The Quality of information 4: Economics of Information

- 1. Housekeeping
- 2. Discourse of Economics
 - a. why economics
 - b. claims
 - c. historical context
 - d. Hayek
 - e. Hayek to Cowan et al.
 - f. Boyle
 - g. Tuomi

<u>Housekeeping</u>

- 1. New students
- 2. Breaks
- 3. Blog -- bloggers
- 4. Search assignment
- 5. Reality check

Why Economics?

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--defines society?

Knowledge industry (Machlup; Kerr, 1963)
Knowledge economy (c. 1969, Drucker)
Information Society (c. 1972)
Knowledge Society (c. 1981)
Information economy (c. 1982)

--controls discourse?

New York Times
Paul Krugman
"Economic Scene" (Varian, Postrel &co)
New Yorker
Brad DeLong blog
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--all communication is IP

Why Economics?

--muddies the water

"One should hardly have to tell academicians that information is a valuable resource: Knowledge <u>is</u> power."

George J. Stigler "The Economics of Information" (1961)

"All the aspects of knowledge--its creation, its storage, its retrieval, its treatment as property, its role in the functioning of societies and organization--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 and demand curves, and marginal rates of substitution between one form of knowledge and another"

"The Many Shapes of Knowledge" (1999)

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Hayek, "Economics & Knowledge", 1937
         "Use of Knowledge in Society", 1945
Stigler, "Economics of Information", 1961
Machlup, The Production and Distribution of Knowledge
         in Society, 1962
         Information through the Printed Word,
         1968-1970
Arrow, "Information & Economic Behavior", (1973)
Winter, "Knowledge & Competence as Strategic
         Assets", 1987
Arthur, "Increasing Returns and the New World of
         Business", 1996
Kelly, "New Rules for the New Economy", 1997
Shapiro & Varian, <u>Information Rules</u>, 1996
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Simon, "An information processing theory of intellectual development", 1962

Simon & March, Organizations, 1958

Simon & Newell, "Information processing in computer and man", 1964

Simon, "Information-processing explanations of understanding", 1980

["Knowledge" doesn't enter Simon's 65-year (1937-2002), 938-entry bibliography as a title until 1989 (entry 721): "Human experts and knowledge-based systems"]

HAYEK - Cold-War Project?

Road to Serfdom, 1944

Fatal Conceit, 1988

HAYEK on knowledge/information?

526: in a system where <u>knowledge</u> of the relevant facts is dispersed among many people, prices can act to coordinate the separate actions ... through many intermediaries the relevant <u>information</u> is communicated to all. ... the price system as such a mechanism for communicating <u>information</u> ... the most significant fact about this system is the economy of <u>knowledge</u> by which it operates ... how little the individual participants need to know.

HAYEK and price as "information"

v. Stigler:

"price dispersion is the measure of ignorance in the market"

v. Boyle

should price be commodified?

HAYEK a theory of practice?

- 523: the importance of economic considerations has been driven into the background by the growing importance of technological knowledge
- 528 [quoting Whitehead]: "it is a profoundly erroneous truism ... that we should cultivate the habit of thinking what we are doing. The precise opposite is the case. Civilization advances by extending the number of important operations which we can perform without thinking about them" ... We make constant use of formulas, symbols and rules whose meaning we do not understand and through the use of which we avail ourselves of the assistance of November 11 knowledge which individually we do not possess.

COWAN & co - an Enlightenment Project? (or earlier)

Moxon, Mechanick Exercises, or The Doctrine of Handy-Works, 1693

Diderot & d'Alembert, Encyclopédie. 1751.

Taylor, Principles of Scientific Management. 1911.

Alexandria and the collection of all knowledge

COWAN & co -- the effrontery of the "tacit"

Poalnyi, Personal knowledge, 1962

The Tacit Dimension, 1966: [C&co: "psychology of visual perception"] "we know more than we can say"

Nelson & Winter, <u>An Evolutionary Theory of Economic</u>
<u>Change</u>, 1982

& the downfall of economics?

Any departure from methodological individualism "implies that man is directed by mysterious forces that defy analysis and description"

von Mises (1962)

COWAN & co -- the effrontery of the "tacit"

Oakeshott (political science), 1967:

"The tacit or implicit component of knowledge, the ingredient which is not merely unspecified in propositions, but which is unspecifiable in propositions. It is the component of knowledge which does not appear in the form of rules and which, therefore, cannot be resolved into information or itemized in the manner characteristic of information (p. 167)"

COWAN & co -- the effrontery of the "tacit"

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Chomsky (linguistics), 1965
Ziman (physics), 1967
Fodor (philosophy), 1968
Coats (sociology of economics), 1967
Richardson (economics), 1972
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"Technology cannot always be transferred simply by selling the right to use a process. It is rarely reducible to mere information to be passed on but consists also of experience and skills. In terms of Professor Ryle's celebrated distinction, much of it is 'knowledge how' rather than 'knowledge that'"

COWAN & co -- the effrontery of the "tacit"

McCloskey (economics/economic history), 1985

"Economics is ... a matter of feeling the
applicability of arguments, of seeing
analogies ... of knowing when to reason verbally
and when mathematically, and of what implicit
characterization of the world is most useful for
correct economics ... Problem-solving in
economics is the tacit knowledge of the sort
Polanyi described"

The textbook conundrum

COWAN & co -- the effrontery of the "tacit"

Hayek, 1945

"Even economists who regard themselves as definitely above the crude materialist fallacies ... commit the same mistake ... toward the acquisition of such practical knowledge ... the reproach of irrationality ..."

COWAN & co -- codified and the uncodified

31, "codification at one extremum and tacitness occupied the other"

The central question of government subsidy

Sticky vs leaky

TUOMI -- the knowledge hierarchy

data -- information -- knowledge
-- intelligence -- wisdom ...

the "empirical model" of perception

decontextualization can only happen in context

it is important to view knowledge management and organizational memory systems as essentially social systems, where technology complements and supports the processing of knowledge

BOYLE -- economic incoherence information a commodity (IP) or the condition for commodity markets to function?

Neoclassical price theory is not only the most sophisticated utilitarian language available, but also the one whose disciplinary assumptions ... best reflect a liberal vision of the production, distribution, and exchange of information.