When Truth Doesn't Win in the Marketplace of Ideas: Entrapping Schemas, Gore, and the Internet

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Let [Truth] and Falsehood grapple; who ever knew Truth put to the worse in a free and open encounter?

John Milton, Areopagitica

Western political philosophy has long been optimistic about the competitive advantages of truth. In 1644 John Milton published the Areopagitica, appealing to Parliament to eliminate governmental censorship. His metaphor of Truth winning a "free and open" wrestling match with Falsehood has resonated during the next 350 years of political discourse.

Indeed, the belief in truth's competitive advantages has spurred the development of the law of free speech. Of all the arguments that have been used to justify free speech, the "predominant and most persevering" is that it is valuable "because it leads to the discovery of truth" (Schauer, 1982, p. 15). Since Oliver Wendell Holmes' famous opinion in Abrams, "The best test of truth is the power of the thought to get itself accepted in the competition of the market" (Holmes, Abrams v. United States, 1919), the "marketplace image is both historically and doctrinally at the heart of modern First Amendment philosophy" (Weinberg, 1993, n164-165). Indeed, it "dominates First Amendment thinking both rhetorically and conceptually" (Baker, 1989, p. 12).

Belief in the competitive advantages of truth arises more from confidence in the competitive marketplace of ideas than faith in the rational capacities of individuals. Milton was an optimist, but political theorists such as John Stuart Mill had a healthy appreciation for the fallibility of individuals, as have most legal scholars in the free speech tradition. They were aware that con artists of all kinds want to spread false claims and that some gullible people might believe them. But they also thought that when beliefs competed in a free marketplace of ideas, the most accurate ones would be more likely to survive.

Even if many marketplaces of ideas are insufficiently competitive for a truth-seeking mechanism to operate, some situations may generate ample competition. In politics, elections are a natural domain for claims about truth's competitive advantages. Of course, candidates have ample incentives to distort the facts---e.g., to disparage rivals. But strategic forces could also lead to self-correction: maligned candidates will want to correct misimpressions, and voters are not fools. This form of the "marketplace of ideas" finds modern expression in certain rational models of campaigns. Citizens may be uninformed---rationally so (Downs 1957)---but ignorance isn't stupidity. Voters understand the game: it is easy to grasp that political rivals might have incentives to slander each other. And so, being good Bayesians as well as good

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game theorists, voters will disregard much of what politicians say in campaigns, relying instead on more credible sources of information (Lupia 1994; Lupia and McCubbins 1998).

Nowhere are the stakes higher and the incentives more intense, for both candidates and voters, than in presidential elections. Because this context is so competitive, documenting failures in the marketplace of ideas in a presidential campaign would provide an interesting boundary condition on the marketplace metaphor. Accordingly, in this paper we try to provide precisely such evidence--and in the closest, most contested presidential election in American history: the race of 2000. Of 150.3 million votes, the final margin was under 338,000 (Harwood, 2000; Newsweek, December 25, 2000). Although Al Gore won the popular vote, George Bush won the Electoral College, 271 to 266 (Harwood, 2000). The electoral outcome famously hinged on Florida, with 25 electoral votes up for grabs. Several court cases and a Supreme Court Opinion later, Governor Bush won Florida and the presidency.

To investigate how the marketplace of ideas functioned in this highly competitive setting, we study an example where Al Gore was falsely attributed with saying that he "invented the internet." We show that the false version of Gore's statement dominated the true one in mainstream political discourse by a wide margin. This is a clear failure in the marketplace of ideas, which we document in detail. At a theoretical level, this failure can be understood through research that suggests that the marketplace of ideas often favors surprising or emotional ideas, even if they are false.

Interestingly, however, the story does not end there. This first failure fed a second electorally significant event. Though this second event is harder to categorize unambiguously as a "failure," it too points to limitations in the marketplace metaphor. In many competitive situations, even highly emotional ideas might easily be countered. However, in the last election, the internet story triggered a broader schema about Gore that turned into his most serious negative character issue. Remarkably, Al Gore---once considered one of the most straight-laced of politicians---faced at the election's end widespread concerns about his loose command of the truth. Our evidence for this second "failure" is less direct than that for the first failure because it is inherently more complex. In assessing this failure, we present evidence that the "liar" schema, once evoked, induced people to interpret new data in a way that reconfirmed it. We describe how the liar schema illustrates a more general set of schemas that can persist in the marketplace of ideas because they are "entrapping"--they are easy to confirm and hard to falsify because the opportunities to confirm are more frequent, the threshold for confirming evidence is low, and their formulation enables ambiguous evidence to be interpreted as confirmatory. Negative attributions are generally more entrapping than positive, so entrapping schemas may have implications for the prevalence of negative campaign tactics and for the robustness of trust in democratic institutions (e.g. the Presidency) in the face of violations (e.g., Watergate).

The plan of the paper is as follows: We first present theoretical background that provides criteria for effective competition in the marketplace of ideas---i.e., to identify domains that provide a favorable chance for competition to produce truth---and argue that presidential elections satisfy these rigorous criteria.

In our empirical work, we first describe evidence indicating that the truth about Gore and the internet did not win out in the electoral marketplace. We review the history of Gore's role in the

internet and his initial claims about his role. Using a content analysis of the top 50 newspapers in the United States (and a smaller content analysis of web pages on the Net) we show that people more often quoted Gore as saying he "invented" the internet than what he actually said (i.e., he "took the initiative in creating" the internet). Of course, these two quotes may have almost the same meaning. To show otherwise, we report a study of English-speaking university students (unfamiliar with the Gore-internet events) from France, Singapore, and Hong Kong. This study suggests that the more common incorrect quote is substantially more likely to lead someone to believe that Gore lied. Next, we present evidence that the internet event triggered a schema of Gore as a liar, and we argue that the liar schema has properties that can make it "entrapping." We demonstrate that once Gore was falsely labeled as a liar, overcoming the false label became very difficult.

Combined, our results suggest that truth does not always win out in the marketplace of ideas, even when the marketplace is highly competitive.

The marketplace metaphor—requirements for competition

Even if we believe that the marketplace of ideas can be self-correcting, we also recognize that patent falsehoods can be found in a free society. Hence, we might add a "competition criteria" to our general view of the marketplace of ideas—holding that the "marketplace" will produce truth only when there is active competition over claims. This criterion recognizes that there are flaws in the most general analogy between the marketplace for ideas and for other economic goods. The marketplace of ideas lacks a pricing mechanism to induce people to work diligently and cleverly to promote their views, so it is likely to promote truth only under certain conditions.

Below we use the legal and philosophical literature on free speech--which has taken the truth-seeking functions of the marketplace of ideas most seriously --to derive five principles of effective competition.

Competing ideas. The most basic requirement is simple: there must be alternative ideas that compete. Frederick Shauer, in a prominent book on the philosophical underpinnings of free speech, says, "The process of advancing knowledge by offering and evaluating challenges and alternate hypotheses depends in part for its effectiveness on the number and variety of such challenges" (Schauer, 1981, p. 27). In his argument against censorship, John Milton claimed that truth is healthier when it competes against other ideas: "I cannot praise a fugitive and cloistered virtue, unexercised and unbreathed, that never sallies out and sees her adversary but slinks out of the race." Since Milton, the desire for competing ideas has been central to arguments against a priori restraining the press, for such controls may prevent competing ideas from entering the marketplace. Thus historically it has been deemed more important to protect the printed word from prior restraint than to prevent punishment after publication of the idea. In the latter case "at least the public has been given an opportunity to hear and judge the communication" (Barron & Dienes, 1999, p. 347).

In *On Liberty* Mill held that truth is aided when even false ideas can compete. If people do not confront false opinions, they will not know why true opinions are true, and the truth will turn

into “dead dogma” rather than “living truth” that can survive new attacks. This principle is embodied in modern defamation law, which sets low thresholds for allowing information, *even potentially false information,* into the marketplace of ideas. To win a suit for defamation, information must not only be false, it must be spread in a knowingly malicious manner. This low threshold is designed to avoid the “chilling effect” from setting the burden of accuracy too high: otherwise, people might censor themselves and competing ideas would be stillborn (Schauer, 1981, p. 170). Although the threshold is generally low, it is set especially low for speech about public issues and figures because the public domain is so important that all ideas must be allowed to compete.

The doctrine of counterspeech holds that bad speech is remedied by more speech (see Brandeis’ opinion in Whitney v. California 274 U.S. 377). “Governments do not need to worry about limiting seemingly dangerous speech because ‘Good [counsels]’ are a ‘remedy’ for ‘evil counsels’… The suggestion is that "more speech" can accomplish practically everything that suppression could accomplish” (Strauss, 1991).

Motivated advocates. Most descriptions of a competitive marketplace of ideas also feature motivated advocates who will eagerly promote and defend their ideas. Although allowing motivated advocates is generally desired, free speech law is mixed on this issue because achieving this goal may hinder other goals such as individual autonomy. For example, the Court has resisted limiting spending for political campaigns because imposing a more equal voice in the marketplace of ideas would force the government to curtail the speech of some advocates. Nonetheless, when other factors are roughly constant, free speech law has tended to favor vigorous competition among motivated advocates. In Brennan’s words, "Our legal system reflects a belief that truth is best illuminated by a collision of genuine advocates." CBS v. DNC, 412 U.S. at 184 (Cole, 1986, n190)

This idea has a long tradition in political thought. In On Liberty, Mill illustrated the value of conflict between motivated advocates by referencing an institutionalized adversarial system: “the Roman Catholic Church, even at the canonization of a saint, admits, and listens patiently to, a ‘devil's advocate’. The holiest of men cannot be admitted to posthumous honors until all that the devil could say against him is known and weighed.” In the U.S., Federalists like Alexander Hamilton thought that discussion in a heterogeneous republic would be enlightening because “the jarring of parties” will “often promote deliberation” (Sunstein, 1992, n177).

A prominent First Amendment scholar of the first half of the 20th century, Zecheriah Chafee, pictured the ideal marketplace of ideas as relying on the adversarial system used in courts. Just as courts “use the adversary system to determine the facts… so society should enshrine the adversary system as a method of determining truth in any field of enquiry” (Schauer, 1982, p. 16).

Access to a forum. Advocates cannot compete in the marketplace of ideas if they lack a forum for their ideas. Here too the courts have tread lightly because using state power to provide a forum for an “excluded” individual might tempt the state into favoring certain ideas or advocates. Again, however, the courts have tended to maintain that advocates deserve a forum. For example, since the 1940s the FCC’s “fairness doctrine” requires that broadcasters provide time—free of charge, if necessary—to allow advocates "a reasonable opportunity to respond"

when "during the broadcaster's presentation of views on a controversial issue of public importance, an attack is made on the honesty, character, integrity or like personal qualities of an identified person or group." This doctrine was challenged in a famous case, but the Supreme Court upheld it, saying "the purpose of the First Amendment [is] to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail, rather than to countenance monopolization of that market" (Red Lion Broadcasting Co. v. FCC, 395 U.S. 390 (1969)).

Private citizens can win defamation suits more easily because when they are defamed they rarely have a forum to rebut the charges; lacking meaningful "access to the channels of effective communication", they may have no "realistic opportunity to counteract false statements." Gertz v. Robert Welch, Inc., 418 U.S. 323, 344 (1974). But when advocates already have a forum, the courts resist intervention. The Supreme Court has held that "the first remedy of any victim of defamation is self-help - using available opportunities to contradict the lie or correct the error and thereby to minimize its adverse impact on reputation" (Gertz v. Robert Welch, Inc., 418 U.S. 323, 344 (1974)). Public figures--even celebrities without explicit political roles--find it especially difficult to win defamation lawsuits at least in part because their public standing gives them a forum to rebut false charges (Posner, 1992, Economic Analysis of Law, p. 669; Weinberg, 1993, n202).

Deliberation not passion. Historically, certain types of speech were not protected because they can inflict immediate injury or incite an immediate breach of the peace: lewd, obscene, or profane speech, libelous or insulting speech, and "fighting words" (Ingber, 1984, n155). Courts have regulated such speech because they tend to trigger emotional reactions instead of fostering deliberative thought. Although the law protects profane and libelous speech more than it once did, fighting words remain outside constitutional protection. Schauer (1981) notes that "Because the process of rational thinking is the foundation of the [marketplace] theory, the theory weakens or dissolves when the process does not obtain… When, because of emergency, passion, or anger, there is no opportunity to reflect and no opportunity for counter-argument, there is no reason to rely on the argument from truth" (p. 30).

Time frame sufficient for deliberation. Establishing an appropriate time frame for the emergence of truth in a competitive marketplace of ideas is difficult. The key question is, How long is the long run? Some have answered, quite long. Mill noted that one age's key truths may be the falsehoods of the next, but his time frame would make it hard to test the truth-seeking properties of a competitive marketplace. Luckily for our empirical purposes, free speech doctrine has assumed that competitive forces are effective outside the extremely short run: as long as competing ideas can be aired. Incitement to riot or crying fire in a crowded theater are not protected forms of speech because they short-circuit deliberation. Apart from such emergencies, however, the marketplace should operate: "no danger flowing from speech can be deemed clear and present, unless the incidence of the evil apprehended is so imminent that it may befall before there is opportunity for full discussion. If there be time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education, the remedy to be applied is more speech, not enforced silence. Only an emergency can justify repression" (274 U.S. 377).

Applications of these competition criteria

Of course, the marketplace metaphor has been repeatedly questioned. Many scholars have noted that we lack an adequate theory of the marketplace of ideas, hence it is premature or even misleading to discuss market failures (e.g., Strauss, 1991, n44-45; Coase's proceedings?; Ingber, 1984). Some have argued that, though the Court often uses the marketplace metaphor, it has not consistently acted as though the system is a true market (Bush, 2000; Post, 2000).

Yet, even critics of the marketplace metaphor typically reinforce the principles of competition we outlined above, by arguing that the law has sometimes failed to produce effective competition along one or more dimensions. For example, critics often suggest that important participants do not have access to a forum in the marketplace so motivated advocates cannot compete (e.g., Ingber, 1984; Fiss, 1986; Weinberg, 1993; and Richards & Calvert, 2000, for a summary) or that the emotional character of public response may violate rationality criteria (Sunstein & Kuran?; Ingber, 1984, n15).

Note that if we accept these competition criteria, we have dramatically shrunk the domain where we predict the market to produce truth. Most issues don't come close to meeting these criteria. Most people have heard the New Age urban legend that "we only use 10% of our brain," and this falsehood may persist because of a dearth of competing ideas (no one is arguing that it's really 5% or 43%) or competing advocates (neuroscientists are rarely motivated to step into the fray). Urban legends may succeed because they evoke strong passions that undermine rational deliberation. Yet the popularity of such falsehoods doesn't disconfirm the weaker version of the "marketplace of ideas" because we can assume that truth will out in domains that are *sufficiently* competitive.

Indeed, although the domain for effective competition may be small, it might be exceptionally important. In the law, the public sphere in general and elections in particular are regarded as so important that they are almost always given special status: e.g., discussions of public issues and public officials enjoy great leeway under defamation law. "Here the loss of truth is most serious, and this can be avoided only by sacrificing some number of individual reputations" (Schauer, 1981, p. 173). Thus, marketplace theory should be especially concerned about finding violations of the truth-seeking function of markets in elections.

Furthermore, elections, particularly presidential ones, meet most of the key requirements (described above) for an effective marketplace. Regarding Gore's comments about the internet, there are competing ideas (the various accounts of what he said), stressed by motivated advocates (whose motivations are unusually fervent given the prize at stake), who have easy access to a forum (presidential candidates are the most public of figures), without strong passions (although surprise and humor helped the winning idea, these emotions pale next to the passions evoked by fighting words) over a time period that allowed for ample discussion (18 months from the date of Gore's original faux pas). Finding that truth is not produced even under these favorable conditions might induce us to lower our estimates about how much will be generated when the competition criteria do not hold so well.

We strongly agree with the idea that competition can help correct false beliefs. But we also believe that the theory goes too far. These processes have some very rough edges, in both elections and markets. And some of these rough edges involve <u>systematic</u> biases, not random errors. We suggest that a hardheaded look at how voters <u>process</u> information---not merely

whether they are often uninformed (that issue is settled; cf. Kinder 1999) but how they think about the information they have---will suggest that intensely competitive processes can exhibit failures that are both systematic and consequential. That is, highly competitive races can harbor false beliefs that (a) go uncorrected for an entire campaign and (b) affect the electoral outcome. Thus, by a pragmatic criterion, of a kind that has mattered to adherents of the marketplace-of-ideas metaphor, these are significant distortions.[2]

The heart of our argument is simple: voters are not stupid, but distortions in the marketplace of ideas can be quite subtle and individual citizens may find it difficult to correct for them. To understand the marketplace of ideas, people must comprehend aggregate properties of a large, complex system. This system has many players, some have opaque motives, and they interact in complicated ways. People naturally have trouble understanding such complex systems (Simon, 1947). In contrast, some game theory modules are more straightforward. When we witness an electoral attack ad, it is clear (at least in principle) how rational citizens should discount its claims: there are only a handful of players (mainly the Republican and Democratic candidates), each with obvious motivations. Whether many voters in practice satisfy the demanding standards of rational inference-making even in such relatively straightforward game-theoretic situations is unclear (*add cite to Shiv paper*). But in the marketplace of ideas it is much harder to identify all the relevant actors, ascertain their incentives, and understand the complex web or interactions, so discounting appropriately in such contexts is much more difficult.

How well voters make inferences is, of course, a tremendously important issue both for democratic theory and for democratic systems. It is therefore worth emphasizing that we are not asserting that voters are dumb. There is a huge terrain between stupidity and perfect Bayesian information processing. Few voters are professionals in politics, and there is ample evidence that amateurs do not think like experts (Chi, Glaser and Farr 1988; Ericsson 1999; Simon and Chase 1973). It is not just that the latter have much information than the former; they also organize, store and retrieve information differently.[3] And amateurs can believe claims that, were they operating under strict scientific norms, they would reject. Finally, and relatedly, this does not entail an invidious distinction between a sophisticated elite and the great unwashed. The modern view of expertise is that it is domain specific (Simon 19xx). High-quality reasoning is effortful; few people do it at home.[4] So every expert is an amateur in most aspects of life. Even if

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[2] We hasten to add that we agree with Churchill's evaluation of democracy, compared to all other alternatives. What we are critiquing are claims about absolute levels of systemic performance.

[3] The modern view of expertise is that high-quality reasoning is domain specific. This kind of thinking is effortful and hard to sustain; few people do it at home. So every expert is an amateur in most aspects of life.

[4] And when they try to, they can encounter interpersonal problems as well as cognitive ones (cf. Garfinkle 19xx).

astronomers or biochemists are experts in some kinds of complex systems, they are likely to reason as amateurs when confronting a complex system---such as the marketplace of ideas---outside their specialty.

In short, the marketplace of ideas is a complex system, and few citizens specialize in studying it. We therefore expect inferential errors---consequential ones--- to occur more often than the advocates of the marketplace metaphor have suggested.

Gore and the Internet

Gore didn't say he "invented the internet;" his actual claim was somewhat more reserved. On March 11, 1999, Gore was interviewed by Wolf Blitzer of CNN, and Blitzer asked Gore why voters should favor him over Bill Bradley, his opponent in the Democratic primaries. Gore replied with a paragraph-long description of differences. As part of this reply, Gore said, "During my service in the United States Congress, I took the initiative in creating the Internet." Blitzer, a long-time Washington reporter, ignored this statement and did not return to it later in the interview.

Republicans, however, jumped on it. The next day House Majority Leader Dick Armey of Texas replied, "If the vice president created the Internet, then I created the interstate highway system." (Mittelstadt, March 12, 1999). Three days later, Republican Senate Majority Leader Trent Lott of Mississippi quipped that "During my service in the United States Congress, I took the initiative in creating the paper clip." Lott also provided some early design sketches for the paper clip "including the straight-line and a V-shaped model" (Washington Post, March 14, 1999). Dan Quayle's quip was, perhaps, the best: "If Gore invented the Internet, I invented spell-check" (Sandalow, March 16, 1999).

How egregious was Gore's initial claim to have taken "the initiative in creating the internet"? According to many observers, Gore did, in fact, play a seminal role in creating the internet. Robert Kahn and Vinton Cerf developed one of the key innovations of the networked world: the TCP/IP protocol that allows data to be sent between computers with incompatible operating systems. Late in the election cycle, these two scientists wrote a memo that gave Gore substantial credit: "We would like to acknowledge VP Gore's contributions as a congressman, senator and as vice president," they said, "No other elected official, to our knowledge, has made a greater contribution over a longer period of time."(Thompson, October 15, 2000). Kahn noted that Gore raised public awareness of the potential of computer networks just by coining the term "information superhighway" in the late 1980s (Raasch, March 19, 1999). This term was Gore's way of carrying on family tradition: his father had sponsored the legislation that funded the interstate highway system (Hughes, April 16, 1999).

In 1986, then-Senator Gore introduced the Supercomputer Network Act, which called for networking the computers of universities and federal research labs. In 1988he introduced the High-Performance Computer Act that paved the way for universities, colleges, and libraries to gain widespread access to the Internet, which was still restricted to very few users. Although neither law passed in its initial form, a version of the High-Performance Computer Act became

law in 1991 (Chandler, October 17, 2000; Coopersmith, October 26, 2000). In advocating this bill, Gore envisioned a network that would "provide for teleconferencing, link your computer to millions of computers around the country, give you access to huge digital libraries of information and deliver service we cannot yet imagine" (Coopersmith, October 26, 2000). In 1990, Gore described the value of such a network to "the little girl in Tennessee who would be able to reach the Library of Congress and look up dinosaurs." An employee of the Congressional Office of Technology Assessment said that at the time even academics in computer science might have rejected this vision (Hughes, April 16, 1999).

Historically, government networks like Arpanet were legally prohibited from being used for any commercial purpose. In 1991 Gore's High Performance Computer Act lifted that ban. The law funded a network backbone called NSFnet, which served as a higher-speed replacement for the old Defense Department Arpanet (Chandler, October 17, 2000). The law also provided for NSFnet to be gradually turned over to commercial use (Hughes, April 16, 1999). By opening the traditional government network, Gore's legislation opened the way for the Internet's explosive growth.

Even Gore's political opponents give him credit for the Internet. Newt Gingrich, the fiercely partisan speaker of the House of Representatives during Gore's years in Congress, said. "Gore is the person who, in the Congress, most systematically worked to make sure that we got to an Internet."" (Gerstenzang, September 22, 2000).

So, as long as Gore was referring to his role as a politician and not to his hands-on engineering skills, his claim that he "took the initiative in creating the internet" was defensible. However, this is not how Gore's statement was presented to most audiences. Within two days, he was being misquoted as having said he "invented" the internet (Kamen, March 15, 1999), and, as we will show later, within three months the false attribution that he said he "invented" the internet was more prominent than his real statement.

How much did Gore exaggerate?

When people form opinions of Gore's claim about the internet, the way he was quoted probably matters. In his original statement, by claiming that he "took the initiative in creating," he hedged by claiming "initiative." This hedged claim is likely to appear less grandiose than claiming to have either "created" or "invented" without the qualifier. However, the two solo verbs also probably differ. The word "invented" implies hands-on activity (invent: "to originate as a product of one's own contrivance: *to invent a machine*" from Webster's New Universal Dictionary) whereas "create" is much more abstract ("to cause to come into being") and because it is more general, may seem less grandiose.

Establishing more precisely how naïve observers might view a politician who made these claims is difficult because people in the United States have already formed opinions on these issues: after the last election, U.S. residents have views of Gore and his character and are unlikely to be able to hear his words as they would have when they were first uttered. Thus, we tried to find speakers of English who could interpret the semantic differences between these claims without having pre-existing opinions about the political situation where the claims arose.

To do this, we surveyed students attending non-U.S. universities where instruction is primarily in English, and we presented them with the following scenario:

> Mr. T is an elected representative in the national government of Kenya. Over the last few years, the telecommunications network in Kenya improved dramatically. The current network developed from an older government network (built when Mr. T was young) that was primarily used by government employees. At the time Mr. T started talking about the telecommunications network, few other government officials were thinking about it. Mr. T worked to explain to people why a larger network would be good. He also proposed legislation to expand the old network and open it to people outside the government.
>
> In the last few years, the telecommunications network improved a lot, because business organizations expanded the old government network and increased its size and capacity. Thousands of engineers improved the network and made it useful to a large number of people.
>
> Recently there was an election where Mr. T was campaigning for a higher government office. He was interviewed by a reporter who asked how he differed from his opponent in the election. According to the newspaper, Mr. T said as part of his answer, "During my service in the legislature,
>
> [I took the initiative in creating the modern telecommunications network."]
>
> [I created the modern telecommunications network."]
>
> [I invented the modern telecommunications network."]

We created three different experimental conditions of the questionnaire, each containing one of the phrases in brackets. In each condition, after reading the scenario, participants answered three yes/no questions: (1) Did Mr. T tell the truth when he said this? (2) Did Mr. T exaggerate how much he was responsible for the modern telecommunications network? (3) Would you vote for Mr. T?

Participants. Through faculty contacts, we surveyed students at three international universities where primary instruction is in English: in Hong Kong (N = 97), France (N = 64) and Singapore (N = 45). To ensure that these subjects were not biased by their knowledge of the American election, we asked them at the end of the survey whether the scenario reminded them of "any real world situation." On the basis of this question we dropped 3 participants in Hong Kong and 4 in France who said that the scenario reminded them of "Gore"; "the recent US election", etc.

Results (Table 1). Consider first the overall pattern. Although most participants thought that Mr. T exaggerated his role in the telecommunications network, they were also willing to vote for him. This may indicate that people typically assume that politicians overstate their achievements. Indeed, the expressed intention to vote for Mr. T is high overall and does not differ significantly across conditions. Without information about opponents, Mr. T may seem a reasonable bet—prone to exaggeration but playing a helpful role in creating infrastructure.

However, it is also clear that the phrases lead people to form different opinions about whether Mr. T told the truth. Gore's original phrase, "took the initiative in creating" is evaluated the most positively--participants regarded it as significantly more truthful and less exaggerated than the other two phrases. Similarly, "created" is regarded as more truthful than "invented" although they are considered equally exaggerated.

Discussion of questionnaire study. The results of this study suggest that English speakers who were unaware of the parallel to the 2000 U.S. election rated the three phrases as having different implications for evaluating political candidates. Notably, the "I invented" phrase is the one that people considered least truthful.

Although the three phrases differed in truthfulness and exaggeration, they did not make participants say they would be differentially likely to vote for Mr. T. This is perhaps not surprising: the scenario focused only on a specific situation where Mr. T played a role in producing a good outcome (albeit perhaps less of one than he claimed) and it did not provide any information about Mr. T's opponent. However, the difference in truthfulness between these phrases may have mattered in the 2000 election because it caused people to form a perception of Gore that snowballed over time. Furthermore, we will show later that the coverage of the internet incident induced people to interpret ambiguous Gore statements as exaggerations or lies.

Content Analysis of Newspaper Attributions

We now turn to the content analysis of attributions. We wanted to ascertain which claim won out in the social marketplace of ideas. As a proxy for this marketplace, we surveyed every newspaper article in the top 50 United States newspapers during the 18 months between Gore's original quote and the election. We then coded the articles to establish where they occurred in the paper (news article, editorial, etc.) and event's other properties (e.g., was the speaker a Republican?).

Procedure. We used a standard feature of the Dow Jones Interactive archival database, and searched the Top 50 United States papers by circulation. We collected every article (N = 786) that mentioned "Gore" within 10 words of one of the root words "creat" (e.g., created, creator, creating) or "invent" (e.g., invented, inventor, inventing) within 10 words of "internet."

Coding scheme: For each article, we coded a number of features (need to add inter-rater reliabilities.).

1) Type of article. We coded whether the quote appeared in a news story, editorial, letter to the editor, or non-political feature (e.g., an opinion piece or column in areas like sports or technology).

2) Speaker. We coded whether the person transmitting the quote had any obvious political affiliation such as Republican or Democrat. We also coded direct quotes by Gore and Bush.

3) What did Gore say? We coded the article based on what the article claimed Gore said. We coded the article as containing the correct quote if it quoted Gore as saying "I took the initiative in creating the internet". We coded the article as "created" if the article quotes Gore as saying he "created the internet" without the qualifying phrase "took the initiative." We coded the article as "invented" if it quoted Gore as saying he "invented the internet." We also noted whether the article merely quoted one of the incorrect statements only to deny it.

We also coded elliptical references where the article does not attribute the quote directly to Gore but simply makes a positive statement about Gore's role in the internet: e.g., "Gore,

inventor of the internet,…" or "After Gore invented the internet, he…" We also looked for elliptical references to Gore as "creator", but these happened quite infrequently.

We also coded various other aspects of the article that we omit here for brevity. [1]

Results of Content Analysis

Did truth win out in this case? Figure 1 displays the time trend of quotes and Table 2 contains the numerical analysis. Perhaps the simplest way to explore this question is to consider whether an article associates Gore with the word "created" versus "invented." In this analysis we collapse across all forms of the word stems *creat$* or *invent$*. (The $ indicates that we considered all forms of the word stem—e.g., *creat$* would include *create, created, creates, creating*, etc.) The left panel of Table 2 contains this analysis in columns two and three, and it suggests that truth lost. Consider, for example the first row, which summarizes the results for all 786 articles. The proportion of articles that used the correct phrase, *creat$,* is .36 while .62 used the incorrect phrase, *invent$*, ($t(786) = 8.99$, $p < .001$). The table's other rows show that this pattern holds for various types of articles (pure news, editorial, opinion, letters), and for "early" and "late" time periods (defined by the date of the median article in the database). In general, about twice as many articles attribute the false phrase to Gore as attribute the true one.

We note two important aspects of the analysis in the left panel. Both indicate that the source of the problem is not only partisan behavior by Republicans. First, in the table's last row, which omits articles where the Gore quote is spoken by a Republican, the remaining, "non-partisan" speakers are, if anything, more likely to use the incorrect phrase than the partisan ones. (The difference here between proportion of create and invent is slightly larger than in the full partisan articles, $t(784) = 1.60$, $p = .11$)). Second, a similar pattern holds for non-political opinion pieces, such as articles in the sports or lifestyle sections. For these writers, who discuss politics only peripherally, the ratio of incorrect to correct phrases is the highest of any analysis ($t(779) = 2.38$, $p < .05$ relative to all other kinds of articles).

Table 2's right panel provides a more fine-grained analysis by dividing the articles that cite the stem *creat$* into two parts: first, those that cite the full, correct quote with Gore's hedge, "I *took the initiative* in creating the internet"; second, those claiming that he said "I created the internet." To give a comparison, we selected the articles that asserted that Gore *said* "I invented the internet." (This omits articles that referred elliptically to Gore's status as "inventor" of the internet without saying that he *said* he invented the internet.) Again, the pattern of results resembles the table's left panel: the incorrect phrase is used approximately twice as often as either the full phrase or the "I created" one. The comparison in the last two columns is particularly enlightening because it cannot be explained solely by efforts to manage complexity (see discussion of "leveling" in Allport & Postman, 1947). If speakers are trying to be brief, they might omit Gore's four-word qualifier "I took the initiative", but this "leveling" would not explain why speakers, when limiting themselves to two words, claimed that Gore said "I invented" rather than "I created."

We have also explored the prevalence of the two phrases on the internet. For web pages that existed during the three months before the election, the internet results are similar to the results

for newspapers. The ratio of invent$/creat$ for newspapers (.62 / .36 = 1.72) is indistinguishable from the ratio for web pages (1.91; $?^2$ = .89, ns).[2]

General discussion of internet attributions

Thus far we have shown the following. First, an unbiased sample of English-speakers react differently to what Gore actually said about his role ("I took the initiative in creating") versus the false claim that is most often attributed to him ("I invented"). Second, the content analysis of newspapers shows that the false quote that flourished in the marketplace of ideas was exactly the one that was most devastating to Gore. So, we argue that this is a situation where a false idea won out in the marketplace of ideas.

This analysis documents the political equivalent of an urban legend. Gore didn't say he invented the internet, he said something more defensible that would have been interpreted more favorably. Previous research suggests that, in terms of mechanism, this political urban legend succeeded for reasons similar to other urban legends and rumors. Research has shown that complex ideas tend to get simplified as they are transmitted (Allport & Postman, 1947); consistent with this, the qualifying phrase, "I took the initiative" is gone from the simpler dominant version. Research has also shown that ideas are more likely to spread when they pack a strong emotional punch (Heath, Bell, & Sternberg, 2000), and the internet incident is both funny and surprising, particularly in the version where Gore makes the most extreme claim to have "invented."

Although this political urban legend shares mechanisms with other diffusions, its success suggests that the marketplace of ideas need not generate truth even when the competitive criteria (described earlier) are satisfied. It succeeded despite competition from other ideas (including the correct one) and despite advocates who were motivated to correct the record and had a forum for doing so. It was powerful partly because it appeared frequently outside of narrowly partisan attacks: *it was just as successful in non-political discourse as in political discussion.* This made it harder for citizens to use the discounting heuristics they can readily deploy on attack ads where intention is obvious. Further, these events unfolded slowly enough for substantial deliberation and communication. This was not a one-shot event—an attack ad that received currency only as long as it was funded by a political party; the incorrect attribution spread for over 18 months despite active competition.

However, the story does not end with the internet incident. The internet incident was also significant because it triggered a perception that Gore was a liar, and this perception snowballed over time by adding additional false ideas that reinforced this entrapping schema. We now turn to this second set of distortions. They are broader and more complicated, but they also illustrate another potential flaw in the marketplace of ideas.

From the internet to broader concerns

The internet incident triggered an entrapping schema

The internet incident helped to trap Gore with a personality attribution that is difficult to escape--the notion that he is a deceiver. As evidence for this consider Table 3, which documents various attributions about Gore in equivalent time periods before and after the internet incident. Clearly, discussion of Gore's lies, exaggerations and embellishments increase after this incident.

A number of factors, discussed in previous literature, make the internet incident an effective trigger. As mentioned above, the dominant version is exceedingly simple and emotion-provoking. It is especially surprising because most politicians lie or exaggerate about predictable topics: covering up embarrassing behavior (Clinton) or making points consistent with their ideologyReagan). For Gore, the internet quote seemed to come out of nowhere.

The key role of this incident becomes clearer when we compare its effects to those of another situation involving Gore' veracity: the Buddhist Temple fundraiser of April 1996. Gore was accused of violating campaign finance laws by accepting campaign contributions that had been improperly funneled through luncheon participants, including the temple's monks and nuns (Benson, 2000). Gore initially claimed that he was unaware that the event was a fund-raiser, but e-mails later surfaced that suggested he had known (Yost, 2000). Thus in this case the negative attribution was accurate.

Nevertheless, the *mis*attribution ("I invented the internet") triggered the liar schema more effectively than the Buddhist temple incident because it is exceedingly compact and self-evidently false. If Gore actually said he invented the internet, one does not need to understand the nuances of a complex event (e.g., did he know the Buddhist temple was a fundraiser and when did he know it?). With the internet quote, the implications are clear. Indeed, Table 4 suggests that internet incident's impacts swamped those of the Buddhist temple If anything, attributions of Gore as a deceiver *fell* fall in the period after the Buddhist temple episode; in contrast, such attributions rose significantly after the internet incident ($?^2 = 36.6$, $p < .001$).

As a final comparison, consider the results in Figure 2, which compare Gore to other politicians on attributions relevant to the liar/honesty dimension in the 18 months between the internet incident and the election. Before the internet incident, Gore does not notably differ from other politicians, particularly when Clinton articles are removed (this was a time when people were looking for Gore to react to *Clinton's* lies during the Lewinsky scandal). However, in the 18 months after the internet quote, Gore is distinctly more likely to be discussed on these dimensions, exceeding what might have been supposed to be a Clintonian upper bound.

Combined, these analyses show that the internet incident provided a particularly effective trigger for Gore to be classified as a liar, exaggerator, or embellisher. We will argue that this "liar schema" is particularly likely to propagate in the marketplace of ideas because it has the characteristics of an entrapping schema. Below we describe these characteristics.

Characteristics of entrapping schemas

What characteristics of ideas make them more successful in competing in the marketplace of ideas? Below, we focus on one characteristic that has not been highlighted in previous literature and argue that some schemas persist because they are more "entrapping." Schemas will be more entrapping when are easy to confirm and difficult to disconfirm, and we highlight three key ways this pattern can occur: 1) *Opportunity*-- when there are frequent opportunities to confirm a schema and rare opportunities to disconfirm it. 2) *Threshold*--when a schema requires little evidence to confirm and much evidence to disconfirm. 3) *Flexibility*--when the schema is flexible about eliciting positive evidence and dismissing negative evidence. The characteristics of an entrapping schema may increase success in the marketplace of ideas but they often conflict with truth—ideas are probably not more truthful when they are overly flexible in interpreting the evidence, but such ambiguity may make them more successful.[5]

When there are frequent opportunities to confirm and rare opportunities to disconfirm (opportunity)

Schemas will be more entrapping when the environment provides frequent opportunities to confirm them and rare opportunities to disconfirm them. For example, personality traits vary on this dimension: there are fewer occasions in life that people can confirm or disconfirm that they are "devious" than to confirm or disconfirm that they are "messy" (Rothbart & Parks, 1986). Indeed Rothbart and Parks (1986) argue, that there is "an entire class of traits such as heroic, cowardly, homicidal, and violent, that once acquired, may not receive further disconfirmation simply by virtue of the infrequency of 'allowable' occasions. The lack of opportunity to be heroic may ensure that the cowardly label, once ascribed, will not be easily altered" (p. 132).

When they require little evidence to confirm and much evidence to disconfirm (threshold).

Schemas may also differ in their *threshold* for the amount of evidence required to confirm or disconfirm them. Once someone is categorized as a deceiver, it's hard to imagine any actions that the person could take to counteract that label.

Thresholds for disconfirming and confirming evidence may differ because some kinds of evidence are more diagnostic than others. In assessing personality traits, some actions may be less diagnostic because some personality traits allow for more variation in behavior than others (Reder & Brewer, 1979). *Intelligent* people can sometimes act stupid, but *stupid* people can't act intelligent. *Dishonest* people may engage in dishonest and honest behaviors, whereas *honest* people can only engage in honest ones. Thus, the diagnostic value of honest acts is low because they may be committed by dishonest people as well as honest ones. Because some actions are

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[5] The word `ambiguity', with its more negative connotation, thus makes sense from a methodological perspective: to take the extreme case, scientists typically do not regard unfals ifiability as a desirable property of a theory.

less diagnostic, some traits will be harder to disconfirm than others. Once someone is labeled as devious, they may engage in many, many non-devious behaviors without altering their label. In general, Rothbart and Park (1986) found that negative traits required fewer instances of behavior to confirm a trait and more instances of behavior to disconfirm; they argue that "unfavorable traits are easier to acquire and harder to lose than favorable traits" (p. 135). In general, stereotypes of outgroups tend to have negative traits that are abstract and hard to disconfirm (Maass, Montalcini, & Biciotti, 1998).

When they are flexible in interpreting evidence

Schemas will be flexible when they are broader and can be supported by a wider array of evidence. For example, traits that describe personality characteristics differ in their breadth—some are general and broad (e.g., responsible, devious), while others are specific and narrow (e.g., punctual) (Hamilton, Goldberg, & John, 1987). Stereotypes of out-groups tend to consist of broad negative traits and narrow positive ones, while the opposite is true of in-groups (Hamilton et al., 1992).

Schemas may also be flexible by having looser connections between the schema and possible evidence. Rothbart and Parks (1986) note that some personality traits involve behaviors that are more clear, specific, and observable. For example, it is easier to specify behaviors that would both confirm and disconfirm the trait *messy* compared with the trait *devious*. Indeed, the schema for "deviousness" is very flexible in integrating even evidence that potentially contradicts it. Consider, for example, a situation from World War II where the U.S. government was concerned that Japanese-Americans might engage in devious, subversive activity. Earl Warren, who was then governor of California, was testifying before Congress about whether Japanese-Americans constituted a threat to the government: "I take the view that this [lack of subversive activity] is the most ominous sign in our whole situation. It convinces me more than perhaps any other factor that the sabotage we are to get… [will be] timed just like Pearl Harbor was timed…" (Rothbart & Parks, 1986, p. 131). Note here that the "devious" schema is entrapping because it can flexibly interpret even disconfirming evidence as confirmation.

The "liar" schema triggered by the internet incident was an entrapping schema

In this section we provide evidence that the liar schema triggered by the internet incident shared at least two characteristics of entrapping schemas: it meets the threshold test because it requires relatively little evidence to classify someone as a liar and much evidence to classify them as honest; it meets the flexibility test because it can easily interpret many kinds of incoming information as evidence in its favor.

To provide some benchmarks, we compare the entrapping power of the liar schema to two key alternatives—the key alternative personality schema for Gore (that he was boring or stiff) and the key negative schema for Bush (that he lacked intelligence for the job). Table 5 contains this comparison. In each case we performed a compound search for five adjectives that relate to the general personality schema. There were no significant differences in how often the various

schemas appeared in the early stage of the campaign, but appearances differed sharply in the latter period. The use of all the schemas increases as the election approaches, but the liar schema for Gore increases by a factor of 3.79, while the intelligence schema for Bush increases by only a factor of 2.30 (chi-sq=97.4, $p < .001$).

The liar schema meets the threshold test

We have argued that schemas differ in their opportunity for confirmation and threshold for confirmation. We used the lists of trait adjectives studied by Rothbart and Parks (1986) to examine these dimensions for the liar schema and the two benchmark comparisons. Table 6 provides the results of this analysis.

Note, first that all three schemas are comparable on the opportunity test—they provide a similar number of occasions to confirm or disconfirm them. All three schemas provide slightly fewer opportunities to confirm than the average trait of Rothbart and Parks' 150 trait adjectives, and all provide slightly more opportunities to disconfirm. -

However, three schemas differ significantly in their thresholds for confirming and disconfirming evidence. Compared with the other two, the liar schema requires substantially less evidence to confirm and more evidence to disconfirm. The unintelligent schema falls in the middle. From this evidence we can infer that people can be more easily labeled as a liar than as dumb, and they will have to work harder to escape this attribution once it is made—on this dimension, the liar schema is the most entrapping of the three. Indeed the liar schema is not just entrapping relative to these three schemas, it is perhaps the most entrapping of all personality schemas. Of the 150 adjectives studied by Rothbart and Parks, the 8 traits associated with the liar schema hold 6 of the lowest 10 positions for evidence required to confirm and 6 of the highest 10 positions for evidence required to disconfirm—thus they are among the easiest to confirm and hardest to disconfirm of all 150 trait adjectives studied by Rothbart and Parks.

Note that the liar schema for Gore and the unintelligent schema for Bush do not differ on the key good/bad affective dimension. One of the most basic findings of social attribution is that many judgments are driven primarily by a basic good/bad dimension that controls approach / avoidance reactions (Osgood, 1962). Here both schemas are among the most undesirable of all 150 traits considered by Rothbart and Parks, so any difference between them must be driven by other qualities—we suggest in this case by the threshold differences that make the liar schema more entrapping. The schemas also differ in frequency, but since people give greater attention to unusual or unexpected events (Fiske & Taylor, 1991, p. 247-250), the pattern on this dimension would predict that people would attend more to the boring and unintelligent schemas.

In a close election, many small factors could have conceivably altered the outcome. By the end of the election candidates were deciding whether to spend a few additional hours of campaign time in one swing state rather than another. The issue of truthfulness was not a small factor for voters. In July 2000, four months before the election, the Pew Research center surveyed a national probability sample of voting-age adults (Pew Center, 2000), and asked them how much their vote would be affected by several statements about Bush and Gore. For Gore, the statement "Gore stretches the truth" influenced 49% of voters to say they would be less likely vote for Gore, while 40% said this statement wouldn't make a difference. In comparison, the

prominent character issue for Bush, "Bush doesn't know enough about the issues to be President" influenced 42% to be less likely to vote for Bush, while 47% said the statement wouldn't make a difference. The impact for Gore was more extreme than the impact for Bush (N = 1204; $?^2 = 6.72$, $p < .01$).

The liar schema was flexible in interpreting evidence

We have also described entrapping schemas as more flexible in interpreting evidence. The liar schema seems to score well on this criterion. Candidates during elections comment on a wide range of topics in a variety of contexts, and once the liar schema is evoked, any joke, forgetful mistake, exaggeration, or misstatement could be interpreted as evidence that confirms it. Below, we describe three situations where Gore was accused of lying where another politician who had not been entrapped by the liar schema might have received less attention.

Look for the Union Label

On September 18, 2000, two months before the election, Gore traveled to Las Vegas to accept a long-awaited endorsement from the Teamsters union. A videotape transcript captures some of his remarks (Hannity & Colmes, September 29, 2000):

> GORE: I still remember the lullabies that I heard as a child. (singing) Look for the union label...
>
> (LAUGHTER)
>
> GORE: It's just -- it's kind of in my...
>
> (APPLAUSE)
>
> GORE: And then when I -- I was a little bit older -- what was that other one?
>
> (singing): Whose side are you on?
>
> Anyway, it's just kind of in my bones, if you get my point.

A story in USA Today reported the event as follows: "On Monday, addressing a Teamsters meeting, Gore spoke of childhood lullabies and then sang, 'Look for the union label . . .' That song was written in 1975, when Gore was 27." (McQuillan, September 20, 2000).

Overall, 74 stories in Top 50 newspapers recounted this incident, the majority of them citing it as a lie, exaggeration, or embellishment. Gore had a different interpretation of the event: "That was a joke," he said. "You know, nobody sings a lullaby to a little baby about union labels… If somebody didn't get the joke, then maybe I'd better tell better jokes" (Sammon, September 23, 2000).

Visiting Disaster Sites in Texas with James Witt

The next incident from the first presidential debate was cited in 121 newspaper accounts. Here is one, particularly accusatory, account from the Arizona Republic:

> Burned
>
> Claim: "I accompanied James Lee Witt down to Texas when those fires broke out [in Parker County]." -- First presidential debate, Oct. 3.
>
> Truth: Federal Emergency Management Agency spokeswoman Mary Margaret Walker told National Review: "During the fires in Parker County, Texas, the vice president participated in a roundtable about the

> fires with FEMA's regional director. ... He was not with Mr. Witt at that time." (Arizona Republic, October 11, 2000).

FEMA officials pointed out that Gore may have confused the Texas trip with other visits to disaster sites—as Vice President, he visited disaster areas 32 times, and was accompanied on 26 of them by James Witt (Mittelstadt, October 5, 2000). A spokesman for the Gore campaign seemed flummoxed by the flak Gore was taking: "Did Gore go to Texas? Yes. Was he briefed on the fires? Yes. Did he make a mistake saying he was with Witt? Yes." (Wildermuth, October 5, 2000).

"Discovering" Love Canal

Another incident, cited in 105 newspaper stories was described in the following seemingly damning report in the Washington Post in December of 1999:

> Add Love Canal to the list of verbal missteps by Vice President Gore.
>
> The man who mistakenly claimed to have inspired the movie "Love Story" and to have invented the Internet says he didn't quite mean to say he discovered a toxic waste site when he said at a high school forum Tuesday in New Hampshire: "I found a little place in upstate New York called Love Canal."
>
> Gore went on to brag about holding the "first hearing on that issue" and said "I was the one that started it all."
>
> But yesterday, the Democratic presidential candidate called an Associated Press reporter in upstate New York to play down his role and applaud local residents of the Niagara neighborhood who fought the long battle against the waste site.
>
> "If anybody got the misimpression that I claimed to do what citizens in Love Canal did, I apologize," Gore said in a telephone interview he initiated.
>
> As a junior House member, Gore held hearings in 1978 on the dangers of chemical contamination--two months after residents evacuated Love Canal. (Connolly, December 2, 1999).

A similar story appeared in the New York Times. The full context of the quote shows that Gore's words were misinterpreted rather dramatically:

> The Love Canal controversy began on Nov. 30 when Gore was speaking to a group of high school students in Concord, N.H. He was exhorting the students to reject cynicism and to recognize that individual citizens can effect important changes.
>
> As an example, he cited a high school girl from Toone, Tenn., a town that had experienced problems with toxic waste. She brought the issue to the attention of Gore's congressional office in the late 1970s.
>
> "I called for a congressional investigation and a hearing," Gore told the students. "I looked around the country for other sites like that. I found a little place in upstate New York called Love Canal. Had the first hearing on that issue, and Toone, Tennessee---that was the one that you didn't hear of. But that was the one that started it all… We've still got work to do. But we made a huge difference. And it all happened because one high school student got involved." (Parry, 2000, see also Milwaukee Journal Sentinel, April 10, 2000).[6]

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[6] The pundits on ABC's This Week shook their heads at Gore's supposed statement:

> "Gore, again, revealed his Pinocchio problem," declared former Clinton adviser George Stephanopoulos. "Says he was the model for Love Story, created the Internet. And this time, he sort of

The high school students who were present at Gore's visit pushed the Washington Post and the New York Times for a correction (Dolce, December 12, 1999), and the AP newswire put out a story that provided the correct context (Ramer, December 13, 1999). But the correct contextual information in the AP story did not get wide play.

Five days later, the Washington Post ran a half-hearted correction:

> A Dec. 1 article and a Dec. 2 Politics column item about Vice President Gore's involvement in the Love Canal hazardous waste case quoted Gore as saying "I was the one that started it all." In fact, Gore said, "That was the one that started it all," referring to the congressional hearings on the subject that he called. CORRECTED BY THE WASHINGTON POST DECEMBER 7, 1999.

The Post still didn't get the referent correct—"that" refers to the Toone, Tennessee event brought to his attention by the high school student. The New York Times didn't correct their story until eight days later and it also did not explain the context of the initial misquote. "They fixed how they misquoted him, but they didn't tell the whole story," said one of the Concord High students (Ramer, December 13, 1999).

Analysis of entrapment: top scandals

Table 7 lists the 12 most frequently cited missteps (lies, exaggerations, embellishments) of the Gore campaign. Figure 3 captures the interrelationships among the top six missteps. The area of the circles corresponds to the relative number of articles about each "misstep", and the arrows indicate cross-citation patterns. Arrows are shown whenever more than 10% of articles about a particular misstep cite another misstep, and the width of the arrows indicates the percentage of source misstep articles that cite the misstep at the destination (e.g., 20% of articles about Love Canal mention Buddhist temple, and 70% of articles about Love Story mention the Internet).

Note that the internet incident is the most central of these missteps. Even though the Buddhist Temple incident generated more publicity overall than the internet incident, the internet incident that, as we previously established, triggered the liar schema, plays a much more central role in this collection of "evidence" of exaggeration and lies.

General Discussion

In the first part of this paper, we showed that the misattribution that Gore said he "invented the internet" became more common in the marketplace of ideas than the more accurate attribution that Gore said he "took the initiative in creating" the internet.

In the second half of the paper, we showed that the internet incident played a key role in triggering the liar schema for Gore, and we described why this schema was particularly entrapping—compared with Bush's key personality issue (intelligence) and Gore's alternative character issue (boring, stiff), the liar schema is more entrapping because it has a lower threshold

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discovered Love Canal." A bemused Cokie Roberts chimed in, "Isn't he saying that he really discovered Love Canal when he had hearings on it after people had been evacuated?" (Parry, 2000).

for confirming evidence and a higher threshold for disconfirming evidence. Furthermore, it is a schema that is quite flexible in interpreting ambiguous situations as evidence.

Combined these two studies suggest two potential failures in the marketplace of ideas. First, an especially egregious, false version of the internet quote circulated widely; second, the concern over the internet incident was extrapolated to a broader schema, that entrapped Gore by shifting how people interpreted ambiguous behavior.

These empirical results suggest two mechanisms that might bias the diffusion of information in the marketplace of ideas. First, consistent with previous work, simple, emotion-provoking ideas are differentially likely to succeed. In our view, this is a fairly pervasive mechanism that is likely to lead to many distortions.

However, even when emotional information propagates widely, it may not always stick as long as competitive ideas are available. In a Markov-style process, you could picture this as a transition probability that is biased towards placing the system in a state where emotional information is present. However, in many situations, even emotional information might be successfully debunked by authoritative non-emotional information. In Gore's case, the situation was more complicated because the initial emotional shock triggered an entrapping schema that tended to be reinforcing. In the Markov analogy, the transition probability for escaping an entrapping state is low.

One of the most basic findings in classic rumor literature is that rumors become simpler (i.e., "leveled") over time. Indeed, at a micro level this happened in the Gore situation with the loss of the hedge phrase from his original quote. However, at a more macro level, the interesting feature of this case is that the original internet incident was elaborated and embroidered with a number of other details as shown in Figure 3.

Limitations of our study; other possible explanations

What about other character issues with Gore?

In any complex social event, it is always possible to suggest a variety of potential issues that may have contributed to a particular outcome. When we have presented these results, people have sometimes mentioned that Gore may have been especially prone to criticism because he was regarded as less warm and likeable than Bush. This is indeed a key dimension of interpersonal judgment (Asch, 1946). Others have suggested that Gore may have been particularly vulnerable to the accusation of lying because he had previously been regarded as a goody-goody, and observers may have taken special pride in bringing him down because he could be labeled as a hypocrite.

Both of these observations are valid, but they do not account for the complete pattern of evidence we have described. If voters were merely looking for reasons to dismiss a less likeable presidential candidate, there is no particular reason why Gore had to be brought down as a liar. Such explanations cannot explain the specific content of the schema (liar, exaggerator,

embellisher). The hypocrite explanation can do more to explain content (because catching a goody-goody in a lie is particularly rewarding), but it doesn't explain why the internet incident was more effective than the Buddhist temple in evoking this schema, and it doesn't describe the centrality of the internet incident in the collection of missteps in Figure 2. If someone is simply looking for some reason to dismiss Gore, why do they need so many cross-referenced justifications? In short, we acknowledge that there may have been many factors that exacerbated the basic power of the liar schema, but we think it is unlikely that these other factors would have been as important without the trigger of the internet incident and without the entrapping nature of the liar schema.

Others have argued that Washington insiders were suspicious of Gore's penchant for exaggeration earlier in his career (Drehle & Connolly, October 8, 2000). However, these views don't mesh well with the Boy Scout image described by other Washington insiders—in a book on scandals during the Cinton administration, Howard Kurtz, a long-time reporter for the Washington Post wrote a chapter on Gore entitled "Mr.Clean," he said that prior to the Buddhist Temple scandal that "Gore had been certified one of the good guys, a boy scout, an upright if boring figure" (Kurtz, 1998, p. 160). More systematically, this view doesn't explain the pattern of data in Figure 2, which shows that before the internet event, Gore did not differ from other politicians on the dimension of honesty.

Why don't more people get trapped by the liar schema?

Others have wondered why, if the liar schema is entrapping, other politicians have not been similarly trapped. However, Gore's supposed claim to have invented the internet is unusual because of the surprise factor we mentioned earlier. While Clinton was widely regarded as a liar, the content of his lies was predictable—married men who have affairs typically try to hide them. In contrast, if Gore lied about "inventing the internet" or "discovering Love Canal", there is no obvious way to explain why he told these lies other than assuming he has a serious personality flaw. Reagan exaggerated at times (e.g., his famous embellished story about welfare queens), but his kind of ideological exaggeration may evoke quite different attributions from pro- and anti-Reagan partisans. What may be regarded as an outright lie by the left may be regarded as an understandable simplification by the right. Any time a behavior can be framed in opposing ways, it is harder to draw conclusions from it (Peabody, 1967). Gore's supposed claim to have "invented" the internet is hard to frame in different ways depending on ideology.

For these reasons, we believe that Gore was especially subject to the liar schema, but at a more general level, we suspect that other politicians have been trapped by the same schema. Politics is a domain where issues of trust, commitment, and credibility are particularly salient. Overt confidence in our politicians and government institutions dropped substantially during the Watergate incident and has never completely rebounded to pre-Watergate levels. Figure 4 suggests that even compared with other professions not known for their honesty-- car salespeople and lawyers-- politicians are notably more likely to be associated with lies or exaggerations.

Other applications of entrapping schemas: Negative campaigning

Entrapping schemas have potential implications for other election phenomenon. For example, Ansolabehere and Iyengar (1995) study negative campaigning and argue that it is on the rise.

They say that a decade before their study, attack advertisements composed a small fraction of political messages, now "politicians come out swinging." They cite research that shows that half of political commercials emphasize the weaknesses of the opposition rather than the strength of the sponsor (Ansolabehere & Iyengar, 1995, p. 90).

Unfortunately, consistent with our argument about entrapping schemas, the individual incentives for politicians favor going negative. Ansolabehere and Iyengar show that when opponents are conducting a negative campaign, a politician looks particularly weak if he or she stays positive. In Rothbart and Parks' (1986) survey of 150 personality traits, negative traits were, in general, more entrapping. Although the honesty issue that Gore faced is particularly entrapping, Rothbart and Park's evidence suggests that almost any negative dimension will be more entrapping than equivalent positive dimensions.

Unfortunately, negative campaigning tends to demobilize voters by undermining their faith in politicians and the political process; Ansolabehere and Iyengar argue that voters "learn from the mudslinging and name-calling that politicians in general are cynical, uncivil, corrupt, incompetent, and untrustworthy" (p. 110). Controlled experiments showed that negative campaign messages produced an overall decline in intentions to vote, particularly for independents who do not have a strong group affiliation to either traditional party--after seeing one attack ad, Republicans and Democrats dropped by 3%, but Independents dropped by 11%.

Concluding Remarks

We believe that the study of entrapping schemas has implications for both micro and macro aspects of elections. On the micro level, it speaks to a longstanding issue, the competence of voters. Many students of voting, particularly those known as behavioralists, have come to rather pessimistic conclusions about voters' competence. Others, particularly those steeped in rational choice theory, take more optimistic positions. The debate initially focused on the quantity and quality of the *information* possessed by voters. Behavioralists such as Converse (19xx) observed that voters often lacked key pieces of information. In reply, rational choice theorists such as Downs (1957) pointed out that given the collective action problems inherent in large-scale elections, it is rational to remain ignorant.[7] More recently, pessimists influenced by behavioral decision theory have emphasized that many voters not only have scant information, their processing of the information they do have is often suboptimal. (For an excellent overview of this perspective, see Kinder 1999.) But again the optimists have a reply: clever heuristics can "make us smart" (Lupia 1994; Lupia and McCubbins 1998; for the general argument, see Gigerenzer et al. 20xx).

Although the optimists have not yet articulated a joint reply to this last foray, we think it is seriously incomplete because it underestimates the causal importance of variations in task difficulty. To be sure, when faced with a simple dichotomous choice ("on a referendum on

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[7] Downs' point is well taken, but it raises a related uncomfortable issue for rational choice theories of elections: if voters are rational, then why do so many vote (the so-called "paradox of voting")? For an attempt to solve this anomaly via a behavioral theory of electoral participation, see Bendor, Diermeier and Ting (forthcoming).

smoking, should I vote for or against the initiative?"), a natural and easily deployed friend-foe heuristic may suffice ("ah-ha! The tobacco lobby is for it; hence I'll vote no."). But over the course of an election voters confront problems of widely varying degrees of difficulty, and it is axiomatic in the study of problem-solving (e.g., Simon 1989) that possibly latent cognitive constraints will become manifest in the face of sufficiently difficult tasks. (Indeed, Simon regarded this "scissors principle" as fundamental to the research program of bounded rationality---models of imperfect rationality have explanatory cutting power, relative to theories of full rationality, only when *both* cognitive constraints and problem difficulty are operating simultaneously---.) Clever heuristics may indeed "make us smart"---when the problems aren't too hard,[8] but as we described above, understanding potential distortions in the social marketplace of ideas is difficult and it's not clear that we have developed a set of individual or cultural heuristics to solve this particularly hard task.

Let us turn now to the related macro debate over the truth-generating powers of a system: the marketplace of ideas. Though political theory, particularly that of free speech, has often been optimistic about the outcomes associated with the marketplace of ideas, our results council caution. In a democratic society, public elections are arguably the important domain of the marketplace of ideas and one of the few domains that meet the rather stringent criteria for competition, we have provided some evidence that the marketplace of ideas failed in its truth-seeking function.

Does any of this matter for presidential elections in general? I.e., one might argue that although understanding entrapping schemas and related phenomena might help us grasp the psychology of voting, they are electorally insignificant: second-order factors at best. There are two quite different arguments underlying this assessment. One is empirical; the other, theoretical.

The empirical argument is that often the "fundamentals"---e.g., the state of the economy or an incumbent president's dismal performance---overwhelm the fine structure of campaigns. (The extreme form of this argument is that the fundamentals will have their way and so campaigns rarely matter.) There is no doubt that this sometimes true: Alf Landon's campaign in 1936 was probably irrelevant; studying its fine structure would be a pointless exercise.

But the problem with this empirical argument is that fundamentals are not always overpowering. Evidently they were not in the 2000 presidential race. And in close races campaigns and candidates' tactics can have decisive effects. Even mistakes can matter. Candidates and their staffs are professionals, but over a long and grueling campaign even seasoned veterans make mistakes. (Consider, e.g., Muskie's losing control in the snows of New Hampshire in 1972 or Ford's gaffe about Poland in 1976.) In turn, these mistakes provide

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[8] This idea is completely intuitive to us in the other part of our professional lives: as teachers we create exams designed to separate the strong students from weak ones, and typically we accomplish this by writing down a mix of easy questions and hard ones..

opportunities for their opponents, who are also professionals and so are quick to spot errors. Indeed, as in chess and other highly competitive situations, one player's gaffe is his/her rival's strategic opportunity. Grandmasters don't err very often, but when they do their rivals are usually quick to seize the advantage. And in campaigns, unlike chess, precisely what is a mistake depends partly on the properties of vital third-parties---the media and voters---and their interactions. That is, what Gore (really) said about his role in creating the Internet was a mistake precisely because it was vulnerable to distortion *and because such distortions would not invariably be corrected by competitive forces*: truth would not necessarily win out in the marketplace of ideas.

The theoretical argument is Downsian. What is central to elections---including close ones---is the ambition of professional, fully rational politicians to win office. Their efforts to achieve this goal means (if the canonical Downsian conditions hold) that in equilibrium the median voter is decisive. All else is secondary.

But as an objection to the present paper this argument begs an important question: do the canonical Downsian conditions typically hold in real elections? In particular, may it not be possible for some voters---enough to matter---to be misled about an important characteristic of a candidate? And for this misunderstanding to endure over the entire campaign? These questions must ultimately be settled empirically; they cannot be resolved by theoretical fiat.

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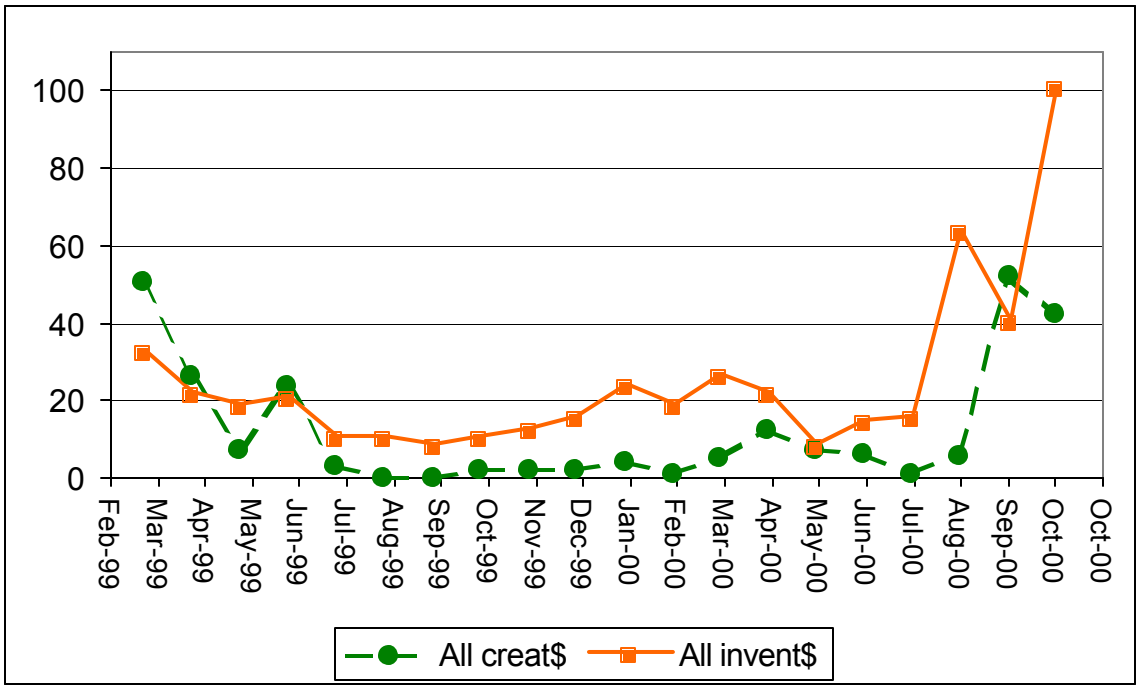
Figure 1

Time Series of Attributions in Top 50 Newspapers



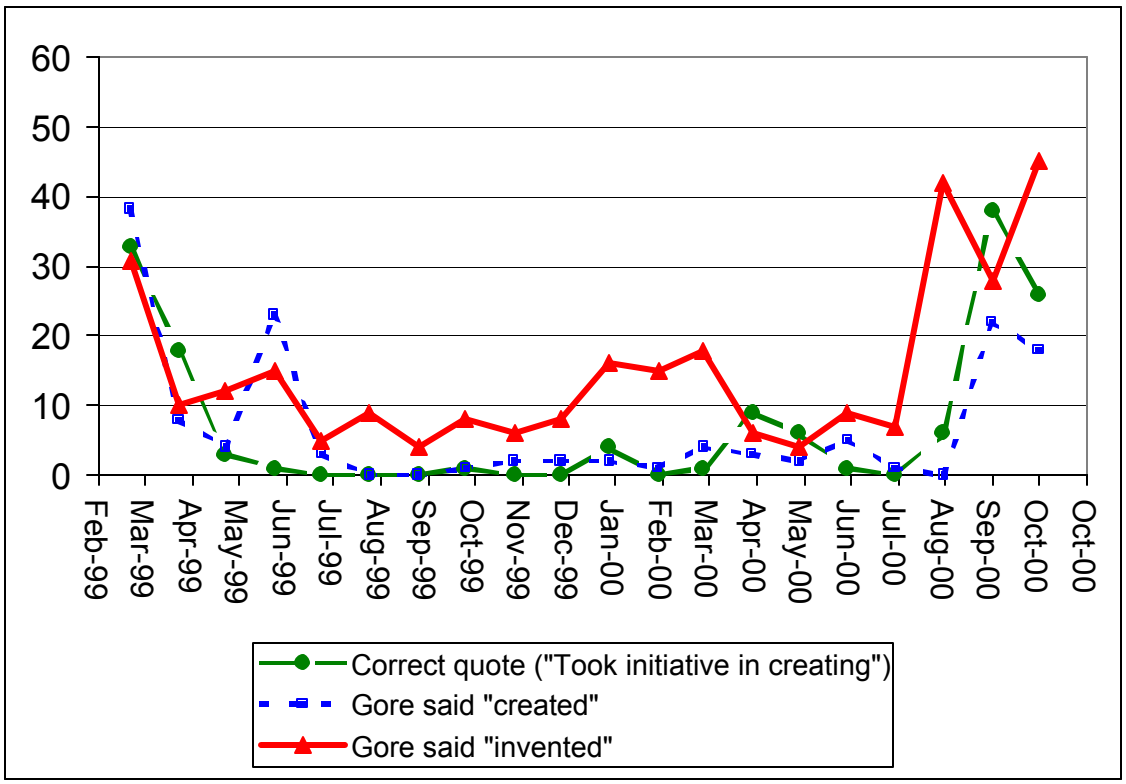
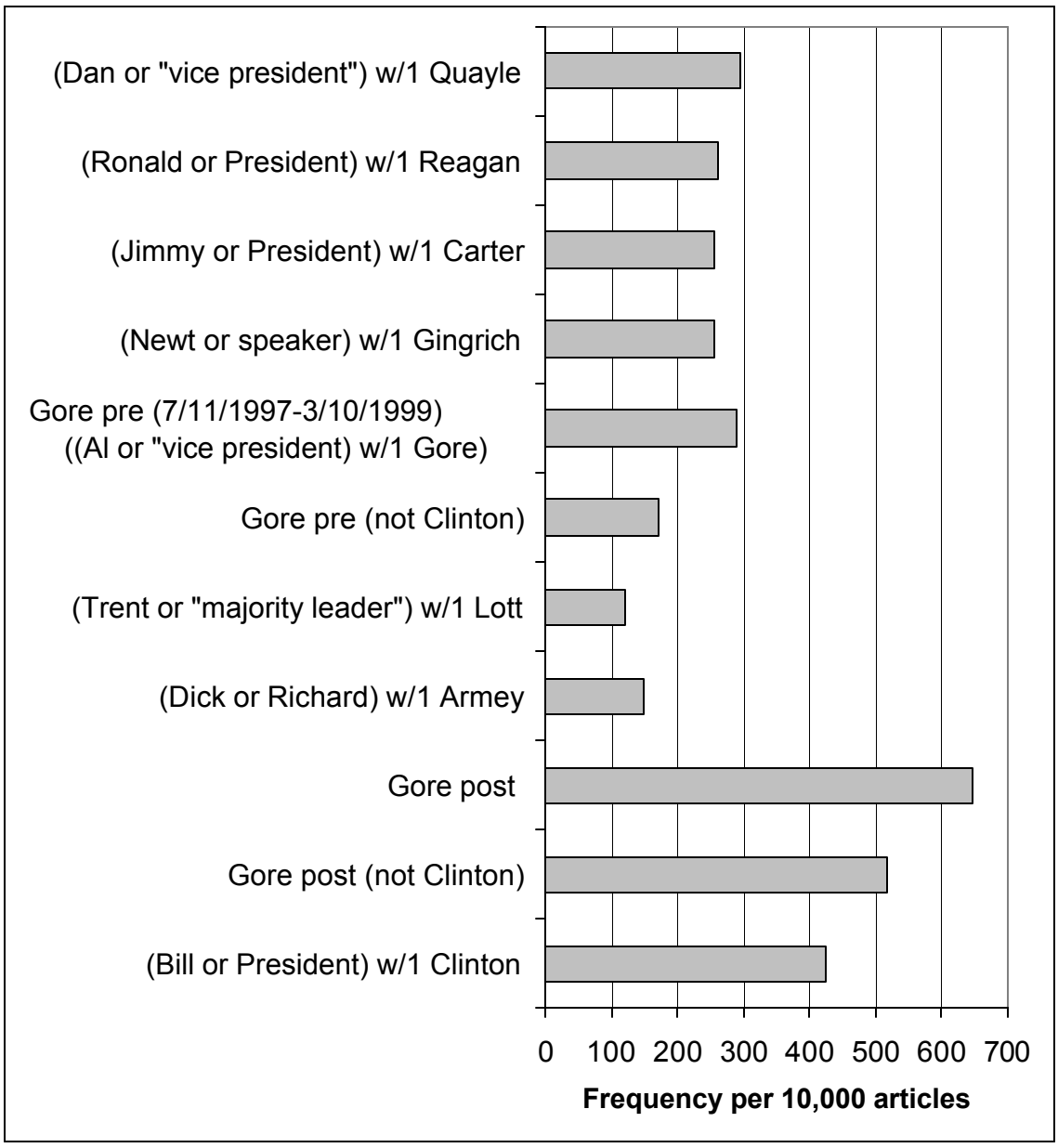


Figure 2

Frequency (per 10,000 articles) of Attributions about Gore compared with other politicians



Sample search string: ((Al or "vice president) w/1 Gore) and (gore same (lie or liar or lying or lies or exaggerat$ or embellish$ or truth or stretch$ or dishonest$ or honest)). All comparisons from 3/11/99-11/4/00 except for Gore pre.

Figure 3

Cross-citation Patterns Among Gore Missteps

The area of the circles corresponds to the relative number of articles about each "misstep". Arrows are shown whenever more than 10% of articles about a particular misstep cite another misstep, and the width of the arrows indicates the percentage of source misstep articles that cite the misstep at the destination (e.g., 20% of articles about Love Canal mention Buddhist temple, and 70% of articles about Love Story mention the Internet).

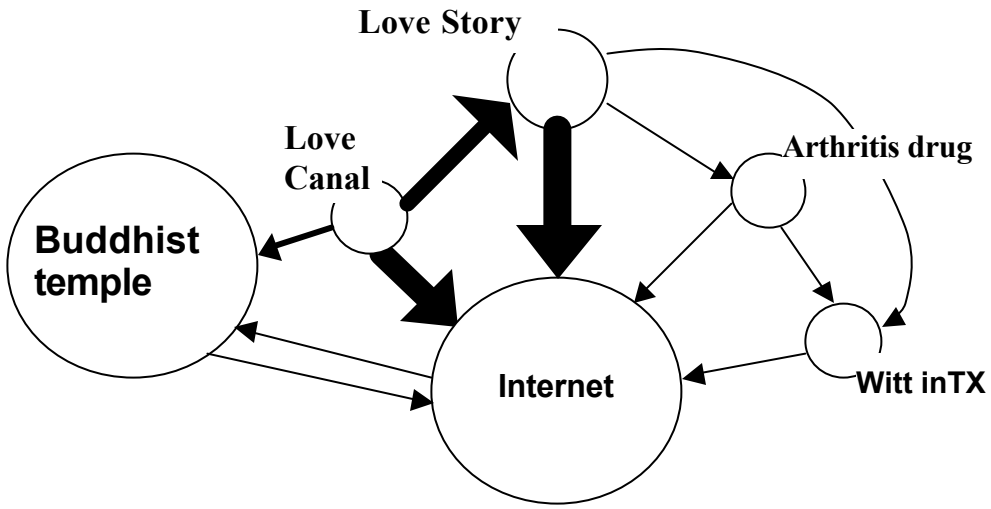
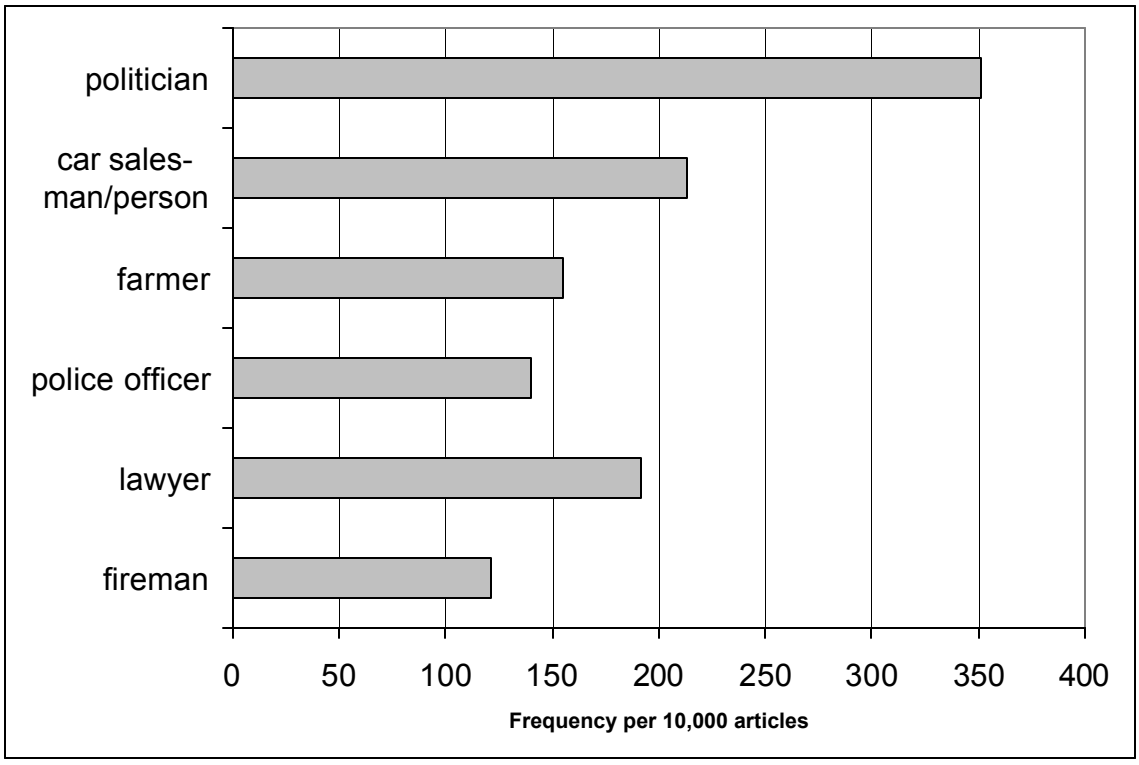


Figure 4

Frequency (per 10,000 articles) of Attributions about politicians compared with other careers



Sample search string: politician same (lie or liar or lying or lies or exaggerat$ or embellish$ or truth or stretch$ or dishonest$ or honest)

Table 1

Percentage of Participants Answering "Yes" to Questions about Mr. T Scenario

	What Mr. T claimed about his role in the modern telecommunications network		
	"took the initiative in creating"	"created"	"invented"
Did Mr. T tell the truth when he said this?	.65[a]	.30[b]	.15[c]
Did Mr. T exaggerate how much he was responsible for the modern telecommunications network?	.65[a]	.86[b]	.85[b]
Would you vote for Mr. T?	.72	.67	.58
N			

Note. Column means that differ by a superscript differ significantly at $p < .05$

Table 2

Percentage of Top 50 Newspaper Articles that Use Various Phrases

		Two category split		Three category split		
	N	Creat$, all forms	Invent$, all forms	"I took the initiative in creating"	"I created"	"I invented"
All articles	786	.33[a]	.62[b]	.19[a]	.18[a]	.38[b]
News articles	421	.36[a]	.62[b]	.21[a]	.21[a]	.45[b]
Editorials	221	.33[a]	.60[b]	.18[a]	.17[a]	.33[b]
Opinion (non-political)	54	.20[a]	.78[b]	.09[a]	.13[ab]	.26[b]
Letters to the editor	84	.27[a]	.64[b]	.18[ab]	.11[a]	.29[b]
Early (before 5/00)	393	.35[a]	.62[b]	.18[a]	.23[a]	.41[b]
Late (after 5/00)	393	.31[a]	.61[b]	.20[a]	.13[b]	.35[c]
Omit republicans	526	.32[a]	.65[b]	.18[a]	.16[a]	.40[b]

Note. Column means that differ by a superscript differ significantly by paired t-test at $p < .05$

Table 3

Frequency (per 10,000 articles) of Various Attributions about Gore in Equal Time Periods Before and After Internet Quote

	All articles		Articles that don't mention Clinton	
Gore in same paragraph with:	20 months before Internet quote 7/15/97-3/10/99	20 months after Internet quote 3/11/99-11/4/00	20 months before Internet quote 7/15/97-3/10/99	20 months after Internet quote 3/11/99-11/4/00
lie or *liar* or *lying* or *lies*	133	193	51	142
exaggerat$	16	135	22	126
embellish$	2	47	0	46
truth	90	238	46	196
stretch$	24	98	19	85
honest	39	72	29	48
dishonest$	6	34	10	20
Total articles	24387	70497	6801	33517

Note. The "$"indicates that the search considered any variant of the stem. For example exaggerate$ finds articles that included exaggerat*ed*, exagerat*es*, exaggerat*ing*, etc.

The right-hand panel of this analysis excludes articles which mention Clinton because otherwise the "before" period contains many articles which focus primarily on Gore's reaction to Clinton's lies / exaggerations / etc. during the Lewinsky scandal.

Search for left-hand panel:

// ((Al or "vice president) w/1 Gore) and (Gore same _____)//

Search for right-hand panel:

// ((Al or "vice president) w/1 Gore) and (Gore same _____) not Clinton //

*** $p < .001$

Table 4

Frequency (per 10,000 articles) of Attributions that Gore is Liar / Embellisher Before and After Buddhist Temple and Internet Quote

	Buddhist temple (story breaks on 10/17/1996)		Internet (story breaks on 3/12/1999)	
	Before	After	Before	After
12 month window	157	150	142	322***
Total articles	2477	3473	4233	13014

Note. Search was // ((Al or "vice president) w/1 Gore) and (gore same (lie or liar or lying or lies or exaggerat$ or embellish$ or truth or stretch$ or dishonest$ or honest)) not Clinton//

* Before/after comparison differs significantly by Chi-square test.

Table 5

Frequency (per 10,000 articles) of Various Attributions about Gore and Bush in Equal Time Periods Before and After Internet Quote

Candidate	in same paragraph with:	20 months before Internet quote 7/15/97-3/10/99	20 months after Internet quote 3/11/99-11/4/00	Ratio
Gore	liar or exaggerat$ or embellish$ or truth or honest	97 [a]	368 [a]	3.79
	boring or rigid or wooden or stiff or dull	112 [a]	258 [b]	2.30
Bush	dumb or intelligen$ or ignoran$ or stupid or smart	109 [a]	195 [c]	1.79

Note. Entries in columns that differ by a superscript differ significantly at $p < .01$.

The "$"indicates that the search considered any variant of the stem. For example exaggerate$ finds articles that included exaggerat*ed*, exagerat*es*, exaggerat*ing*, etc.

(("George W." or Governor) w/1 Bush) and (bush same (dumb or intelligen$ or ignoran$ or stupid or smart))

((Al or "vice president) w/1 Gore) and (gore same (liar or exaggerat$ or embellish$ or truth or honest)) not Clinton

((Al or "vice president) w/1 Gore) and (gore same (boring or rigid or wooden or stiff or dull)) not Clinton

*** $p < .001$

Table 6

Average z-scores from Rothbart and Parks (1986) for Various Traits Relevant for Three Key Schemas

		Opportunity: i.e. occasions to		Threshold: i.e. evidence to:			
Personal attributions	Traits (R = reverse coded)	confirm	dis-confirm	confirm	dis-confirm	Goodness	Frequency
Dishonest	Boastful, Deceitful, Phony, Deceptive, Untruthful, Honest (R), Trustworthy (R), Truthful (R)	-.25 [a]	.34 [a]	-1.68 [a]	1.79 [a]	-1.44 [a]	.20 [a]
Boring	Boring, Humorless, Methodical, Rigid, Somber	-.47 [a]	.37 [a]	.01 [c]	-.46 [c]	-.66 [b]	-.92 [b]
Dumb	Ignorant, Stupid, Intelligent(R), Wise(R)	-.11 [a]	.68 [a]	-.56 [bc]	.73 [b]	-1.26 [ab]	-.75 [ab]

Means in a column with different superscripts differ by $p < .05$ by independent samples t-tests.

Opportunity is defined as: # occasions to confirm - # to disconfirm; an occasion to confirm honesty or other (R) traits is treated as an opportunity to disconfirm "dishonesty"

Threshold is defined as:# observations required to confirm - # required to disconfirm; the number of observations required to confirm honesty or other (R) traits is treated as the number of observations to disconfirm "dishonest" traits.

Table 7
Number of Top 50 Newspaper Articles that Mention Various Gore "Misstatements" During 20 Months after Internet Quote (Between 3/12/99 and 11/4/00).

"Misstatement"	Number of articles
Claims he was unaware of fund raiser at Buddhist temple //"Buddhist temple"//	1302
Said he invented/created the internet, //(invent$ or creat$), internet//	1176
Said he and Tipper were the models for the characters in the novel, *Love Story* //"Love Story"//	259
Claims his mother-in-law pays three times as much for the same arthritis medicine used by his dog, actual figures were from Congressional survey, //(medicine or drug), mother, dog//	170
Said he visited fire damage in Texas with Interior Secretary James Witt, //Texas, Witt//	121
Claims he discovered Love Canal //"Love Canal"//	105
Claims his parents used to sing him to sleep by singing "Look for the union label…", //"union label"//	74
Claims to have been fired upon during his experience in Vietnam as a journalist //Vietnam, fire//	54
Claims he was part of discussions of Strategic Reserve since it was first established //"strategic reserve"//	44
Claims to have always supported abortion rights, but sent letter to constituent saying that abortion was "arguably the taking of a human life" //abortion, constituent//	42
Vowed in 1996 convention speech to fight against smoking because of sister's death from cancer, yet family farm continued to grow tobacco //sister, tobacco, convention//	42
Told a story about an elderly Iowa woman who collects and recycles cans to pay for her food and medicine //Iowa, woman//	41

Note. Basic search is Gore in the same paragraph as the search string(s) enclosed by //.

[1] Does article give Gore credit for helping the internet? We coded credit as "yes" if the article gave Gore some credit for assisting the development of the internet (e.g., the article mentioned Gore's legislation), even if the article also said that Gore exaggerated or boasted. We

coded credit as "no" if the article (1) stated explicitly that Gore didn't deserve credit or (2) if the article juxtaposed his statement with another statement that makes his statement implausible (e.g., "The internet was created in the 1960s…") or if the article ridiculed his statement (e.g., the article quoted Bush's stump speech line: "this Gore no more invented prosperity than he invented the internet.")

Republican quip. Many of the articles seemed to bring up the Gore "statement" in order to feature a clever Republican riposte. We coded quips when Republicans did more than simply quote Gore, but also had a catchy response (e.g., Dan Quayle saying "if he invented the internet, I invented spell-check" or Bush saying, "If he's so smart, how come all the internet addresses start with WWW?" Or Republican TV ads, "Yeah, and I invented remote control").

Other Gore missteps. We also quoted whether the article mentioned other Gore "exaggerations" (e.g., he discovered Love Canal, he was model for Love Story, his mother and law and dog pay different prices for same arthritis drug, etc…).

[2] This analysis is complicated because of the poor search technologies available for compound searches on the internet. Details are available from the authors.