THE EVOLUTIONARY MODEL IN ECONOMIC AFFAIRS¹

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Draft: June 19, 2019

Thinking about economic affairs proceeds along two pathways: the cyclic model of orthodox economics and the evolutionary model of heterodox economics including notably personalist economics.

The Cyclic Model

As with other disciplines such as history which "repeats itself," orthodox economics is constructed on a cyclic model that applies circular descriptions and explanations to economic events. Consider 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 that restore current income to some prior purchasing-power benchmark; and (7) the natural-rate hypothesis which claims that unemployment returns to its normal or natural rate regardless of the rate of inflation.

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 orthodox economic analysis. Using cyclic reasoning, and given the data required to operationalize their econometric models, orthodox economists are comfortable in asserting that changes in economic affairs can be predicted. What they do not fully appreciate is that one other requirement 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*.² Without this rationality and constancy about human individuals as economic agents, and the

¹ Based on my "From Individual to Person: An Evolutionary Process Grounded in Human Communication," in *Looking Beyond the Individualism and Homo Economicus of Neoclassical Economics*, edited by Edward J. O'Boyle, Marquette University Press, 2011.

² *Homo economicus* can change in terms of property holdings, financial wealth, educational attainment, health and marital status, and work experience, but not in fundamental nature.

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 orthodox paradigm, consider 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; assuming (3) that dependent and independent variables are normally distributed in the population; (4) that measurement error is randomly distributed, (5) using budget constraints which ignore kinks, discontinuities, gaps, and nonconvexities; and (6) glossing over sample selectivity bias (Berndt, pp. 614-649).

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 unrepeatable and unique human person (Ong 1967, p 78; emphasis added).

Ong is arguing that there is no way to posit a *never*-changing *homo economicus* without casting aside "the central corporate discovery of all mankind" and without cloning all economic agents from a single cell taken from a hyper-rational abstract human being. At the very heart of personalist economics is the economic agent who is not cyclic but evolutionary, in a Darwinian sense adapting to the economic environment and in a personalist sense changing simply by acting as an economic agent. We return to personalism and the economic agent later in this essay.

There are numerous examples of evolutionary thinking *outside* orthodox economics. Marx, for instance, is a leading advocate of the evolutionary model. So too are Veblen, Commons, Mitchell, and Ayres whose evolutionary thinking about economic affairs forms the intellectual foundations

of the Association for Evolutionary Economics. Sherman and 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.

Deriving its inspiration from Schumpeter, the *Journal of Evolutionary Economics* also presents economic affairs in terms of an evolutionary process. Evolution is one of four ideas that 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 orthodox economics with "uncertainty and imperfect information, routines, heuristic search processes and optimizing behavior, and nonequilibria" (Blauwhof, pp. 153-154). 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 orthodox economics (see, for example, Leydesdorff and van den Besselaar).

Explicitly analogizing economics to biology, Daly in the 1960s argued that matter-energy are *degraded* through the economic process in the same way that matter-energy are *degraded* through the metabolic process. 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 the ultimate subject matter of economics and biology under two aspects: steady-state and evolutionary (Daly 1968, pp. 392-394). Daly's thinking is linear not cyclic. 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 1980s Boulding (p. 17) argued that Smith, Malthus, and Marshall employed the evolutionary model and that it was Walras and his followers who by grounding economics in mathematics 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, 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, Walker (pp. 69-77) supplies the most important example for our purposes. He argues that the economic agent has evolved from the accumulator of wealth, a concept widely embraced until well into the 20th 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 Robbins and his followers and is dominant within contemporary orthodox 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 can be characterized as maximizing personal net advantage, orthodox economics is able to 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 humans switch from one role to another, sometimes acting in accord with one role only, and at times in keeping with two or more roles as their own personal circumstances dictate.

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 about specific empirical findings.

Economic Change and Human Communication

Following Ong and rejecting the *never*-changing *homo economicus* of orthodox economics, we argue that the *person of action* 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 orthodox 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 *person of action* and the more modern philosophy of personalism which emerged during the electronic stage of human communication.³

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. Individualism which fleshes out the meaning of individuality emerges with the 17th-18th 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 15th century became much more accessible to the literate public through the invention of 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.

Ong locates Adam 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"

³ See Ong 1967 for more on the three stages of human communication.

(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 landline and cell-phone 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 phone 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.

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 phone. This interdependency is underscored when a severe storms brings down landlines and cell towers which at least momentarily renews their isolation. Self-awareness is rooted in both human individuality and human sociality.

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).

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 phone 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 20th 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" ("T") 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, orthodox economics continues to function 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*.

Work Changes the Economic Agent

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 main reason. While orthodox 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.

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 defective goods and services and re-work. 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 orthodox and personalist economics is seeing the worker as an economic instrument rather than a human person. The *person of action* 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 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 economic gains, thereby making it possible to incorporate that advance into economic affairs. In that sense, 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 natural selection and symbiosis do in the biological order.

Consumption Changes the Economic Agent

Orthodox 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 that healthy and normal human beings are expected to address their own needs and wants to the extent of their own abilities. In this matter, 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 is not checked by the virtue of sympathy or other feeling which assures that both parties benefit from the exchange, a routine transaction cannot be executed.

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 signs 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 but also hopes and plans for the future.

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 to achieve that goal. Need is entirely rejected by orthodox 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 orthodox 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.

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 due to a debilitating condition.

Additionally, consumers behave 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. 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 orthodox economics, the consumer is not only hind sighted but also foresighted as when parents have to reduce their current consumption for years 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 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."

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 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. 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.

Person of Action: Basic Unit of Economic Analysis

Personalist economics is constructed on four 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 the *person of action* 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 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.

Personalist economics thinks in term of an evolutionary model. Economic agents are not rigidly predetermined, fully revealed, and entirely predictable throughout economic history. They are not *never*-changing. Rather, 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 orthodox 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.

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 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. Rest⁴ 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 mind, body and spirit require human beings to work and consume, the mind, body, and spirit at the same time impose limits on work and consumption. The mind rejects work that is dull, monotonous and demeaning. 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 orthodox 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 orthodox economics elevated *homo economicus* to the status of

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⁴ Among orthodox economists universally referred to as "leisure" which they define as time spent not working. We prefer rest instead because it has a positive connotation: time spent reinvigorating the human mind, body, and spirit.

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 Smith's Two Masterpieces

	Human Awareness	Organizing <u>Principle</u>	Social <u>Value</u>	Principle of Justice	Human <u>Virtues</u>	Ultimate <u>Goal</u>
Wealth of Nations	self ("I")	competition	freedom	equivalence	diligence prudence self-reliance	good of individual
Moral Sentiments	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 *person of action* as the basic unit of economic analysis and personalism as its philosophical foundations, thereby making economics more relevant to economic affairs in the 21st 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.



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