Blogging and political information: truth or truthiness?

Michael C. Munger

Received: 2 June 2007 / Accepted: 9 June 2007 / Published online: 17 August 2007 © Springer Science+Business Media, BV 2007

Abstract Does the blogosphere generate truth, or what Stephen Colbert calls 'truthiness,' facts or concepts one only wishes or believes were true? Bloggers and the mainstream media face the same difficulties if they wish to rely on the blogosphere as a generator of truth. First, both bloggers and media converge on a small number of key blogs as sources of information. But the proprietors of these elite blogs are likely to resist information that doesn't conform to their existing attitudes and beliefs, precisely because they are already highly aware of politics. Second, blogs and blog readers are likely to separate themselves into smaller networks according to their particular tastes. However, under some circumstances the blogosphere may still approximate a parallel processing statistical estimator of the truth with 'nice' properties. The key to this outcome is that judgments are independent, and that problems of polarization are mitigated.

Keywords Truth · Truthiness · Blogs · US politics · Hayek

This essay takes up a number of themes that have been raised in earlier papers in this special issue. The distinction I want to focus on is one popularized by Stephen Colbert in his October 17, 2005 segment of "The Word" on *The Colbert Report* on the cable TV network Comedy Central.

We tend to think of public debates, and to some extent even voter choices in elections, as distinguishing between truth and error. But Stephen Colbert, on the October 17, 2005 segment of "The Word" on Comedy Central's *Colbert Repor(t)* claimed this distinction was false, or at least incomplete. He proposed a neologism: 1

Truthiness The quality of stating concepts or facts one wishes or believes to be true, rather than concepts or facts known to be true.

M.C. Munger (⊠)

Political Science, Duke University, Durham, NC, USA

e-mail: michael.munger@duke.edu

¹As the American Dialect Society (2006) points out, "truthiness" itself is not a new word, but the sense intended by Colbert does appear to be new. For some etymology, see Language Log (2005).



Colbert's point was that truthiness trumps truth: intuition based on feeling or values is more important than debate and evidence.²

Some of the key topics raised in this special issue can be distilled to claims of truth vs. truthiness, or so I will argue. I want to ask the reader to consider the blogosphere as a (potential) generator of truth claims, in effect a statistical estimator that returns predicted values for an unobservable parameter of political interest. Under some circumstances, this estimator has desirable properties, and is a means of glimpsing outlines of the truth. Under other circumstances, blogging is simply an exercise in truthiness, and reinforces pre-existing disputes over the truth, possibly rendering their resolution more difficult, or even impossible. I'm not sure we understand the properties of this estimator yet, but this special issue has begun to establish some basic principles.

1 Truth vs. truthiness: the end of the beginning

"Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning." Winston Churchill, The Lord Mayor's Luncheon, Mansion House, November 10, 1942

Churchill was referring to what he called the "remarkable and definite victory" of Allied troops at El Alamein. But the claim is strikingly apt for the state of blogs and their impact on elections and politics. Never again will we be surprised by the kind of frenzy that swept the blogosphere in 2004, and the strange political consequences of a large number of nameless, faceless writers who had an FTP client and a rented IP address.

The incident that ended the beginning of political blogging is cited so commonly, and so smugly, by bloggers that it is now its own meme, reduced to the status of a fortune cookie saying. But it really happened, and it is important to get the events right. And it is important to say why it is important: we depend on truth, not truthiness, as a basis for political discourse. The incident reveals how blogs can discipline the main stream media (hereafter, as in several of the previous essays, MSM). But it also reveals how bloggers themselves can be seduced by truthiness: if thousands of people are already convinced of an essential truth, their combined efforts can discredit almost anything, or anyone. Is casting doubt the same thing as protecting truth?

The date was September 9, 2004. The television show 60 Minutes, a dinosaur even by the standards of the MSM, had been accused of being duped by doctored documents. These documents purported to show significant irregularities in G.W. Bush's National Guard service, most particularly in a failure to report for a physical, in violation of a direct written order issued May 4, 1972 by Lt. Colonel Jerry Killian. CBS had the documents to prove it, and they had broken the story on 60 minutes on September 4.³

The Executive Vice President of CBS News, Jonathan Klein, was appearing on the Fox News Channel on that night of September 9. He was "debating" *Weekly Standard* writer and

³Some have argued that the timing of the release of the documents, and breaking of the story, was politically motivated. It is true enough that the September 4 is close to the election. But since CBS was also criticized for not checking the story more closely, and another two weeks of checking would have brought the story's release even closer to the election, this seems a little far-fetched. I would be more willing to believe that CBS rushed the story simply to protect its exclusive possession of the documents, thus "scooping" the other MSM outlets, rather than any political motivation.



 $^{^2}$ Mr. Colbert was actually referring to the Harriet Meiers Supreme Court nomination, where President Bush had persisted in a view (Meiers was qualified) that had little factual support.

pundit Stephen Hayes, in the confrontational style now popular on TV news shows. Hayes, and the host, were both citing claims by bloggers that the documents were obvious forgeries, and that CBS should acknowledge that.

Jonathan Klein responded with a level of condescension that will take its place beside Marie Antoinette's historically dismissive, "Let them eat cake." The last words of the main stream media's ancient regime⁴ were:

You couldn't have a starker contrast between the multiple layers of checks and balances [i.e., fact checkers at 60 Minutes] and a guy sitting in his living room in his pajamas writing.

It turned out to be true, though not in the way that Mr. Klein intended. The documents may or may not have been forged, after further scrutiny. In fact, there were (and still are) significant irregularities. But that meant that the "multiple layers of checks and balances" in the MSM had gotten it wrong, and the pajamas guys had it right: no reputable news source should have used *these documents* to support *that story*.

The reason CBS had gone ahead is simple: they believed that story more than they believed in the need for double-sourced, irrefutable evidence. They acted on truthiness. Dan Rather, in particular, believed that George W. Bush had violated an order to report for a physical. This was, for Rather, part of a larger "essential truth" (Rather's words), that the President's service record was an indication of indifference (at best) or outright shirking of duty during wartime. This idea of an essential truth, or a truth that transcends mere facts, is a remarkable claim for a news organization. CBS persisted in defending this exercise in truthiness long after it was clear to most people, even those who shared the basic distrust of the President and his policies, that they had gotten their facts wrong.

Now, the documents either were or not forgeries. Three decades had passed since the letters had been written (if they were real), so it would not be surprising if memories were hazy. But peculiarities in the letters surfaced, and the primary focus quickly moved to apparently simple features of the letter in which the supposed "direct order" was issued. The most obvious problem was with the raised (superscripted) letters, in a smaller font-size, on unit numbers in the letter. This way of typing would not be conventional on most military typewriters, as it would have required changing the type ball and manually moving the line setting to create superscripts. This, it was pointed out on dozens of blogs, is nearly impossible to do without distorting the line-up of type at least slightly. Furthermore, other (legitimate) letters from the files at around the same time from the same office showed a completely different, nonproportional typeface.

None of this is proof, of course, but the questions kept coming as more and more people independently studied the letter. My use of "independent" is important, because each person is bringing a new perspective, trying to make sense of the truth in a complicated problem. Before long, the supposed "source" for the letter had changed his story about where he had gotten it, and CBS eventually threw in the towel. Dan Rather issued a tepid, narrow apology for the use of the letters, and CBS News fired four people, including the (apparently) overzealous producer Mary Mapes.

Right up until the end, Dan Rather defended the story as "essentially" accurate. That is, even though the specific documents were (possibly) not real, Rather and the producers at CBS argued that their description of the *behavior* of President Bush was real. CBS saw the behavior, and not their evidence documenting the behavior, as the real issue. On several occasions, as documented in the Thornburg and Boccardi (2005) report and elsewhere, senior

⁴The "ancient regime" reference to the MSM was first made, as far as I know, by Liberman (2004).



CBS personnel (including Dan Rather) flatly stated that they could prove the essential truth of the story: The President had not denied their claims about his missing service time.

Let me summarize what I have intended by giving this extended example. CBS's 60 minutes producers, particularly Mary Mapes, believed so firmly in the essential truth of their argument that the Killian documents were seen as examples, not evidence. In fact, no evidence was required. They both relaxed the normal standards of fact-checking and speeded up the production process so they could be first with the story. The President's guilt was a foregone conclusion; the news producers' only job was to get the word out.

The universe of bloggers, partly out of (nearly universal) innate contrarian impulses and partly out of (widespread, though perhaps not majority) partisan antipathy, jumped on inconsistencies in the evidence for the claims. And the particular evidence that CBS had used had varied between flimsy and fancy. Consequently, as an exercise in disciplining a powerful MSM organization, blogs proved more potent than anyone had imagined.

But we should at this point jump off the bandwagon, or at least slow it down. CBS had erred in a relatively narrow and technical sense. There was quite a bit of other evidence, both in the form of documents and eyewitness testimony, that supported the CBS claim, at least in its broad outline. Because of MSM surrender to truthiness in one broadcast, the blogosphere painted CBS as prejudiced against the president, exhibiting the liberal bias that we all know is common in the MSM.⁵ But evidence for "liberal bias" is at best soft, and often seems to be cut from the same cloth of truthiness, just on the other side. "We" do not, in fact, all know that the MSM is systematically biased. But then, what do "we" all know? In the blogosphere, is there even a "we" at all?

2 Truthiness changes the level of the argument, and the nature of evidence

Consider for a moment a network of people, most of whom are potentially in communication with each other. At any point in time, resource and attention constraints require that I am in actual communication with only a tiny fraction of these. And the messages received by me from these other sources are selected by me: I choose to listen, or not listen, by allocating attention. The question is this: does it matter how large the potential network is, if my actual connections (the sources I actually read, and pay attention to) are relatively few, and nonrandomly selected? As we saw earlier in this volume, only a few "elite" blogs (as Drezner and Farrell called them, in Chap. 1) have large numbers of connections, and even many of these are one way: Smith's blog links to Instapundit, but Instapundit does not link to Smith.⁶ However, given the evidence that Drezner and Farrell present, it is possible that this asymmetry, or skewed distribution of readership, still has the aggregative function that

⁶And if Instapundit did link to Smith's blog, Smith's server would crash in the resulting "Instalanche." As Fat Kid once opined, Glenn "linked a man in Reno, just to watch his server crash." For the full list of reasons that Glenn Reynolds is evil, check Amish's full post: http://musingsofafatkid.blogspot.com/2005/02/glenn-reynolds-is-evil-amish.html.



⁵For example, this from Cyberalert (2004), itself quoting from two prominent left-leaning newspapers. "In recalling Rather's long career, both the *Washington Post* and *New York Times* touched on his history of liberal bias. 'Mr. Rather's disputes with President Nixon and Vice President George H.W. Bush won him plaudits from peers and the continuing ire of conservatives,' the *New York Times*'s Jim Rutenberg recalled." Winning the ire of conservatives in an era of conservative presidents such as Reagan, Bush I and Bush II, is not exactly evidence of systematic bias in reporting the news. It is true that a number of other studies have sought to document Rather's bias, but *assuming* bias in every statement or action is rather a different thing. It is, in fact, truthiness.

proponents might claim. Elite blogs are able to use emails from readers as the source for much of their "new" material, and the search costs are much reduced, at least compared to requiring the actual reading of millions of posts to glean content.

No less important, as Drezner and Farrell note, is the fact that the MSM is able to read these same elite blogs. So elite blogs serve an aggregative function, distilling from the great mass of content certain central tendencies, and they also serve as portals or conduits for this information, attracting the attention of reporters and political leaders.

And it is at this point that truthiness raises its ugly face, as an obstacle to the functioning of the blogosphere as sufficient statistic for truth, even if only in a few elite blogs. Bloggers and the MSM both face twin problems: the first is coordination on a small number of elite blogs, and the second is the provision of the public good of truth, rather than mostly private good of truthiness.

Drezner and Farrell review the coordination problem persuasively, and note that simple path dependence, or essentially random initial conditions (personal connections, family, some other focal point features) will solve it. What of the public good problem for producing accurate but not public information? It would appear that there is a solution. Blogs, as Drezner and Farrell note, may not be useful sources of general information. But they are capable of generating lots of specific information at very low cost: Does [blank] document exist? Does anyone know whatever happened to [blank]? Some obscure blogger quite likely does know, and for providing the information they are likely to get paid in the coin of the realm, a link on an elite blog. Problem solved.

Or is it? There are two problems that may prevent any such cybernetic network from operating effectively to produce truth, even if it otherwise has good properties. The first is resistance to reception and persuasion, which differentiates political communication from simple transmission of information. The second is the nature of political arguments, which often invoke fundamental tastes and values rather than questions of fact or evidence.

Reception and persuasion Any analysis of the potential for a collection of blogs, or any other information network, to have good properties is the Zaller (1992) "RAS" model. R-A-S stands for "receive-accept-sample." The theory is designed to explain the conditions under which a citizen even notices (receives) a message from the media. Then, contingent on the message being received at all, the model tries to predict if it will be accepted or rejected. If the message is accepted, the recipient updates his or her beliefs. If not, there is no impact on beliefs, and it is as if the message was never received.

Zaller's claim is that initial reception of messages will depend on the intensity of the message and salience of the subject, as well as the potential recipient's political awareness. The interesting thing is that Zaller predicts that the highly aware are much more likely to resist, and reject, messages that do not conform to their existing attitudes and beliefs.

To put it succinctly, then, the RAS model predicts that most messages will not be received by most people. On the other hand, since bloggers are relatively more politically aware than the general population, they are much more likely to receive messages. Finally, and again because bloggers are relatively sophisticated in terms of political awareness, they are more likely to reject, or rationalize away, claims and messages that are discordant, or that violate their beliefs.

There is one particular area where this phenomenon is of most importance for the information aggregation function. For the key nodes of the information aggregation process to function well, the information, not just the data (the content of posts and the body of emails), must be processed by the brains of elite bloggers. But there is no reason to believe that anything like this occurs, most of the time. In fact, elite blog sorting of useful from garbage



links is likely to be at least as subject to RAS processing as political information for citizens. This was put best in a conversation with someone who has operated as a "semi-elite" blogger (my characterization) in the past. This person asked to remain anonymous, but told me that:

I think people fail to appreciate the extent to which something like RAS explains linking behavior by elite bloggers, who are skimming hundreds of reader emails per day. I've probably sent a few thousand emails promoting my posts to elite bloggers, and found through painful repeated experience that it is just pointless to try to get links to anything that even vaguely conflicts with someone's politics. Also, they frequently end up hating me for disagreeing with them and won't link any more.

Taste and truth Many of the questions in politics do not admit of any truth, or fact of the matter. You like chocolate, I like vanilla, and neither evidence nor reason will influence our views. At best, we might persuade our listener that we do, we *really* do, prefer chocolate. But that has no impact on the listener, who still likes vanilla.

The problem, as several of the papers in this volume have noted, is that we may sort ourselves into chocolate-likers and vanilla-likers, and only listen to those of like minds (or tastes). In this circumstance, the number of participants in actual communication in a network is nearly irrelevant, because all of the links connecting nodes (individuals with Internet connections) will be endogenously selected. More simply, I don't just like to read random blogs; I read the blogs I already know I like.

So the discussion is polarized, or even partitioned. Polities are segmented into groups with different views. This is not a problem of a dissent engaging an orthodoxy, which can have very positive effects on both sides. Instead, the problem is a complete division into "us" and "them," good and evil, with little communication of any kind, and what communication there is more likely to be vituperation instead of argument.

There are other problems, questions of national defense or of policy choices, where the objective is agreed on (nearly) universally, but we disagree about which means is most likely to lead to that end. It seems unlikely that blogs, even blogs written by people with considerable expertise, would have much value as truth-generators here. At best, blogs might be used to disseminate arguments that have been thought about more deeply elsewhere. Alternatively, blogs might provide links to studies or evidence that could prove dispositive, allowing many people very quickly to encounter evidence inconsistent with their own views.

The McKenna and Pole paper in this volume offers some conclusions about how political bloggers spend their time, and effort. They categorize blogging as being divided into four distinct activities: informing, media-checking, political advocacy, and charity. And they found find that bloggers do seem to work to inform readers about MSM stories of interest, either good or bad, and they point to key posts on other blogs. Most bloggers also devote some space and effort pointing out real or imagined errors or biases in the MSM. Advocacy and charity are observed much, much less frequently. Their random sample of 500 blogs certainly oversamples nonelite blogs, if only because the truly elite blogs are so few in number. Thus, their conclusions are a good indication of how *bloggers* spend their time, where the Drezner and Farrell paper was an indication of how *readers* spend their time on blogs. And the claim about essentially private goods is confirmed: bloggers spend time writing links, and seeking links, rather than advancing the coherence of an agenda or advocating a cause in persuasive terms.

On the other hand, as the McKinnon piece in this volume points out, the very fact of widespread dissemination of opinion and information is itself a public good. If a large number of people, separated by a repressive political organization, gain access—even partial



access—to the blogosphere, it can reduce transactions costs dramatically. MacKinnon notes that the direct value of blogs to dissidents may be minimal, because of the ability of the government to control access through "accommodations" in the blog creation software provided to Chinese citizens by major providers. But the fact that blogs serve as an alternative news source, and an extremely rapid means of communicating with large numbers of people, both frightens and quite likely conditions the Chinese government and its actions.

And, as I have tried to point out, this conditioning (as well as this fear) is the key effect on the MSM as well. The simplest setting where truth-generation might matter is questions of fact, whether in the Chinese mainland or the home of the Solons of Washington, DC. The CBS News producers and staff firmly believed that the President had acted as they alleged, and they had reached this conclusion on the basis of many small pieces of information. But then they used this conclusion to extend an implicit claim that the Killian documents they had been given were genuine. And, as was pointed out before, this was presented as a truth claim, and was subject to checking by outsiders. If the Chinese government finds itself unable to sustain its own claims about "facts," including the treatment of Falun Gong or the events at Tienanmin Square, then the monopoly on the writing of history is broken. But if the monopoly of the MSM is broken ... what then? Will there likewise be no authoritative account of history, but rather polarized, nearly religious, truthiness claims?

The answer comes down to whether the primary function of "blogs as subject" is to do fact-checking, or to provide an alternative source of "news" that is entirely outside of the usual norms, and constraints, of the MSM. It is easy to cite examples where the blogosphere is wrong, either as a matter of fact or as a matter of moral action. In the case of the early, and erroneous, calls on the 2004 elections, some bloggers made grossly incorrect extrapolations from early exit polls, and then contributed to the sense of anxiety among citizens by making rather strained allegations of vote fraud.⁷ To be fair, however, a number of prominent bloggers, even those on the left, were much more careful about circumspection regarding exit polls, and worked to dampen the flames of outrage over the "stolen" election.

One problem is that when we say "the" blogosphere, of course, we are making a reduction of hundreds of thousands of individual estimates into one, or at most a few, central tendencies. On any given day, even a single blog may be both right and wrong, in the sense that some posts, or parts of posts, are later borne out by events or new findings, and others are shown to have been nonsensical.

It is that central tendency (or tendencies, if the distribution of views is multimodal, as seems likely) of all those independent bloggers that is of interest. Several of the papers in

⁷Assessing the arguments in favor of exit poll use presents a moving target. Wonkette published every exit poll number she could find, labeling them as exit poll numbers but making rather exuberant claims based on "If these are right ..." reasoning. But she later took a different position, in a speech to the Online News Association, 11/11/2004, shown on C-SPAN (Cox 2004), where she said, "My retrospective argument seems relevant: We had to publish exit polls in order to kill them." Expanding on this theme, she said, "I like my porn free, and my email private." Her implication was that bloggers are not journalists, and that blog readers, not bloggers themselves, are responsible for their own use of blog posts. Finally, she offered a perspective on the role of bloggers and journalists. "Those who work in the business [of journalism] have a stake in the illusion that getting it right most of the time is getting it right all of the time. Bloggers have eliminated that gap between all of the time and most of the time." I quote this at length because the whole speech captures some of the tension between blogs and the MSM: a journalist who gets it wrong has violated a trust, while a blogger who gets it wrong will get it right tomorrow, or later today, without shame. More simply, if a citizen believes an MSM source who gets it wrong, shame on the MSM. If a citizen reads a blog that gets it wrong, and the citizen acts on that information, shame on the citizen. My own favorite commentary on the exit polls, and other aspects of the election, are simply the entire week of archives on Atrios' blog, "Eschaton." It's worth reading, from the bottom to the top: http://atrios.blogspot.com/2004_10_31_atrios_archive.html.



this volume ask whether the conversation taking place in the blogosphere is anything like a "marketplace of ideas," and they examine how this market works. This brings us to the second conception of the analysis of blogs, the "blogs as objects" partition.

The Zuckerman piece investigates whether blogs communicate, or even link, across nations. The Hargittai, Gallo, and Kane paper, by contrast, chooses to look at blogs that bridge, or don't bridge, ideological divides. The juxtaposition is striking, since it is clearly an open question whether language division or political polarization present a bigger obstacle. Zuckerman consciously examines the phenomenon of "bridgeblogs," wondering whether the decentralized and wide open self-concept of many bloggers has any basis in fact. He defines bridgeblogs this way:

Bridgeblogs are weblogs that reach across gaps of language, culture and nationality to enable communication between individuals in different parts of the world. They are distinguished from the vast majority of blogs by their intended audience: while most blogs are targeted to friends and family, or to an audience that's demographically similar to the author, bridgeblogs are intended to be read by an audience from a different nation, religion, culture or language than the author. A Tanzanian blogging in Kiswahili about local politics is not bridgeblogging; a Tanzanian blogging in English about Tanzanian politics, explaining the positions of the politicians mentioned and the context of the issues debated, is bridgeblogging. (Zuckerman 2007, this volume.)

Zuckerman points out, though, that the language of the presentation is not the key to distinguishing a bridgeblog. Rather, a bridgeblog takes the time to identify cultural assumptions, and issues, that insiders might take for granted, but that outsiders could not hope to understand with guidance or personal experience. Defined this way, bridgeblogs come much closer to public goods than blogs focused inward. Some compensation may be offered to the bridgeblogger in terms of increased hits, and links, from outsiders. But it is not clear why someone within a nation might value these "payments," at least not in the same way as if the hits and links came from sources in the same nation. Zuckerman notes an interesting challenge, one that is growing every day: much of the early growth in blogs was in English, and with Western assumptions and idiom. The rapid growth of blogs in India and other nations, mediated by Blogstreet or other aggregators, may soon move the center of gravity of blogs into non-Western, and non-English, formats.

Hargittai, Gallo, and Kane (hereafter, HGK) ask some of the same questions, but the bridges they look for cross ideological chasms, not distances of space and language. HGK perform a real service because, as they rightly note, few of the theories about connections of links across ideological divides have until now been based on anything more than speculation or intuition.

There are two exceptions, at least, and HGK focus on these two works. First, HGK point to research by McPherson et al. (2001), on social networks, to highlight the well-known phenomenon that many people are surprised that there are people who disagree with their views. "Why, I don't know anyone who thinks [widely held position]!", we've all heard people say. My reaction is always, "Well, you should get out more!" I had a liberal friend, a big fan of "the people," who after the 1988 election of George H.W. Bush was literally convinced that there had to have been fraud on a massive scale. "I don't know *anyone* who voted for Bush!" she exclaimed. I didn't have the heart to tell her that she was wrong (she knew me), because her basic point was correct: she had chosen the members of her social network in such a way as to filter out opposing views very effectively, as McPherson et al. (2001) show dramatically.

Second, as HGK note, some of the implications of this divide, if it exists increasingly in citizen news sources as well as social networks, have already been pointed up by Sunstein's



(2001) important and provocative book Republic.com. Sunstein himself extends this view, in this volume (Sunstein 2007), on which more in a moment. The question is, does this Balkanization of news sources, making our information gathering look more like our social networks, really exist? And are blogs contributing to the decline, or are they arresting the fall? HGK's conclusions are rather optimistic, given the possibilities for gloom:

We find that although these political commentators are much more likely to engage those with similar views in their writing, they also address those on the other end of the spectrum. The empirical results [suggest] that there is much more linking to those who share a blogger's ideological stance. That said, there is also some amount of linking to opposing points-of-view. As the qualitative analyses of the data showed, while a considerable proportion of these links are for straw-man arguments, numerous links substantively engage others' arguments or, in the least, politely acknowledge them as the source of some information discussed by the blogger.

Moreover, we find no support for [the claim of an] increasingly isolating role of the Internet. Over the ten-month span included in our data set, we find no evidence that conservative or liberal bloggers are addressing each other less at the end of our time period than at the beginning.

The Woodly paper in this volume makes two important points, both of which are significant in this point of the discussion. First, there is a source of hopefulness in the discussion that the either/or approach based on Sunstein's conception of the media in a republic might not countenance. Blogs, in some limited ways, have made news acquisition and gathering more of a "percolating up, rather than cascading down" arrangement. Woodly doesn't oversell this claim, but it is an interesting alternative. And, second, Woodly notes something constitutive, and fundamental, about the author/reader interaction:

Blog readers are able to contribute to dialogue with amateur authors that they have *made* legitimate and influential by and through their sustained readership. Their comments, voluntary research, and specialized knowledge may all be partially constitutive of the news they that they consume—news that is also consumed by opinion and policy makers about whom they make political decisions.

This sense of belonging, of readers making the source better and more useful, smacks of "small r" republicanism of a type that much of the current discussion misses, or (in the case of Sunstein) dismisses. It is useful at this point to turn to Sunstein's paper in the present volume. Sunstein is skeptical of the market metaphor in general and the Hayek application of the generation of information in particular. This view seems correct, as far as it goes, but it is a limited conception of the Hayekian idea of a spontaneous order. In fact, the blogosphere is a spontaneous order (though it is not a market), and may in some circumstances approach a result argued in Condorcet's famous "Jury Theorem." I want to respond to it in some detail.

Under some conditions, conditions which have not yet been understood by anyone, social orders serve collective purposes. Hayek's general claim, having nothing whatsoever to do with markets or prices, was this:

To understand our civilization, one must appreciate that the extended order resulted not from human design or intention but spontaneously; it arose from unintentionally conforming to certain traditional and largely *moral* practices, many of which men tend to dislike, whose significance they usually fail to understand, whose validity they cannot prove, and which have nonetheless fairly rapidly spread by means of an evolutionary selection—the comparative increase of population and wealth—of those groups that happened to follow them. (Hayek 1988, p. 6; emphasis original.)



More simply, my argument is this: the blogosphere approximates, under some conditions (which are not always satisfied) a cybernetic "thinking machine," a parallel processing statistical estimator which has nice properties. I am not going to argue the technical side of this claim, but instead will point out the value of a low-cost, private institution that even approximates this result.

3 Estimating truth: consistency and large numbers

Statisticians think of "truth," if it exists at all, as a probabilistic concept. It is possible, through Monte Carlo tests, to embed a "true" parameter in data and have a contest between different estimators to see which most closely approximates the desired result under different circumstances.

The properties of a good estimator, or the qualities that make one estimator better than another, are not much in dispute. An unbiased estimator is one that, if there is an error in the parameter value, the value of that error is as likely to be low as high. A consistent estimator is one that converges to the true estimate as the size of the sample grows arbitrarily large. This convergence assumes unbiasedness: the area of any given confidence interval shrinks symmetrically around the "true" value as the number of observations grows.

There is an ancient tension in the question of how to generate wisdom, as several papers in this volume have noted. The problem is deceptively simple: Is it more reliably accurate to depend on the wisdom of the wise, or the crowd? Aristotle, Rousseau, and Condorcet all make arguments, though on different grounds, that there is more wisdom in the group than there is in any one individual that makes up the group. One set of claims rests on the power of many people independently registering judgments. Another set of claims rests on the quite different power of open-minded deliberation (Sunstein 2002, 2003).

We can place these claims about the elicitation of accurate information beside Hayek's notion of decentralized market processes for calculating and transmitting information about relative scarcity and demand. The point is that the process of information discovery, the institutions through which information is filtered and distilled, matter a lot. The three processes I have outlined ((a) elaborations of Condorcet's "Jury Theorem," (b) deliberation, and (c) market processes) are not mutually exclusive. That is, although these processes are different they are all three going on in a society at any point in time, each fulfilling certain important functions.

4 Why this matters for blogs

Earlier in this volume, Sunstein argues that two kinds of arguments made by advocates of the blogosphere are probably false. He argues (correctly, in my view) that the analogy to Hayekian market processes is unworkable, because there is no clearly measured and decentralized price mechanism to provide feedback. Likewise, because of problems of polarization and disconnection, an honestly deliberative "town meeting" is not a good description of the evolution of views in the blogosphere.

But there remains the Jury Theorem claim, the registering of many independent views and the emergence of a central tendency, more by analogy to the central limit theorem of statistics than to market processes in economics, that can lead to wisdom, or at least the distillation of truth.

Since the reader is likely to be familiar with the , I will not discuss it at great length. The possibilities for the truth of Aristotle's (2006) claim that "... the many, of whom each



individual is but an ordinary person, when they meet together may very likely be better than the few good," has been analyzed by formal theorists for decades. The first set of results (e.g., Cohen 1986; Coleman and Ferejohn 1986; Estlund et al. 1989; Grofman and Feld 1988; Ladha 1992; Miller 1986) were optimistic: many people registering their own views, independently arrived at, could be wiser than the wise. In fact, they should almost never be wrong, if their numbers are large enough.

In some sense, we all know this to be true, at least in the sense that we can think of examples. Many examples are documented in Surowiecki (2004, xiii–xiv), who argues that: "... under the right circumstances, groups are remarkably intelligent, and are often smarter than the smartest people in them ... when our imperfect judgments are aggregated in the right way, our collective intelligence is often excellent."

The most striking popular example of the phenomenon is the TV game show, "Who wants to be a millionaire?" Contestants had to answer questions of increasing difficulty. If they got stuck, they could use various "lifelines," or ways of asking for help. The best lifeline, by far, in terms of reliability was the "ask the audience" lifeline. Each member of the audience, without speaking to each other or doing research, registered his or her view of the correct answer on a digital recording device. And the central tendency of the audience answer, often the median response even though there were four alternatives, was almost always correct.

Which leads me to my point: isn't an appeal to the blogosphere a lot like the "ask the audience" lifeline on "Who wants ...?"

Sunstein and others might well answer "no," or at least, "not always, and maybe even not often." There is no real evidence for my position, and even if there is some conditional truth to the claim we are not far enough along in the process to make judgments. Even in the formal political science literature the claim is questionable. The reason is that the condition of independence is not met, and the reasons it is not met have to do with complexities both of strategic action and the complexities of human psychological filtering of information. The problem of "correlated votes," raised but not fully addressed by Ladha (1992) and Estlund (1994), was elaborated very effectively by Austen-Smith and Banks (1996) and Feddersen and Pesendorfer (1998). There are other important discussions in this debate, some of which take a more optimistic view (Coughlan 2000; Gaus 1997; List and Goodin 2001).

But the need for independence is precisely the basis of the criticism Sunstein has made in Republic.com and other writings. If we divide up into distinct social networks, and only talk to each other, there is no reason to believe the independence claim will be tenable, and the functioning of the network as a cybernetic truth producing machine will be crippled.

Interestingly, the fundamental idea of truthiness can be described, and has been described, in terms both scientific and poetic, and so is perhaps harks back as much as it looks forward. Let me close with two example many readers are likely already familiar with.

The first is Thomas Kuhn's famous 1963 book: *The Structure of Scientific Revolutions*. He might be thought of as describing something close to "truthiness," even in the minds of scientists, as researchers persist in using one paradigm in spite of what looks like disconfirming factual evidence. These are often treated as anomalies, or errors in measurement, and dismissed or at least ignored. As Kuhn (1963, p. 77) pointed out, "Though they may begin to lose faith and then to consider alternatives, they do not renounce the paradigm that has led them into crisis. They do not, that is, treat anomalies as counterinstances, though in the vocabulary of philosophy of science that is what they are."

In the limit, researchers on different sides of a paradigmatic divide may find it hard even to comprehend the arguments made by the other side, much less take them seriously. Truth for one side looks like cynical and stubborn truthiness to the other, and communication breaks down.



[W]hat the participants in a communication breakdown can do is recognize each other as members of different language communities and then become translators. Taking the differences between their own intra and inter-group discourse as itself a subject for study, they can first attempt to discover the terms and locutions that, used unproblematically within each community, are nevertheless foci of trouble for inter-group discussions Having isolated such areas of difficulty in scientific communication, they can next resort to their shared everyday vocabularies in an effort further to elucidate their troubles. Each may, that is, try to discover what the other would see and say when presented with a stimulus to which his own verbal response would be different. If they sufficiently refrain from explaining anomalous behavior as the consequence of mere error or madness, they may in time become very good predictors of each other's behavior. Each will have learned to translate the other's theory and its consequences into his own language and simultaneously to describe in his language the world to which that theory applies. That is what the historian of science regularly does (or should) when dealing with out-of-date theories. (Kuhn 1963, p. 202.)

Thus, truthiness in and of itself, even if practiced fanatically, need not be a permanent barrier to understanding and prediction.

This phenomenon is also strikingly described in one of my favorite poems about discovery, and communication. It was written by John Godfrey Saxe (1816–1887), based on an Indian fable.

It was six men of Indostan
To learning much inclined
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.

In the story, each of the six blind men reached out his hand, and explored that portion of the vast beast within that man's limited reach. One grabbed the tail, and came to the conclusion that elephants are like ropes. Another grabbed the leg, and announced that elephants are like trees. And so on.

If we increase the number of independent observers from six to ten, and then to one hundred, or one thousand, at some point an aggregate picture of the elephant begins to emerge, provided there is some mechanism for sharing and aggregating the information. No one observer can "see" the elephant, it is true. But the central tendency of the description can be made as precise and accurate as necessary, simply by exploiting random, independent judgments of large numbers of ignorant individuals.

But this claim about central tendency would be true only if there is some pressure to arrive at some single aggregate answer. If instead there is a tendency toward polarization (the "like a tree" group wants to talk smack about the "like a rope" group, and so on), then there is no independence of judgments being registered. Instead, the "search" process simply replicates existing opinion. In this example, that would mean that if someone new comes in, the "like a rope" group says, "C'mere! Feel this!" Feeling the tail, the newcomer concludes that, yes, in fact, elephants are like ropes. Replicating the same inputs in such polarized settings also replicates outputs, and the independence property necessary for avoiding truthiness is destroyed.

The last two stanzas of Saxe's poem are instructive, for all of us interested in blogging:



And so these men of Indostan

Disputed loud and long,

Each in his own opinion

Exceeding stiff & strong,

Though each was partly in the right,

And all were in the wrong!

Moral: So oft in theologic wars,

The disputants, I ween,

Rail on in utter ignorance

Of what each other mean,

And prate about an Elephant

Not one of them has seen!

References

American Dialect Society. (2006). *Truthiness* voted 2005 word of the year by American Dialect Society. http://www.americandialect.org/Words_of_the_Year_2005.pdf (accessed May 2006).

Aristotle. Politics. Translated by Benjamin Jowett. http://classics.mit.edu/Aristotle/politics.html (accessed May 2006).

Austen-Smith, D., & Banks, J. S. (1996). Information aggregation rationality and the Condorcet jury theorem. American Political Science Review, 90(1), 34–45.

Cohen, J. (1986). An epistemic conception of democracy. Ethics, 97(1), 26-38.

Coleman, J., & Ferejohn, J. (1986). Democracy and social choice. Ethics, 97(1), 6-25.

Coughlan, P. J. (2000). In defense of unanimous jury verdicts: mistrials communication and strategic voting. *American Political Science Review*, 94(2), 375–394.

Cox, A. M. (2004). Televised speech, presented to the Online News Association 11/11/2004, shown on C-SPAN (rtsp://video.c-span.org/project/c04/c04_rwh112804.rm).

Cyberalert. (2004). The 1,868th CyberAlert. Tracking liberal media bias since 1996 9:35am EST, Wednesday, 24 November 2004 (Vol. 9, no. 231). http://www.mediaresearch.org/cyberalerts/2004/cyb20041124. asp1 (accessed November 2006).

Estlund, D. (1994). Opinion leaders independence and Condorcet's jury theorem. *Theory and Decision*, 36(2), 131–162.

Estlund, D., Waldron, J., Grofman, B., & Feld, S. (1989). Controversy: democratic theory and the public interest: Condorcet and Rousseau revisited. *American Political Science Review*, 83(4), 1317–1340.

Feddersen, T., & Pesendorfer, W. (1998). Convicting the innocent: the inferiority of unanimous jury verdicts under strategic voting. American Political Science Review, 92, 23–36.

Gaus, G. (1997). Does democracy reveal the voice of the people? Four takes on Rousseau. *Austral–Asian Journal of Philosophy*, 75(2), 141–162.

Grofman, B., & Feld, S. L. (1988). Rousseau's general will: a Condorcetian perspective. American Political Science Review, 82(2), 567–576.

Hayek, F. (1988). The fatal conceit. Collected works of F. A. Hayek (Vol. I). W. W. Bartleby III (Ed.). Chicago: University of Chicago Press.

Kuhn, T. (1963). The structure of scientific revolutions. Chicago: University of Chicago Press.

Ladha, K. K. (1992). The Condorcet jury theorem, free speech, and correlated votes. American Journal of Political Science, 36(3), 617–634.

Language Log. (2005) Truthiness or trustiness? http://itre.cis.upenn.edu/~myl/languagelog/archives/002586. html (accessed November 2006).

Liberman, M. (2004). You couldn't have a starker contrast. Language Log http://itre.cis.upenn.edu/~myl/languagelog/archives/001459.html (accessed May 2006).

List, C., & Goodin, R. (2001). Epistemic democracy: generalizing the Condorcet jury theorem. *Journal of Political Philosophy*, 9(3), 277–306.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: homophily in social networks. Annual Review of Sociology, 27, 415–444.

Miller, N. R. (1986). Information, electorates, and democracy: some extensions and interpretations of the Condorcet jury theorem. In B. Grofman & G. Owen (Eds.), *Information pooling and group decision* making. Greenwich: JAI.



Sunstein, C. (2001). Republic.com. Princeton: Princeton University Press.

Sunstein, C. R. (2002). The law of group polarization. The Journal of Political Philosophy, 10(2), 175-195.

Sunstein, C. R. (2003). Why societies need dissent. Cambridge: Harvard University Press.

Sunstein, C. R. (2007) Neither Hayek nor Habermas (this volume).

Surowiecki, J. (2004). The wisdom of crowds. Why the many are smarter than the few and how collective wisdom shapes business, economies, societies and nations. New York: Random House.

Thornburg, D., & Boccardi, L. (5 January 2005). Report of the Independent review panel on the 8 September 2004 60 minutes Wednesday segment 'for the record' concerning president Bush's Texas Air National Guard Service. Washington, DC. http://wwwimage.cbsnews.com/htdocs/pdf/complete_report/CBS_Report.pdf (accessed May 2006).

Zuckerman, E. (2007). Meet the bridgebloggers: who's speaking and who's listening in the international blogosphere. *Public Choice* (this volume)

