer the grasp of the principles, the better they can think. In the absence of logical instruction—or, alternatively, in the grasp of schools of thought that have inherited the mantle of the attack on logic and treat it as nothing more than a kind of game played with symbols (“logic chopping”)—students are deprived of their most effective means of evaluating a politician’s speech, or seeing the connections between different issues on the policy table. They are vulnerable to popular pseudosciences and might be prone to consult horoscopes or believe an exciting view such as that civilization was founded by ancient astronauts, or that millions of people have been abducted by UFOs, or that psychics can communicate with the dead, or that their health will improve if they sleep under pyramids.

For the most part, those beliefs are relatively harmless. Others are far less so. What happens, for example, when an entire population is too intimidated to question political pronouncements about the need for “hate crimes” laws, because they will believe uncritically media reports about an avalanche of attacks on ethnic minorities and homosexuals by evil, straight, white men. They will have no incentive to investigate and find out whether or not the actual statistics might tell a far different story. What happens when an angry few (led by well-monied lawyers) approach the political establishment with demands for reparations for slavery, which has not been practiced (in its chattel

form, anyway) for 140 years? Will it be possible to confront such demands with counter-demands, based on logic, for evidence that the legacy of slavery is the best explanation when blacks do not achieve? Or consider homosexuality. Over the past ten years, homosexuality has gone from being shunned to being accepted, having been brought under the politically correct umbrella of universal tolerance. This pop-philosophy also began in the universities and clearly has its roots in the idea that moral standards are only social conventions resulting only in prejudice. Logic is the intellectual discipline capable of supplying the tools for evaluating such ideas. Has they been established by reasonable lines of thought, or does one have the sense of their having been imposed by the force of enormous popularity and, perhaps, intimidation? How does the idea of right vs. wrong being a subjective, social convention square with the idea of universal tolerance itself? Is universal tolerance also a social convention? What, if anything, exempts it from its own relativization of moral and intellectual judgments?

These are not idle, academic questions. Matters of public health policy, for example, could turn on how a community answers them. While many of the critics of the mainstreaming of homosexuality rely on the injunctions in Leviticus and Romans, of course, not all of them do. Some authors have observed, relying on considerations deriving from nothing more than human anatomy, that homosexual sex is physically dangerous, disease-spreading, and *cannot be otherwise*. What is the appropriate response to these considerations? Should they be ignored in the name of universal tolerance? One must add to this the studies showing how homosexuals tend to be more promiscuous than heterosexuals, and how AIDS is still primarily a homosexual disease after more than 20 years of study despite all the claims to the contrary, and therefore the first disease in history to be politicized. There is, within the public health education community, a kind of dogma about human action: human beings are unable to resist temptation and are likely to engage in sexual activities of various sorts. Moreover, another quasi-absolute is that all persons including children should have the right to make their own sexual decisions. Therefore there should be sexuality education in all government schools, and it should begin as early in life as possible—so that children will know their options. They may, of course, be told that abstinence is their best bet—but if they choose to have sex, here is how to be safe and healthy. Logically speaking, how are children—or adults, for that matter—to evaluate this mixed message?

The situation is potentially worse. We live (for better or worse) in a participatory democracy.<sup>46</sup> Every four years, two major party and usually at least three minor party candidates run for President. An educated public needs to be able to distinguish rhetoric from substance, and distinguish evidence of a positive, constructive agenda on the part of one candidate from mere attacks on the other candidate. Perhaps, too, it is worth observing that so-called minor party candidates may well bring useful ideas to the table, and merit far greater attention than they can expect to receive. Should the ideas of those in the Libertarian Party, for example, be evaluated on their own terms, or should they be dismissed on the grounds that if they really had something to say they would not be part of a “fringe movement”? Proper logical instruction raises these questions in one’s mind. Perhaps we emphasize Presidential elections too much here. There are myriad others at all levels of government. Perhaps, too, we overemphasize what government can do.

What role—if any—should government play in a society the economic system of which is purportedly characterized by free enterprise? A society of intimidated followers, raised up within the “affective domain” and enslaved to the canons of political correctness will lack the skills to ask them, much less offer answers. Intimidated followers are simply unfit to function in a free society. Which may, of course, be the entire point! The purveyors of universal tolerance despise the idea that individuals should be allowed to make their own choices, after all; they believe themselves ideally suited, both temperamentally and by virtue of their intellectual training, to choose for everyone. They would give us a centralized, socially engineered society.<sup>47</sup>

These issues, and many others, are bound to occur sooner or later to alert, thinking minds. Today, especially following the horrific events of September 11, 2001, and the ensuing war that our government began on the al-Qaeda terrorist network, there is a widespread assumption that larger government can make us more secure if we give it more power. This assumption must be evaluated on the basis of the best evidence available, and this evidence must be examined openly and carefully by those with an eye to evidence, and who can see through smokescreens and detect it when official reports do not “add up.” Logical thought about matters of public policy has never been more important than it is right now, as our country moves into what could be a prolonged period of crisis.

What, in this case, should be the role of logic in education. In a profound but now little-read essay, Richard Weaver discussed two conceptions of education.<sup>48</sup> One conception of education saw the task of education as the preparation of citizens who can think clearly, reason independently, and have come to terms with the present through an understanding of the past. In this case, all students should receive the core of what has been called traditional liberal arts education. They would graduate versed in logic, literature, history, geography, science and theology, and their education would be an integrated package rather than a piecemeal, smorgasbord of specialized disciplines, some of which contradict the others. The other school of thought holds that education is primarily vocational. Educators, in this view, have done their jobs if they have helped produce useful workers, having prepared students only for earning wages. In this case, there is no need for traditional liberal arts education that points the way toward vistas outside the vocational. It would only distract them, and interfere with the needs of business. There would be no need for detailed instruction in logic; for the global mercantilism of the near future (governments and megaconglomerates in “public-private partnerships) will have no need for workers who can think, and wonder about the effects of globalization on their own personal future, their culture and way of life.

Both conceptions of education are still around, and the debate over them is still going on. Moreover, it is clear that vocational education is winning, having received enormous boosts through such legislation as the School-To-Work Opportunities Act of 1996, which Democratic President Bill Clinton signed, or the No-Child-Left-Behind Act of 2001, which Republican President George W. Bush Jr. signed. Vocational education, in some of its forms, encourages children to begin thinking about vocation or career before they even enter secondary school. In secondary school, it replaces classroom

instruction with “hands on” workplace activity. It teaches not logic but tasks. Now surely the teaching of tasks is necessary, and some students are more suited for it than others. Not everyone should become a philosopher, after all! But surely it is in keeping with the better sentiments of those discussed above that all (or as many as possible) should have a voice in determining what policies are instituted that affect them directly. Having thought critically about such matters, they might conclude that the policies do not fit their values, are not in their best interests and should therefore be done away with. Without at least some initial training in a mode of thought that enables them to step outside their immediate situation, as it were, and imagine other possibilities, the reasoning that could lead to this conclusion cannot even get started. Logical instruction, carried out properly, is the key to such training. Those benefiting will not automatically and thoughtlessly bow to authority. Educated citizens wish to be their own authorities, and will not willingly go down a path leading them into involuntary servitude. One can only suspect that this is the reason those who are obsessed with politics and power have developed philosophies that make no place for any supervening logic. To those who want power, logic is the Public Enemy Number One.

To summarize, an absence of the sort of careful, critical thought that is only available through a logical approach to situations and issues places a population in grave danger. An obsession with “oppression” permeates the writings of the new regime in scholarship, even though those alleging it are better off economically, politically and culturally in the U.S. than they would be anywhere else in the world. I submit that we are in more danger from genuine oppression without logical instruction than we are with it. Many people would doubtless wield power over others, were they given it, and there are people whose primary motivation is power. Nothing more than careful, deliberate investigation that relies on evidence and eschews innuendo will expose those who want power and ensure that the groundwork for individual human freedom remains intact. Below we will respond to the assault on logic in some detail. A first step is to show that the attacks on logic we have seen above rely on a variety of misunderstandings or errors; and that, in the last analysis, such things as being “outside logic, different from logic, other than logic,” as Andrea Nye put it, simply fails to make sense. Attacking logic, in fact, makes as much or as little sense as attacking gravity. Our first step will be to gain a sense of just why this is the case. As we move forward, with a better sense of what logic is, it should become evident why logic is important, why it is a key not just to the understanding of the rise of human knowledge but to the development of our civilization, which will not survive its passing.

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<sup>1</sup> Stanley Grenz, *A Primer on Postmodernism* (Grand Rapids, Mich.: Eerdmans, 1996), p. 7.

<sup>2</sup> Zygmunt Bauman, *Intimations of Postmodernity* (London: Routledge, 1992), p. ix.

<sup>3</sup> Cf. Catharine MacKinnon, “Feminism, Marxism, Method and the State: Toward Feminist Jurisprudence,” *Signs: Journal of Women in Culture and Society* 8 (1983), pp. 635-58. From pp. 645-47, where MacKinnon presents her outrageous and absurd blurring of voluntary sexual intercourse and rape: “Objectivist epistemology is the law of law. It ensures that the law will most reinforce [*sic.*] existing distributions of power when it most closely adheres to its own highest ideal of fairness.... Such law not only reflects a society in which men rule women; it rules in a male way.... Feminists have reconceived rape as central to women’s condition in two ways. Some see rape as an act of violence.... Others see rape, including its violence, as an expression of male sexuality.... The more feminist view, to me, one which

derives from victims' experiences, sees sexuality as a social sphere of male power of which forced sex is paradigmatic.... The uncoerced context for sexual expression becomes as elusive as the physical acts come to feel indistinguishable. Instead of asking, what is the violation of rape, what if we ask, what is the nonviolation of intercourse? To tell what is wrong with rape, explain what is right about sex."

<sup>4</sup> See Hilary Rose, "Hand, Brain, and Heart: A Feminist Epistemology for the Natural Sciences," *Signs: Journal of Women in Culture and Society* 9 (1983), pp. 73-90. Rose's article begins with this sentence: "This paper starts from the position that the attitudes dominant within science and technology must be transformed, for their telos is nuclear annihilation."

<sup>5</sup> Cambridge: Harvard University Press, 1982.

<sup>6</sup> *Ibid.*, pp. 26-27, 29.

<sup>7</sup> Sandra Harding, *The Science Question in Feminism* (Ithaca, NY: Cornell University Press, 1986).

<sup>8</sup> *Ibid.*, p. 15, emphasis the author's.

<sup>9</sup> Mary E. Hawkesworth, "Knowers, Knowing, Known: Feminist Theory and Claims of Truth," *Signs: Journal of Women in Culture and Society* 14 (1989), p. 536, emphasis the authors.

<sup>10</sup> *Ibid.*

<sup>11</sup> Jane Flax, "Gender as a Social Problem: In and For Feminist Theory," *American Studies / Amerika Studien* (1986), p. 17, quoted in Harding, *op. cit.*, [?] pp. 26-27.

<sup>12</sup> Andrea Nye, *Words of Power: A Feminist Reading of the History of Logic* (London: Routledge, 1990), p. 4.

<sup>13</sup> *Ibid.*, pp. 176-77.

<sup>14</sup> *Ibid.*, p. 177.

<sup>15</sup> *Ibid.*, p. 179.

<sup>16</sup> *Ibid.*

<sup>17</sup> Molefi Kete Asanti, *The Afrocentric Idea* (Philadelphia: Temple University Press, 1987), p. 6.

<sup>18</sup> *Ibid.*, p. 7.

<sup>19</sup> *Ibid.*, p. 9.

<sup>20</sup> *Ibid.*, p. 165.

<sup>21</sup> John H. Stanfield, "The Ethnocentric Basis of Social Science Knowledge Production," in *Review of Research in Education*, Vol. 12 (1985), ed. Edmund W. Gordon (Washington, D.C.: American Educational Research Association, 1985), p. 393.

<sup>22</sup> *Ibid.*, p. 396.

<sup>23</sup> *Ibid.*, p. 389.

<sup>24</sup> *Ibid.*, p. 403.

<sup>25</sup> Jean-François Lyotard, *The Postmodern Explained* (Minneapolis: University of Minnesota Press, 1992), p. 15.

<sup>26</sup> *Ibid.*, p. 45.

<sup>27</sup> *Ibid.*, p. 51.

<sup>28</sup> Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1984), pp. 8-9.

<sup>29</sup> *Ibid.*, p. 37.

<sup>30</sup> Michel Foucault, *Power/Knowledge: Selected Interviews and Other Writings 1972-1977* (New York: Pantheon Books, 1980), pp. 131-32.

<sup>31</sup> See especially Richard Rorty, *Philosophy and the Mirror of Nature* (Princeton, NJ: Princeton University Press, 1979).

<sup>32</sup> *Ibid.*, pp. 5-6.

<sup>33</sup> *Ibid.*, p. 393.

<sup>34</sup> Richard Rorty, "Solidarity or Objectivity?" in *Objectivity, Relativism and Truth: Philosophical Papers, Vol. I* (Cambridge: Cambridge University Press, 1991), pp. 21-34.

<sup>35</sup> Rorty, *Philosophy and the Mirror of Nature*, pp. 315-16.

<sup>36</sup> Stanley Fish, *There's No Such Thing As Free Speech and It's a Good Thing, Too* (Oxford, UK: Oxford University Press, pp. 56-57).

<sup>37</sup> *Ibid.*, p. 57.

<sup>38</sup> Alan Sokal, "Transgressing the Boundaries: Toward A Transformative Hermeneutics of Quantum Gravity," *Social Text* 46-47 (1996): 217-52.

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<sup>39</sup> Alan Sokal, "A Physicist Experiments With Cultural Studies," *Lingua/Franca*, May/June 1996, pp. 62-64; cf. also Alan Sokal, "Transgressing the Boundaries: An Afterward," *Dissent* 43 (1996): 93-99.

<sup>40</sup> "A Physicist Experiments With Cultural Studies," *ibid.*

<sup>41</sup> Stanley Fish, "Professor Sokal's Bad Joke," *New York Times*, May 21, 1996.

<sup>42</sup> For the best recent account see Alan Charles Kors and Harvey A. Silverglate, *The Shadow University: The Betrayal of Liberty on America's Campuses* (New York: The Free Press, 1998).

<sup>43</sup> When one examines, e.g., Morris R. Cohen's and Ernest Nagel's *An Introduction to Logic and Scientific Method* (New York: Harcourt, Brace and Co., 1934), an extremely difficult book by today's standards, it seems hard to believe that this text was originally intended for undergraduate courses in logic.

<sup>44</sup> See Steven Yates, *Civil Wrongs: What Went Wrong With Affirmative Action* (San Francisco: ICS Press, 1994), chs. 2 and 3.

<sup>45</sup> For an extended critique of the new regime in scholarship from the perspective of its implied critiques of science see Paul R. Gross and Norman Levitt, *Higher Superstition: The Academic Left and Its Quarrels With Science* (Baltimore: The Johns Hopkins Press, 1994) and a companion volume of essays edited by Gross, Levitt and Martin W. Lewis, *The Flight From Science and Reason* (New York: The New York Academy of Sciences, 1996).

<sup>46</sup> For a recent and very formidable critique of the very idea of participatory democracy cf. Hans Herman Hoppe, *Democracy, The God That Failed: The Economics and Politics of Monarchy, Democracy and Natural Order* (New Brunswick, N.J.: Transaction Books, 2001).

<sup>47</sup> For an extended argument see, e.g., Thomas Sowell, *The Vision of the Anointed* (New York: Quill Paperbacks, 1994).

<sup>48</sup> See Richard Weaver, "Education: Reflections On," in Ted J. Smith III, ed., *In Defense of Tradition: The Collected Short Writings of Richard M Weaver 1929-1963* (Indianapolis: Liberty Fund, 2000), pp. 167-75.

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## *In Defense of Logic*

### **Projected Analytical Table of Contents**

**Chapter One: The Assault on Logic.** Provides a concise account of the attacks on logic via attacks on rationality, etc., coming from radical feminists, postmodernists, and other new scholars of the contemporary regime in academia.

**Chapter Two: Logic and Contradiction.** Ponders the oddness of the very idea of “attacking logic” by observing how logic is being used to undercut logic; establishes a viable sense of the principle of contradiction as a universal law not merely of correct thought but of ontology, and hence the senselessness of being “outside of logic”; this implies the weaknesses of empiricism in epistemology and engenders apriorism of the sort defended by thinkers ranging from Brand Blanshard to Ludwig Von Mises.

**Chapter Three: Logic and Self-Refutation.** Extends the above argument by considering how arguments from self-referential inconsistency establish the impossibility of relativism, how attempts to “unload the self-refutation charge” fail the test of coherence, and how apriorism establishes that polylogism is necessarily false in any form it takes. It is important that the results of arguments from self-refutation or self-referential inconsistency are as definitive as those in mathematics and geometry.

**Chapter Four: Logic and Human Action.** Considers Mises’ arguments in more detail, showing how the apriori concept of action at the foundation of praxeology provides a bridge from logical necessity to necessity in the world of acting persons and caused events. Results in the Austrian school of economics employ arguments based on the self-refutation of denials of its basic axioms (e.g., the “action axiom”) and hence also lead to definite, lasting cognitive achievements.

**Chapter Five: Logic and Reality.** Develops the implications of the Misesian version of apriorist epistemology for both a praxeology of logical inquiry and for ontology are taken up, one result being a “semantic triangle” of language, concepts, and entities in the world.

**Chapter Six: Logic and Civilization.** Argues that the rise of science and technology in the pre-reflective order is explained given (1) the idea that logic, mathematics and praxeology comprise general and very useful truths about the world, and (2) a further development of apriorist epistemology observing that in science or in technology we always choose the structurally simplest theory that explains or is compatible with the facts or which solves the problems at hand—committing us further to an ontology in which reality exhibits structural simplicity.

**Chapter Seven: Logic and Education.** Concludes that logic should be a basic component of education in which we address questions such as: what is logic? why is it important? what are the dangers of a society permeated by logical illiteracy? Logical

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instruction should distinguish between and fully explain the structure of deduction versus induction, identify and classify fallacies of various sorts, and clarify such notions as certainty versus uncertainty. The purpose is to create the conditions for a citizenry whose members have the cognitive skills for survival and genuine prosperity in a free society as well as the capacity to question the authority of both “established opinion” and the pronouncements of government and media, while still respecting that longstanding traditions and customs have worked and are worth preserving because their enormous utility reflects real relationships between human beings and a determinate and objectively-knowable reality.