

PEER-REVIEWED JOURNAL ON THE INTERNET

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## **The Attention Economy and the Net** **by Michael H. Goldhaber**

*If the Web and the Net can be viewed as spaces in which we will increasingly live our lives, the economic laws we will live under have to be natural to this new space. These laws turn out to be quite different from what the old economics teaches, or what rubrics such as "the information age" suggest. What counts most is what is most scarce now, namely attention. The attention economy brings with it its own kind of wealth, its own class divisions - stars vs. fans - and its own forms of property, all of which make it incompatible with the industrial-money-market based economy it bids fair to replace. Success will come to those who best accommodate to this new reality.*

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Explanatory note: This article began as a draft of a conference[ \* ] presentation,

and has been left pretty much in that form. Another version was actually presented.

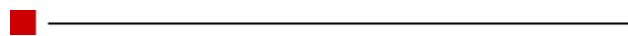
## Greetings

This is a conference on the "Economics of Digital Information." My guess is that most of the speakers, and most of the listeners interpret that title to mean that while "digital information" requires special consideration enough to justify a special conference, the basic meaning of the word "economics" can be taken for granted. What we are to be concerned with is how prices, costs, productivity, and so forth apply to digital information.

My vantage point is quite different. What we mean by economics cannot be taken for granted if what we are talking about is the economics which applies, say, to the Internet, or more generally to cyberspace, or more generally still, to life in the foreseeable future. We are moving into a period wholly different from the past era of factory-based mass production of material items when talk of money, prices, returns on investment, laws of supply and demand, and so on all made excellent sense. We now have to think in wholly new economic terms, for we are entering an entirely new *kind* of economy. The old concepts will just not have value in that new context.

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Of course, there is nothing so new about the insight that the Internet is part of a revolutionary change in the way we do things and also in why we do them. Many names for the new era have been invoked: the information age, the Third Wave, the move towards cyberspace, all of which point, vaguely at least to the fact that new patterns of activity and of interrelationships among people are now emerging. The trouble with that insight is that it is so vague that you can easily agree with it without feeling the necessity of changing your economic thinking in the least. My effort over the past several years - it's embarrassing to admit how many - has been to overcome that vagueness, to come up with specifics about what this revolution actually implies. My conclusions are that we are headed into what I call the attention economy.



## Change Happens

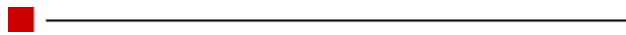
Before offering any details about the new economy itself I want to deal with a feeling you no doubt have. "Economics is economics; it really can't change." Even if you are not saying that in so many words, I feel fairly confident it is somewhere in your mind at this point. To try to convince you at least to have some doubts about that certainty, let me invoke two different analogies. (Since it is obviously beyond my capabilities to explain the full workings of an entire new economy in the brief time available here, getting you to take the

the Net and  
cyberspace...

thought of it seriously would not be a useless accomplishment.) The first analogy comes from science. Most scientists would agree that early in its existence, the planet Earth held no life. There were various kinds of minerals, volcanoes, sea water, chemicals in solution - lots going on, but all of it understandable in terms of the laws of physics, chemistry, geology. Then, fairly suddenly, some chemical molecules began to commingle in a new way, capable of growing and reproducing. Life had emerged, and, in its tremendous variety, grew and flourished according to completely new laws, the laws of molecular biology, of physiology, of ecology and so on.

To try to understand life solely on the basis of the old laws of physics and chemistry, would be an enormous, crippling mistake; you couldn't talk about the most obvious things, like sex or aging or digestion or species or parasites, since those are all biological concepts that have no place in physics or chemistry. The parallel I want to draw is that the new kinds of connection that the Net and cyberspace make possible also demand a whole new way of thinking if you are to understand what is going on between people, the kinds of organized effort that are now possible, the motivations that most matter, and a host of other facets of life.

This analogy is imperfect in one way though. I don't mean to imply that the new concepts of economics we need come on top of or in addition to the old concepts. Rather, economics is about the overall patterns of effort and motivation that shape our lives, and it is these patterns and motivations that are changing. That implies a wholly new set of economic laws that *replace* the ones we all have learned.



## A Feudal Hope

My second analogy should make this point more clearly. It also involves looking back to an earlier time, but, instead of billions of years ago we now must think back a mere five centuries. The expansion into cyberspace now underway parallels the expansion of European civilization into North and South America that followed Columbus's discoveries, exactly 498 years before Tim Berners-Lee discovered, or rather invented, the Web. Europe back then in the 15th century was still ruled pretty much on feudal lines, and the feudal lords took it for granted that the new world would be a space for more of a feudal economy, with dukes and counts and barons and earls ruling over serfs throughout the newly discovered continents. They did in fact begin to set up that system, but it was not what turned out to flourish in the new space. Instead, the capitalist, market-based industrial economy, then just starting out, found the new soil much more congenial. Eventually it grew so strong in North America that, when it re-crossed the ocean, it finally completed its move to dominance in Western Europe and then elsewhere in the world [ 1 ].

Contemporary economic ideas stem from that selfsame market-based industrialism, which was thoroughly different from the feudal, subsistence-farming-based economy that preceded it. We tend to think, as we are taught,

that economic laws are timeless. That is plain wrong. Those laws hold true in particular periods and in a particular kind of space. The characteristic landscape of feudalism, dotted with small fields, walled villages, and castles, differs markedly from the industrial landscape of cities, smokestack factories and railroads, canals, or superhighways. The "landscape" of cyberspace exists only in our minds, perhaps, but even so it is where we are increasingly coming to live, and it looks nothing like either of those others. If cyberspace grows to encompass interactions between the billions of people now on the planet, those kinds of interaction will be utterly different from what prevailed for the last few centuries, or ever before [ 2 ].

If you want to thrive in this new world, it behooves you not to mistake it for a place where the dukes and earls of today will naturally continue to prosper, but rather to learn to think in terms of the economy natural to it [ 3 ].

## The New Natural Economy

So, at last, what is this new economy about? Well if the Net exemplifies it, then you might guess it has less to do with material things than with the kinds of entity that can flow through the Net. We are told over and over just what that is: information. Information, however, would be an impossible basis for an economy, for one simple reason: economies are governed by what is scarce, and information, especially on the Net, is not only abundant, but overflowing. We are drowning in the stuff, and yet more and more comes at us daily. That is why terms like "information glut" have become commonplace, after all. Furthermore, if you have any particular piece of information on the Net, you can share it easily with anyone else who might want it. It is not in any way scarce, and therefore it is not an information economy towards which we are moving. What would be the incentive in organizing our lives around spewing out more information if there is already far too much?

Well, my title gives it away, of course. There is something else that moves through the Net, flowing in the opposite direction from information, namely attention. So seeking attention could be the very incentive we are looking for. Parenthetically, I have now rejected both parts of the conference title; no economics in the conventional sense, and not digital information either. You might conclude I am speaking at the wrong conference. I would rather say it has the wrong title. Except the title did serve its purpose. It did get your attention, and that was something, in fact a lot.

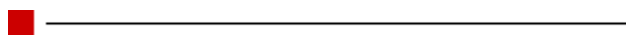
Attention, at least the kind we care about, is an intrinsically scarce resource [ 4 ]. Consider yours, right now. You are reading this paper, or more likely, since it is intended to be delivered at a conference, listening to me speaking it. You have a certain stock of attention at your disposal, and right now, a large proportion of the stock available to you is going to me, or to my words. Note that if I am standing in front of you it is difficult to distinguish between paying attention to me and paying attention to my words or thoughts; you can hardly do one without doing the other. If you are just reading this, assuming it gets printed in a book, the fact that your attention is going to me and not just to what I write may be slightly less obvious. So it is convenient to think of being in the

audience at this conference in order to consider what attention economics is all about.

First of all, if this talk is not a total bust, at this moment I am getting attention from a considerable audience. There is a net flow of attention towards me. If this is a reasonably polite group, there may be no great competition for your attention at the moment, but nonetheless, if there were, you would have to choose, or someone else, say the chair, would. The assembled audience cannot really pay attention to very many people speaking at once, usually not to more than one, in fact. Which is another way to say that the scarcity of attention is real and limiting.

Now this might not matter if attention were not desirable and valuable in itself, but it is. In fact, it is a very nice feeling to have respectful attention from everybody within earshot, no matter how many people that may include. We have a word to describe a very attentive audience, and that word is "enthralled." A thrall is basically a slave. If, for instance, I should take it in my head to mention panda bears, you who are paying attention are forced to think "panda bears," a thought you had no inkling would come up when you decided to listen to this talk. Now let me ask, how many of you, on hearing the word "panda" saw a glimpse of a panda in your imagination? Raise your hands, please. Thank you. ... A ha.

What just happened? I had your attention and I was able to convert it into a physical action on some of your parts, raising your hands. It comes with the territory. That is part of the power that goes with having attention, a point I will have reason to return to. Right now, it should be evident that having your attention means that I have the power to bend your minds and your bodies to my will, within limits that in turn have to do with how good I am at enthralling you. This can be a remarkable power. When you have superb control over your own body, so that you can perform great athletic feats, it feels great; likewise, it feels good when your mind feels focused and powerful; how much more wonderful then to be able to have the minds and bodies of others at your disposal! On the rather rare occasions when I have felt I was holding an audience "in the palm of my hand, hanging on my every word," I have very much enjoyed the feeling, and of course others who have felt the same have reported their feelings in the same terms. The elation is independent of what you happen to be talking about, even if it is to decry something you think is horrible.



## **A Driving Force**

This is not a particularly huge audience, but it is possible to enthrall any number of people if you can reach them and if you are good enough at it. So having attention is very, very desirable, in some ways infinitely so, since the larger the audience, the better. And, yet, attention is also difficult to achieve owing to its intrinsic scarcity. That combination makes it the potential driving force of a very intense economy.

Of course, not everybody necessarily wants a great deal of attention, just as in a money economy not everybody wants a great deal of money or many of the material goods that money can buy. But, just as in a money economy practically everyone must have some money to survive, so attention in some quantities is pretty much a prerequisite for survival, and attention is actually far more basic. This has always been the case for tiny babies. About the only thing they can get for themselves, or can give, is attention, which they begin to do within a half hour of birth, by smiling at those who smile at them. Without attention an infant could never satisfy its material needs, for food, warmth, fresh diapers, being burped, and so on. At a slightly later stage infants and toddlers need attention if they are to develop any sense of themselves as persons, and neither of those needs ever completely goes away. So even if you do not especially make a point of reaching for attention, even if you are very shy and reclusive, you still probably cannot do without some minimum, which however reluctantly, you may have to fight for. And no matter how humble you now may be, at some time in your own childhood you certainly sought attention, or you wouldn't be here.

As we move towards an attention economy in a fuller sense, the ethos of the old economy which makes it often bad taste or a poor strategy to consciously seek attention seems to be giving way to an attitude that makes having a lot of attention rather admirable and seeking it not at all to be frowned upon. Think of the sorts of things people are now willing to admit about themselves just to get on the likes of Oprah or the Sally Jesse Raphael show. Even the President of the United States is willing to discuss his underwear on nationwide television.



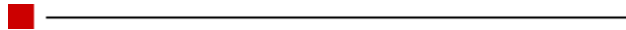
## **Chatting, But Not Necessarily About Anything**

But I am running a bit ahead of myself. Before saying more about the workings of the attention economy and its ramifications, I have to offer you a bit more of an idea about how to view different situations in terms of the exchange of attention. Earlier I suggested that when information flows one way through the Net, attention has to be flowing the other. Now I want to say that it would be even better to think in terms of attention of some kind flowing both ways.

Consider an ordinary conversation. You could describe it as the exchange of information, but except in a highly technical sense that is rarely a very accurate description of what takes place. A conversation is primarily an exchange of attention. When you say "how are you?" for instance, you don't really want to know, as a rule, but if whomever you're talking with chooses to say how he or she is, it is more to get attention from you than to convey information. Even if this person genuinely thought you did want to know about her/his health, in answering, s/he would be attempting to pay attention to you. And even if you, in turn genuinely did want to know, the usual reason would be to pay attention to her/him.

Information, in the sense of something not previously known to one of the parties or another is secondary, if present at all. If I want your attention for any

reason, I might begin by asking you for information, such as who you are and what you do, not necessarily because that is of great interest to me, but because it is a good way to get your attention. Children ask countless questions with this motive often patently obvious, and adults are not necessarily any different. Even if I am desperately searching for some fact that you happen to know, to get it from you I first have to get your attention. So what really matters in every conversation is the exchange of attention -- an exchange that normally must be kept more or less equal if one party or the other isn't likely to lose interest.



## Illusory Attention

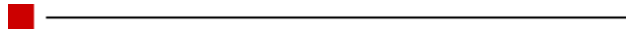
Now, let us come back to the example of this conference, in fact the very interchange going on between me and you at this moment. If you are still paying attention, it is at least in part because what I am saying interests you; that is, to some extent I am addressing some need or desire that you now have. Thus it appears, in a certain sense that I am paying each of you attention individually, even though I can't really be doing that. Of course, in this setting it helps that I have some idea of why you are here, but I obviously am not in a position to focus on your individual needs. If just the two of us were having a conversation, rather than my standing up here and reading this paper to this whole audience, you would be quite rightly incensed if instead of pausing to answer your questions or seeing whether you were still interested I just talked on and on in this fashion. As another sign of the asymmetry between us, if I leave the room after this talk, I would be extremely unlikely to be able to recognize a particular one of you three months from now, though you might well be able to recognize me.

What I am trying to get at here is that while you would normally want a conversation to involve a more or less equal exchange of attention, in the special circumstances that you are listening to a speaker, your feelings about what is a fair exchange are altered. What I would suggest is going on is less that I am providing you with information that you deem in advance will be of value, than that I am offering you individually the *illusion* of my full attention. I don't claim to be very good at this, but what I have done to some extent is to set up some expectations in you about what I will get to by the time the talk is finished, and any sense of progress towards that goal then feels as if I am filling *your* need, even though it is a need I have subtly created. (Any speaker must somehow do this, of course, to hold attention.)

If rhetoric is the art of persuasive speech, then anyone who speaks or writes or seeks attention in any way has to become something of a success in the special rhetoric of persuading listeners, readers, and so on, that he or she is meeting their individual needs, when in fact some of these needs have been artfully set up in advance [ 5 ]. You want to know what I am driving at, for instance, because I have already provided clues galore that I am driving at something that should matter to you.

My success, if any, in meeting these expectations I have myself set up in you

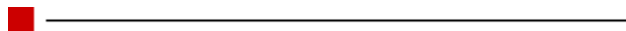
will appear to be attention - call it *illusory attention* - that flows from me to you. That helps create an apparent equality of attention, and it can in fact go beyond that to create a feeling of obligation on your part or the part of other readers or listeners. The audience members can each feel they have not paid as much attention to a speaker as the speaker has paid personally to them, even though, in a very real sense the reverse is closer to the truth. The speaker may still not know them from Adam though they have the speaker's visage, voice, and thoughts permanently etched in memory.



## The Effect of the Audience

Much more is going on here. One thing is the question of why you started listening in the first place. Well one reason is that I was introduced by the chair, who had your attention already, she was paying attention to the committee that set up this conference, in particular to Brian Kahin. He in turn paid attention to Esther Dyson, who gets paid a lot of attention. And indeed you possibly came here because you saw Esther's name on the organizing committee, and you already had gotten used to paying her attention. A key truth is that if you have the attention of an audience, you can then pass that on to someone else. For instance, if I happened to spot a friend of mine in the audience, or just chose someone at random, I could turn over all of your attention to that person.

Now, the fact that attention can be passed on from someone who has it to someone else, and on and on, is of course a vital feature if there is to be anything resembling an economy. We will return to this general point. But right now, I want to combine the idea that I could pass the whole audience's attention on to you with the thought I introduced before that you can feel in a certain sense that I am paying attention to you specifically - what I referred to as *illusory attention*. Since I observably do have at least a good fraction of the whole audience's attention, if I were to pay attention specifically to you in reality, by singling you out, I would of course be paying not only my own attention but that of everyone else here, and yet, it would seem to be arriving at you through me.



## A Miniature Working Model

And now, just a few more quick points about this conference. First, the whole conference works pretty much as an attention economy. While you are here, your main concern is how you pay attention and where you pay it, perhaps whether you get enough in return to have a chance at being one of the conference stars, perhaps only through the brilliance of the questions you ask. Even between sessions, the exchange of attention is what mostly tends to occupy people at a conference. Of course, there are material considerations, such as having enough to eat, a comfortable chair, etc. But they tend to be secondary issues, taken for granted, and not occupying much attention. We are

living a temporary attention economy in miniature right at this moment.

It bears repeating: *We are living a temporary attention economy in miniature right at this moment.* It should be evident by now that everyone has always lived with some degree of an attention economy, but through most of human history it hasn't been primary. Material needs and the production of material goods or the provision of purely material and basically impersonal services such as railways held sway. Even fifty years ago, the percentage of the American population that could take basic material needs for granted and didn't work directly in factories or on farms was much smaller than it is today.



**We are living a temporary attention economy in miniature right at this moment.**

If you look at how you live your life when you are not attending this conference, you will probably see that quite a bit of what you personally do is better characterized as involving attention transactions than monetary transactions. You most likely make many more decisions every day about where and towards whom your attention should now go than about where your or anyone else's money should go. It is an issue every time you get a phone call, receive a memo, see someone you know waving at you, decide whether to go to a movie, or surf the Web, to list just a few examples. You are probably quite concerned too with getting attention in one way or another, or perhaps helping someone else get it. In this you are typical of a growing proportion of our society, and indeed of almost every sizable society on this globe now.



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## **A Material Economy Falls Victim to Its Own Success**

The simple fact, which I have no time to discuss at any length, is that compared with our capacity to produce material things, our net capacity to consume those things can no longer keep pace. Thus fewer and fewer of us, on a percentage basis are involved in producing standard items than ever before, and this is true despite the fact that per capita consumption of material goods keep rising. It just cannot rise fast enough to keep pace with possible production. There just is not enough work of the older kinds to keep us as busy as we once were. So, for example, actual manufacturing employment as a fraction of the total population continues its slow decline. Even in so-called developing nations, the Green Revolution in agriculture has led to the same sort of decline in the number employed producing material things, including food crops.

Yet strangely, we are all busier than ever. In fact, in the light of what I have been saying so far, that is not so odd. It is precisely because material needs at the creature comfort level are fairly well satisfied for all those in a position to demand them that the need for attention, or what is closely related to attention, meaning or meaningfulness of life, takes on increasing importance. In other words, the energies set free by the successes of what I refer to as the money-

industrial economy go more and more in the direction of obtaining attention. And that leads to growing competition for what is increasingly scarce, which is of course attention. It sets up an unending scramble, a scramble that also increases the demands on each of us to pay what scarce attention we can.

And because we all need some attention, as competition for it rises, the effort begins to take on still more importance. When real attention of the right sort is unavailable, one has to make do to make do with the illusory kind, which comes through an increasing variety of media: paperback books, sound recordings, movies, radio, magazines, TV, video, and most recently computer software, CD-ROMs and the Web.



## It's Not for Productivity

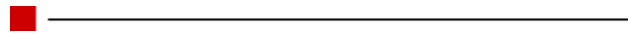
But the longing to get real attention and lots of it is only intensified by that experience. If the average kid today at age twenty has seen over 30,000 hours of TV, and, if, as is often suggested, TV offers young viewers role models for acceptable behavior, then the one thing everyone visible on the tube has in common to model is going after attention and getting it. This is also what is universally modeled by rock stars, successful athletes, politicians, and to a lesser degree even by school teachers and college professors.

So it is no coincidence that some of the most popular uses of computers, fax machines, networks, phone systems, etc., have more to do with getting attention than with directly aiding what they are supposedly about, increasing productivity of an organization or society as a whole [ 6 ]. For an important truth is getting attention is of primary value to individuals rather than organizations, and attention also flows from individuals. This conference is sponsored by several organizations, most notably Harvard University, and quite possibly additional organizations have sent more than one attendee apiece. However, within the confines of the conference, attention flows primarily irrespective of organizational affiliation.

If you are after attention, you use whatever organization you are part of as a stage upon which to perform for as wide an audience as you can manage. The Web and the Internet fit well in this model. The physical walls and barriers that might once have defined a university, a government bureau or an industrial corporation, making outside and inside sharply distinct, are pretty much no barriers at all on the Web or the Internet, or even on a phone system equipped not with a central switchboard allowing an operator to direct every incoming call but, as most are today, with direct inward dialing. You often don't even know what organization goes with the number you are dialing, the e-mail message you are responding to or the particular Web site you have been linked to.

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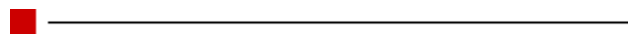
In a full attention economy practically all organizations will be basically temporary, either communities in which attention is shared around pretty equally, or, more often, entourages of fans who form around one or a few stars to help them achieve the performances they are attempting. Think of the groups that come together to make a movie or to create a new piece of software, etc. More often than not, a few stars dominate the process; in the case of a movie, it is not only the main actors, but the directors, writer, producer, and possibly the cinematographer, the chief editor, and a few others. If the movie is to be made, everyone else involved focuses their attention on these stars; afterwards, the stars usually go their separate ways, bringing together different entourages for their next performance.



## **A Point Worth Repeating, Though Not Too Often**

This might be good point to add that since it is hard to get new attention by repeating exactly what you or someone else has done before, this new economy is based on endless originality, or at least attempts at originality. By contrast, the old industrial economy worked on the basis of making interchangeable objects in huge numbers. One could spend a lifetime of work in a factory, for instance, repeating the same motions over and over, polishing the same small area on car after car, for instance. And it was such repetition that allowed standard prices for things and standard wages for definite jobs to make sense. The entire money system is based on the simultaneous inter-changeability of units of money, on the one hand, and of standardized goods on the other. One dollar is as good as another; one quart of non-fat milk is as good as another; both statements must be true, or non-fat milk will have no price.

With the endless originality and diversity of the attention economy, that kind of exchange is no longer possible. Even though one can loosely compare amounts of attention paid to different performances, attention does not come in precise, indistinguishable units, and neither does the illusory attention for which it is exchanged.



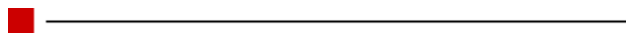
## **Organizations Diminish as Transparency Grows**

Again, I digress. Let me return to the thread I have been trying to follow: the breakdown of organizational barriers. The Web and other media aid this development by allowing you to look behind the scenes as easily as at them. Gossip, interviews, biographies of individuals involved in specific efforts, photos, videos of rehearsals, documentaries of pre-performance steps, all are visible or can be visible on the Web, taking equal status with the final performances themselves. Documentaries about the production of movies are common by now; a movie about a movie is just as accessible as the first movie.

This *transparency* will even more be the case in the very near future, and, as a

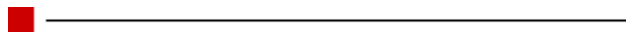
result, organizations will diminish in importance at rapid pace, relative to the importance of the individuals who are temporarily in them. Even as stable and long-lasting an institution as Harvard will be less its familiar buildings and more the people in the buildings, and the networks of attention among them. And whether these people are physically at Harvard or somewhere else will matter less and less, until the institution loses all coherence, all distinctness from other universities or from any one of hundreds of other organizations which have audiences in common.

In a full-fledged attention economy the goal is simply to get either enough attention or as much as possible. Recall now what I pointed out earlier: if you have a person's full attention, you can get them to perform physical acts, ranging from moving their eyes to follow you, to raising their hands, to applauding, to bringing you a glass of water, to handing you a sandwich, or, as is not uncommon in the case of rock groupies or sports fans, having sex with you (to cite a notorious example). Just as a parent paying attention to a child fills its material wants and desires, so a fan, that is anyone paying attention can feel an obligation or a desire to do the same for whomever they are paying attention to.



## Material Things Reinterpreted

In an attention economy as confined as a conference of this sort, the material goods such as a snack or a sandwich come from outside the system. If the whole world is an attention economy, then making material goods, growing food from scratch in a garden or on a farm, or obtaining resources in any other fashion, and ultimately turning these over to you can be a direct act of attention paying. Thus, if you have enough attention, you can get anything you want. If you don't have enough your options will be distinctly more limited, but supplying you with some range of items, produced in a fairly automated fashion, can also be a successful form of paying you illusory attention, in return for some real attention that you pay to whomever is apparently doing this for you.



## Wealth and Property Take New Forms, Too

One lesson to draw is that material goods and the acts of producing them are only secondary in an attention economy. What is primary is attention in the form of hanging on your every word or gesture. Paying attention in that sense is not over when its over. If what I say to you today makes any impression at all, for instance, you will remember me as well as some of the message for some time, possibly

**...obtaining attention is obtaining a kind of enduring wealth, a form of wealth that puts you in a preferred position to**

even for the rest of your life. Even if you find what I say outrageous or stupid, it will be easier for you to tune into me the next time I come across your field of vision, however that might happen. That is, getting attention is not a momentary thing; you build on the stock you have every time you get any, and the larger your audience at one time, the larger your potential audience in the future. Thus obtaining attention is obtaining a kind of enduring wealth, a form of wealth that puts you in a preferred position to get anything this new economy offers.

Wealth that can endure and sometimes be added to is what we mean by property. Thus, in the new economy attention itself is property. Where is it? Primarily it is located in the minds of those who have paid you attention in the past, whether years ago or seconds ago. You may have forgotten all about some children's author whose books you had read to you as a child, but if you come across the book again, your memory will very likely be reawakened. Likewise you will remember actors you saw on television, sports figures who captured your attention in the past, professors, teachers, politicians, business leaders, etc. Thus, attention wealth can apparently decline, only to revive later. It is rarely entirely lost.

Seeing this kind of wealth as property suggests a strategy for maintaining and enlarging what you have that is far different from what is usually considered to be the case when dealing with ideas or information. Suppose you get attention through some text you send out over the Internet. Would you want your audience to copy this and pass it on to others who might pay attention in turn? Of course you would. It would be insane to want to stop or restrain such copying, since that would deprive you of much attention you could otherwise get. This is an area, clearly, where the new economy and the old are at sharp odds. Thus the fight over intellectual property and rights to make copies is actually a struggle between the outlooks of the new economy and the old, a reason why they cannot both coexist forever, and thus a feature of the period of transition from old to new.



## Money and Attention

So let's now take up the topic of this of transition, which has been underway for some time and will loom still larger in the next few years. I have described the attention economy itself without saying anything about the role of money in it, which was easy because in a pure attention economy money has no essential function, no real role to play. In the period of transition from old economy to new, however, the connection between money and attention is significant and needs examining. If you have a lot of attention, you are a star of one sort or another, and we all know that these days stars generally have little trouble obtaining money in large amounts. Just think of the amounts that go to movie stars, sports stars, or even leading politicians or generals who retire to the lecture circuit or propose to oversee the ghostwriting of their memoirs. And if they have some pet project, such as a movie they want to make or a cause they want supported they can often influence their publics or bankers to cough up

many millions more.

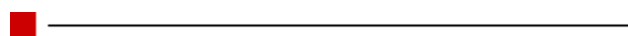
Within the framework I have suggested, there is little mystery as to why this should be. If fans are willing to do anything up to some limit for stars, such as wait in long lines to see them perform, avidly make sure to be there when they come to town, applaud them and sing their praises however they can, often paying more attention to stars than to members of their own families and so on, then it should come as no surprise that fans are also willing to pay out money at the stars' behest. It is just one more way to follow a star's wishes.

In other words, money now flows *along with* attention, or, to put this in more general terms, when there is a transition between economies, the old kind of wealth easily flows to the holders of the new. Thus, when the market-based, proto-industrial economy first began to replace the feudal system of Western Europe, in which the prime form of wealth was aristocratic lineage and inheritance of land, both the noble titles and the lands that went with them soon ended up disproportionately in the hands of those who were good at obtaining what was then the new kind of wealth, namely money.

With considerable ease, the rising merchant and industrialist class could buy old titles, induce governments to grant them brand new ones, or marry into the old impoverished gentry. The parallel today, again, is that possessors of today's rising kind of wealth, which is attention, and whom we label stars of every sort, have an easy time getting money.

But now let me point out that the other way round doesn't work nearly as easily. Contrary to what you are sometimes urged to believe, money cannot reliably buy attention. Suppose it did work that way. Then you could have been paid to sit here and listen closely even if I were to read you something as boring as the phone book or an unabridged dictionary. Presumably it wouldn't even matter if I kept repeating the same few syllables over and over. If money could reliably buy attention, all I would have to do is pay you the required amount and you would keep listening carefully through all that, not falling asleep en masse, nor allowing your minds to wander. In truth, even if you had been paid a huge sum, this would be most difficult, and if you did it, it would be a testament more to your own deep sense of principle than to a general condition in which another roomful of similar people could be expected to do equally well.

Someone who wants your attention just can't rely on paying you money to get it, but has to do more, has to be interesting, that is must offer you illusory attention, in just about the same amounts as they would if you had instead been paying money to listen to them -- which by the way is closer to the case here. Money flows to attention, and much less well does attention flow to money.



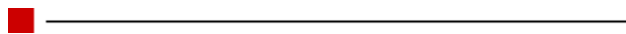
## **Business as Performance**

There are exceptions, if only in a peculiar way. Business is still a lively

spectator sport for instance, and just as we care about who is the best or the record breaker in football or basketball or any other such game, so we are interested in who heads lists like the Forbes 400 of those with the most money. According to some, like Ted Turner, who are on that list, in fact the main motive for trying to earn still more boils down to wanting to be recognized as number one. Presumably, Bill Gates might want to hold the record for more annual first-place finishes than anyone else. Even in this regard however, when the amount of monetary wealth you have draws attention to you, the price of such fame keeps going up. Even more literally does that happen in the well-known cases of the ultra-rich seeking political office. The price they must pay per vote keeps rising, and no matter how good the advertising geniuses they hire, they have to be good at attracting attention on their own.

Bill Gates is also a good example of how even monetary fortunes of his magnitude are in larger and larger measure just covers for stardom. A century ago, Gates' analog would have been John D. Rockefeller, leader and chief owner of the Standard Oil Trust. His wealth consisted chiefly of oil fields, oil wells, tanker cars, refineries, and so on -- material things that would have been worth just as much if someone else bought him out. Rockefeller could have sold his interests and still kept about the same net worth, which is what monetary net worth is supposed to mean. But the share value of a company such as Microsoft is already far more a result of attention-getting and the star process. Its future sales, for instance, largely depend on software that is yet to be completely designed.

If Gates were to decide to sell out and buy control of the XYZ Corp. instead of staying at the helm of Microsoft, as soon as he let this be known, his Microsoft stock would fall precipitously and XYZ's would rise. His own net worth would plummet, at least temporarily, but such is the attention wealth he has, that as soon as he began to issue pronouncements from his new stage, XYZ's stock would probably rise further, and Gates' former monetary wealth might magically reappear. Despite the fact that the arena in which he made his mark happens to be business, it is already true that Gates' actual wealth, and that of many like him, is less in money or shares of stock than in attention.



## Further Expectations

I hope that by now you have some sense that there is far more to discuss here or to think about than I can conveniently explain or you can take in at one sitting. So let me now just summarize a few developments that seem reasonable to expect over the next decade or so:

- A continuing rapid rise in the number of people attached to the Web and trying to get attention through it.
- A continuing growth in the capacity of those on the Web to send out multimedia or virtual reality signals, and thus to capture attention through all these means. Say you are primarily a writer of mere words,

i.e. text; still, on the Web you will be able to supplement your writings with your picture, with video images, with recordings of your voice, with interviews or pieces of autobiography. The advantage of doing that is that by offering potential readers a more vivid and rounded sense of who you are, you can both increase their sense of who it is who is offering them illusory attention, and have them have a clearer and more definite feeling than otherwise of what it is like to pay attention to you, rather than to some other writer of similar sounding words. Both these effects can help you hold their attention better. This of course helps explain why authors' pictures are so commonly stuck on book jackets, and increasingly on the front cover rather than the back.

- All this and more will make the Web a better and better means of transmitting and circulating attention, a circulation that is essential for a full-fledged economy to emerge. To show that most strikingly, consider an author in the distant past, say the ancient Greek philosopher Aristotle. Over the past than two thousand years and more, his writings have gotten the direct attention of probably millions of readers. Still, except for contributing to his "immortality," the vast majority of that attention did him little personal good, since it came when he, along with all known descendants, had been long dead. Very few of today's attention getters can expect to remain in the public eye for thousands of years, but they do have a far better shot at reaping the benefits of attention from millions of people through the Web while they are still alive. Thus they can live, and live well, in the new economy.
- Individual attention getters of all sorts will find it ever easier to get attention directly through the Web, without any corporate packaging necessary. They will also find diminishing advantage in trying to make use of money, since attention in a wider and wider a variety of forms, filling more and more of their needs will be able to flow to them either directly through the Web, or as a kind of adjunct to it.
- Companies of all kinds will have less definite and fixed structures, since they will be structured not by physical walls and buildings, but through the Net itself, and more and more of their proceedings will be done in the full glare of Web attention, as temporary and rapidly re-forming projects. This means that companies will be unable to provide even what loyalty they do now to their employees, or say, in the case of publishers, to authors who have signed with them. Just as baseball stars move around from team to team or TV stars from network to network, so employee loyalties to companies will decrease as well. What will matter more for everyone is the stars one has particular loyalty to, or the Net communities of which one is a part and through which one gets attention.
- Attention transactions, which already are far more numerous than monetary transactions will come to dominate even further. So even if you have lots of money, you will find it less and less convenient or worthwhile to bother to use it. As a result, our deeply ingrained desire for monetary recompense will begin to fade as well.

## Advice for the Transition

All this means that the changeover to total domination by the new economy, while by no means complete or about to be, is moving very rapidly and is already quite far along, and probably unstoppable. Any individual today who fails to take that into account in her or his personal plans may be in for a rude awakening. Efforts that fit in with the overall flow of things are far more likely to work to your benefit than those that ignore them or are consciously opposed.

Say for example you work for a book publisher today. If you have any sense, you understand your employer as temporary. You will either strive to achieve stardom through what you do in your current job directly - say by being a great editor, a great marketer of books, a very visible cover designer or something of the sort - or (and this is not an exclusive but an inclusive or) you will want to be as visible and indispensable a part of what I call the entourages of bigger stars, so that through them you can get indirect attention. Your interest in your company's success as such is like a Major League baseball player's interest in his current team's success, something that can help him shine, and valuable to the extent that it does, but less valuable if it keeps him from displaying what he does best.

Simply amassing money (say by investing a large chunk of your salary in stocks) is not necessarily the best strategy if you believe you can do that without bothering to capture and in some way maintain some attention of your own. Even if the stock market never goes down, money, like the aristocratic titles of the past, may turn out to be less and less meaningful in the future.

A publisher also has to decide how to deal with the Internet. At present, for instance, it is impractical to distribute books directly over the Net, though it is easy to foresee that need not be the case for long. We still do understand material things as objects that generally are to be bought and sold in exchange for money, but we also understand that more people are likely to pay attention to a book if they find out about it than if they don't. So in the case of a book, the Internet should now be viewed as a useful and free publicity mechanism. Let passages be freely copied and circulated on the Net, because most of the time, the more of copying that takes place, the more customers there will be for the physical printed version. If you have a Web site, don't charge for it, because that will only reduce the attention it gets. If you can't figure out how to afford it without charging, you may be doing something wrong.

In due time, publishing companies as such will hardly be necessary, for actual physical books will be seen as cumbersome and quaint. Still, many of the kinds of tasks once performed by publishing company employees such as acquisition and line editors, designers, publicists, and so, will still be done, but on much more ad hoc and free-lance, eventually even unpaid basis. All of this will take place over the Web. No one will earn

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**... actual  
 physical books  
 will be seen as  
 cumbersome**

monetary profits from it. And this disappearance of the involvement of capital will be equally the case for attention-getting objects of just about any sort.



## A Closing Scenario

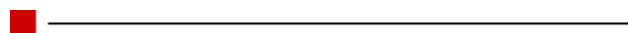
Money will not necessarily fade in value, in other words inflation will not set in, in the old sense; neither will recession nor deflation. Instead, money will just lose importance, just as noble titles have over the past few centuries. The stock market might not even fall; stockholders may simply lose interest, ceasing to sell and buy in equal ratio.

Am I speaking about the far future? I think not. Already, if you are reading this, you are probably involved in far more organized person-to-person or audience-type situations where what is being exchanged is attention, real and illusory, than you are in direct monetary transactions or the direct production of material goods. The fraction of time spent in pursuits more closely tied to the new economy is, even now, well above fifty per cent and rising. The new practices are already almost fully functioning for some, and more and more in place for others.



## The End

At the end of the feudal period, the pomp and display of the nobility reached a level never before attained; the most gorgeous armor, the most magnificent tournaments of knights, the most elaborate ceremonies between rival nobles, the most brilliant marriages, the greatest interest in noble lineage. But by then it had lost all real function or importance. So today, when the stock market goes up and up, when money wealth itself seems a source of fame more than ever, when being number one on Forbes 400 list seems the height of perfection, when every basketball superstar wants a contract that is at least a million more than the last record one, we seem to be more dazzled by money than ever, just as we seem to be more intrigued by material goods than ever. But these interests are superficial and faddish. They are signs of decadence not of a glorious future for the money economy. Even in themselves they speak to the growing desire for attention, the need for it as well. Money is now little more numbers, one number among many, and as a source of lasting attention it can fade in an instant. The attention economy is already here, and more completely so every day.



## The Author

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## Notes

The conference was on "Economics of Digital Information," hosted by the Kennedy School of Government, Harvard University, Cambridge, Mass., January 23-26, 1997.

1. To be more exact, in Western Europe as whole, feudalism as an economic system reached its high point around the eleventh or twelfth century (i.e. between 1000 and 1200). After that the market economy began its slow rise. But the outward forms and ways of thinking long remained feudal, certainly in the Iberian peninsula whence the first explorers came. In the Americas, where feudal systems hadn't previously existed, they were unable to compete with the new economic ways that most of the settlers brought with them. As is most obvious in the case of the Puritan colonists in New England, many of these settlers quite consciously had come to escape the old forms of rule. The "Puritan Ethic" they brought with them was much more suitable to a capitalistic, market economy than to feudalism. The great text that argues the last point (though ignoring earlier economic history) is Max Weber, 1958. *The Protestant Ethic and the Spirit of Capitalism*. New York: Scribner.

2. Just as settlers in the Americas fashioned the geography they found to fit their purposes and values, so cyberspace is being shaped largely by those who want a space for their own new purposes. As I suggest elsewhere (Michael Goldhaber, 1986. *Reinventing Technology*. New York: Routledge & Kegan Paul) technology (such as that which goes into cyberspace) is shaped by the values of those who create it and it then helps promote those values, in the main, as it allows certain actions and not others. In the case of the kinds of technology (such as software) that make up cyberspace, the users play a very large role in deciding in what directions the technology as a whole will advance, and their underlying purposes and values are more in the direction of the new economy I will outline than the old.

3. Despite its seeming generality, the following definition, (Paul Samuelson, 1973. *Economics*. New York: McGraw-Hill, p. 3) as read by millions of students of basic economics, shows why this new thinking must be very basic:

Economics is the study of how men and society end up choosing, with or without the use of money, to employ scarce productive resources that could have alternate uses, to produce various

commodities and distribute them for consumption, now or in the future among various people and groups in society. It analyzes the costs and benefits of improving patterns of resource allocation.

As will become evident, "employing scarce productive resources," "produc[ing] various commodities and distributing them for consumption" and "improving patterns of resource allocation" are simply not relevant for what I will argue is unfolding. Nor is this a particularly perspicacious way of examining older economies, .e.g. feudalism.

4. On attention's scarcity and its economic importance, see also Michael H. Goldhaber, 1989. "Equality and Education in America Now," In: *Education and the American Dream*, H. Holtz, I. Marcus, J. Dougherty, J. Michaels, and R. Peduzzi (eds.), Granby, Mass.: Bergin & Garvey, Chapter 6, pp. 70-76; Michael H. Goldhaber, 1992. "The Attention Society," Release 1.0, ( 26 March), No. 3, E. Dyson (ed.), New York, EDventure Holdings, pp. 1-20; Michael H. Goldhaber, 1992. "Attention: The System of Post Industrialism?" *Z papers*, Vol. 1, No. 2 (April-June); and, Michael H. Goldhaber, 1996-97, Web site: <http://www.well.com/user/mgoldh/>

I still remember the thunderclap of insight that attention, not information is the key to the new system, a thought that struck me in 1984. While the details I present about the new economy stem from my own explorations, the fact that the following people, among others, have independently arrived at similar conclusions about the economic centrality of attention scarcity adds weight to the argument. See, for example, Richard Lanham, 1994. "The Economics of Attention," Proceedings of 124th Annual Meeting, Association of Research Librarians, Austin, Texas, <http://sunsite.berkeley.edu/ARL/Proceedings/124/ps2econ.html> or W. Thorngate, 1988. "On Paying Attention." In: *Recent Trends in Theoretical Psychology*, W. Baker, L. Mos, H. VanRappard, and H. Stam (eds.), New York: Springer-Verlag, (pp. 247-264), or W. Thorngate, 1990. "The Economy of Attention and the Development of Psychology," *Canadian Psychology/Psychologie Canadienne*, Vol. 31, pp. 262-271.

5. The rhetorician Kenneth Burke (in his 1931 book *Counter-Statement*, New York: Harcourt, Brace, p. 157) describes literary form in a very similar manner: "Form in literature is an arousing and fulfilling of desires."

6. Controversy continues to swirl around this point. It is argued at length by Thomas K. Landauer ( in his 1995 book *The Trouble with Computers*, Cambridge, Mass.: MIT Press) among others. Erik Brynjolfsson and Lorin Hitt (1995, "Information Technology as a Factor of Production: The Role of Differences Among Firms," *Econ. Innov. New Techn.*, Vol. 3, pp. 183-199) present data revealing an overall positive correlation between total amounts of spending on information technology and total output for Fortune 500 companies. However, they do not show an increase in labor productivity per se, as is commonly presumed to be the case. What is indisputable is in the two decades since the introduction of the personal computer and related technologies, national measured productivity growth was lower than in the two decades following World War II, when such technology was either non-existent

or much more limited. That is totally the opposite from what intuitive estimates of the value of these technologies would suggest and what has repeatedly been predicted.

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While it would be impossible to thank everyone who has contributed to this lengthy project, I would like especially to thank Anatole Anton, Sandra Braman, Erik Brynjolfsson, Esther Dyson, Rishab Ghosh, William Gladstone, Nat Goldhaber, Peter Oppenheimer, Bruce Sterling, Edward Valauskas, and Terry Winograd for comments and/or encouragement that aided in the writing of this article. In addition I would like to thank Ilene Philipson. No one on this list should be held responsible for anything said here, however.

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