

**FROM INDIVIDUAL TO PERSON:  
AN EVOLUTIONARY PROCESS GROUNDED IN  
HUMAN COMMUNICATION**

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*Homo economicus* is a deeply-ingrained concept of mainstream economics which of late has come under greater scrutiny.<sup>1</sup> For instance, in the summer 2000 issue of the *Journal of Economic Perspectives* three articles are relevant. Ernest Fehr and Simon Gächter address the need for re-thinking *homo economicus* in terms of the adequacy of the pure self-interest model.

We believe that for important questions in these areas (such as labor market interactions, public goods, and social norms) progress will not come from additional tweaking of a pure self-interest model, but rather from recognizing that a sizable proportion of economic actors act on considerations of reciprocity (Fehr and Gächter, p. 178).

Elinor Ostrom presents the issue in terms of the cogency of the self-interested agent.

It is possible that past policy initiatives to encourage collective action that were based primarily on externally changing payoff structures for rational egoists may have been misdirected -- and perhaps even crowded out the formation of social norms (such as reciprocity, trust, and fairness) that might have enhanced cooperative behavior in their own way (Ostrom, p. 154).

Charles Manski defines the issue in terms of the accuracy of the core concepts.

The very first step in undertaking research on *social interactions* is to get the concepts right. The core concepts -- of preferences, expectations, constraints, and equilibrium -- offer a coherent framework within which one can define rigorously and analyze constructively many *interaction processes* (Manski, p.132, emphasis added).

In the very same issue of that journal, however, Bernard Saffran's recommended reading list calls attention to Alan Blinder's article in 2000 in which Blinder (pp. 18, 24) approvingly references *homo economicus* as a "rational, self-interested calculating machine" and trumpets that Adam Smith has made a "worldwide comeback." While Blinder references Smith's *Wealth of Nations*, nowhere in his article does one find reference to reciprocity, trust, and fairness, or even Smith's *Moral Sentiments*. If one accepts Blinder's views as typical of mainstream economics, what is stirring in the ranks of economists today is a restlessness with a concept that is centrally important to the way in which economic affairs are understood and economics is taught. A restlessness which indeed is present at the very beginnings of economic science and is reflected in the idealism in *Moral Sentiments* and the individualism in *Wealth of Nations* (Haney, pp. 232-235).

At times, this restlessness evokes no specific remedy. At other times, it elicits one which is more specific but does not advance a convincing argument as to why that remedy is better than any

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<sup>1</sup> We have been able to trace "*homo economicus*" (more specifically "*homo oeconomicus*") to a book published in 1889 by the Italian economist Maffeo Pantaleoni.

other. Joseph Henrich and several colleagues, for instance, assert that “recent investigations have uncovered large, consistent deviations from the predictions of the textbook representation of *Homo Economicus*” (Henrich, p.1). Herbert Gintis and Allen Orr quite forcefully would replace *homo economicus* with *homo reciprocans*.

... human beings exhibit a form of strong reciprocity that cannot be explained by reciprocal altruism or enlightened self-interest. Reciprocal altruism cannot explain why people vote, give to charity, participate in large collective actions to transform social institutions, or sacrifice themselves in battle. In each of these cases, people incur costs while contributing to a collective good, but cannot expect a compensating, long-term benefit to result from their contribution ... *Homo economicus* is what we would commonly call a sociopath: an individual totally indifferent to the well-being of others (Gintis and Orr, p 2).

Karine Nyborg in 2000 introduced *homo politicus* which she recommends not as a replacement for *homo economicus* but a complement.

[The] distinction between consumers and citizens seems to suggest that every individual may have two distinct and possibly conflicting preference orderings over social states, one associated with each role ... I propose a formalization of the distinction between consumers and citizens, or *Homo Economicus* and *Homo Politicus*, using well-known concepts from neoclassical welfare economics (Nyborg, p. 306).

Ten years earlier, sociologists Paul Hirsch and others (pp. 39-56) recommended *homo sociologicus* in a wide ranging exposition of the differences between economics and sociology within a collection of papers which call attention to the defects in the neo-classical paradigm. In the same collection, Richard Swedberg and others (pp.57-86) set out the fundamental items in the neo-classical paradigm and compare those items with the paradigm employed in economic sociology. A short time later Chris Doucouliagos (pp. 1-5) satirically adds *paleo-homo economicus* and *neo-homo economicus*, and refers approvingly to *homo sapiens*. At roughly the same time, we added to this list of terms with *homo socio-economicus* (O’Boyle 1994, pp. 287-288).<sup>2</sup> Heath Pearson (pp. 933-989) several years later introduced the antecedents of *homo economicus* from primitive economics: *homo erroneus*, *homo gustibus*, and *paleo-homo economicus*.

More recently, Richard Thaler (pp.133-141) predicted that developments in other disciplines notably psychology increasingly will be incorporated into economics and consequently *homo economicus* eventually will evolve into *homo sapiens*. Thaler argues for constructing economic models on the basis of an economic agent who better represents the full range of human behavior

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<sup>2</sup> We were not the first to use “homo socio-economicus.” Siegwart Lindenberg used the term in 1990 and Thomas Nitsch in 1982, though we were not aware of their use of the term when we used it for the first time in 1994.

in economic affairs. To Thaler, economics must recognize the role of emotion in economic agency and integrate it with rationality in economic decision-making.

Following years of criticism of the main tenets of mainstream economics, Joseph Stiglitz in his 2001 Nobel address (pp. 460-501) sharpened his attack on the neo-classical paradigm for: “seemingly precise models” which leave out information concerns; impossibility of involuntary unemployment; separation of equity and efficiency; continuous market clearing and equilibrium; Pareto-efficient markets; and reduction of economics to engineering. Included in his indictment are these central tenets of neo-classical economics as well: failure to differentiate types of markets; information efficiency of markets; separation of action, information, and behaviour; invisible hand leading to Pareto-efficient allocation of resources; privatization as welfare enhancing; supply and demand constituting the whole of economic analysis.

The problem, as Stiglitz (p. 488) makes explicit, is that “the economists’ traditional model of the individual is too narrow.” He does not point out, however, that the underlying philosophy of individualism must be too shallow, nor does he offer a carefully articulated substitute for the individual or individualism. With the exception of Peter Danner, to our knowledge no one else has either (see his *The Economic Person: Acting and Analyzing*).

In 1986 Daniel Kahneman and others stated that there are two ways to improve the basic microeconomic model. One is to “adopt a more complex view of the environment and of the interactions among transacting agents;” the other is to abandon “the standard assumption of rational expectations” (pp. 298-299). They warn that the second way adds uncertainty regarding predictions of human behaviour in economic affairs and complexity to the factors which influence economic behaviour. J.G. Mequior (pp. 353-378) is more forceful and more alarmed. *Homo economicus* is under attack and with it the central values of individualism and critical objectivity in knowledge. Thus does he suggest, though clearly would condemn, that in order to amend the meaning of economic agency conveyed by *homo economicus*, it is necessary to offer a cogent alternative to individualism.

In this essay we intend to demonstrate that the remedy for this restlessness lies in the distinction between the individual and the person, between individualism and personalism, and why today the person as the basic unit of economic analysis is superior to the individual. Additionally we will explain why the remedy is found in Smith’s two masterpieces *taken together* and why Smith who was embedded in the script stage of human communication and the individualism of the Enlightenment could not fully integrate the “self” (“I”) of *Wealth of Nations* and the “other” (“Thou”) of *Moral Sentiments* into a more fully human economic agent. Classical economics embraced “self” and rejected “other,” and down to this very day mainstream economics -- Blinder’s earlier comments taken as indicative -- has followed suit.

## **CYCLIC VERSUS EVOLUTIONARY: FUNDAMENTAL CONFLICT IN THINKING ABOUT ECONOMIC AFFAIRS**

Walter Ong, a specialist in rhetoric, communication, language, and technology, identifies what is wrong and clarifies what needs to be done. The problem and the solution lie in the difference between thinking about economic affairs from the cyclic model versus the evolutionary model.

### ***What's Wrong: The Cyclic Model.***

As with other disciplines such as history which “repeats itself,” economics is constructed on a cyclic model that applies circular descriptions and explanations to economic events. Note the following examples from economics past and present: (1) the use of the circular flow diagram to better understand macroeconomic affairs; (2) the characterization of the market as a system which clears shortages and surpluses, automatically returning to a state of micro-economic equilibrium; (3) the way in which automatic stabilizers restore macro-economic equilibrium; (4) Say’s law that supply creates its own demand; (5) the business cycle as a representation of macroeconomic affairs unfolding over time, repeating a pattern of expansion, contraction, peak, and trough; (6) cost-of-living adjustments which restore current income to some prior purchasing-power benchmark; (7) the iron law of wages -- higher real wages induce increases in the birthrate and subsequently in the supply of labor which in the long run leads to wages reduced to a level just sufficient to maintain the population; (8) the natural-rate hypothesis which claims that unemployment invariably returns to its normal or natural rate regardless of the rate of inflation, and Knut Wicksell’s natural rate of interest; (9) the economic life cycle which asserts that a person’s lifetime income varies according to a regular pattern with age and experience; (10) the cobweb theorem which argues that the quantity supplied today is a response to price and profit signals from the past.

In the cyclic model events are construed as identical and inevitable, and therefore predictable. With the cyclic model reality is closed in and brought under control; though assertive, thinking remains in a primitive mold (Ong 1967, pp. 87, 73, 95). Thus, the widespread use of econometrics in mainstream economic analysis. Using cyclic reasoning, and given the data required to operationalize their econometric models, mainstream economists are comfortable in asserting that changes in economic affairs can be predicted. What they do not fully appreciate is that one other requirement -- a central premise of their way of thinking about economic affairs -- must be firmly in place: specifically and notwithstanding any changes taking place in economic affairs over time, *homo economicus* is an *utterly rational, never-changing human individual*. Without this rationality and constancy about human individuals as economic agents, and the automaticity which is characteristic of market economies, the cyclic model disintegrates for lack of predictability.

Ong beckons us to set aside cyclic thinking for evolutionary thinking because “one can make use of the circle model only as a result of a careful selection of details and the calculated elimination of others” (Ong 1967, p. 89). In addition to the cyclic thinking embedded in the mainstream paradigm as enumerated above, note the following examples of “careful selection” and “calculated elimination”: (1) resting on the central premise that the economic agent is *never-changing* and taking as a given in economic analysis that whatever may be excluded or not considered remains constant (*ceteris paribus*); (2) imputing values for unobserved or unobservable variables; (3) omitting regressors; assuming (4) that dependent and independent variables are normally distributed in the population (multivariate normality), (5) that measurement error is randomly distributed, (6) that in linear programming two of the lines bounding a region of basic feasible solutions do not intersect at the same corner point (no degeneracy); (7) using budget constraints which ignore kinks, discontinuities, gaps, and nonconvexities (a problem with first-generation studies); (8) employing linearization to simplify complex problems with budget constraints; (9) glossing over sample selectivity bias; in matters of comparative dynamics (10) deciding what is to be held fixed, and (11) choosing between measures of permanent income and other measures which include transitory income (Berndt, pp. 614-649).

### ***What Needs to be Done: The Evolutionary Model.***

Charles Darwin’s theory of evolution with its twin emphasis on adaptation of living organism to the environment and natural selection has had a powerful influence on modes of thought well beyond the precincts of biology.

There can be no doubt that the discovery of the process of evolution, cosmic and organic, has been one of the greatest achievements of the human mind. In a sense, this is the central discovery in the Western world since Renaissance times, and in a still further sense it is the *central corporate discovery of all mankind* (Ong 1967, p. 61; emphasis added).

The discovery of evolution has undermined cyclic views even more than would at first blush appear. In the universe as we know it, there exists no real model or analogue for cyclicism -- that is the identical and inevitable repetition of an event or two (much less at an infinite number of) points in time (Ong 1967, p. 73).

*The birth of man in the cosmos is striking evidence against cyclicism* if further evidence is really needed. For *here we have the cosmic processes terminating not in repetition but in its antithesis, the utterly unrepeatably and unique human person* (Ong 1967, p 78; emphasis added).

By extension, Ong is arguing and we certainly concur that there is no way to posit a *never-changing homo economicus* without essentially casting aside “the central corporate discovery of all mankind” and without effectively cloning all economic agents from a single cell taken from a hyper-rational abstract human being. At the very heart of economic affairs is found the economic agent who is not cyclic but evolutionary, in a Darwinian sense is adapting to the economic

environment, and in a personalist sense is changing simply by acting as an economic agent. We return to personalism and the economic agent later in this essay.

There are, fortunately, numerous examples of evolutionary thinking *outside* mainstream economics. Karl Marx, for instance, is a leading advocate of the evolutionary model. So too are Thorstein Veblen, John Commons, Wesley Mitchell, and Clarence Ayres whose evolutionary thinking about economic affairs forms the intellectual foundations of the Association for Evolutionary Economics.<sup>3</sup> Howard Sherman and William Dugger identify Commons and Ayres as “moderates” who held the view that “evolutionary change in society was mostly smooth, virtually irresistible, involved little class conflict, and led to progress” (Sherman and Dugger, p 5). Marx and Veblen, on the other hand, are radicals whose evolutionary vision Sherman and Dugger embrace and apply directly to their own way of thinking about contemporary economic affairs. Their assertion that “we study the evolution of societies, not the evolution of species” (Sherman and Dugger, p. 6) points to a void in evolutionary economics which we hope to fill -- the evolution of the economic agent.

Several other examples that demonstrate evolutionary thinking in economics are worthy of note. Deriving its inspiration from Joseph Schumpeter, the *Journal of Evolutionary Economics* also presents economic affairs in terms of an evolutionary process.<sup>4</sup> Though somewhat confusingly titled *Evolutionary Economics*, Marc Tool’s two-volume work which was published in 1988 is a collection of papers on institutional economics. The first article in that collection, however, helps clarify the difference. Evolution is one of four ideas which are foundational to institutional theory. The other three are culture, cultural relativity, and instrumental valuing (Mayhew, p. 23). Evolutionary economics replaces the maximization and equilibrium assumptions of neo-classical economics with “uncertainty and imperfect information, routines, heuristic search processes and optimizing behavior, and nonequilibria” (Blauwhof, pp. 153-154). With high expectations and considerable enthusiasm initially, evolutionary economists have been applying the concepts of path-dependency, non-linearity, and self-organization from chaos theory to the problems of innovation and technological change. Their work continues and advances have been made but the results have not shaken the foundations of mainstream economics (see, for example, Loet Leydesdorff and Peter van den Besselaar).

Explicitly analogizing economics to biology, Herman Daly in the late 1960s argued that matter-energy are *degraded* through the economic process (production and consumption) in the same way that matter-energy are *degraded* through the metabolic process (anabolism and catabolism). In both the biological order and the economic order the purpose is the same: the maintenance and enjoyment of life. In his extended analogy, Daly examines the life process which he regards as

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<sup>3</sup> See [www.orgs.bucknell.edu/afee/](http://www.orgs.bucknell.edu/afee/); Lewis Hill (p.168).

<sup>4</sup> See <http://link.springer.de/link/service/journals/00191/aims.htm>.

the ultimate subject matter of economics and biology under two aspects: steady-state and evolutionary (Daly 1968, pp. 392-394). Unlike the cyclic thinking which dominates mainstream economics, Daly's thinking is linear. He visualizes the flow of matter-energy in economic affairs as "one-way, non-circular, and irreversible" (Daly 1968, p. 395). Several years later Daly employed linear thinking again to give expression to a steady-state economy based on the flow of matter-energy (see Daly 1974, pp. 15-21).

In the early 1980s Kenneth Boulding (p. 17) argued that Smith, Thomas Malthus, and Alfred Marshall employed the evolutionary model and that it was Leon Walras and his followers who by grounding economics in mathematics subsequently steered it in the direction of the cyclic model. Economic science, in other words, was first a biological science before it was fashioned into a physical science. With some reservation, Boulding (pp. 85-86) added Schumpeter to this list of evolutionary thinkers especially as regards economic development. With even greater reservation, Ulrich Witt and others (1992, p. 4ff.) cited Schumpeter's contributions regarding innovation, the entrepreneur, and economic development as examples of rudimentary evolutionary thinking. In 1993 Witt offered a definition of evolutionary economics which is well-suited to our purposes because it is grounded in both Schumpeter and Darwin.

Evolutionary economics may be ... characterized by its interest in economic change and in its causes, in the motives and the understanding of the involved agents, in the processes in which change materializes, and in the consequences (Witt 1993, p. xiii).

Because he uses the evolutionary model in his thinking about economic agency, K.E. Walker (pp. 69-77) supplies perhaps the most important example for our purposes. He argues that the economic agent has evolved from the accumulator of wealth, a concept which was widely embraced until well into the 20<sup>th</sup> century, to the allocator of economic means between various material ends in order to enhance his/her own well-being. The allocator concept was introduced more recently by Lionel Robbins and his followers and is dominant within contemporary mainstream economics. Though clearly different, these two concepts are alike in that both are based on an inward-directed economic agent. Both underscore human individuality. Walker points to two other concepts neither of which has replaced the allocator concept: the supporter of socially endorsed ethical standards; and the co-operator in provisioning human material and cultural wants and needs. Both are alike in that they are based on an outward-directed economic agent. Both emphasize human sociality.

By confining economic agency to the role of the allocator whose behavior is strictly optimizing mainstream economics is able to greatly simplify economic analysis and to achieve the appearance of greater certainty in its findings. By including all four roles -- allocator, accumulator, supporter, and co-operator -- personalist economics encompasses a wider range of fundamental human action in economic affairs in which human beings from time to time switch from one role to another role, sometimes acting in accord with one role only, and at times in

keeping with two or more roles as their own personal circumstances require. Human beings are complex creatures, often torn between the demands placed on them by these different roles, and therefore not always able to act as optimizing allocators. By making the economic agent more complex, personalist economics renders economic analysis more problematical, calling for more hands-on experience in the details of the specific economic affairs under investigation and leading to less certainty with regard to specific empirical findings.

Two models of economic agency clearly are neither mainstream nor evolutionary: *homo sovieticus* and *homo heroicus*.<sup>5</sup> We mention them here because both are based on compelling philosophies, the one from Marxism, the other from fascism. Even though both left deep tracks across human civilization in the electronic age, we mention them no further because both have been undone in the last 50 years by more compelling ideas.

### **ECONOMIC CHANGE AND THE THREE STAGES OF HUMAN COMMUNICATION**

Following Ong and rejecting the *never-changing homo economicus* of mainstream economics, we argue that the *homo socio-economicus*<sup>6</sup> of personalist economics is *ever-changing*, adapting to the economic order in a way which parallels Darwin's thinking about the internal mutation of living organisms in the biological order. Personalist economics asserts that economic change is not just a matter of the *what* and *how* of production, distribution, exchange, consumption, and investment but also the *who* of economic affairs, the persons engaged in and being changed by those activities, principally by the work they do and the things they consume. In this regard the changes taking place over a long period of time in human communications, from oral to script and more recently electronic, are critical to understanding economic agency and in general have been neglected by mainstream economics. In the following, we replace the individual (*homo economicus*) and the out-dated philosophy of individualism which are rooted in the Enlightenment and the script stage of human communication with the *acting person*, the *person in action*, and the more modern philosophy of personalism which emerged during the electronic

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<sup>5</sup> *Homo sovieticus* – a human being with no creativity, initiative, or responsibility who through a pact with the state tolerates lies, petty crimes, and poor morale in the workplace in exchange for security -- originates with the Josef Tischner (see Goldfarb, p. 1, and Halik, p. 4, and Alakbarov, p. 2). In 1939 Peter Drucker (p. 137) juxtapositioned the heroic or noneconomic man of fascism, who functions entirely independently of any economic status, to the economic man of capitalism. According to Drucker, heroic man is a new conceptualization of the human being as self-sacrificing, self-disciplined, and self-abnegating. Later Drucker's heroic man was latinized to *homo heroicus* (see "Los Principios," p. 6). See also Eugen Weber (pp. 40-42) who associates the fascist concept of the human being with the medieval knight well-known for "sacrifice, abnegation, and entire devotion to the cause ... and the mystical idea of transcendence by expiation."

<sup>6</sup> Hereafter referred to as the *acting person* or the *person in action*. We prefer these terms to *homo socio-economicus* which we used routinely for more than 10 years because the *acting person* and the *person in action* better convey the notion that the economic agent *acts* in economic affairs and through that action either grows or diminishes as a human person. Further, the person connects economic agency to the philosophy of personalism just as the individual is tied to the philosophy of individualism.

stage of human communication.<sup>7</sup> Changes in communication, in other words, are at the very core of the meaning of the global economy.<sup>8</sup>

### ***Oral Communication.***

Face-to-face is the most intense and personal method of communicating, requires the parties to agree on meeting at the same time and in the same place, and makes this kind of interaction costly in terms of out-of-pocket expenses (including meals, lodging, transportation) and opportunity costs. Teaching and learning in the oral stage of human communication are strictly face-to-face. In terms of their work, however, human beings are more isolated and therefore must be more self-reliant. Human self-awareness is built mainly around the individuality of human beings. The philosophy of individualism which fleshes out the meaning of individuality is borne of the 17<sup>th</sup>-18<sup>th</sup> century Enlightenment. Libertarianism is a type of individualism which rejects all forms of coercion. To the extent that community -- both in terms of living and working in close physical proximity and in terms of the ties which bind the human heart and spirit -- developed during the oral stage, it was severely circumscribed by the distance that a person could travel by foot, horse, or boat in a day's time.

### **Written Communication.**

Written communication, which emerged around 3500 BC (Ong 1967, p. 4), is less intense and personal, does not require the parties to meet at the same time or in the same place, reducing considerably though not eliminating entirely the costs associated with this method of communicating. Humans are less isolated in their work, more dependent on others, and no longer as self-reliant. Even so, self-awareness remains largely a matter of human individuality.

Written communication evolved over a very long period of time and in the 15<sup>th</sup> century became much more widely accessible to the literate public through the invention of the first instrument of mass-production -- the printing press. Teaching and learning no longer are tied to direct face-to-face communication because printed materials are intended primarily for private, silent reading, as is demonstrated so clearly in the traditional library setting. For that reason, in the script stage of communication human beings remain individuals who are aware of their individuality and are wedded to individualism. In this stage and until the development of the railroad, community was similarly constrained to the distance one could travel in a day by foot, horse, or boat.

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<sup>7</sup> See Ong 1967 for more on the three stages of human communication.

<sup>8</sup> Thomas Friedman (pp. 9-11) identifies three great eras of globalization. In the first stage (1492-1800), the dynamic force was countries globalizing. In the second stage (1800-2000), companies provided the dynamic force behind globalization. In the third stage (2000- ), individuals began to collaborate and compete globally.

Ong locates Smith toward the end of the script stage of human communication which Ong describes as a “spectacularly aggressive period ... of empire-building and laissez-faire economics” ...“with which our present less aggressive, more socialized age appears to have lost its nerve” (Ong 1970 p. 99). At the same time, Smith was embedded in the Enlightenment and its dominant philosophy which effectively deified the individual. Father of economics aside, Smith still was very much a child of his times.

### *Electronic Communication.*

Communicating by telephone, including video-phone and cell-phone,<sup>9</sup> is less intense and personal, requires the parties to agree on meeting at the same time but not in the same place, substitutes phone charges for travel expenses, and eliminates other out-of-pocket costs but not opportunity costs. Notice, for example, that primary-care physicians no longer make house calls largely because both types of cost involved in getting to the patient’s home are so much greater than the cost of maintaining telephone service which very often provides access to sufficient information to make a well-informed decision as to the nature and severity of the patient’s condition, and what should be done next.

Workplaces are re-constructed around telecommunication systems and thus humans are much less isolated in their work, and much more dependent on others. Today hardly anyone in the modern workplace is able to function without immediate access to a telephone. This interdependency is underscored when a severe storms brings down telephone lines which at least momentarily renews their isolation. Self-awareness is rooted in both human individuality and human sociality. This duality is characterized by Ellen Ullman as follows.

... out of ... the recognition of the identify of others, comes our own identity, the sense that we exist, ourselves, our self. Everything we call consciousness unwinds from that ...We don’t merely send out signals to identify ourselves; we create one another’s identity ...Yet somehow for our own survival (and pleasure) it is critical that we attain a unified view of ourselves as unique selves (Ullman, p. 70).

Carla Surratt puts individuality and sociality in John Hewitt’s language of differentiation and identification and in the context of the economic order and the Internet.

The distinguishing feature of the most successful corporations is that they celebrate the validity of the self via Net Logic.<sup>10</sup> It should come as no surprise that customization and community-building are the two attributes vital to modern corporate success, as both

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<sup>9</sup> Cell phones are capable of more than voice transmission. Today due to the digital revolution they come with color displays and screen savers, memory, software programs, and games, offer access to a wide variety of services including mapping and directions, traffic information, e-mail access, sports news, and restaurant and movie guides. One new service provides real-time information on NASCAR races including the names of the frontrunners (Wildstrom, p.16).

<sup>10</sup> As with all other media, the specific logic according to which the Internet operates as an institution (Surratt, p. 8).

strategies implicate the modern self at the core. Customization is the recognition of self as a unique, valuable entity. According to Net Logic, the individual is no longer part of a "mass." He or she is a unique individual worthy of special attention and endowed with consumer rights. It is the attempt to achieve the first half of Hewitt's equation -- differentiation from. Conversely, successful corporate attempts at fostering community online complete the second half of Hewitt's equation -- identification with (Surratt, p. 207).

By virtue of the ongoing developments in electronic communications, human beings themselves are evolving from individuals to persons. In this regard, it may be comforting to note that, as Ong states unequivocally, it is "virtually impossible" to determine if societies built on modern technology are more or less depersonalizing than other societies (Ong 1981, pp. 200-201).

The philosophy of personalism enlightens us further as to why the individual and individualism no longer serve us well in the age of electronic communication (O'Boyle 2001, pp. 367-394). The constraints on community are relaxed considerably by the telephone and by much faster and relatively inexpensive means of long-distance travel, making the opportunity costs much lower.

The digital revolution within the electronic stage, notably e-mail and wireless internet access, produces human communication which is even less intense and personal, does not require meeting at the same time and in the same place, reduces even further the cost of communication but does not eliminate opportunity costs. Workplaces are designed around digital communication systems which often must be upgraded just to maintain contact with others. Humans are even more dependent on others including persons at distant locations due in part to the much lower cost of communicating.

This ever greater interdependency makes humans more aware of others and thereby more fully aware of themselves as human persons. Their dependency becomes even more evident when the internet crashes due to a storm which interferes with satellite transmission or a virus infects the system. During the interruption of service, human beings for a while become diminished as persons because a powerful communications link with other humans has been severed.

There are for sure new dangers originating in electronic communications affording additional opportunities to reduce some humans to ciphers, to spread lies about them much more widely, to transform themselves and others into pornographic objects, to steal their identity, and in the extreme strip them of their personhood through enslavement. Whether it is used for good or ill, communications by electronic means has made humans increasingly aware that they are more than just human individuals, that they are human persons. In this stage of human communication the constraints on community imposed by time and distance between the "I" and the "Thou" are being lifted.

With hindsight informed by Ong's powerful observations that personalist philosophies emerged first in the 20<sup>th</sup> century and only in high-tech cultures (Ong 1981, p. 200; Ong 1967, p. 14) and that our thinking needs to be more evolutionary, we see more clearly how to remedy the restlessness in economics regarding the individual as the basic unit of economic analysis. Taking the "self" ("I") from Smith's *Wealth of Nations* and uniting it to the "other" ("Thou") from *Moral Sentiments* produces the person – a more fully human economic agent, a unit of economic analysis far better-suited to the electronic age. Smith was on the right track regarding economic agency but lived in an age when he was not able to realize the fullness of his own ideas. By holding fast to the individual as the basic unit of economic analysis and individualism as its philosophical foundations, mainstream economics functions in effect in the script stage of human communication as if the telegraph, telephone, radio, television, internet, and e-mail had never happened and Smith had never written *Moral Sentiments*.

### **HOW WORK INFLUENCES ECONOMIC AGENCY**

The individual as the central unit of economic analysis, with individualism supplying the foundations for a deeper understanding of human behavior in economic affairs, no longer suffices for one central reason. While mainstream economics readily acknowledges that the electronic age and digital technology have changed work itself, it sees work strictly in terms of *what* the worker contributes to the process of production. It does not and perhaps cannot admit that work changes the human beings who work. *Homo economicus* is *never*-changing.

#### ***Work Changes the Person Who Works.***

Personalist economics, on the other hand, recognizes that two major changes take place through work: (1) the transformation of resources into goods and services and (2) the development of the one who works. At times the work is done poorly; the outcome is goods and services which are defective. Sometimes the work is mind-numbing; the result is a human being whose development as a person has been arrested. While acknowledging the instrumental dimension, personalist economics sees work primarily in terms of the *who* that worker is becoming. The difference between the mainstream and personalist economics is seeing the worker as an economic instrument rather than a human person. *The acting person* is *ever*-changing.

There are two dimensions to the process by which work changes the worker. Rightly organized, work provides opportunities for using one's creative skills and talents and for being brought together with others in a common enterprise. The one reflects the need of the human person which originates in individuality while the other reveals the need which is rooted in sociality. The need to belong which inheres in our nature as social beings is the foundation to the right of workers to associate for the purpose of representing their interests to the employer. Workers have a right to associate, to form a union, because acting collectively is a more effective means for conferring on wages, hours, and working conditions than is acting individually, and therefore a

better means for provisioning their need for income, their need to belong, and their need for work that is challenging. Exercising that right and bargaining collectively depend critically on the goodwill of the employer. It follows that workers also have a corollary right to strike in order to deal with an employer who is lacking in goodwill.

Work more so than consumption or leisure is crucial to understanding personhood and economic agency because if human sociality is not admitted in the workplace it will not be admitted in the marketplace or the household. And, seeing that for most adults work takes up more time and human energy than consumption or leisure, work is by far the most important economic activity giving shape and form to the human person. With great insight and foresight, the nineteenth-century poet Gerard Manley Hopkins (poem 57) put the matter in these simple words: “what I do is me.” We add the following: because the good or service I produce can be sold only when there is some gain for the buyer, “what I do is for others.” Sympathy or fellow-feeling is necessary to assure that the transaction is a positive-sum experience. In the absence of this virtue, the transaction can degenerate into a zero-sum, or worse yet, negative-sum experience.

Work and the persons who do the work change under the influence of the entrepreneur who introduces new products and services, sets up new processes of production, brings new materials into the production process, penetrates new markets, and initiates new ways to administer the economic enterprise. In that sense, the entrepreneur is the principal agent transforming the worker both as an instrument and as a person. The entrepreneur is the driving force behind the evolution of human communications from the oral and script stages into the electronic stage with its digital revolution because it is the entrepreneur who figures out how to transform a strictly technological advance in electronics into an economic gain, thereby making it possible to incorporate that advance into economic affairs. In that regard, the entrepreneur has played a key role in making economic agents more aware of others and of themselves and therefore in the development of personalism and the evolution of the economic agent from a human individual to a human person.

Because meeting and interacting with others were demanding and costly in the oral and even the script stage of human communication, economics more easily could construe humans as self-reliant, compelled to undertake work alone for whatever gains were associated with that labor, and inward-directed, aggressive, competitive *individuals*. When meeting (in real and virtual space) and interacting with others became more convenient and less expensive in the electronic stage, humans more readily can be seen along the other dimension of their nature as socially-reliant, open to working together especially on tasks which cannot be done as well or at all by the individual alone, and outward-directed, nurturing, cooperative *persons*. In the economic order competition *and* cooperation activate economic affairs just as do natural selection and symbiosis in the biological order.

The following scheme shows in brief the internal mutation of the economic agent from individual to person through work, and why most fundamentally thinking about economic affairs should be evolutionary rather than cyclic. The principal difference between mainstream economics and personalist economics is not so much in what is included in economic agency (human individuality) as to what is left out (human sociality).

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Work is performed in a strictly oral/written communication environment, making for a worker ...

- ➔ who is autonomous, self-reliant, and inward-directed
- ➔ who is represented by mainstream economics strictly in terms of *human individuality*
- ➔ whose worth is determined entirely by what he/she contributes to economic affairs
- ➔ whose nature is described by the philosophy of *individualism*

Work is performed in an electronic communication environment, making for a worker ...

- ➔ who is autonomous, self-reliant, and inward-directed and at once dependent, socially-reliant, and outward-directed
  - ➔ who is represented by personalist economics in terms of both *human individuality and human sociality*
  - ➔ whose ultimate worth derives not from *what* he/she contributes to economic affairs but from *who* he/she is -- not an instrument, object, slave, or even an individual -- a person made by the Creator to be nearly divine<sup>11</sup> and
  - ➔ whose nature is made clear by the philosophy of *personalism*
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## HOW CONSUMPTION INFLUENCES ECONOMIC AGENCY

Mainstream economics depicts the consumer as unique, solitary, autonomous, self-centered, and self-made, traits which accent the consumer's individuality. For example, the practice of power dressing and the popularity of health foods give evidence of the consumer who is self-made. The trendsetter and the traditionalist are consumers with much individuality.

Self-centeredness is necessary in the sense that healthy and normal human beings are expected to address their own needs and wants to the extent of their own abilities. In this regard, two virtues are critical. Self-centeredness degenerates into selfishness when the virtue of moderation is disregarded and the things sought after become ends in themselves rather than the means to satisfying their wants and meeting their needs (Danner 2002, pp. 124-125). If extreme selfishness

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<sup>11</sup> See John Paul §84 paraphrasing the 8<sup>th</sup> Psalm, verses 5-6.

is not checked by the virtue of sympathy or other feeling which assures that both parties benefit from the exchange, a transaction involving agents who are *acting persons*, are free to act, cannot be completed. To the extent that these two virtues -- moderation and sympathy -- are neglected in economic affairs, personal and economic chaos follows.

The consumer behaves predictably in ways which are described as utility-maximizing, privacy-protecting, and commodity-acquiring. In Western culture, acquiring and accumulating goods are perceived as a sign of success. The consumer is free to choose whatever he/she is able to afford, makes those choices informed strictly by reason for the purpose of satisfying some want, and takes into account not only experiences in the past (is hindsighted) but also hopes and plans for the future (is foresighted).

Comparisons are made but they are rigorously intra-personal or inward-looking, wherein consumers evaluate their own wants over time without any regard for others. Adults typically plan years ahead for their retirement, carefully budgeting -- rationally planning income and expenses -- to achieve that goal. Need is entirely rejected by mainstream economics as a central determinant of consumer behavior because it is a value-laden concept. *Homo economicus* is *never-changing*.

There is more to the consumer, however, than mainstream economics admits. The consumer is a social being as well as an individual being, and as such is both alike and unique, at once communal and solitary, dependent in addition to autonomous, utility-satisficing no less than utility-maximizing, gift-giving in addition to commodity-acquiring, emotional and rational in decision-making, concerned for needs no less than wants, free to choose and morally accountable. Just as the trendsetter and traditionalist are persons with much individuality, the caring neighbor and the philanthropist are persons with much sociality.

In America, soul food and Cajun cuisine originate in specific cultures and appeal especially to persons born and raised in those cultural environments. Pre-teens are persons who are dependent on their parents for the things they need and want. Similarly, the elderly may become dependent on their adult children because of a debilitating condition.

Additionally, the consumer behaves in ways which are described as utility-maximizing and utility-satisficing, privacy-protecting and company-seeking, commodity-acquiring and gift-giving. At times, friends may share what they have, one friend taking less than the maximum available if he/she were to exclude the other, in order that the other friend might have more, thereby affirming and strengthening their friendship.

In personalist economics, the consumer is free to choose whatever he/she is able to afford, but is morally accountable for the choices made, makes those choices informed by reason and emotion,

by mind and heart, for the purpose of satisfying a want or meeting a need. Fear drives some consumer choices, as at times with handguns and security systems. Some persons known as compulsive consumers or shopaholics are addicted to shopping. Their choices are not rationally determined, nor are they freely made.

As with mainstream economics, the consumer is not only hindsighted but also foresighted as when parents have to reduce their current consumption for years in order to set aside sufficient funds for their children's future education. Even though it is a value-laden concept, need is embraced by personalist economics because self-evidently it is a central determinant of consumer behavior. Thus the consumer is both want-satisfying and need-fulfilling.

O. Henry's "The Gift of the Magi," is a short story of a young married couple too poor to buy one another a present for Christmas: the husband buys a comb for his wife's beautiful long hair by selling his gold watch and she buys a chain for his watch by cutting and selling her hair. This story is enchanting because it exemplifies the gift-giving behavior of a husband and wife in love, the willing subordination of "I" to "Thou."

Because humans are both individual beings and social beings, consumers often struggle with decisions which require a reconciliation between the demands originating in the two-sides of their nature. A husband, for instance, may have to postpone buying new fishing gear because his wife needs to replace some of her clothing in order to be suitably dressed on her new job. An older sister with a steady job may be asked to help support a younger brother while he completes his college degree even though it means that she cannot buy the new car her heart is set on. A homeowner may have to forego buying new sod for his lawn in order to buy a privacy fence to block out the view of his/her neighbor's junk-filled yard. The decisions persons make as consumers under these kinds of conditions determine how they grow and develop, when they mature, and whether they regress. Just as we observed earlier regarding work, consumption changes the one who consumes. The *person in action* is Darwinian in nature, is *ever-changing*.

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In sum, the consumer who is represented by mainstream economics as *never-changing* ...

- ➔ is unique, solitary, autonomous, self-centered, and self-made
- ➔ is privacy-protecting and commodity-acquiring
- ➔ makes intra-personal comparisons
- ➔ is utility-maximizing, free to choose and act, rational in all decision-making, strictly want-satisfying, both foresighted and hindsighted.
- ➔ is an *individual being* whose nature is described by the philosophy of *individualism*

The consumer who is represented by personalist economics as *ever-changing* ...

- ➔ is unique and alike, solitary and communal, autonomous and dependent, self-centered and other-centered, self-made and culture-bound
  - ➔ is privacy protecting and company-seeking, commodity acquiring and gift-giving
  - ➔ makes intra-personal and inter-personal comparisons
  - ➔ is utility-maximizing at times and utility-satisficing at other times, free to choose and act but accountable for his/her choices, rational at times and emotional at other times, usually need-fulfilling before want-satisfying, both foresighted and hindsighted
  - ➔ is an *individual being* and a *social being* whose nature is illuminated by the philosophy of *personalism*, who often must resolve conflicts that arise between his/her individuality and sociality
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### PERSON AS THE BASIC UNIT OF ECONOMIC ANALYSIS

Mainstream economics is built on four premises: the individual -- *homo economicus* -- is the basic unit of economic analysis; left unrestrained individuals sort out all problems in economic affairs through markets; with the right information and theoretical models certainty in economic analysis is possible; human beings have instrumental value. By far the most important premise is the individual. Neo-classical economists today are able to hold firm to *homo economicus* only by denying the evolutionary process

Personalist economics is constructed on four other premises: the person is the central unit of economic analysis; institutional intervention is necessary when market failure occurs; certainty in economic analysis is not always possible; human beings have a sacred dignity quite apart from their instrumental value. To personalist economists person – the *acting person* -- is the most important premise, and they embrace this premise because they accept and incorporate the evolutionary process in their way of thinking about economic affairs.

Personalist economics is a work in progress which calls for re-thinking economic affairs from the very beginning. Even so, we can state unequivocally that the individual as the central unit of economic analysis and the individualism no longer suffice because both are grounded in the past, in the oral/script stage of human communication. What is required is an understanding of contemporary economic affairs in which economic agency is embedded in the electronic stage of human communication where human beings are represented as persons and personalism articulates what it means to be human.

Whereas mainstream economics thinks about economic affairs in terms of a cyclic model, personalist economics thinks about the same affairs in the context of an evolutionary model. Simply put, economic agents are not rigidly predetermined, fully revealed, and entirely predictable throughout economic history. They are not *never*-changing. Rather, as human persons economic agents are dynamically evolving, only partially revealed to themselves and others, and unpredictable. They are *ever*-changing. Frequently they are called on to reconcile the conflicting demands of the self and the other, of the “I” and the “Thou.”

The economic agent in an evolutionary model allocates economic means between various ends, accumulates wealth, cooperates in provisioning human needs and wants, and supports socially endorsed ethical standards. By construing the economic agent as a multi-dimensional human person rather than the one-dimensional (optimizing allocator) human individual of mainstream economics, personalist economics renders economic analysis more problematical, calling for more judgment on the part of the analyst and less certainty with regard to its findings.

Because it involves a universal presumption rather than a specific finding, the law of nature is not the final word on the basic fairness of the interactions between economic agents in a market system. It is extensive support for and faithful practice of justice and caring and not the invisible hand of the market which help contain such specific abuses as dumping, insider trading, redlining, bribing, harassing, price gouging, counterfeiting, industrial spying and sabotage, loan sharking, expense padding. Even so, these types of practices are likely to continue as long as there are gains to be gotten through deception, exploitation, and opportunism.

In personalist economics, human beings are creatures with both needs and wants. There is, for example, no way to construe poverty except in terms of unmet human material need. Meeting that need is the primary goal for which economic systems are instituted and are to be evaluated. Needs are the things required for human well-being. Wants, on the other hand, are the things desired. Needs and wants inhere not in the things themselves but in the human person and to the extent that humans differ so do their needs and wants. The diabetic for example needs insulin. Others have neither the need nor the desire for insulin since their bodies produce it naturally.

Human beings are two dimensional twice over: individual and social, body and spirit. Rest and sustenance are the needs and wants of the body which are addressed directly through consumption and indirectly through work which provides much of the income required for consumption. Truth, goodness, and beauty are the needs and wants of the spirit which also are addressed by work and consumption. Human beings work in order to meet the needs of the spirit which cannot be met through consumption: the need to belong which originates in their sociality and the need for opportunities to use their creative skills and talents which originate in their individuality.

While the needs and wants of the body and spirit require human beings to work and consume, the body and spirit at the same time impose limits on work and consumption. The body limits work in the sense that it cannot function without regular rest. The body also limits consumption in the sense that taken to excess consumption is harmful to the body. The spirit moderates consumption through the warning that consumption is not an end in itself but the means to satisfying wants and meeting needs. In like fashion, the spirit moderates work to assure that it remains a means and does not become an end in itself.

The roots of *homo economicus* run deeply in neo-classical economics and therefore are very difficult to pull up. As Ong states (1986, p. 3), a fascination with individuals and individual differences “marks nineteenth century thought” in the British Isles and on the Continent -- the time and place where the historical antecedent of neo-classical economics elevated *homo economicus* to the status of icon which simplified economic analysis of the old economy of slow-paced oral and written communication and the hugely powerful nation-state. It no longer suffices for the new economy of high-speed electronic-digital communication and supra-national bodies such as the European Union and the World Trade Organization which more and more are subordinating the nation-state in economic affairs in order to promote economic development.

Pulling together what we have been saying to this point with what we can glean from *Moral Sentiments* and *Wealth of Nations* on human virtues and ultimate goals, it becomes clear that

#### THE COMPLEMENTARITY OF ADAM SMITH’S TWO MASTERPIECES

	<u>Human Awareness</u>	<u>Organizing Principle</u>	<u>Social Value</u>	<u>Principle of Justice</u>	<u>Human Virtues</u>	<u>Ultimate Goal</u>
<i>Wealth of Nations</i>	self (“I”)	competition	freedom	equivalence	diligence prudence self-reliance	good of individual
<i>Moral Sentiments</i>	other (“Thou”)	cooperation	community	contributive	sympathy generosity benevolence	good of all

there are compelling reasons to include both masterpieces in a reconstruction of economics around the *acting person* as the basic unit of economic analysis and personalism as its philosophical foundations, thereby making economics more relevant to economic affairs in the 21<sup>st</sup> century.

*Moral Sentiments* and *Wealth of Nations* are complementary works which should be read and interpreted together to fully appreciate Smith's enormous contribution to our ability to describe and understand contemporary economic affairs more accurately. Had he lived in the electronic age, Smith probably would have seen more clearly the complementarity in his own work, and would have shared that more profound vision with his followers.

## References

- Alakbarov, F. (2002), "Reader's Forum: Homo Sovieticus," available at [http://www.hajibeyov.com/research/alakbarov/alakbarov\\_2.html](http://www.hajibeyov.com/research/alakbarov/alakbarov_2.html), (accessed on May 21, 2003).
- Berndt, E. (1991), *The Practice of Econometrics: Classic and Contemporary*, Addison-Wesley Publishing Company, Inc., Reading.
- Blauwhof, G. (1994), "Non-equilibria Dynamics and the Sociology of Technology," in Leydesdorff, L. and van den Besselaar, P. (Eds.), *Evolutionary Economics and Chaos Theory*, St. Martin's Press, New York, pp. 152-166.
- Blinder, A. (2000), "How the Economy Came to Resemble the Model," *Business Economics*, volume 35, number 1, pp. 16-25.
- Boulding, K. (1981), *Evolutionary Economics*, Sage Publications, Beverly Hills.
- Daly, H. (1968), "Economics as a Life Science," *Journal of Political Economy*, volume 76, number 3, pp. 392-406.
- Daly, H. (1974), "The Economics of the Steady State," *American Economic Review*, volume 64, number 2, pp. 15-21.
- Danner, P. (2002), *The Economic Person: Acting and Analyzing*, Rowman and Littlefield Publishers, Inc., Lanham.
- Doucouliafos, C. (1994), "A Note on the Evolution of Homo Economicus," *Journal of Economic Issues*, available at <http://proquest.umi.com/>, (accessed on April 29, 2003).
- Drucker, P. (1939), *The End of Economic Man: A Study of the New Totalitarianism*, The John Day Company, New York.
- Fehr, E., and Gächter, S. (2000), "Fairness and Retaliation: The Economics of Reciprocity," *Journal of Economic Perspectives*, volume 14, number 3, pp. 159-181.
- Friedman, T. (2005), *The World is Flat: A Brief History of the Twenty-First Century*, Farrar, Straus, Giroux, New York.
- Gintis, H., and Orr, A. (2001), "Why Do We Cooperate?" *Boston Review*, available at <http://bostonreview.mit.edu/bostonreview/BR23.1/Gintis.html>, (accessed on April 18, 2001).
- Goldfarb, D. (1994), "'Polish Theatre: From the Shadows of the Communist Past to the Challenges of the Democratic Future' a Lecture by Kazimierz Braun, 28 April 1994, Bruno

Walter Auditorium, Lincoln Center,” available at <http://www.echonyc.com/~golbfarb/kbraun.htm>, (accessed on May 21, 2003).

Halik, T. (no date), “The Shadow of a Dead God?” SVU, Czechoslovak Society of Arts and Sciences, available at <http://www.svu2000.org/issues/halik2.htm>, (accessed on May 21, 2003).

Haney, L. (1949), *History of Economic Thought*, The MacMillan Company, New York.

Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., Gintis, H., and McElreath, R. (2001), “Cooperation, Reciprocity and Punishment in Fifteen Small-scale Societies,” available at [http://www-unix.oit.umass.edu/~gintis/aeaanthr\\_abst.html](http://www-unix.oit.umass.edu/~gintis/aeaanthr_abst.html), (accessed on May 9, 2003); in *American Economic Review*, volume 91, number 2, pp. 73-78.

Hill, L. (1990), “The Institutionalist Approach to Social Economics,” in Lutz, M. (Ed.), *Social Economics: Retrospect and Prospect*, Kluwer Academic Publishers, Boston, pp. 155-174.

Hirsch, P., Michaels, S., and Friedman, R. (1990), “Clean Models vs. Dirty Hands: Why Economics is Different From Sociology,” in Zukin S., and DiMaggio, P. (Eds.), *Structures of Capital: The Social Organization of the Economy*, Cambridge University Press, Cambridge, pp. 39-56.

Hopkins, G. (1970), *The Poems of Gerard Manley Hopkins*, edited by W.H. Gardner and N.H. MacKenzie, Oxford University Press, London.

John Paul II (1995), *Evangelium Vitae*, available at [http://www.vatican.va/holy\\_father/john\\_paul\\_ii/encyclicals/](http://www.vatican.va/holy_father/john_paul_ii/encyclicals/), (accessed on June 19, 2003).

Kahneman, D., Knetsch, J., and Thaler, R. (1986), “Fairness and the Assumptions of Economics,” *Journal of Business*, volume 59, number 4, pp. 285-300.

Leydesdorff, L and van den Besselaar, P., editors, (1994), *Evolutionary Economics and Chaos Theory*, St. Martin’s Press, New York.

Lindenberg, S. (1990), “Homo Socio-oeconomicus: The Emergence of a General Model of Man in the Social Sciences,” *Journal of Institutional and Theoretical Economics*, volume 146, pp. 727-748.

“Los Principios de la Accion Fascista,” (no date), Asociación Cultural DisidenciaS, available at <http://www.red-vertice.com/disidencias/textosdisi32.html>, (accessed on May 21, 2003).

Manski, C. (2000), “Economic Analysis of Social Interactions,” *Journal of Economic Perspectives*, volume 14, number 3, pp. 115-136.

- Mayhew, A.(1988), “The Beginnings of Institutionalism,” in Tool, M. (Ed.), *Evolutionary Economics: Volume I Foundations of Institutional Thought*, M.E. Sharpe, Armonk.
- Merquior, J.G. (1991), “Death to *Homo Economicus*?” *Critical Review*, volume 5, number 3, pp. 353-378.
- Nitsch, T. (1982), “Economic Man, Socio-economic Man and *Homo-economicus Humanus*,” *International Journal of Social Economics*, volume 9, numbers 6/7, pp. 20-49.
- Nyborg, K. (2000), “Homo Economicus and Homo Politicus: Interpretation and Aggregation of Environmental Values,” *Journal of Economic Behavior and Organization*, volume 42, number 3, pp. 305-322.
- O’Boyle, E. (1994), “*Homo Socio-Economicus*: Foundational to Social Economics and the Social Economy,” *Review of Social Economy*, volume 52, number 3, pp. 286-313.
- O’Boyle, E. (2001), “Personalist Economics: Unorthodox and Counter-Cultural,” *Review of Social Economy*, volume 59, number 4, pp. 367-394.
- Ong, W. (1981), *Fighting for Life: Contest, Sexuality, and Consciousness*, Cornell University Press, Ithaca.
- Ong, W. (1986), *Hopkins, the Self, and God*, University of Toronto Press, Toronto.
- Ong, W. (1967), *In the Human Grain: Further Explorations of Contemporary Culture*, The MacMillan Company, New York.
- Ong, W. (1970), *The Presence of the Word: Some Prolegomena for Cultural and Religious History*, Simon and Schuster, New York.
- Ostrom, E. (2000), “Collective Action and the Evolution of Social Norms,” *Journal of Economic Perspectives*, volume 14, number 3, pp. 137-158.
- Pantaleoni, M. (1889), *Principii di Economia Pura*, G. Barbèra, Editore, Firenze.
- Pearson, H. (2000), “*Homo Economicus* Goes Native. 1859-1945: The Rise and Fall of Primitive Economics,” *History of Political Economy*, volume 32, number 4, pp. 933-989.
- Saffran, B. (2000), “Recommendations for Further Reading,” *Journal of Economic Perspectives*, volume 14, number 3, pp. 233-240.
- Sherman, H., and Dugger, W. (2002), *Reclaiming Evolution: A Dialogue Between Marxism and Institutionalism on Social Change*, Routledge, New York.

Smith, A. (1976), *An Inquiry into the Nature and Causes of the Wealth of Nations*, edited by Edwin Canaan, University of Chicago Press, Chicago.

Smith, A. (1976), *The Theory of Moral Sentiments*, edited by D.D. Raphael and A.L. Macfie, Oxford University Press, Oxford.

Stiglitz, J. (2002), "Information and the Change in the Paradigm in Economics," *American Economic Review*, volume 92, number 3, pp. 460-501.

Surratt, C. (2001), *The Internet and Social Change*, McFarland and Company, Inc., Publishers, Jefferson.

Swedberg, R., Himmelstrand, U. and Brulin, G. (1990), "The Paradigm of Economic Sociology," in Zukin S., and DiMaggio, P. (Eds.), *Structures of Capital: The Social Organization of the Economy*, Cambridge University Press, Cambridge, pp. 57-86.

Thaler, R. (2000), "From Homo Economicus to Homo Sapiens," *Journal of Economic Perspectives*, volume 14, number 1, pp. 133-141.

Tool, M., editor (1988), *Evolutionary Economics*, two volumes, M.E. Sharpe, Inc., Armonk.

Ullman, E. (2002), "Programming the Post-Human: Computer Science Redefines 'Life'," *Harper's Magazine*, October, pp. 60-70.

Walker, K. (1955), "The Development of the Concept of Economic Man," *Review of Social Economy*, volume 13, number 1, pp. 69-77.

Weber, E. (1964), *Varieties of Fascism: Doctrines of Revolution in the Twentieth Century*, Robert E. Krieger Publishing Company, Malabar.

Wildstrom, S. (2003), "Cell Phones: Not Just for Talking Anymore," *Business Week*, April 14, p.16.

Witt, U., editor (1992), *Explaining Process and Change: Approaches to Evolutionary Economics*, The University of Michigan Press, Ann Arbor.

Witt, U. (1993), "Introduction," in Witt, U. (Ed.), *Evolutionary Economics*, Edward Elgar Publishing Limited, Aldershot.