quality of information

September 19, 2007

aob

course corrections

economics
overview

economics

why?

what?

economics and information
economics and geography
economics and quality
why economics?

information age/economy

information rules, ok?
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William Harding
Daniel Crissinger
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Ben Bernanke

*“veritable rock-star economist”
The New York Times, until now, has had three economics columns. Economic Scene was written by economists: it rotated between Tyler Cowen, Austan Goolsbee, Robert Frank, and Hal Varian. Economic View was written by journalists, including Daniel Altman, Dan Gross, and Louis Uchitelle. Finally, Times staffer David Leonhardt had his own Wednesday column, Economix. Today, all that changed. This is not good news for economic discourse in the mainstream press.

**economic pundits**

- **New York Times**: Paul Krugman
- **New York Times**: “the economic scene”
- **New Yorker**: Malcolm Gladwell
- **New Yorker**: James Surowieki
- Blogs: Brad deLong, Matthew Yglesias ...
"Caplan is the sort of economist (are there other sorts? there must be) who engages with the views of non-economists in the way a bulldozer would engage with a picket fence if a bulldozer could express glee."

Steven Leavitt & Stephen Dubner, *Freakonomics*, 2006


Greg Clark, *A Farewell to Alms*, 2007

"By almost any market test, economics is the premier social science ... the success ... derives from its rigor and relevance as well as its generality"

- maximizing rational behavior
- equilibrium
- efficiency

"Economics succeeds where other social science fail"

"The most aggressive economic imperialists aim to explain all social behavior by using the tools of economics"
"One should hardly have to tell academicians that information is a valuable resource: knowledge is power"

George Stigler, “The Economics of Information,” 1961
"information as that which is being communicated becomes identical with 'knowledge' in the sense of that which is known"

Fritz Machlup, The Production and Distribution of Knowledge, 1963
"The production, distribution, and consumption of 'knowledge' in all its forms is said to account for 29 percent of gross national product ... and 'knowledge production' is growing at about twice the rate of the rest of the economy ... What the railroads did for the second half of the last century and the automobile for the first half of this century may be done for the second half of this century by the knowledge industry: that is, to serve as the focal point for growth"

--Machlup
knowledge production
"The university and segments of industry are becoming more alike. As the university becomes tied to the world of work, the professor--at least in the natural sciences--takes on the characteristics of the entrepreneur. ... The two worlds are merging physically and psychologically"
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knowledge production

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"we're a bunch of raw material that don't mean ... to be made into any product, don't mean to end up being bought by some clients ... We're human beings"

"There is a time when the operation of the machine becomes so odious, makes you so sick at heart, that you can't take part; you can't even passively take part, and you've got to put your bodies upon the gears and upon the wheels, upon the levers, upon all the apparatus, and you've got to make it stop"
"All the aspects of knowledge--its creation, its storage, its retrieval, its treatment as property, its role in the functioning of societies and organizations--can be (and have been) analyzed with the tools of economics. Knowledge has a price and a cost of production; there are markets for knowledge, with their supply curves, and marginal rates of substitution".

Herbert Simon,
"The many shapes of knowledge", 1999
House of Lords,
Trial of Warren Hastings, 1788:
"You have said Mr. Hastings could not have obtained full and compleat Information upon the subject?"
[the idea of] “personal knowledge that is not readily transmitted as information [is a challenge to] virtually every construction of rational decision processes as the basis for modeling and explaining the behaviors of individual agents”.

Cowan, David, Foray, “The Explicit Economics of Knowledge Codification and Tacitness,” 2000
tacit fears

the Denning assumption
dissent from methodological
individualism "implies that the behavior
of men is directed by mysterious forces
that defy analysis and description".
Ludwig von Mises, *The Ultimate Foundation
of Economic Science*, 1962
so to Hayek

1889-1992

*The Road to Serfdom*, 1944

*The Fatal Conceit*, 1988

“Economics and Knowledge”, 1937

“The Use of Knowledge in Society”, 1945
Hayek, 1937
the “assumption in the data, in the form of demand schedules representing individual tastes and the technical facts, will be equally given to all individuals and that their acting on the same premises will somehow lead to their plans becoming adapted to each other"
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"Clearly there is here a problem of the division of knowledge which is quite analogous to, and at least as important as, the problem of the division of labour. ... instead of showing what bits of information the different persons must possess in order to bring about the result, we fall in effect back on the assumption that everybody knows everything"
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"Economics has come nearer than any other social science to an answer to that central question of all social sciences, how the combination of fragments of knowledge existing in different minds can bring about results which, if they were to be brought about deliberately, would require a knowledge on the part of the directing mind which no single person can possess"
Hayek, 1937
"... the spontaneous actions of individuals will under conditions which we can define bring about a distribution of resources ... as if it were made according to a single plan"
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"equilibrium analysis ... seems to have so extraordinarily little to say about the institutions, such as the press, the purpose of which is to communicate knowledge. ... a peculiar blindness to the rôle played in real life by such institutions as advertising"
Hayek, 1945
"If we possess all the relevant information, if we can start out from a given system of preferences and if we command complete knowledge of available means"
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"If it is today so widely assumed that [the expert] will be in a better position, this is because one kind of knowledge, namely, scientific knowledge, occupies no so prominent a place in public imagination"

"A body of suitably chosen experts may be in the best position to command all the best knowledge available--though this is of course merely shifting the difficulty to the problem of selecting the experts"
"almost heresy to suggest that scientific knowledge is not the sum of all knowledge. But ... a body of very important but unorganized knowledge which cannot possibly be called scientific in the sense of knowledge of general rules ..."
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"... practically every individual has some advantage over all others in that he possesses unique information of which beneficial use might be made"

"economists who regard themselves as definitely above the crude materialist fallacies ... commit the same mistake [of prejudice] toward the acquisition of such practical knowledge ... because in their scheme of things such knowledge is supposed to be 'given'"
Hayek, 1945
"the price system ... a mechanism for communicating information"

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"in a system where knowledge of the relevant facts is dispersed among many people, prices can act to coordinate the separate actions"
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"in a system where knowledge of the relevant facts is dispersed among many people, prices can act to coordinate the separate actions"

"these adjustments are never perfect"

"the unavoidable imperfection of man's knowledge and the consequent need for a process by which knowledge is constantly communicated and acquired"
"knowledge" is rarely reducible to information

G.B. Richardson, *Information & Investment*, 1960
"As the market grows in these dimensions, there will appear a set of firms which specialize in collecting and selling information. They may take the form of trade journals or specialized brokers ... there is a strong tendency towards monopoly ... a 'standard' source for trade information".

--Stigler, "The Economics of Information"
"perfect information ... free, complete, instantaneous, and universally available ... [is] one of the defining features of the perfect market ... "

"at the same time, both the perfect and the actual market structure ... depend on information being a commodity, ... costly, partial, and deliberately restricted"

"by neglecting the whole problem of information, the perfect competition model condemns itself not only to unrealism but to inadequacy even as a hypothetical system"

--Richardson
"somewhere in the world a new opportunity for the use of some raw material, say tin, has arisen ..."

--Hayek, 1945
"Until the middle of the 1970s, economists could give a mathematical description .. only if they assumed ... perfect competition"

"human capital .. could be studied using the economic tools developed for objects"

"Must economic theory recognise a different kind of good--ideas--if it is to explain .. growth? ... If there are only object gaps, the implications for poor countries are much more pessimistic than if there are also idea gaps"
The mechanical faculty of Lancashire is said to be due to the influence of Norman smiths who were settled at Warrington by Hugo de Lupus in William the Conqueror's time. And the greater part of England's manufacturing industry before the era of cotton and steam had its course directed by settlements of Flemish and other artisans; many of which were made under the immediate direction of Plantagenet and Tudor kings. These immigrants taught us how to weave woollen and worsted stuffs, .... They taught us how to cure herrings, how to manufacture silk, how to make lace, glass, and paper, and to provide for many other of our wants.

When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated, inventions and improvements in machinery, in processes and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by others and combined with suggestions of their own; and thus it becomes the source of further new ideas. And presently subsidiary trades grow up in the neighbourhood, supplying it with implements and materials, organizing its traffic, and in many ways conducing to the economy of its material. -- Marshall
limits to localization

Every cheapening of the means of communication, every new facility for the free interchange of ideas between distant places alters the action of the forces which tend to localize industries. Speaking generally we must say that a lowering of tariffs, or of freights for the transport of goods, tends to make each locality buy more largely from a distance what it requires; and thus tends to concentrate particular industries in special localities: but on the other hand everything that increases people's readiness to migrate from one place to another tends to bring skilled artisans to ply their crafts near to the consumers who will purchase their wares.

--Marshall
cheaper and cheaper

regions of innovation
radio, television
oscillator, microprocessor
personal computer
ethernet, web
search
web 2.0

regional policy
"Quality is so disputable a matter, that I look upon all information of this kind [ie, about quality] as somewhat uncertain"

Adam Smith, *Wealth of Nations*, 1776
“Nature has wisely judged that the distinction of ranks, the peace and order of society, would rest more securely on the plan and palpable difference of birth and fortune, than upon the indivisible and often uncertain difference of wisdom and virtue. The undistinguishing eyes of the great mob of mankind can well enough perceive the former: it is with difficulty that the nice discernment of the wise and virtuous can sometimes distinguish the latter”.

Adam Smith, *Theory of Moral Sentiments*, 1759
200 years on

“Quality has not yet been successfully specified by economics, and this elusiveness extends to all problems in which it enters”

Stigler, “The economics of innovation”, 1961
“the still insufficiently explored role of quality (as contrasted with price) in economic life ... Quality changes have usually been dealt with ... through the concept of *equivalent* price or quantity change

... quality and price are ... totally different phenomena

“Information about quality ... poses an intrinsically more difficult problem than uncertainty about prices. ... Quality may be multidimensional, unquantifiable ... irreducibly subjective”.

“The problem of quality has been evaded by the assumption of homogeneous goods”

.... Let us consider these [used-car] dealer markets”.

--Stigler
making lemons

“There is an incentive for sellers to market poor quality merchandise ..."

The difficulty of distinguishing good quality from bad is inherent in the business world.

...Gresham’s law has made a modified reappearance.

“New products are associated with old brand names. This ensures the prospective consumer of the quality of the product”.

“Doctors, lawyers, and barbers, the high school diploma, the baccalaureate degree, the Ph.D., even the Nobel Prize, ... education and labor markets themselves have their own ‘brand names’”.

--Akerlof
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disequilibrium?

- economic discourse
- economics on information/knowledge
- the place of information
- the quality of information