SPEECH, TRUTH, AND THE FREE MARKET FOR IDEAS

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This article examines a thesis of interest to social epistemology and some articulations of First Amendment legal theory: that a free market in speech is an optimal institution for promoting true belief. Under our interpretation, the market-for-speech thesis claims that more total truth possession will be achieved if speech is regulated *only* by free market mechanisms; that is, both government regulation and private sector nonmarket regulation are held to have information-fostering properties that are inferior to the free market. After discussing possible counterexamples to the thesis, the article explores the actual implications of economic theory for the emergence of truth in a free market for speech. When confusions are removed about what is maximized by perfectly competitive markets, and when adequate attention is paid to market imperfections, the failure of the market-for-speech thesis becomes clear. The article closes by comparing the properties of a free market in speech with an adversarial system of discourse.

I. INTRODUCTION

The topic of this article lies at a certain intersection of philosophy, economics, and the law. Within philosophy, it falls under the heading of "social epistemology," at least the conception of social epistemology articulated elsewhere by the first author.¹ According to this conception, epistemology in general tries to identify methods and practices that promote the acquisition of knowledge, i.e., true belief, as opposed to error or ignorance.

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1. A. I. Goldman, Epistemology and Cognition (1986), 5–6, 136–137; Liaisons: Philosophy Meets the Cognitive and Social Sciences (1992), Chs. 10, 11, 12; Knowledge in a Social World (in preparation); and J. C. Cox and A. I. Goldman, Accuracy in Journalism: An Economic

Approach, in Socializing Epistemology (F. F. Schmitt ed. 1994).

Individual epistemology is concerned with purely private events and processes, such as perceptual experience or inference; social epistemology focuses on public and institutional practices that can foster the acquisition of knowledge or information. Among the social practices of interest are practices of speech and communication, through which knowledge (and also error) can be transmitted from agent to agent. As part of social epistemology, then, we should look at alternative frameworks for speech, to see which framework is optimal from a knowledge-promotion standpoint. A natural candidate here is a free market for speech. Free markets are commonly thought to be "maximizing" institutions, so perhaps a free market for speech is the optimal institution for the promotion of true belief. There are already suggestions in the economic literature that markets are good at information dissemination or revelation. An example is Hayek's idea that markets are good ways of aggregating dispersed information and making that information available to economic agents.2 Game theory tells us that, in certain situations, sellers in a competitive market will be constrained to reveal true information about their products.3 Third, in the public choice literature, markets are preferred to political decision devices because of the incentives in the latter to misrepresent.4 Perhaps these hints generalize to a broader conclusion, viz. that markets are optimal institutions from an information-fostering standpoint.

^{2.} See F. A. Hayek, Individualism and Economic Order (1948), 85–86. Hayek emphasizes, however, that the price system of the market provides only limited information to each participant, only the information he or she needs to be able to take the right course of action, not information (for example) about the factors that have caused changes in prices.

^{3.} Here, we have in mind the "unraveling result," in which sellers are impelled (in equilibrium) to reveal accurate information about their product, because, if they remain silent, buyers will infer it is worse than it is. See D. G. Baird, R. H. Gertner, and R. C. Picker, GAME THEORY AND THE LAW (1994), 89–109. The unraveling result applies, however, only in very special circumstances, namely, where information can be verified once it is disclosed, and where lying is sanctionable. It is doubtful how far these special circumstances generalize. For discussion of these kinds of issues, see subsections IV.C and IV.G below.

^{4.} See D. C. Mueller, Public Choice (1979).

^{5.} J. Milton, Areopagitica, A Speech for the Liberty of Unlicensed Printing (1644, H. B. Cotterill ed. 1959); J. S. Mill, *On Liberty*, in On Liberty, Representative Government, the Subjection of Women (1859/1960).

^{6.} Justice Holmes (dissenting), Abrams v. United States, 250 U.S. 616 (1919), at 630.

serve an uninhibited marketplace of ideas in which truth will ultimately prevail...." This seems to affirm what Frederick Schauer calls the "argument from truth" for freedom of speech; more precisely, it articulates the marketplace version of the argument from truth. As Schauer formulates the idea (though without endorsement), "Just as Adam Smith's 'invisible hand' will ensure that the best products emerge from free competition, so too will an invisible hand ensure that the best ideas emerge when all opinions are permitted freely to compete."

It is debatable just how seriously legal theorists now take the marketplace version of the argument from truth. But it is undeniable that a lot of lip service has been paid to this idea. Moreover, given the interests of social epistemology and the aforementioned hints from economics, we believe it is time to look closely and literally at the claim that truth is maximally promoted by a free market for speech. Just what does modern economics tell us about markets? Does the analysis of the properties of markets really guarantee, or even suggest, that unregulated speech—or speech that is regulated only by the market—will promote the acquisition of truth more reliably than other institutional arrangements concerning speech? We shall argue that it is not a consequence of economic theory that a free market provides the most salutary prospects for truth.

An alternative way to challenge the truth rationale for free speech, of course, is to challenge the assumption that truth is such a paramount value that its promotion should swamp all other considerations. This evaluative premise is certainly quite dubious, as Schauer points out. 10 However, we shall concentrate on the factual claim that a free market is the best route to truth. To keep matters clear, let us state the precise claim we shall be disputing. An initial formulation might be (MMTP0) ("the Market Maximizes Truth Possession"):

(MMTP⁰) More total truth possession will be achieved in a free, unregulated market for speech than in a system in which speech is regulated.

The trouble with (MMTP⁰) is its implication that speech goes totally unregulated in a free-market system.¹¹ This is not an accurate claim, given a

- 7. Red Lion Broadcasting Co. v. FCC, 395 U.S. 367 (1969), at 390. Stanley Ingber cites 10 other Supreme Court First Amendment opinions from 1966 to 1981 that are permeated by the marketplace of ideas thesis. See Ingber, The Marketplace of Ideas: A Legitimizing Myth, DUKE L. J. (1984), at 2, n. 2.
 - 8. Free Speech: A Philosophical Enquiry (1982), Ch. 2.
- 9. Id. at 16. Since the quote appears in the chapter entitled "The Argument from Truth," it is evident that by "best" ideas, Schauer means true (or, perhaps, "truest") ideas.
- 10. Id at 33. Of course, the truth rationale might be weakened somewhat so that it does not assign truth preeminence among values. We shall not explore this issue, however, since our concern is with the factual premise of the argument from truth.
- 11. Actually, (MMTP⁰) speaks of the *market* being unregulated; but this is contrasted with situations in which *speech* is regulated, with the implication that speech is unregulated in a market system.

plausible definition of "regulation" (to be presented below). When major television networks decide whether to allow advertisers or political candidates to air commercial or electioneering messages over their airwayes by their ability to pay the required fee, the networks are exercising control over speech. True, they are not using "content" criteria in their decision making; they are using purely financial considerations, like any business enterprise. Nonetheless, the result is regulation. People who would like to speak but cannot afford the price are excluded from this speech forum, whereas the Ross Perots of the world are, in fact, allowed to speak. Surely this qualifies as "regulation," although it is regulation by market mechanisms. What the marketplace-for-ideas thesis seems to be saying, then, when taken literally. is not that all regulation should be excluded, but that only regulation by market mechanisms should be allowed, if truth possession is to be maximized. Presumably, the "free" markets that are envisaged are markets for which there is freedom of entry (and exit) for buyers and sellers and an absence of government control of prices and quantities. 12 So let us reformulate the earlier principle as follows:

(MMTP) More total truth possession will be achieved if speech is regulated only by free-market mechanisms rather than by other forms of regulation.

Of course, the "other" form of regulation principally intended is governmental regulation, which is what the First Amendment addresses. But our formulation of the idea is more general, asserting the inferiority of all forms of regulation other than market regulation. This captures the spirit of the thesis we shall discuss and reject.

We must now be more specific about what is meant by "truth," "truth possession," and "regulation." The primary objects that can be called "true" or "false," in our view, are propositions or statements. A proposition is true just in case what it says to be the case actually is the case, i.e., the "world" is the way the proposition says it is. 14 A proposition can be true whether people know it or not. If, as geologists currently hold, Africa and South America once split off from a single Ur-continent and drifted apart, the proposition asserting the occurrence of this drift is true independently of

^{12.} Freedom of entry does not mean that market entry is costless. It means that no rent is derived from incumbency, i.e., that new agents can enter at a cost that does not exceed the cost incurred by incumbents, and, hence, incumbents do not have a competitive advantage over potential entrants.

^{13.} Theorists such as Cass Sunstein and Owen Fiss deny that there is a legitimate contrast between market regulation and state regulation, because the state institutes the system of property rights that underpin a market system. We shall address this point more fully in section II.

^{14.} The first, formula given here is due to W. Alston, A REALIST CONCEPTION OF TRUTH (1996). For similar defenses of realist, or correspondence, theories of truth, see also M. David, CORRESPONDENCE AND DISQUOTATION (1994), F. Schmitt, TRUTH (1994), and A. Goldman, KNOWLEDGE IN A SOCIAL WORLD, Ch. 2 (in preparation).

anyone believing it. Even if scientists had never discovered the evidence supporting this theory, the proposition would still be true.

It is possible (although we doubt it) that Holmes understood truth to be defined as the opinion that emerges from the free competition of the market. Under that definition, it would, of course, be trivial that opinions generated under free-market conditions are true. But this is a very bad definition of truth. Although it could turn out as a matter of fact that a free market in speech generates true opinions, that does not convey what is meant by truth. What is true or false depends on the way the world actually is, not simply on people's opinions or how they arrive at those opinions. There may be some exceptions to this generalization. If the justness of a political choice is wholly determined by whether people agree to it, then the truth or falsity of a proposition asserting the justness of a certain choice depends on whether people agreed to it. Here, opinion seems to "constitute" truth. 15 In a political context, however, "agreement" is presumably not credal assent or belief in a proposition, but rather endorsement of, or concurrence in, a collective course of action or institutional arrangement. So, even this is not strictly a case in which belief in a proposition makes that proposition true.

We do not maintain, nor need proponents of the truth rationale maintain, that every proposition or statement is either true or false. In fact, entire domains of statements (e.g., according to some people, ethics) may be devoid of truth values. Proponents of the truth rationale could still support the desirability of unregulated speech because of the truth benefits flowing from the remaining statements or propositions that *are* truth-valuable. Not all speech, of course, conveys propositions. A good deal of artistic expression may be nonpropositional in content. Proponents of the truth rationale can either say that these forms of expression should be protected only as an incidental matter, or can offer a different style of rationale for them.

We turn now to the idea of truth possession, which is used in (MMTP). To say that a person "possesses" a truth is to say that he or she believes a proposition and it is true. Thus, when (MMTP) talks of obtaining the greatest amount of truth possession through market mechanisms, it is talking about the amount of true belief or opinion, as contrasted with false opinion or no opinion at all. Each agent's quantity of truth possession might be represented by his or her ratio of true beliefs to true-beliefs-plus-false-beliefs, or perhaps the ratio of true beliefs to true-beliefs-plus-false-beliefs-plus-no-opinions. Since (MMTP) is presumably interested in the social aggregate of truth possession, the relevant ratio should encompass all members of society. So the social ratio would be the total number of true beliefs (or believings) by members of society divided by the-total number of true beliefs, false beliefs, and no opinions. Of course, belief

^{15.} Thanks to Frederick Schauer for this suggestion.

^{16.} For further discussion of these and related proposals, see Goldman, supra note 14, Ch. 3.

can be conceptualized in graded terms as well as in binary (all-or-none) terms. For graded belief, the foregoing idea could be expressed as follows: Measuring degrees of belief from 0 to 1.0, the higher one's degree of belief in a true proposition, the greater is one's degree of "possession" of that truth. Conversely, the greater one's degree of belief in a false proposition, the more this detracts from truth possession. In other words, a degree of belief D ($0 \le D \le 1$) in a falsehood counts as (1 - D) worth of truth possession. To represent the social aggregate of truth possession, we might then take the average (mean) truth possession across all individuals over the propositions considered by members of society. This formula would not solve all problems of quantification. For example, it seems implausible to weight all propositions equally. Believing a (true) law of physics or a (true) economic principle intuitively seems like a more significant cognitive accomplishment than believing a more humdrum truth. This might be handled by providing a measure of the "interest" of a proposition, but we shall not explore this possibility in detail.¹⁷ The foregoing provides at least a rough idea of how total truth possession may be conceptualized, even if it does not provide a full set of measurement techniques for implementing the conceptualization. This should suffice for purposes of the arguments to be offered in this article. Anyone wishing to defend (MMTP) against our arguments is invited to propose an alternative conception of truth possession if they think such an alternative could advance their defense of (MMTP).

The next problem of definition is posed by the term "regulation" (as applied to speech). We shall make some working proposals. Speech is an attempt by one party, a message sender, to communicate with a second party, an intended audience or set of receivers. Communication always uses some type of "forum," such as a public park or billboard, a private living room, a newspaper or journal, a television station, or electronic bulletin board. Messages are transmitted via a channel or medium such as light waves, sound waves, print, cables, or the like. Forums of speech and channels of communication are frequently controlled by third parties, people who are in a position to enable or prevent a potential speaker from using the desired forum or channel to communicate his or her message. A first form of regulation, then, consists of a third party allowing or disallowing selected speakers from using the forum or channel to send certain messages. Potential receivers, of course, are also in a position to decline to receive speakers' messages, by refusing to watch, listen, or read, by changing

^{17.} See Goldman, supra note 14, for further discussion. To register differences in interest or importance, the representation of the social aggregate of truth possession might weight more heavily each agent's true beliefs in propositions that interest him more. This approach might help address the worry expressed by Larry A. Alexander about the variable importance individuals attach to information. See Alexander, Trouble on Track Two: Incidental Regulations of Speech and Free Speech Theory, HASTINGS L. J. 44 (1993): 939–941.

channels, or by turning off their reception equipment entirely. None of this, however, counts as speech "regulation." Thus, the enabling or disabling activity must be performed by a third party to qualify as regulation. Of course, a third party might act as a proxy or agent of a receiver, e.g., an electronic "butler" programmed to filter out or filter in certain types of messages at the direction of the receiver. But this is just an extension of the receiver, not a genuinely independent third party.

A second form of regulation consists of intentionally deterring, or trying to deter, a speaker from sending a message by threatening to impose a sanction if the message is sent. Thus, a statute that threatens a fine or imprisonment for communicating a certain type of message does not literally prevent agents from communicating that sort of message; however, it still counts as speech regulation. Notice that not only governments can regulate speech in this manner. A private corporation might also regulate speech by adopting a policy of firing employees who take a disapproved public stand on a certain issue. A variant of this second form of regulation is the threat of sanction to compel an unwilling or reluctant speaker to speak. This form of regulation imposes a penalty for remaining silent. Courts of law engage in this kind of regulation when they compel the testimony of a witness by threatening contempt of court; and the legal system tries to compel truthful testimony (a kind of speech) by threatening penalties for perjury.

Not every negative outcome of speech, however, nor every threat of a negative outcome, qualifies as speech regulation. If receivers of a message express their disapproval of it by frowning or wincing, this does not qualify as speech regulation. It is not speech regulation even if they antecedently signal their opposition to certain views and thereby deter potential speakers from expressing those views. It appears, then, that "third-party" action, which interposes itself between potential speakers and hearers, is essential for regulation. Of course, someone might double as both a potential hearer and a third party. Corporate executives who threaten to fire their employees for expressing certain views might also be potential receivers of those messages. Their threat still seems regulative because a wider audience is presumably among the intended receivers of the messages, and the dismissal threat is presumably aimed at deterring employees from communicating the message to that wider audience. Relative to this audience, the corporate executives are "third parties." 19

In addition to these two "direct" forms of regulation, there is also "indirect" regulation of speech. This consists of policies imposed by certain

^{18.} The example is due to T. Scanlon, Content Regulation Reconsidered, in DEMOCRACY AND THE MASS MEDIA (J. Lichtenberg ed. 1990).

^{19.} Other examples might be adduced to suggest that second parties, as well as third parties, can engage in the second form of regulation. Since this point is inessential to our overall thesis, we will not pursue the matter further.

agents or institutions that constrain the speech-regulating activities of other agents. For example, if the federal government passes a law requiring radio and television stations to give political candidates free air time, that will presumably influence the speech-controlling activities of station managers. Those managers are the direct controllers of messages sent over their channel, but the government, in this case, would be an indirect regulator.

Another crucial phrase that occurs in (MMTP) is "market mechanism." Thus, it might be appropriate to undertake a definition of this phrase. Unfortunately, the precise definition of a market, or a market mechanism, is a knotty problem that would take us too far afield. We shall therefore rely on the reader's ability to assess which mechanisms are or are not market mechanisms. We do not deny that some problematic or borderline examples will crop up, but we also feel that the tenability of (MMTP) can be assessed through relatively clear cases, as well as by a close look at the theory of competitive markets.

II. OTHER DISCUSSIONS OF MARKETPLACE THEORY

Having clarified the version of marketplace theory we wish to address, we now proceed to comment briefly on other recent discussions of the marketplace theory, identifying points of similarity or contrast with our own treatment. Although there are numerous critics of the marketplace theory, we find some of their criticisms ill-founded, and others simply have a different focus from ours. Certain critics of marketplace theory, for example, take issue with the notion of objective truth. C. Edwin Baker writes; "[T]ruth is not objective. Even in the sciences, the presumed sanctuary of objectively verifiable truth, often only those values to which the scientists personally give allegiance provide criteria for judging between competing theories."20 This theme is echoed by Stanley Ingber: "Although the assumption of the existence of objective truth is crucial to classic marketplace theory, almost no one believes in objective truth today [H]istory is founded on the selective perception of historians rather than on any objective historical truth. The same can be said for the pursuit of truth in any academic, scientific, or professional discipline. The 'truth' of a theory depends on its ability to explain a phenomenon to the judging individual's satisfaction and on its aesthetic appeal to that individual. Today's truth, consequently, may become tomorrow's superstition."21

We do not accept this blanket rejection of objective truth. As indicated earlier, there may be statements in some domains that lack objective truth values, but a global denial of objective truth is unwarranted. Among the

^{20.} Baker, Scope of the First Amendment Freedom of Speech, UCLA L. REV. 25 (1978): 974.

^{21.} Ingber, The Marketplace of Ideas: A Legitimizing Myth, DUKE L. J. 84 (1984): 25.

many plausible candidates for objective truth and falsehood are statements of criminal or historical fact (e.g., who fired a gun on a certain occasion, who was the twelfth President), statements concerning chemical or nutritional properties of commercial products, and causal statements to the effect that certain consequences would follow from the adoption of this or that policy. The general legitimacy of objective truth cannot be argued here at length, but we find the anti-truth contentions of the foregoing critics unpersuasive. Particularly unpersuasive is the suggestion that the mutability of beliefs undercuts objective truth. The mere fact that there was extended controversy over continental drift, and many geologists changed their opinions over time, hardly proves, or even suggests, that there is no objective, belief-independent truth about continental drift. No doubt, it is difficult to get "conclusive" evidence for the truth in any complex and difficult subject, but that does not prove that there is no objective truth. Our own arguments against the marketplace theory will not rest on any skepticism or nihilism about truth.

A second argument by the same critics is that truth is not discoverable (even if it exists) because people lack the rational capacities needed to detect truth. Baker, for example, writes:

The classic model also requires that people be able to use their rational capacities to eliminate distortion caused by the form and frequency of message presentation and to find the core of relevant information or argument. This assumption cannot be accepted. Emotional or "irrational" appeals have great impact; "subconscious" repressions, phobias, or desires influence people's assimilation of messages; and, most obviously, stimulus-response mechanisms and selective attention and retention processes influence understanding or perspectives.²²

This assessment is more pessimistic, we suspect, than empirical research warrants,²³ but even if things are as bad as Baker implies, this would not cut against the truth rationale, or (MMTP). (MMTP) makes a comparative claim; it says that a free market is better at producing truth possession (or knowledge) than a system that features extra-market regulation. This comparative thesis is compatible with the view that all systems do badly in absolute terms because of pervasive irrationality. Even if the knowledge outputs of a free market are far from perfect, as long as they are better than those of an otherwise regulated system, this would suffice for the truth of (MMTP).

A third argument proceeds from inequalities of resources or opportunities in the marketplace. This argument against the marketplace theory is en-

^{22.} Baker, Supra note 20, at 976.

^{23.} See Z. Kunda, The Case for Motivated Reasoning, PSYCHOLOGICAL BULLETIN 108 (1990): 480-498, and A. Goldman, Psychological, Social, and Epistemic Factors in the Theory of Science, in PSA 1994, Vol. 2 (M. Forbes ed. 1995).

dorsed by many writers, especially Owen Fiss and Cass Sunstein.²⁴ Fiss argues in favor of state regulation to enrich public debate, in the sense that all positions would be fully and fairly presented. "The State must act as a high-minded parliamentarian, making certain that all viewpoints are fully and fairly heard."²⁵ This will not necessarily be accomplished by a free market. In fact, says Fiss, noninterference "is likely to produce a public debate that is dominated, and thus constrained, by the same forces that dominate social structure, not a debate that is 'uninhibited, robust, and wide-open."²⁶ Although we concur with Fiss's statements about the likely implications of noninterference in the market, we do not necessarily accept his conclusion about state regulation.²⁷ In any case, Fiss does not explicitly connect the problem with the *truth* argument. The objective on which he focuses is robust debate, which may or may not have truth acquisition as its ultimate end. Furthermore, although the criticism is apt, we would like to embed it in a deeper analysis of the difficulties confronting an economic analysis of speech.

Sunstein also supports greater governmental activity in the interest of better speech practices. In order to promote political "deliberative autonomy," the state may properly require free air time for candidates, and may institute suitable campaign finance laws.²⁸ But Sunstein again differs from us in not focusing explicitly on the truth goal. He interprets the principal aim of free speech to be the Madisonian goals of political equality and deliberative democracy, in which citizens are exposed to diverse views.²⁹ Although these goals may be related to the truth goal (e.g., exposure to diverse views may enhance the prospects for truth, and possession of truth may contribute to more effective deliberation), they do not coincide with the truth goal. Thus, our focus will be somewhat different.

Along with other recent writers, Sunstein also challenges the traditional contrast between the state and the market. The market is itself a "creature" of the state, he stresses, through its allocation of property rights and its laws of contract and tort.³⁰ We take issue with this point, at least as a universal claim. Although *some* important markets are undoubtedly shaped by government, not *all* markets are creatures of the state. For example, trade across

^{24.} O. M. Fiss, Why the State?, HARV. L. REV. 100 (1987): 781, and State Activism and State Censorship, YALE L. J. 100 (1991): 2087; C. R. Sunstein, Free Speech Now, U. CHIC. L. REV. 59 (1992): 255, and DEMOCRACY AND THE PROBLEM OF FREE SPEECH (1993).

^{25.} Fiss, State Activism and State Censorship, at 2100.

^{26.} Fiss, Why the State?, supra note 24, at 786. The final phrase originates with Justice Brennan, in New York Times v. Sullivan, 376 U.S. 254 (1964) at 270.

^{27.} The state is suspect, of course, on two types of grounds: (1) it is not (always) a disinterested party, and (2) it may not be a wholly competent truth-oriented regulator. This need not imply, of course, that state regulation never promotes truth acquisition or error avoidance. In fact, we shall present ostensible cases of this sort in section III. But, as we shall indicate, most of these cases are open to debate.

^{28.} DEMOCRACY AND THE PROBLEM OF FREE SPEECH, supra note 24, at 34.

^{29.} Id. at xvi-xx, 18-23, 51.

^{30.} Id. at 31.

front lines in a war, and the current illegal drug trade, constitute markets that are not a function of state authorization. Furthermore, even to the extent that markets are creatures of the state, this does not obliterate the distinction that (MMTP) marks, viz., the distinction between regulation by market mechanisms and other forms of regulation, governmental and otherwise. So, a marketplace proponent of the truth rationale can still contend that market regulation is preferable to other styles of regulation in truth-related terms. Whether this contention is correct is another matter.

Daniel Farber analyzes First Amendment doctrine from a market perspective and identifies an economic property of speech as the rationale for its protection.³¹ Specifically, Farber argues that speech—or "information," as he puts it—is a *public good*, and is, therefore, likely to be undervalued by both the market and the political system. According to Farber, this is the reason behind a special constitutional protection for information-related activities. We shall also examine speech as a plausible example of a public good (see section IV), but we shall draw slightly different conclusions from this analysis.

The marketplace discussants thus far surveyed are legal theorists, but the market model for speech has also been studied, of course, by economists. Certain economists, including Aaron Director and Ronald Coase, simply assume the virtues of the free market for ideas (or assume that others grant these virtues) and proceed to defend the free market for goods as being entirely parallel with the market for ideas.³² But since we are here raising questions about the alleged virtues of the market for ideas, a mere presupposition of these virtues will not advance the discussion. Two gametheoretic economists, Paul Milgrom and John Roberts, engage in a more constructive attempt to validate the relation between competition and the emergence of truth for a certain class of informational settings.33 We examine their model at the end of section IV. Other writers inspired by economic analysis take a dimmer view of the market rationale for free speech. Richard Posner, for example, proposes to give "the free speech icon an acid bath of economics."34 Although Posner's doubts mirror our own, they are not derived primarily or directly from an analysis of the relation between the market and the prospects for truth possession. He focuses, instead, on a general cost-benefit analysis of regulating or not regulating speech, attending to many factors unrelated to truth possession

^{31.} D. A. Farber, Free Speech Without Romance: Public Choice and the First Amendment, HARV. L. REV. 105 (1991): 554-583.

^{32.} A. Director, The Parity of the Economic Market Place, THE JOURNAL OF LAW AND ECONOMICS 7 (1964): 1-10; R. Coase, The Market for Goods and the Market for Ideas, AMERICAN ECONOMIC REV. 64 (1974): 384-391.

^{33.} P. Milgrom and J. Roberts, Relying on the Information of Interested Parties, RAND JOURNAL OF ECONOMICS 17 (1986): 18–32.

^{34.} R. A. Posner, Free Speech in an Economic Perspective, SUFFOLK U. L. REV. 20 (1986), 1-54, p. 7.

or knowledge. Our concern, in contrast, is specifically the knowledge-generating properties of a free market.

Before proceeding to the substance of our analysis, we hasten to acknowledge the possibility that few theorists currently endorse (MMTP) in the precise form we have stated it. Even if this is so, (MMTP) provides a clear statement that is open to systematic examination. Although proponents of the market approach might prefer some alternative thesis in the neighborhood of (MMTP) to (MMTP) itself, our analysis of the problems facing (MMTP) is likely to identify problems confronting related theses as well. A variety of modifications of (MMTP) are undoubtedly possible, but we leave it mainly to others to explore such modifications. In the final section of this article, however, we will address a rather different conception of what the phrase "marketplace of ideas" means, something that should be sharply distinguished from the standard economic market.

III. SOME PRIMA FACIE COUNTEREXAMPLES

In this section, we present some prima facie reasons for thinking that (MMTP) is false. We do this by adducing apparent "counterexamples" to (MMTP), cases in which nonmarket regulation appears to offer the prospect of improved truth possession as compared with purely market regulation. We concede, however, that most of these cases are open to dispute, so we shall not firmly rest our critique of (MMTP) on them. The cases we examine are of three kinds: (1) spheres of totally unregulated speech in which nonregulation seems to breed error, and where it looks as if nonmarket regulation might help; (2) existing systems or policies of nonmarket speech regulation that ostensibly promote truth possession; and (3) features of market regulation of speech that seem to impede maximum truth acquisition.

Domains of opinion where speech is totally unregulated, or is at most regulated by the market, are arguably the domains where maximum error and falsity are to be found. We have in mind domains in which rumor, gossip, old-wives' tales, and superstition flourish, where astrology and the occult are purveyed and apparently believed. These are topics on which little or no formal education, which might serve to combat popular misconceptions and unfounded folklore, takes place. Formal education is highly regulated: Teachers are selected for their training and comparative expertise, and not everyone is allowed to teach in the classroom. Nor is such regulation simply a matter of the market; public education, at any rate, seems to be a nonmarket enterprise. The targeted domains, by contrast, are precisely the ones relatively unserviced by formal education. If we are right that these domains are particularly rife with error (false belief), this may be associated, at least in part, with the lack of speech regulation. Thus, contrary to (MMTP), more regulation could increase the total amount of truth

possession. We admit, however, that this is a matter of speculation, for which we have no solid proof or evidence.

Next, consider certain forums for scientific and scholarly speech that are highly regulated, and which, nonetheless, are responsible for what many people take to be the greatest amount of knowledge. Scientific, professional, and academic journals are widely thought (certainly by scientists and academics) to be the best forums available for discovering and learning truths, yet these communication systems are highly regulated. Editors and referees impose stringent criteria for the publication of submitted manuscripts. Attempts to "speak" in these forums are often rigidly controlled. People lacking the methodologies and technical skills demanded by these journals have no chance of getting their thoughts aired therein, and even well-trained practitioners encounter difficulties. But regulated journals of this sort are widely thought to be effective in promoting truth.

This ostensible counterexample to (MMTP) is not conclusive because it isn't obvious that scientific and academic journals are not parts of a market mechanism. For one thing, there is usually a journal "industry," with freedom of entry into this industry. Neither government nor any other agency imposes restrictions on the creation of new journals, with any editorial policy they please. Furthermore, the reason editors of journals actually engage in highly restrictive publication policies may be the nature of the "demand" created by the readership. The readership might not subscribe to the journal if it were not so regulated. If this is right, the speech regulation that undoubtedly characterizes scientific and academic publication falls within the sphere of the market, not outside it.

A counter-reply might point to the fact that scientific journals are commonly published by professional societies rather than individual entrepreneurs. Here, it is less clear that decision making is wholly a function of a market. The fuzziness of what counts as a "market" makes it difficult to resolve this issue, but at this point it appears that (MMTP) may survive the challenge.³⁵

Next, consider a variety of governmental policies, to be enumerated below, that surely qualify as nonmarket regulation of speech. These policies are aimed at curbing the dissemination of falsehoods or mandating the revelation of truths. Even if they are only partly effective, they may well serve to decrease the number of spoken falsehoods and increase the number of asserted truths. Although this does not guarantee that more false beliefs will be averted, or more true beliefs acquired (since we do not know exactly which prohibited or mandated speech would be persuasive), there is an initial presumption that these policies produce increases in truth possession, contrary to what (MMTP) implies.

^{35.} The issue will be briefly revisited in section V, however, where the indicated line of defense against the present counterexample will be undermined.

A first example is libel laws, which are clearly aimed at deterring potential speakers from asserting falsehoods about specified individuals or groups. Although the Supreme Court has erected a two-tier system, in which a stiffer standard must be met for libeling a "public figure," it still appears that extant libel laws aim to deter certain categories of false speech. On the assumption that these laws, in fact, avert many libelous statements, and many of these averted statements would be believed if uttered or published, the effect of this nonmarket regulative policy seems to be an increase in truth possession (by decreasing potential falsehood possession).

It is debatable, however, whether libel laws, in fact, are the optimal devices for averting false speech and, hence, false opinions about individuals or groups. Market mechanisms might do better. First, market mechanisms might not try to deter false statements, but might simply offer opportunities for correction of false statements, e.g., by publication of denials or rebuttals in newspapers. Given the costs of litigation, the threat of libel suits is not always very efficacious in any event. Second, although statutes may provide *some* deterrence against false statements, their positive effect may be counterbalanced by the opportunities they create for chilling the exposure of truths. Wealthy individuals or groups may threaten libel litigation to deter the dissemination of true (but hard-to-establish) accusations, especially by speakers with more limited resources for legal engagement. This negative impact on truth promulgation may cancel the positive effect that those statutes achieve.

Other policies of the federal government, especially policies of the regulatory commissions, aim at increasing truth possession or reducing error. The Food and Drug Administration (FDA) controls labeling and advertising practices of companies that sell foods and drugs. Some of this regulatory activity bans advertising or labeling that is false, deceptive, or misleading, where "deceptive" and "misleading" statements are ones that lead people to draw false conclusions, even if the statements are not false in themselves. Another aspect of FDA control is to require informative labeling about the product. This regulatory policy is intended to lead more people to have more aggregate true belief ("information") on these subjects, rather than averting false beliefs. Either result, however, constitutes an improvement in overall truth possession. This is also the purpose of restrictions by the Securities and Exchange Commission (SEC) on what people may say when they sell stocks and bonds.

Again, proponents of the market might reply that the same effects can be achieved by market mechanisms. This has some measure of plausibility in the area of false or deceptive advertising: Consumers could be "protected" from the false claims of some advertisers by the rebuttals or counterclaims of other advertisers, all within the ambit of the market. 36 However, it is not clear

^{36.} For further examination of the advertising case, in connection with Coase's theorem, see section IV.

that rebuttals or corrections reach all of the original audience, or succeed in eradicating initially believed falsehoods.³⁷ Could the market substitute for the FDA's positive mandates to place certain information on product labels? Market proponents might begin by pointing out that the FDA is, in effect, being "hired" to enforce producer revelation of certain information. It is not clear, however, just how interested consumers are in this information, and whether they actually read and acquire the printed truths in large numbers. If people really valued such labeling sufficiently, wouldn't it be profitable for companies to provide it? So, wouldn't the market suffice to elicit the desired information? In the case of false claims by stockbrokers, it is not clear that such private communications are effectively regulated anyway, so it is hard to assess the consequences of these governmental policies.

The next class of examples pertains to the judicial realm. First, consider laws against perjury, obviously aimed at deterring witnesses from testifying falsely. If these laws succeed in deterring some potential cases of perjury, and if some of those potential pieces of perjurious testimony would, if delivered, have produced false beliefs in hearers (e.g., jurors), then the effect of the perjury laws is greater truth possession. Such laws, however, are not market mechanisms, so again (MMTP) is threatened.

Continuing with judicial examples, we note that courts of law are highly regulated speech forums. Who is allowed to speak during a trial, and on precisely which topics, is scrupulously overseen by a judge, who determines which witnesses may testify, what questions attorneys may address to witnesses, and so forth. The rationale behind such speech governance is complex, but a substantial portion of the rationale is based on considerations of truth.38 This is explicit in the Federal Rules of Evidence, which state the purpose of evidence-governing rules as follows: "These rules shall be construed to secure fairness in administration, elimination of unjustifiable expense and delay, and promotion of growth and development of the law of evidence to the end that the truth may be ascertained and proceedings justly determined" (emphasis added).39 The exclusion of hearsay evidence is predicated on the common law insistence on "the most reliable sources of information." Hearsay evidence is (allegedly) an unreliable way of getting the facts, and may lead juries toward erroneous verdicts. Not only are judges instructed to disallow "irrelevant" evidence, which cannot help the cause of truth, but even relevant evidence may be excluded "if its probative value is

^{37.} It is noteworthy, in this connection, that erratum notices in physics journals do not appear to be very effective in avoiding error propagation from an initially published mistake. See M. Thomsen and D. Resnik, *The Effectiveness of the Erratum in Avoiding Error Propagation in Physics*, SCIENCE AND ENGINEERING ETHICS 1 (1995): 231-240.

^{38.} See A. Goldman, Epistemic Paternalism: Communication Control in Law and Society, The Journal of Philosophy 88 (1991): 113–131; reprinted in A. Goldman, Liaisons: Philosophy Meets the Cognitive and Social Sciences (1992).

^{39.} FEDERAL RULES OF EVIDENCE FOR UNITED STATES COURTS AND MAGISTRATES (1989), Rule 102.

substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury "40, where "prejudicing," "confusing," or "misleading" the jury invoke the prospect of producing false beliefs. Thus, the American judicial system assumes that speech regulation at trials is necessary and appropriate to further the judicial quest for truth. We may, of course, question whether all of the devices adopted by the judicial system in fact succeed in increasing the amount of (juror) truth possession. But it is plausible that many (if not all) of them do; and, since none of them is an instance of a market mechanism, they pose a challenge to (MMTP).

These are some of the toughest counterexamples, we think, for market proponents to dispute. On the other hand, the judicial realm is a very specialized domain, and defenders of (MMTP) might be prepared to restrict its scope to all other domains. Be that as it may, the principal moral of this section is that, although there are serious challenges to (MMTP) in several areas, it is difficult to demonstrate conclusively "by example" that (MMTP) is mistaken. In the next section, we will therefore proceed to a different strategy. Rather than challenge (MMTP) by trying to produce exceptions to it, we ask what reason there is for supposing it is true in the first place. Clearly, proponents of (MMTP) imagine that there is something in the nature of market mechanisms, something that follows from the economic analysis of markets, that makes (MMTP) true. In the next section we will show, to the contrary, that economic theory has no such implication whatsoever. Contrary to popular myth, economic theory lends no support to (MMTP).

IV. ECONOMIC THEORY AND TRUTH ACQUISITION

What is the theoretical argument for supposing that market mechanisms will maximize truth possession? To our knowledge, no *detailed* general argument of this sort has actually been presented, but the idea, presumably, is that modern economics has demonstrated that competitive markets are the most efficient modes of social organization, the best way to organize the production and consumption of goods. Shouldn't this hold for intellectual as well as other goods? In this section, we explore what economics really says about free, competitive markets and what that does or does not imply about truth acquisition.

IV.A. Messages, Products, and Product Quality

To fit intellectual matters into the framework of economic theory, we must assume that some product is involved, and that there are some producers

40. FED. R. EVID.. Rule 403.

and consumers of the product. For present purposes, the promising interpretation appears to be that a speaker's messages are products, a speaker is a producer, and hearers are consumers. In light of (MMTP), however, we cannot view just any hearer of a message as a consumer. Only someone who accepts or believes a message should qualify as a consumer of it. Given these assumptions, (MMTP) might be supported or underwritten by economic theory if the theory is susceptible to an interpretation under which it implies that, in a competitive market, messages will be produced and consumed in a fashion that maximizes the amount of truth possession. In short, the theory must imply that the set of messages consumed (believed) under competition will yield a higher social aggregate of truth possession than the social aggregate of truth possession yielded by the messages that would be consumed (believed) under noncompetitive conditions. Can economic theory be interpreted to yield this result?

One might think of it in the following way. True messages are superior to false messages, at least as far as intellectual matters go. Thus, if it were generally true that competitive markets lead to the production and consumption of superior products, this might be directly applicable to the intellectual arena. Many people discussing the laissez-faire underpinning of economic theory seem to hint at such a general thesis. There is the Darwinian idea that competition encourages "survival of the fittest," where the "fittest" are in some sense superior or higher-quality creatures. A similar idea is also contained in the passage from Schauer quoted in section I: "Just as Adam Smith's 'invisible hand' will ensure that the best products emerge from free competition . . ." (emphasis added).

However, economic theory does not imply that the "best" or highest-quality products will be produced and consumed under free competition, at least where "quality" refers to some pre-designated, market-independent character of the products, such as truth or falsity. What economic theory actually says is that, under competition, the levels of outputs for each type of good will reach efficient levels, relative to the production possibilities facing producers and the preferences of consumers. This makes no categorical prediction about which types of goods will be produced in relatively greater quantities, where types of goods are antecedently classified by some specific intrinsic characteristics. There is no way, then, in which market theory implies that, under competition, the messages produced and consumed will have an optimal amount of truth. To suppose that economic theory implies this is to misunderstand what it actually asserts.

IV.B The Role of Preferences

This point may be clarified as follows: Economic theory says that a perfectly competitive market will provide consumers with an economically efficient,

i.e., Pareto-optimal, allocation of commodities. This means that the commodity bundle consumers get is optimal in a way defined by their own preferences and the costs of producing the various goods in that bundle. Without reference to the consumers' preferences, however, nothing can be deduced about the particular properties of the commodity bundle that is yielded. In other words, economics does not say that any specific types of commodities will be produced in large quantities in a competitive market. The whole idea of economic efficiency is that the system should be responsive to consumers' tastes or preferences (subject to the limits of technology), not that it should produce certain goods in comparatively large quantities no matter what people want. Thus, if consumers have no very strong preference for truth as compared with other goods or dimensions of goods, then there is no reason to expect that the bundle of intellectual goods provided and "traded" in a competitive market will have maximum truth content. If people valued falsehood, then perfect competition would provide falsehood in a Pareto-optimal way. Or, to make a more realistic assumption, if truth is one thing people value, but they are willing to substitute other commodities (e.g., entertainment) for truth, then economic theory says that they will get the amount of truth such that the marginal rate of substitution between truth and these other commodities equals the marginal rate of transformation in the technology between producing truth and producing the other commodities. If consumers do not value truth very much (relatively speaking), perfect competition will efficiently ensure that they don't get very much truth as compared with other goods. (The foregoing statements presuppose the assumption that conditions of perfect competition are met, an assumption concerning the truth-possession domain that we shall challenge in the ensuing discussion.41) What cannot be said is that competition will maximize truth possession under all circumstances, i.e., no matter what consumers prefer. But that is precisely the unqualified statement that (MMTP) makes.

A defender of (MMTP) might reply to the foregoing as follows: "Granted that market regulation will not maximize truth possession when people wish to substitute entertainment for truth. But won't other systems of regulation equally fail to maximize truth possession when people have the same preferences? So how does the point about the role of preferences undercut the comparative claim of (MMTP) that market regulation of speech is superior to (or at least as good as) competing forms of regulation?" To answer this challenge, we may simply consider alternative modes of regulation that consist of market regulation modified by specific types of government intervention in speech. For example, consider an intervention that consists of government subsidizing public television and radio news (as it does now),

^{41.} The statements in the text also assume that truth and falsehood function like other goods or commodities, a basic premise of the argument from truth. This premise will be challenged, however, in subsection IV.F. below.

thereby making certain (largely) true messages, or classes of messages, cheaper to produce or consume than they would be under pure market practices. Then, even with the same preferences initially described, some people might well acquire more true belief. To take a more extreme example, consider a system under which government suppresses certain entertainment products that people now spend their time consuming. If these products were unavailable, at least some people might choose to consume more news, with a net increase in truth possession (compared with the amount attained under a pure market system).

These kinds of government intervention would, of course, interfere with market efficiency for the total set of goods. But reduction in efficiency is compatible with increasing the production and consumption of certain goods—in this case, true messages. The pure market promotes efficiency, but it does not follow that, for every type of good, the market promotes maximal production and consumption of that type of good. There are nonmarket forms of regulation, then, that seem likely to promote greater amounts of truth possession, given the same set of consumer preferences. It should not be inferred, of course, that we advocate the indicated forms of regulation (nor that we oppose them). A decision to advocate or not to advocate such policies, all things considered, must depend on how the theorist balances the value of truth possession as compared with other things (including economic efficiency). This is not an issue we try to settle here.

IV.C. Imperfect Information

Let us now assume that efficiency would promote truth possession, because people do have a strong preference for it. As is well known, however, efficiency is guaranteed only under conditions of *perfect* competition, and the economic model of perfect competition is highly idealized, incorporating crucial assumptions that may not be satisfied either in general or in the case before us. The proof of the efficiency or optimality of perfect competition holds only where those assumptions are satisfied; where they are violated, optimality does not follow from competition as a theoretical proposition.

One assumption of the standard model is perfect information, e.g., buyers and sellers are assumed to have accurate knowledge of market prices. If this condition is not satisfied, the "invisible hand" theoretical results concerning the market are no longer operative. This assumption is particularly relevant to the case before us for the following reason. Truth possession depends on the consumption (i.e., acceptance) of true messages and the nonconsumption of false messages. Thus, consumers must be in a position to make accurate selections between true and false messages. But their ability to make such selections depends on their possession of infor-

mation. The trouble is that such information, or perfect knowledge, is assumed as a *condition* of the optimal operation of the market, not as a *consequence* of the market. In the present inquiry, we are asking whether the competitive market is capable of generating such knowledge; but all the theory says is that *if* there is perfect knowledge (and other conditions are met), then efficiency follows. This ostensibly throws the problem of knowledge acquisition into a different domain, prior to and independent of the market's operation.

This point can be clarified as follows: The economic theory of competition actually assumes many markets, each of which is a market for a single uniform, or homogeneous, product. This assumption is used in deriving efficiency results in the following manner. As long as the product is homogeneous or identical across all firms selling it, and as long as there is perfect information about the prices being charged, then each firm selling the product must sell it for the same price. For if any firm attempted to set its price at a level greater than the market price, it would immediately lose all of its customers. If any firm set its price at a level below the market price, all of the consumers would immediately come to it so that the other firms would have to match its price if they wanted to stay in business. This is how theorists derive the conclusion that a competitive market will generate a single market price. However, these inferences cannot be sustained if there is product differentiation. Under that condition, a superior variant of the product might command a higher price, so there wouldn't be a single market price for this type of product.

Notice, now, the following point about information: Unless consumers are assumed to know which particular products belong to the kind in question, they will not necessarily act in the manner specified above. Suppose, for example, that there is a uniform product (type) X, say toasters, but that a certain consumer falsely believes that a particular toaster is superior in quality to the rest. Then, this consumer might be willing to pay more for the particular toaster, although, in point of fact, it is no different in quality from all others on the market. Thus, consumers' information or informability about particular (token) products must be assumed in the standard model of (perfect) competition. If that assumption is violated, the standard efficiency or optimality results do not follow.

This is directly relevant to the issue before us. First of all, there is a problem of specifying the product that is involved in the market for speech. If some speech messages are true and others false, the product-type speech is itself not a uniform, or homogeneous, product. Assume, therefore, that the unit in question is true speech. (This will still not yield perfect uniformity, but set that aside.) The next problem that arises is whether consumers will recognize instances of this product-type as such. When they are offered a true message, will they know that it is true? Not necessarily. There is no guarantee, therefore, that they will be prepared to pay prices appropriate to the

product category to which a proffered specimen of speech actually belongs. If hearers cannot distinguish truths from falsehoods, speakers of truths will not be able to command higher prices for them, and, hence, the market for speech will not have the optimal properties it would have under perfect information.⁴²

We see, then, that imperfect information can upset the correlation between free markets and economic efficiency, a problem studied by the economics of information. A much-cited example is the market for used cars, first investigated by George Akerlof.⁴³ There are many variants of the used-car example, but we shall present two: one in which trade in used cars is completely destroyed because of imperfect information (specifically, asymmetric information), and the second in which trade in *good* used cars is destroyed, leaving only trade in "lemons." The first case is one in which the quality of used cars is uniformly distributed, and the second is one in which there are only two types of used cars: good cars and shoddy ones.

In the first case, assume that we can represent the quality of a used car by a real number, q, such that $q \in [0,1]$. Assume that the owner and potential seller of a specific used car knows its quality. A potential buyer is assumed not to know the quality of a specific used car; a buyer knows only that the population of used cars has a uniform distribution of quality on the interval [0,1]. Since the average value of a random variable that is uniformly distributed on [0,x] is x/2, the average quality of the population of used cars is 1/2. Assume that there is a large number of potential buyers of used cars, each of whom is willing to pay any amount up to 3q/2 dollars for a car of quality q. Also assume that there is a large number of potential sellers, each of whom is willing to sell a car of quality q for any price that is not less than q dollars. Since potential buyers value a q-quality car at 3q/2 dollars, and potential sellers value it at q dollars, there can be mutual gains from exchange. If quality were observable by both buyers and sellers, a car of any quality q could be sold at some price between q dollars and 3q/2 dollars. But quality is not observable by buyers; they can only estimate the quality of a used car. A risk neutral buyer will be willing to pay at most $3\overline{q}/2$ dollars, where \overline{q} is the average quality of used cars offered for sale. In that case, what is the equilibrium price in the used car market? It is zero, as we shall now explain. Consider any price, $p \in [0, 1]$. At price p, owners of cars with quality less than p will offer them for sale. Hence, the average quality of cars offered for sale

43. G. Akerlof, The Market for "Lemons": Quality Uncertainty and the Market Mechanism, QUARTERLY JOURNAL OF ECONOMICS 84 (1970): 488-500.

^{42.} The point of this paragraph is in the neighborhood of a point made by Alexander, Trouble on Track Two: Incidental Regulations of Speech and Free Speech Theory, at 936–939. Alexander points out that purchasers of information typically agree to a price for an item (or body) of information before receiving the information, i.e., before they know what it will be. Our point is not only that purchasers of information do not know beforehand what messages they will receive from a source, but also that once they receive a message they still may be unable to assess its truth value correctly. They won't necessarily know whether or not it is an instance of the product-type: true speech.

will be $\overline{q} = p/2$. Thus, the *highest* price that risk-neutral buyers will be willing to pay is $3\overline{q}/2 = 3p/4$, which is less than p, the supposed market price of cars. Furthermore, risk-averse buyers would not even be willing to pay 3p/4. Thus, at any p > 0, the supply of used cars is positive and the demand is zero; hence, no p > 0 can be an equilibrium price. The only equilibrium price in this market if buyers are risk-neutral or risk-averse is p = 0, at which the equilibrium quantity exchanged is 0. Thus, in the present example, the information asymmetry causes adverse selection that is so extreme that it destroys the market.

Adverse selection can be a problem even if it does not destroy the market, as our next example illustrates. Our second model is one in which the population of used cars consists of two homogeneous types, good cars and lemons. Assume that a potential seller knows the type of a car that she owns. A potential buyer cannot observe (does not know) the type of a specific used car; he or she knows only that the proportion θ of the population of used cars is lemons and the proportion $1 - \theta$ is good cars. Let p_i^b be the highest price that a potential buyer would pay for a lemon and let p_{σ}^{b} be the highest price that a potential buyer would pay for a good car. Define p_1^s and p_2^s as the lowest prices at which a potential seller would be willing to sell a lemon or a good car. Assume that $p_i^b > p_i^s$ and $p_g^b > p_g^s$. If buyers were able to observe a car's type, then lemons could be traded at a price between p and p_l^b , and good cars could be traded at a price between p_g^b and p_g^b . When buyers cannot observe a car's type, the highest price that a risk-neutral buyer would be willing to pay for a car is $p = \theta p_1^b + (1 - \theta) p_2^b$. If $p > p_3^s$, then both types of cars can trade in a single market with risk-neutral buyers. Alternatively, if (a) $p < p_g$ or (b) $p \ge p_g$ but buyers are risk-averse, with a bid price for randomly selected used cars that is less than p_g , then no trade is possible at any price greater than or equal to p_g^{s} . 44 In that case, good cars cannot be traded; only lemons can trade, at a price between p_i^s and p_i^b . This is a Pareto-inferior outcome characterized by zero gains from exchange of good used cars.

The preceding examples are not offered as support for a (foolish) prediction that trade in used cars is impossible, or even that only lemons can be traded, but rather to make clear that information asymmetry is a problem that must be overcome in order for trade to occur. How can it be overcome? Perhaps by market "signaling." Owners of (homogeneous) good cars have an incentive to signal that their cars are not lemons, and, hence, to create the possibility of sale at a supra-lemon price. But if the good car signal is to be credible, then it must be one that lemon owners cannot afford to send. One obvious possibility is for sellers of good used cars to provide warranties to the buyers. Warranties on lemons would be more costly to sellers than warranties on good cars. Hence, a warranty can be designed that will be

^{44.} For the definition of "bid price," see J. W. Pratt, Risk Aversion in the Small and in the Large, ECONOMETRICA 32 (1964): 122–136.

profitable for good car owners to offer and unprofitable for lemon owners to offer. Thus, the adverse selection problem created by information asymmetry can be overcome. But warranties decrease the incentive that buyers have to undertake costly maintenance of their cars. Hence, the warranty "solution" to the problem of information asymmetry in the used car market substitutes moral hazard (of buyers) for adverse selection (of cars). The resulting allocation is still Pareto-inferior to that which could be attained by perfectly competitive markets if both buyers and sellers could costlessly observe the quality of used cars.

This discussion of information asymmetry nicely illustrates that unless information is (already) perfect, competition per se does not ensure optimality, which is precisely the problem for the market in ideas. If consumers (hearers) are unable to tell by other means whether speakers' messages are true or false (good messages or lemons), mere competition cannot solve the problem, at least according to anything economic analysis offers. If hearers recognize their inability to detect message quality, they will be unwilling to pay as much for messages that, in point of fact, are true as they would be prepared to pay if they could tell that they are true. They need tools of truth recognition (and confidence that those tools are reliable) prior to and independent of the market in order for the market to be optimal. Thus, competition alone does not guarantee efficiency or maximization of truth possession, as (MMTP) asserts.

IV.D. Externalities

Let us move now from the consequences of imperfect and uncertain information to the consequences of "externalities," which are also known to derail the usual theoretical conclusions about competitive markets. A producer's activities may impose costs, or nonzero utility effects, on people with whom the producer does not trade. A firm that produces air pollution, for example, imposes costs on people living near the firm in terms of ill health and grime. Polluters will not take these "external" costs into consideration when making production decisions. Firms will take into account only the private costs of production, not the costs to the whole society (the social cost). If the social cost were taken into account, less pollution would be generated. One way of dealing with externalities is intervention. For example, by requiring firms to obtain sufficient numbers of tradeable emissions permits to legalize their emissions levels, and restricting the total supply of permits, the government can prompt firms to reduce their external diseconomies in a cost-efficient way. 45

^{45.} See C. R. Plott, Externalities and Corrective Policies in Experimental Markets, ECONOMIC JOURNAL 93 (1983): 106–127, and R. Franciosi, R. M. Isaac, D. E. Pingry, and S. S. Reynolds, An Experimental Investigation of the Hahn-Noll Revenue Neutral Auction for Emissions Licenses, JOURNAL OF ENVIRONMENTAL ECONOMICS AND MANAGEMENT 24 (1993): 1–24.

Return now to our target domain, the regulation of speech, and look again at government regulation of advertising and labeling. We might consider untruthful statements as acts of "pollution," and interpret regulation of such statements as the use of government power to try to reduce such pollution. In discussions of this kind, economists frequently talk about property rights over a good being assigned to one or another party, where those rights might include conditions on the uses to which the good may be put. In the air pollution case, property rights in the air might belong to a firm, an individual, or society at large, and these property rights might be absolute or hedged in various ways. In the case of commercial advertising, one might give unconditional property rights to advertisers to put any labels they like on their products, or say anything they like about them over the public media; alternatively, one might allow advertisers only to make statements supported by scientific evidence. If advertisers are given unconditional speech rights ("nonregulation" by government), consumers will have to bear the cost of trying to ascertain whether the statements are true; otherwise, they risk falling into error if the statements are lies or deception. Restricting advertisers to messages that have been certified by scientific evidence (government "regulation") will presumably reduce the incidence of false messages and consequent error on the part of consumers.

In discussion of externalities, it is often pointed out that agents who suffer costs from negative externalities might pay or "bribe" the agents creating those externalities to reduce their level of production. In the classic example, an eyeglass firm is downwind from a charcoal firm, and the charcoal in the air from the charcoal-making firm affects the precision grinding wheels of the eyeglass firm. Why shouldn't the eyeglass firm pay the charcoal firm to reduce its emissions, thereby increasing the quantity of high-quality eyeglasses that the former firm produces? Indeed, Ronald Coase has famously argued that the possibility of payments of this sort implies that firms left on their own, without governmental interference, can arrive at the most efficient level of outputs (in this case, of charcoal and eyeglasses). 46 Each will be led by the "invisible hand" to the optimal level. Similarly, why couldn't consumers pay advertisers to reduce their level of deception ("pollution"), and thereby achieve an economically efficient level of deceptive output?

As is well known, however, Coase's analysis applies only when transaction costs are zero. In this case, by contrast, it looks fairly clear that transaction costs will be positive, and, indeed, rather high. Even if consumers can reach a bargain with advertisers to reduce the level of deception (for a certain payment), they will not be able to enforce this agreement without paying high costs of determining whether advertisers are complying with their contract or not. This will require the consumers to determine whether the messages they are receiving are indeed truthful or deceptive, and the cost

^{46.} R. H. Coase, The Problem of Social Cost, The JOURNAL OF LAW AND ECONOMICS 3 (1960): 1-44.

to them of doing this (in the absence of detailed knowledge about the manufacturing process, for example) may be prohibitive. Thus, transaction costs are likely to be very high, which vitiates the hope for economic efficiency.

IV.E. Public Goods

Another commonly discussed cause of market failure is public goods.⁴⁷ Let us define public goods in terms of two properties: nonexclusivity and nonrivalry. For most private goods, like hamburgers, people may be excluded from the benefits the goods provide. Nonexclusive goods are ones from which people may not be excluded, or not easily excluded. Once an army or navy is set up, for instance, people in the country cannot be excluded from the benefits of its protection whether they pay for it or not. Nonrival goods are goods for which benefits can be provided to additional users at zero marginal social cost. Consider one more car crossing a bridge during an off-peak period. Since the bridge is already there anyway, one more vehicle crossing it requires no additional resources.

How can public goods be responsible for market failure? In buying a public good, any one person will not be able to appropriate all of its benefits. Since others ("free riders") cannot be excluded from enjoying its benefits at no extra cost, society's potential benefits from a public good will exceed the benefits accruing to any single buyer. A single purchaser, however, will not take the potential benefits to others of the purchase into account in his or her expenditure decisions. Hence, private markets will tend to underallocate resources to public goods.⁴⁸

Now, messages in an open forum that enunciate truths are plausible examples of public goods. They have the property of nonexclusivity because anybody can listen in and enjoy their benefits. They have the property of nonrivalry because their benefits can be provided to additional listeners at zero marginal social cost. There is reason to expect, therefore, at least according to standard economic analysis, that a private market would tend to underallocate the resources necessary to the discovery and transmission of true messages. This suggests that the private market cannot be relied on, all by itself, to generate as much total truth possession as might be achieved by supplementing market mechanisms with other mechanisms.

Daniel Farber, who also stresses that speech (or "information") is a public good, uses this fact to arrive at a somewhat different conclusion from ours.⁴⁹

^{47.} See P. A. Samuelson, The Pure Theory of Public Expenditure, REVIEW OF ECONOMICS AND STATISTICS 36 (1954): 387–389.

^{48.} For a general treatment of public goods, see J. O. Ledyard, *Public Goods: A Survey of Experimental Research*, in THE HANDBOOK OF EXPERIMENTAL ECONOMICS (J. Kagel and A. Roth, eds. 1995)

^{49.} Farber, Free Speech without Romance: Public Choice and the First Amendment, supra note 31.

Farber contends that a large portion of free speech doctrine can be traced to the recognition that the market will underproduce information, creating a need to protect or "subsidize" speech. "Our polity responds to this undervaluation of information," says Farber, "by providing special constitutional protection for information-related activities. This simple insight explains a surprising amount of First Amendment doctrine." 50

Although Farber's angle on the subject differs from ours, we do not believe that his analysis gives reasons to reconsider our rejection of (MMTP). For one thing, he fundamentally concurs that the market per se is incapable of producing an adequate supply of information, which supports the rejection of (MMTP). It is true that he generally opposes government intervention into speech, but even he acknowledges (albeit briefly) that some speech consists of misinformation (a public "bad"), so that "in some instances government intervention may be warranted to prevent the dissemination of false information."51 Farber tends to overlook, however, the kind of government intervention that mandates certain kinds of speech, e.g., requiring manufacturers to place accurate information on product labels, or requiring witnesses to testify truthfully in court. This kind of regulation addresses the undersupply of information on which Farber focuses, but it runs directly counter to his main message, because it tends to rationalize government regulation rather than the restriction of government regulation.

IV.F. Is Speech a Good at All?

Although the previous discussion assumes that messages are public goods (or "bads," if false), it is really questionable whether messages are goods or products at all. This was provisionally granted at the beginning of this section, but it is time for reconsideration. Products are normally thought of as having a producer and a consumer, or a seller and a buyer. Until now we have construed speech as involving a producer/seller and a set of consumers/buyers, but, in many cases of speech, this interpretation is extremely dubious. Consider billboard advertising. Here, we have a speaker or message sender who is plausibly construed as a "producer," and a set of viewers who might be construed as consumers. Notice, however, that the viewers pay nothing for the right to view the message. It is not just that some people pay and others are free riders; rather, no viewers pay for the message (except, perhaps, by incurring the cost of environmental blight). More significantly, in the sense of message "consumption" relevant to our problem, viz., belief in the message content, there is no difference in payment between viewers who "consume" the message and those who do not. Moreover, the pro-

^{50.} Id. at 555.

^{51.} Id. at 560.

ducer/seller of the message does not get paid for it, even by those who "consume" it. True, people who believe the message are more likely to buy the advertised item, the cost of which will partially reflect the cost of advertising. But people can believe (and therefore "consume") a commercial message without buying the advertised item. It may be too expensive for them, of no interest to them, or less desirable than another brand despite what the new information reveals. Not only does the producer receive no payment for his message, but he or she actually pays to transmit it. So the message does not seem to display the properties of a classical good at all, since the producer is not paid for "exchanging" or "trading" the message to the consumer. In fact, there seems to be no "exchange" or "trade" at all.

If messages are not goods or products at all, then there is no market in messages. But if there is no market in messages, then (MMTP) seems to lack even surface plausibility. How can market mechanisms concerning speech maximize truth possession if speech, or speech messages, involve no market mechanisms?

One might try to save (MMTP) by distinguishing between messages and another class of items in the speech domain, namely, speech opportunities. Even if messages are not products, it is plausible to hold that speech opportunities are products, and that there is a market for them. Owners of communication forums, such as billboards, radio and television stations, newspapers, and magazines, all sell space or time for commercial and political speech. Prospective speakers pay for these opportunities to display or air their messages. Moreover, speech opportunities are private goods by the criterion of exclusivity, since a would-be speaker can be excluded from the benefit of using the advertising space or time allotted to another speaker. So speech opportunities are goods, and there is definitely a market for them, whether or not messages are goods and there is a market for them.

However, is the speech opportunity market an optimal institution in terms of aggregate truth possession, as would be required to salvage (MMTP)? Do market mechanisms concerning speech opportunities provide the "best test," or best testing ground, of truth? This is highly dubious. As noted in section II, many critics of the market have pointed to "discourse inequalities," especially unequal resources among prospective speakers for the purchase of speech opportunities. Many messages that some speakers would like to transmit over the public media may not get transmitted at all because of the expense; or, even if they are transmitted, they may be repeated less often and packaged less persuasively than other messages.⁵² It is therefore doubtful that the market for speech opportunities is an optimal promoter of truth. This is precisely why marketplace "reformers" support more regulation of the speech market rather than less. What they really seek is more regulation

^{52.} Of course, there may be other constraints on speech opportunities in addition to cost. Positions of power and influence, for example, can affect speech opportunities, especially when the latter are not sold on the open market but allocated in some other fashion.

of the speech *opportunity* market, for example, by requiring broadcasters to give free air time to political candidates. It is unclear how economic theory implies that such government regulation would not increase the aggregate amount of truth possession.

IV.G. A Game-Theoretic Approach to Competition and Truth-Revelation

Economists Paul Milgrom and John Roberts have developed a game-theoretic analysis of certain speech situations that they regard as supportive of the marketplace model of truth promotion. Milgrom and Roberts do not examine (MMTP), but they do analyze the similar proposition that competition among interested parties attempting to influence a decision maker can elicit "truth" or, more precisely, all of the relevant information that is known to the interested parties.⁵³ They analyze the case in which interested parties can withhold information, but the truth of the information that they do provide can always be ascertained by the decision maker.

Milgrom and Roberts construct models of strategic behavior in which one or many interested parties present information to a decision maker who has no other source of information. Two of their propositions, concerned with the effects of competition among interested parties, are relevant to our discussion. Milgrom and Roberts' Proposition 4 shows that, when all of the interested parties are fully informed and able to report all of their information, and the full information decision is "strictly" Pareto-optimal for them, then competition in suggesting decisions and providing information can make it possible for an unsophisticated and (a priori) uninformed decision maker to make an informed decision.⁵⁴ This proposition provides sufficient conditions for a "naive automaton" decision maker to make a decision based on the true information state.

In their Proposition 5, Milgrom and Roberts introduce a special structure to the information state space. They also relax the assumption that the interested parties can report all of their information, but assume that the decision maker is "sophisticated" rather than a "naive automaton." A sophisticated decision maker is one who adopts a skeptical strategy of forming pessimistic expectations about every decision alternative suggested by an interested party. This is effective when at least one interested party favors the full information decision over all alternative decisions, because such a party will have an incentive to report information that supports the full information decision.

^{53.} Milgrom and Roberts, Relying on the Information of Interested Parties, supra note 33.

^{54.} We use the term "strictly" Pareto-optimal to denote Milgrom and Roberts' assumption that the full information decision is Pareto-optimal and no other decision is Pareto-indifferent to the full information decision.

Milgrom and Roberts' Proposition 5 applies to the case in which the interested parties cannot verifiably report their preferences. Instead, the interested parties are limited to requesting (one or more) decision alternatives, stating sets of relevant (decision-evaluation) attributes, and reporting information about the standing of their requested decision alternatives on each reported attribute. The reports about the attribute standing of decision alternatives are assumed to be verifiable by the decision maker. Proposition 5 states that if there is no decision, d, and set of initial conditions, w, such that d is weakly preferred to the full information decision at w by all interested parties, then there exists a sequential equilibrium at which the decision maker adopts a sophisticated, skeptical strategy. At every such equilibrium, the decision reached is the full information decision. The existence of such sequential equilibria is supported by having each interested party suggest the full-information decision, report the full-attribute set, and provide accurate information about the suggested decision. The characterization of all equilibria involving the skeptical strategy follows from noting that once the skeptical strategy is adopted, the argument of Proposition 4 applies.

Milgrom and Roberts' propositions do not provide support for (MMTP) for two reasons. First, they assume that the "decision maker" will implement a Pareto-optimal decision and that the full information decision is "strictly" Pareto-optimal. This is an indirect way of assuming that the decision maker places high value on truth and therefore assumes away the difficulty with (MMTP) that we explained in subsection IV.B. above concerned with the role of preferences. The second limitation on the implications of Milgrom and Roberts' propositions comes from their assumption that the decision maker can (costlessly) verify the truthfulness of all assertions by the interested parties. This assumption is not as restrictive as the perfect information assumption of the model of perfect competition, examined in our subsection IV.C., but it limits the domain of application of Milgrom and Roberts' propositions to an information-verification condition that is not a consequence of the market.

V. THE FREE MARKET, ADVERSARIAL DISCOURSE, AND TRUTH

The image of a marketplace of ideas is often confused with another image, that of an adversarial system of discourse. In the latter image, parties on all sides of a dispute engage in critical debate and mutual cross-examination. In Anglo-American law, this sort of adversary system is enshrined as the best method for getting the truth. Perhaps this is what some defenders of the marketplace metaphor are thinking of when they praise the market as the best means to truth; they are really thinking of an adversarial proceeding. We agree that an adversarial proceeding, at least a properly constrained

adversarial proceeding, has many virtues as a method of truth acquisition, but the ordinary marketplace does not constitute, and does not guarantee, any such proceeding. In this final section, we highlight a few differences between the two by contrasting a constrained adversarial system, e.g., the American legal system, with a free market in speech.

Our example of legal proceedings might strike some as surprising, since legal judgments are not the obvious venue to expect to find the highest ratio of truth over error. However, the legal system faces the most extreme obstacles to truth revelation, since parties have the strongest possible motives to deceive, misrepresent, conceal evidence, and so forth. A system that performs even tolerably well under these adverse circumstances may be quite a good system indeed. Moreover, we are by no means suggesting that all features of the present legal system are optimal in truth-promoting terms, only that certain features of it seem to be superior to market mechanisms. This is further evidence of the nonoptimality of market mechanisms.⁵⁵

The following differences strike us as significant. First, as previously noted, the best forums or channels in the marketplace for reaching and influencing the largest audience are very expensive and/or difficult to penetrate. Given inequalities of resources, not all speakers have equal access to these forums, or indeed any access at all if they lack requisite resources. In the legal setting, at least in the criminal law, such disparities are somewhat mitigated by the system. A defendant is entitled to court-appointed counsel and allotted opportunities to rebut the case against him or her. Obviously, this does not place indigent defendants in the same position as an O. J. Simpson, but it may at least be better in truth-promoting terms than the raw economic marketplace.

A second difference between legal proceedings and speech in the marketplace is the presence of an evidential and argumentative "structure" or "discipline" in the former that is absent from the latter. Judges allow attorneys to present only relevant evidence (or what they deem relevant, at any rate), whereas speakers in the marketplace may present any kind of evidence or rhetoric that suits their fancy. Courts require parties to authenticate their evidence, another constraint standardly missing in the marketplace. Further, in ferreting out evidence from a witness, a judge may direct a witness to answer certain questions, on pain of being cited for contempt. A structured presentation of authenticated and relevant evidence by both sides may better enable an audience to sift truth from falsehood than the undisciplined, disordered, and unauthenticated array of messages hearers

^{55.} Of course, it would be misleading to suggest that the legal adversary system is wholly distinct from an economic system. Obviously, parties to legal disputes hire their attorneys, and the economic resources at their command can make a significant difference to the level of skill and the amount of time their advocates devote to their case. Nonetheless, there are important points of contrast between the judicial adversary system and the ordinary economic market-place for speech.

are likely to encounter in the marketplace. Similarly, courts try to preclude the audience from getting messages that are "prejudicial" or "misleading," whereas the marketplace is filled with messages of precisely this character. For this reason, too, the marketplace may be more of a breeding ground for false belief.

Another example of a constrained adversarial system is that of the scientific journal. Here, scientific adversaries are allowed to debate the scientific merits of their favored theories, but subject to constraints of carefully obtained empirical evidence and rigorous argumentation. Admittedly, section III considered the possibility that scientific journals are themselves products of market mechanisms. But now, it is appropriate to point out that although scientific publication procedures may be selected by market forces (given the desires, tastes, or preferences of scientists), these procedures are not themselves examples of market mechanisms. So the contrast being drawn here is legitimate.

Third, there is the matter of balancing the audience's receipt of rival messages. In the marketplace, nothing guarantees, or even makes it likely, that hearers will pay attention to messages on all sides of the issue. To the contrary, people are commonly disposed to attend rallies, listen to broadcasts, and read articles that support only the side of an issue they antecedently favor. Even if rival positions are represented in the media, people's reading, listening, and evidence-gathering habits may be highly partisan or "confirmation biased," i.e., biased in the direction of their preexisting views. In the courtroom, by contrast, jurors are required at least to listen to the evidence and the debate on both sides of the dispute. This feature may also contribute toward greater truth promotion in the legal context. Of course, nothing in the legal system ensures that jurors will listen with equal sympathy to both sides of a dispute, nor even deliberate extensively on the evidence presented. But nothing in the market framework encourages such activities either.

It is not at all our contention that the current American legal system is an optimal truth-revealing device.⁵⁶ We are merely identifying some significant contrasts between constrained adversarial systems and the ordinary

^{56.} For example, defects in the jury selection system may skew judicial results away from truth; and defects in the discovery system may fail to uncover crucial pieces of evidence. (On the latter topic, see W. Talbott and A. Goldman, "Games Lawyers Play: Legal Discovery and Social Epistemology," in preparation.) There are many complexities and incomparabilities here that cannot be examined. For instance, nothing in the open market for ideas is analogous to a jury, where a set of decision makers or "believers" is selected to represent the system or institution. There is also a problem of relating verdicts with beliefs of jurors. Voting for a verdict is an action, which may be inspired by many things other than an opinion about the substantive matter in dispute. So it cannot be assumed that a factually false verdict reflects false opinions of jurors. They might vote a certain way to "send a message" of some sort, or to engage in jury nullification. Thus, however difficult it is to determine which verdicts are true or false, it is even more difficult to determine whether jurors had true or false beliefs, which is our official topic here. This is further complicated by the "beyond reasonable doubt" standard for guilt in the criminal law.

market for speech, contrasts that disclose relative weaknesses in the latter system. Does this mean that regulative mechanisms analogous to those in the courtroom should be imposed systematically on the public arena? Even if this were feasible, which it isn't, we would not propose it. Although such mechanisms might increase levels of truth acquisition, they would also entail sacrifices of other values. Truth possession is just one value among many. Our concentration on the truth-conducive properties of various systems does not mean that we regard true belief as the preeminent value; considerations of truth possession can certainly be trumped by other values, as indicated earlier. We have focused on truth possession because that is what the truth rationale invokes.

In this final section, we have augmented our brief against (MMTP) by distinguishing the market framework from another type of framework with which it is sometimes confused and by indicating the comparative deficiencies of the market framework. When these deficiencies are combined with a recognition that economic analysis lends no theoretical support to (MMTP), any hope for salvaging (MMTP) must finally be abandoned.