

From Homo Economicus to Homo Sapiens

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During the IIFET 2000 meeting, one session was set aside to discuss issues raised in an article by Richard H. Thaler entitled "From Homo Economicus to Homo Sapiens," in a recent (2000) issue of *The Journal of Economic Perspectives* 14(1): 133-141. The session began with the following summary of some of the key arguments raised by Thaler.

Homo Economicus will begin losing IQ, reversing a 50-year trend

After observing that writers such as Irving Fisher and John Maynard Keynes stressed psychological factors in their explanations of economic behavior, Thaler notes the trend toward models of rational behavior. He predicts "that this trend will be reversed in favor of an approach in which the degree of rationality bestowed to the agents depends on the context being discussed."

Homo Economicus will become a slower learner

Thaler predicts "that economic models of learning will become more sophisticated by making their agents less sophisticated and giving greater weight to the role of environmental factors, such as the difficulty of the task and the frequency of feedback, in determining the speed of learning."

The species populating economic models will become more heterogeneous

After observing that most economists admit that they know many people with flawed reasoning, Thaler suggests that in the future, models, which predict that rational agents always dominate people that try hard, but are subject to systematic errors, will be challenged more frequently.

How can we use Thaler's suggestions in fishery economics?

Economists will study human cognition

Thaler suggests that exciting research awaits those who "attempt richer characterizations of human cognition." He gives as an example the prospect theory of Kahneman and Tversky that attempts to explain why people place much higher values on losses than gains. We may wish to go further and pursue the literature review by Rabin in the first issue of 1998 *Journal of Economic Literature*.

Economists will distinguish between normative and descriptive theories

After noting that psychologists describe theories based on "rational" decision making such as the expected utility hypothesis as normative and theories grounded on observations as descriptive, Thaler observes that some economists have developed data driven theories (e.g., Baumol's sales maximization hypothesis). He predicts more economists will seek to develop data driven theories, if they can consistently describe economic behavior better than theories grounded on rational choice..

Homo Economicus will become more emotional

Thaler admits that many economists are already pursuing leads he predicts above, but suggests that emotion theory, recently reviewed by Jon Elster in the first issue of 1998 *Journal of Economic Literature*, has much to offer. One example is the failure of any attempt to contract when trials trigger the emotion of spite among the lawyers. He lists some emotions taken from Elster: anger, hatred, guilt, shame, pride, liking, regret, joy, grief, envy, malice, indignation, jealousy, contempt, disgust, fear, and love.

Following this summary, I suggested that the following perplexing policy issues in fisheries might be better understood by pursuing some of Thaler's suggestions.

- What is the value of (wild) salmon recovery?

Hundreds of millions of dollars per year are being spent to save wild (non-hatchery reared) salmon in the Pacific Northwest. Some use the concept of existence value to justify the difference between these costs and the estimated level of benefits to use values of salmon. The testimony in public hearings suggest that an analysis of the emotions of those saving species might prove a more complete explanation.

- Why do fishery policy analysts hold such sharply different and polarized views of individual fishing quotas (IFQs)?

Many of the economists relying on the conventional neoclassical paradigm see IFQs as an invaluable solution to the open access problem. Many social scientists from other disciplines have many concerns about the narrowness of the economic analysis. Are any of the suggestions from Thaler helpful in the critique of the economist's standard framework?

- Why and when do fishers comply with regulations?

Sutinen and his colleagues suggest that conventional studies of compliance overestimate fishers' evasion of regulations and that inclusion of social characteristics provides a much richer ability to predict compliance. Is compliance an emotional issue? Might Elster's work help us understand compliance?

- How do we allocate fisheries (commercial vs. recreational, gear type, ethnic groups, etc.)?

The standard economic explanation of allocation is to allocate resources to maximize net economic value. Does this explain the special treatment for traditional fishing groups including aboriginal people? Does public support for life-style considerations in allocation have a connection to emotional response to fishery management?

- What is the market for super (genetically modified) salmon?

Scientists suggest that the public fear of genetically modified foods is not founded in objective analysis of risks. Do we need an analysis that includes emotions?

- Why and when should displaced fishers, riparian landowners, etc. receive compensation?

Neoclassical economic analysis suggests that compensation decisions should be grounded in the costs and benefits of such programs including incentives to underinvest and overinvest as well as transaction costs. Is this literature an adequate guide to the political process? If not, does any of the literature identified by Thaler help us understand the recent surge of license buyback programs and disaster relief programs?

- How do fishers respond to a rapid decline in fishing opportunities?

At a meeting on limited access systems several years ago, Philip Meyer argued that the problem with many fisheries is not entry and whether it should be limited, but rather the difficulty of limited exit. Anthropologists and sociologists have been analyzing the response to reduced fishing opportunities by explaining difficult family and personal adjustments. Does the standard economic paradigm as used in studies of labor economics and rural economic development provide adequate guidance for fishery economists or do we need to pursue literature identified by Thaler?