Needing to Be Noticed: Understanding the Market in an Attention Economy

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For this paper, I have decided to step through the proscenium and appeal directly across the "fourth wall" to whatever readers this piece may attract, in the hopes that someone among you will be able to help me figure out the answers to a set of questions with which I have been wrestling for several years. For fun, let's call this paper an exercise in crowd-sourcing.

The context is this: Information used to be scarce and human attention comparatively abundant. Now that ratio has flipped over—information is available in mind-boggling abundance, and human attention is so scarce that it must be competed for. Hence the notion of an attention economy—anyone who is trying to get the public to notice and heed a message (which can be anyone from a soap salesman to the U.S. secretary of State) is now in the position of, in effect, offering "wares" for which the target audience will "pay attention" (or perhaps will "buy our argument"). As the discussion below will show, attention has many—but not all—of the characteristics of money, which makes the notion of an "attention economy" a potentially useful tool both for those who must communicate messages, like people in public diplomacy, strategic communications, and psychological operations, and those who try to intercept and understand the messages being sent by those whom we consider our rivals and opponents.

That much makes sense to me. What I cannot figure out, however, are things like the following:

- **How might the "market price" for attention be determined?** If there is a desired audience for a particular message, presumably other message senders are also competing for the same attention. Just as someone selling soap might set the price so low that he or she captures the entire market but in the process goes bankrupt, so might

The contours of diplomatic engagement are changing rapidly, as are the environments in which diplomacy is crafted, honed, and practiced. New media have changed the pace and content of political awareness and provided new tools for diplomacy.

Every global issue now tests the assumptions and practices of traditional diplomacy. Non-state actors—whether benign or malign, constructive or disruptive—now play increasingly important roles in the conduct of international politics and lead us to think differently about global development, conflict, and reconciliation.

These issues, conditions, and actors are helping to refine, and perhaps redefine, what diplomacy means, how it is conducted, and how we examine the new terrain of diplomacy.

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a "message seller" pander so broadly to the desired audience that all attention is gained but at the cost of destroying the image, respectability, or authority of the message sender (this is what has been dubbed "gonzo marketing").

- **Is there a way to determine ROI (return on investment) for attention?** Although in some ways this is the same question as the one above, it calculates the problem in a slightly different manner. Is it possible somehow to calculate the "profit" gained by one messaging strategy vs. another? Again, a campaign to sell a particular product might be so expensive that any increased sales are more than offset by the cost of the campaign.

- **Are "attention products" durable, or ephemeral?** One of the obvious traits of the new information environment is how faddishly it behaves, with the things to which people pay attention seeming to come and go with mind-boggling speed. Government spokespeople cannot compete well in that fad-driven environment, nor, probably, should they. Similarly, analysts trying to figure out the consequences of other areas of the "attention market" will only want to track "attention offerings" of lasting or durable value. So what is an attention "durable good"?

- **Is it possible to do an "attention market needs" study?** People trying to sell cars are able to survey the market and get a sense of the size of the overall potential market, its demographic profile, and its needs both satisfied and unsatisfied and so figure out how best to position their proffered car in that overall market. Is it possible to do something similar for a desired "attention market," and if so, how?

- **How do humans perceive and prioritize their attention needs?** In part this is a question about what humans receive in return when they "pay attention." Is it information? Affirmation? Is it a kind of social capital that they can then "resell" to hold or gain status in their own community? Does Abraham Maslow's "pyramid of needs" apply in this kind of market, and, if yes, to what level of that pyramid would a message sender's "attention good" be directed?

I am not an economist, so perhaps I have phrased these questions poorly (and I would be grateful for being corrected). I hope, however, that the purpose of these questions is clear—since it appears to be the case, as I argued in an earlier paper, that the flow of information clamoring for attention has been increasing at somewhere between 30 and 60 percent *per year* for the past two decades, while our ability to absorb information has been growing at only about 5 percent per year (and that primarily through our growing tendency to "multitask," or do several things superficially rather than one or two things deeply), then the competition for attention grows ever tighter. As suggested above, I believe that better understanding how an attention economy functions would help both government communicators and government analysts to do their jobs more effectively.

So what makes me think that attention is a currency, or a medium of exchange?

LACK OF ATTENTION = LACK OF EXISTENCE

It is not necessary to resolve the ancient metaphysical conundrum of whether or not objects exist independent of humans to perceive them ("if a tree falls in a forest . . .") to acknowledge that in the world of human interaction, Bishop George Berkeley's principle of *esse est percipi* ("to be is to be perceived") is intuitively unassailable. To take but one example, most of my readers are unlikely to be swayed one way or the other by the main editorial in today's *Hashte-e-sobh*—for the very simple reason that most of us are unlikely to have read this Kabul newspaper (or be able to read it, even if we were in Kabul).

The need to be noticed was implicit in the communication theories elaborated in the mid-twentieth century. Harold Lasswell [profiled in this well done YouTube biography] defined a communication attempt as having five parts: a ***sender***, who

crafts a message, which is sent through a ***medium***, to an ***audience***, in order to have an ***effect***. Most studies concentrate on the first four of these elements, because they are discernible, susceptible to study, and also consonant with the persistent belief of message senders that it is they who control the process. The fifth element—the effect—is utterly beyond the control of the sender, despite the claims of generations of advertisers, strategic communicators, spin-meisters, propagandists, and others to the contrary.

To be sure, entire industries claim that there is a predictable relation between message sent and behavior elicited. The sudden appearance at the beginning of the twentieth century both of an entity called "the masses" and of new means of reaching and, it was presumed, influencing those masses—the "mass media"—seemed somehow to explain both new political phenomena such as Bolshevism or Nazism and also to explain new industries like advertising; public relations; and, indeed, the phenomenon of "public opinion." As "*ur*-publicist" Edward Bernays exulted in his 1928 book, *Propaganda*, "With the printing press and the newspaper, the railroad, the telephone, telegraph, radio, and airplanes, ideas can be spread rapidly and even instantaneously over the whole of America," allowing "the invisible rulers" of society to shape public behavior, from purchasing habits to political preferences.

Research has repeatedly showed, however, that the operative word here is "can"—not "will." Early in the development of mass marketing it was already axiomatic that "half of my money spent on advertising is wasted, but I don't know which half" (usually attributed to John Wanamaker or William Levy). Advertisers, who are those most concerned with proving a connection between a message sent and a consumer response, traditionally measured exposure—the number of consumers who *could have seen* an advertisement—through such devices as newspaper circulation or TV ratings. More direct methods of measurement, such as direct mailings, are generally acknowledged to be successful if they receive responses from as few as 0.5 percent of those to whom the message was sent.

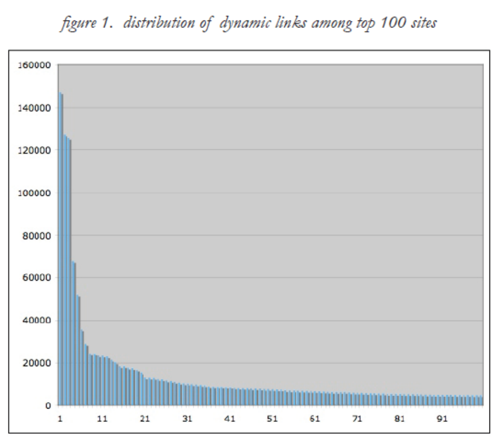
Surprisingly, online advertising appears to have similar response rates. The standard measurement of online advertising efficacy is the so-called "click-through rate," or CTR—meaning the percentage of those who accessed a particular website who also click on the advertising link the page offers, thus paying it their attention. According to industry accounts, when first introduced, page-linked ads typically got response rates of from 2 to 5 percent, but within just a few years the typical rate has fallen tenfold, now to be more typically 0.2 percent. Unlike direct mail campaigns, online advertisers can also measure the so-called "conversion rate," meaning the percentage of those who click on the ad who actually *do* something. Discussions on advertising bulletin boards [example one, example two] suggest that "conversions" may be almost as small a proportion of "click-throughs" as "click-throughs" are of total visitors—meaning the relation between message sent and effect approximates that of mere chance.

Such response rates are probably not surprising, given that the average American is said to have anywhere from three thousand to five thousand advertisements per day clamoring for his or her attention [this blog aggregates a number of figures and supplies their sources, with the further conclusion that most of the figures seem to be made up]. No one seems to have done the further calculation, of how many of those are noticed in an active way, how many in a passive way, and how many not noticed at all. It seems intuitively obvious, however, that only ads in the first group will have any chance at all of "existing."

HOW MANY PEOPLE DOES IT TAKE TO BE "AN AUDIENCE?"

Figure 1, taken from Harvard University's Berkman Center for Internet and Society's study on the relationship between the "mainstream media" and the blogosphere, tracks the information sources to which a group of ten thousand prominent bloggers had linked during a year. As the study notes, figure 1 reflects the fact that just twenty information sources (most of them the web versions of "mainstream media") were the source of 22.4 percent of all outlinks from that large group of influential bloggers.

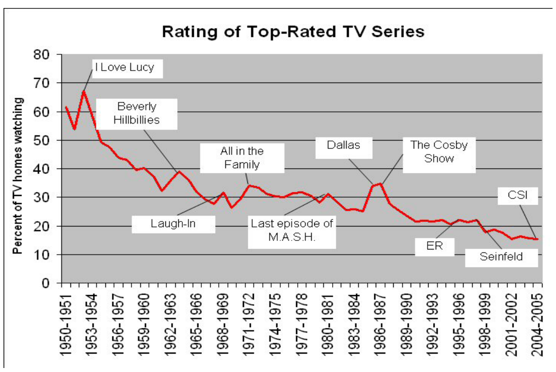
Figure 1



Source: Berkman Center for Internet and Society (Cambridge, MA).

This type of sharply kurtotic (flat) graph—what author Chris Anderson dubbed a "long tail graph"—can be found in all kinds of domains. Such graphs are generally interpreted in one of two ways: either they are (1) used as the Berkman Center report did, to demonstrate the continued dominance of the sources that are most linked to; or (2) are used, as Anderson did, to celebrate how much larger the choice available to a would-be user of something is now, because of the Internet, than it was previously, before the Internet. Anderson shows, for example, that the online retailers Netflix, Amazon, and Rhapsody each have about five times as many (respectively) films, books, and song recordings available for purchase than do their giant "brick and mortar" counterparts Blockbuster, Barnes & Noble, and Walmart.

Figure 2



There is another way, however, to interpret that information, as is suggested by figure 2. Each of the points on this line would be at the extreme left of figure 1 (that is, would represent the show watched by the greatest number of people). However, when represented as the percentage of the total "potential attention" that might have been paid ("ratings" being the percentage of potential viewers who actually watched), it is vividly clear that the "attention share" even of the biggest "attention winners" continues to diminish.

Thinking about a Pareto curve in this way has several consequences. One, it reminds us that such curves are fractal—any subsection of the figure will have the same overall shape, as long as there are roughly equivalent things among which humans may choose. Two, the downward slope of the market share grabbed by the top-rated TV shows is a reminder that the old relationship between the cost of production and the cost of attention has been inverted, with profound consequences for what used to lie at the top of the attention curve. The best explanation of this that I have seen belongs to Harvard University's media expert Umair Haque, in his presentation on the economics of new media. When technology made the threshold of entry into communication high, the amount of attention relative to the amount of information to which it could be paid was relatively large. This made it worthwhile for content producers to invest more in production than in marketing.

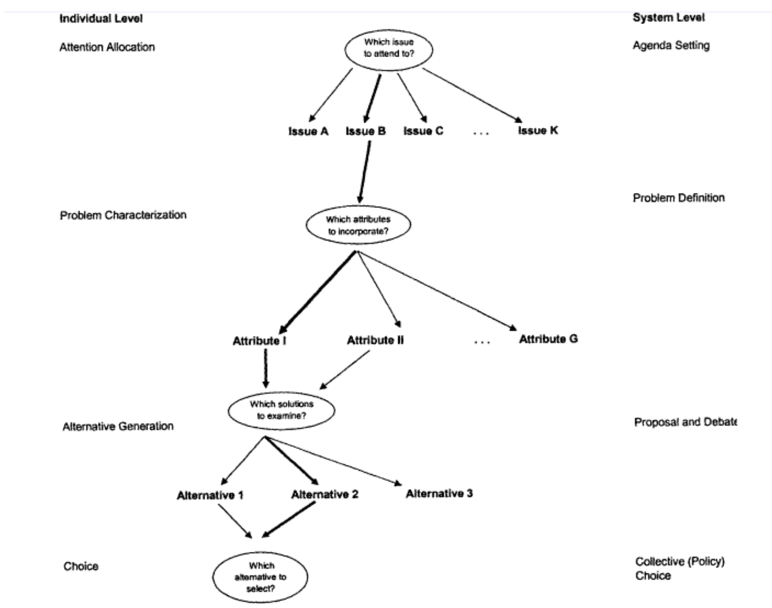
The various tools of the new media—blogs, Twitter, YouTube, and so forth—have lowered the threshold of entry effectively to zero, which, unsurprisingly, has made content supply effectively infinite. Although there are studies [one example, second example] that suggest that the human brain is sufficiently elastic to be able to increase the amount of attention we are able to pay, the rate of such growth is far outstripped by the rate at which information choice grows, just as the University of California–San Diego study cited above suggests. According to Haque's model, the cost of trying to attracting attention (marketing) quickly becomes prohibitively high relative to possible ROI, which puts a downward pressure on content quality—this becomes less professional and more amateur. It also becomes much shorter—part of multitasking is that people prefer songs to entire albums and ringtones to entire songs, just as they prefer blogs to books or articles and prefer tweets to longer blogs. News headlines are sufficient, rather than entire articles, and soundbites trump conversations. This process Haque calls "atomization," which he uses in two ways—the content gets smaller, but so too do the audiences for any particular bit of content.

ACTION REQUIRES ATTENTION—BUT HOW MUCH?

The workings of an attention market get more complicated as the number of actors required for an action begins to scale. The best explanation of this process that I have found is that in the book *The Politics of Attention,* by political scientists Bryan Jones and Frank Baumgartner. After examining more than fifty years' worth of voting behavior, newspaper articles, congressional deliberations, and other data, the two reached a hypothesis of "disproportionate information processing."[1] This has three stages: (1) How individuals and institutions choose among the many

1. Bryan Jones and Frank Baumgartner, *The Politics of Attention: How Government Prioritizes Problems* (Chicago, IL: University of Chicago Press, 2005), p. 29.

Figure 3



Source: James and Frank Baumgartner, *The Politics of Attention: How Governments Prioritize Problems* (Chicago, IL: University of Chicago Press, 2005).

issues competing for attention; (2) How decisionmakers understand and interpret the issues to which people do choose to pay attention; and (3) How solutions or remedies for those chosen problems are defined and chosen. The authors' hypothesis is captured in figure 3, taken from their book.

This hypothesis explains how something emerges from all the myriad random actions and events of the world, becomes classified as something-which-deserves-attention, and then further acquires a menu of competing proposed remedies, one or more of which is eventually chosen. As the authors note, the three elements ("which issues, which dimensions, which solutions") "each . . .adds a measure of disproportionality to the policymaking process," because "they 'bend' the response to new information . . . in complex and interactive ways so severely that it is very difficult to connect information signals to policy response even in democratic governments."[2] Laid out in this manner, it is clear how all kinds of competing elements—legacy systems, lobbying pressures, media attention, customary practices, and so forth—come into play, battling with one another at each stage of this process, seeking to control how each of the three elements (issue, dimension, solution) is defined. Although the authors do not use the example, perhaps the most dramatic illustration of their argument might be the problem of radical Islam, which, prior to 9/11, was not defined as an issue deserving of high attention either globally or nationally but then became the central defining issue for the rest of the decade. As Baumgartner and Jones might argue, what changed was not the issue but the attention that we pay to it.

What their hypothesis does not examine so well, however, are the various processes by which the various elements come

2. Ibid., p. 30.

to be defined. The Baumgartner and Jones system is based on the mass media information system, which (as I noted in another essay) tended to create large blocks of shared views and attitudes. In this environment, media did not tell people what to think, but they did tell them what to think about[3]—because there were only a limited number of topics in the broad consensus media.

The huge increase in the supply of information has changed that situation dramatically. Although academic studies lag behind the pace of technological change (for example, most studies of the influence of new media on voting behavior use the 2000, 2002, and 2004 elections), findings suggest that, while overall political knowledge in the U.S. electorate has remained relatively constant, it has gotten markedly more "lumpy"—that is, the degree of knowledge has risen sharply in some segments of society and decreased equally significantly in others. According to one influential study, the best single indicator for both degree of knowledge and likelihood to vote is what the study calls "relative entertainment preference," or REP. Among those who listed news and public affairs programs as their preferred content, the increased information made possible by cable TV and Internet access increased their degree of participation as well as their knowledge of the issues, while those who disliked or were indifferent to news—*which was more than half the respondent pool*—showed a significant decrease both in knowledge and in participation.

ATTENTION COMMUNITIES

This term belongs to Michael Goldhaber, who has written extensively (and somewhat possessively) about "the attention economy" [1997 article, another 1997 article, 2006 article]. Goldhaber and the other authors with whom he has debated his notions (Rishab Ghosh, Phillipe Algrain) seem in general agreement that attention-as-quasi-currency is a phenomenon of

3. Maxwell E. McCombs, Donald L. Shaw, "The Evolution of Agenda-Setting Research: Twenty-Five Years in the Marketplace of Ideas," *Journal of Communication,* vol. 43, no. 2 (1993): 58–67.

the "post-material" market—that once industry and commerce have given society a certain level of material comfort then, just as Maslow's pyramid might predict, nonmaterial incentives and rewards begin to rise in significance. Often offered as an example is Linus Torvalds, the programmer who released his Linux as a free "open source" operating system, thus forgoing, by one estimate, "$500 million" in potential annual income, because doing so was, he said, a "natural decision within the community that I felt I wanted to part of."

This probably is why some researchers have seen the "attention economy" as more like a "gift economy" than a market economy. In a gift economy, people accumulate status based on their ability to give, not their ability to sell. Attention thus is a form of social capital—we offer "attention-worthy" things to a community of which we wish to be a part and then maintain or improve our status within that community (or more likely, within the several communities of which we are simultaneously a part) by continuing to collect, produce, and exchange attention. Viewed in this light, attention then is less a currency or commodity than it is a tribal identifier—which might prove a more useful analytic approach to how attention might be used as a means of better understanding the behavior of the "atoms" in an atomized information environment.

As far as I am aware, the scholar who has written most extensively about the human battle for attention is Erving Goffman, who argued that all human social behavior, individual and group, is basically performance—a complex set of signals, behaviors, and props meant to attract the attention of those whose attention we wish to capture while also controlling to the greatest degree possible the ways in which others define us. According to Goffman, we human beings do not really have a "true nature" but rather have a spectrum of roles that we play in the world—even, he argues, when we are alone, as we prod ourselves to exercise or lose weight or study, in essence pretending to ourselves that we are better than we are.[4] A more entertaining, and possibly more useful version of the same ar-

4. Tom Burns, *Erving Goffman* (London: Routledge, 1992), p. 15.

gument is advanced by Massachusetts Institute of Technology (MIT) researcher Sam Ford, who has created an intriguing line of work around the phenomenon of professional wrestling. As Ford points out, professional wrestling is "men performing the illusion of one-on-one sporting competition, while most fans know that what they are watching is for show." The industry, Ford argues, is a useful "carnival mirror," one that reflects a certain reality but with predictable and, perhaps, instructive distortions.

What is important in professional wrestling is the interplay between an established narrative and variation within that narrative. In Ford's view, wrestling is not important so much as an activity itself as much as it is "an excuse to build community." People are wrestling fans not because they are drawn to wrestling but because wrestling allows them to create and share the particular aspects of themselves that are rewarded in a wrestling culture. Ford's studies suggest that this culture—and perhaps, by implication, all such attention communities—is highly dynamic, with a need for novelty and constant renewal but always within the larger confines of an established narrative structure.

ADAM SMITH AGREES

One of my strangest discoveries in trying to understand how to make analytic use of attention was that Adam Smith had already been there 250 years ago. Although now known primarily for his *Wealth of Nations (WN)*, Smith actually devoted more of his life to an earlier work, *The Theory of Moral Sentiments (TMS)*, which scholars argue is the foundation upon which the later works must rest. Somewhat like Goffman, Smith saw each person as having an inner spectator—what he called "the man in the breast"—who watches and judges our own behavior, appealing to our vanity, our desire to be well thought of by others, as the spur to better behavior. In Smith's words (as quoted by scholar A.L. Macfie[5]): "To be observed, to be attended to, to be taken

5. A.L. Macfie, "Adam Smith's *Moral Sentiments* as Foundation for his *Wealth of Nations," Oxford Economic Papers,* New Series, vol. 11, no. 3 (October 1959): 209–228.

notice of with sympathy, complacency and approbation, are all the advantages which we can propose to derive from [vanity]."

As explored by Smith, this "vanity," or the desire to be thought of well by others, is a fundamental element for social cohesion, helping to resolve the paradox of why people who are driven primarily by self-interest will, in his view, work for what in sum is the greater good of society at large. Indeed, the famous phrase "an invisible hand" appears in *TMS* before it does in *WN*,[6] to explain why it is that people seeking "the gratification of their own vain and insatiable desires" also "divide with the poor the produce of all their improvements . . . led by an invisible hand to make nearly the same distribution of the necessaries of life, which would have been made, had the earth been divided into equal portions among all its inhabitants." Indeed, there is a strong suggestion, at least in Macfie's reading of Smith, that the more strictly economic *WN* is an investigation of one specific kind of "vanity satisfaction," in which money serves as the surrogate measure of attention offered and attention paid.

As Smith wrote (quoted in Macfie): "Man has almost constant occasion for the help of his brethren, and it is in vain to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favor.... Give me that which I want, and you shall have this which you want." According to a student's notes taken when Smith must have been lecturing on this point, the mechanism of this exchange, this mutual satisfaction of the requirements of individual vanity, is explicitly monetary—in the student's transcription, Smith on that occasion concluded this point by noting: "A bargain does this in the easiest manner."[7]

What Smith seems to be arguing, at least in Macfie's interpretation, is that currency is a surrogate of attention rather than, as Goldhaber and the others tend to imply, that attention is a surrogate of currency. The worker fashions something that,

6. Emma Rothschild, "Adam Smith and the Invisible Hand," *The American Economic Review,* vol. 84, no. 2 (May 1994).

7. As quoted in Adam Gopnik, "Market Man: What Did Adam Smith Really Believe?" *New Yorker,* October 18, 2010, p. 84.

he or she hopes, will draw the attention of someone else, in return for which a token of that attention—a coin—will be given. Indeed, in Smith's view, we have no choice but to try to draw the attention of others, because this is the only means by which we can validate and define ourselves. In terms of Smith's "vanity" or "self-love," we seek to engage the sympathy of others by in effect hijacking it—"sympathy" exists only to the degree that we can be brought to share the interests of those seeking our attention.

GOT TOOLS?

From the above, I can see glimmers of ways in which an "attention market" or "attention demand" might be measured, at least among an "attention community" of interest (this could mean either a community that a public communicator wished to reach or one that an analyst wished to understand) and how that might be used in real work.

For example, Baumgartner and Jones offer a structure of how we might map the transition from attention to action, making it possible to catch behaviors or attitudes as they are emerging, rather than after they have become fixed. Using that approach might have made it possible, to take one example, to notice that violent jihad was emerging as a preferred solution to perceived social and economic problems in Egypt in the 1970s and 1980s (a process described by Lawrence Wright in this article), rather than have to discover this after jihad had already hardened as the "solution."

Goffman's notion of life-as-performance and Goldhaber's concept of the attention community suggest that part of understanding particular "attention markets" may be to better understand the narrative structures that bind particular attention communities together. Although I have not found this in written form, Ford made the suggestion in a presentation (Chicago, May 2010) that small, cohesive attention communities have a curious dynamic, in that people try to build their own social capital by increasing the overall community "stock" of whatever it is to which they are paying attention, but they also do not wish to share too much of it, because they then lose the exclusivity of the source (the example was based on obscure bands). A consequence, Ford suggested, is that the elements of a narrative can change, as the group itself navigates the boundaries of its own "tribal edge." Although he was talking about marketing products, rather than ideas, Ford agreed that it might be possible for professional communicators to engineer particularly desired (or undesired) elements of a set narrative identity. Thus rather than attempt utterly to dissuade a group of something, it might be possible—provided one understood how to value the "currency of attention" within a group—to influence just a few points of particular concern.

Doing any of this, however, requires tools. Although the growing interest in word-of-mouth marketing, viral marketing, and "buzz" is facilitating the development of what might be called "prototools," there does not yet seem to be an easy tool suite for "attention marketing." The Alexa site offers considerable amounts of information about interest trends, at least at the level of particular websites, and the tag features of Technorati or the trending query boxes of Icerocket and Blogpulse are suggestive at least of fads, albeit in the comparatively narrow confines of the blogosphere. The Google trends tool and the various "twittermeters" can be suggestive as well of what people are searching for—although the demographic groups into which that information can be broken remains still quite coarse.

The Berkman Center's Media Cloud experiment moves in a somewhat different direction, trying to track the stories that the media are offering for attention in various places. The University of Illinois has an even more ambitious experiment underway, which attempts to provide a daily "dashboard" of volume and sentiment around a given issue, further pinpointing important "influencers" in a given story flow. For the moment, the project is confined to a small slice of the global climate change story—hence the project's name, The Carbon Capture Report—but the approach seems scalable to a wider swath of news stories or topics of interest. There are also commercial services like Quantcast and Compete and Hitwise, which promise all sorts of monitoring miracles—for a fee (meaning I have only seen their sales pitches and not the products).

AND SO . . .

I have reached the place I always reach—and where I would now welcome your help. It continues to make sense to me that if we could understand the attention economy better we could

- understand the "message needs" or the "attention market" within a particular group of interest;
- understand the kind of "message product" that is more likely to meet those needs and therefore to compete more successfully against all the other "message products" that are bombarding that market, competing for the payment of that market's attention;
- understand why other "message products" may be outcompeting our "message products" and learn how to rectify whatever problems may exist (and maybe, if we are lucky, or very good, we can even figure out how to make these products so desirable that they "go viral," meaning that the "customers" themselves do the marketing for us); and finally
- learn how to improve our own products so that they are not just noticed but also do a better job of achieving the purposes for which we have been "marketing" them.

In closing, I cannot help but recall this:

> American humorist Will Rogers was reputedly once asked how the Allies should deal with the German U-boat threat during World War I. He suggested that the solution was simple. "You just boil the oceans. The U-boats will turn pink and pop to the surface. Then, you just pick them off." When asked how he would boil the oceans, he responded, "I never worry about details."

What I am saying is—I would appreciate your help in "worrying about the details."

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