ON HUMAN BEHAVIOR, HUMAN FULFILLMENT,
AND THE NATURE OF THE WORKPLACE

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A[It is] precisely the narrowing of the broad Smithian view of human beings, in modern economics, that can be seen as one of the major deficiencies of contemporary economic theory. This impoverishment is closely related to the distancing of economics from ethics” (Sen, p. 18).

“The form of association,...which if mankind continue to improve, must be expected in the end to predominate, is not that which can exist between a capitalist as chief, and workpeople without a voice in the management, but the association of the labourers themselves on terms of equality, collectively owning the capital with which they carry on their operations, and working under managers elected and removable by themselves” (Mill, p. 773).

ABSTRACT: Many notable heterodox economists have viewed workplace democracy as essential for the realization of the Enlightenment ideals of liberty, equality, and community. Yet the economics profession has never given their ideal more than a passing and dismissive glance. The reasons for this have been well-covered in the literature. But one reason that has been all but ignored is that the theory of human behavior that is credited to Adam Smith’s Wealth of Nations and that has dominated economic thinking ever since is not supportive of workplace democracy. However, Smith developed a far richer theory of human behavior in his Theory of Moral Sentiments. His fuller theory depicted humans as fully social beings, in need of community. This article outlines the “social approbation” theory of human behavior that Smith developed in his Theory of Moral Sentiments and demonstrates how it is in accord with the findings of contemporary evolutionary psychology. It then examines the manner in which this theory suggests workplace democracy as the appropriate organizational form of control for society’s sphere of production.

KEYWORDS: Adam Smith, Self-interest, Altruism, Approbation, Cooperation, Workplace democracy.

Since the beginning of the nineteenth century, a number of important heterodox economic thinkers have advocated workplace democracy as the ideal for organizing and controlling productive enterprises. They viewed worker control of the means of production as essential to the realization of the Enlightenment ideals of liberty, equality, and community. Yet
the economics profession has never given their ideal more than a passing and dismissive glance. There are a number of reasons for this that have been well-covered in the literature.¹ But one reason that has been all but ignored is that the theory of human behavior that is credited to Adam Smith and that has dominated economic thinking ever since is not supportive of workplace democracy.

Adam Smith is widely viewed within the profession as the father of modern economics. He is also viewed as the author of a conception of human behavior – later termed *homo economicus* – that would serve as the key behavioral assumption of economics. But Smith's theory of human behavior was radically different from that of the competitive self-interested individual. His fuller theory depicted humans as fully social beings, in need of community. And it is a theory that points to workplace democracy as an ideal social institution.

This article outlines the “social approbation” theory of human behavior that Smith developed in his *Theory of Moral Sentiments* and demonstrates how it is in accord with the findings of contemporary evolutionary psychology. It then examines the manner in which this theory suggests workplace democracy as the appropriate organizational form of control for society’s sphere of production.

**THE MISTAKEN APPROPRIATION**

Mainstream economics' conception of human behavior depicts humans as atomistic, rational-calculatingly self-interested, utility-maximizing individuals, blessed with perfect knowledge concerning all personal and economic data relevant to their free decision-making. The problem with this depiction is not so much that it is wrong as it is inadequate. Alone, it is
without social content. And when mainstream economics provides this conception with social content, it typically does not do so in a manner that would lead the economist to an investigation of the ideal of workplace democracy. For instance, following upon Smith's quip that "Consumption is the sole end and purpose of all production" (1776, p. 625), work is typically depicted by the profession as unpleasant, as coming forth only as a consequence of the income bribe that makes consumption possible. Work is rarely seen by the profession as providing a vent for creativity and self-expression, as a locus for human community, as an important site for value formation, as a productive activity through which, by contributing to the welfare of others, one gains their approval.2

In fact, the world depicted by the mainstream economic conception of humans is not very attractive. Individuals are essentially alone, giving up control over an important part of their lives to bosses, for a wage with which to purchase goods and services. "More is better," where more refers to consumption, not presumably to more self-determination, more opportunity for creativity, or more solidarity with others.

The classic statement of what would become the mainstream conception of human behavior – often referenced as homo economicus -- comes at the very beginning of the Wealth of Nations. It is one of the few passages from the classics with which all economists are familiar. It goes as follows:

"It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages" (1776, p. 14).
But in fact, this passage does not capture more than one aspect of Smith's view of humans. What few economists realize, and fewer still regard as of theoretical importance, is that the conception of human behavior that Smith put forth was not of asocial self-interested individuals, but rather of highly socialized, other-directed beings. He developed his fuller theory in an earlier work, *The Theory of Moral Sentiments.*³

In this work, which he considered to be the more important of his two books (Ray, p. 436), Smith argued that

"Nature, when she formed man for society, endowed him with an original desire to please, and an original aversion to offend his brethren. She taught him to feel pleasure in their favourable, and pain in their unfavourable regard. She rendered their approbation most flattering and most agreeable to him for its own sake; and their disapprobation most mortifying and most offensive" (1759, p. 112). But more striking, he asserted that "Humanity does not desire to be great, but to be beloved," and "...it is chiefly from [the] regard to the sentiments of mankind that we pursue riches and avoid poverty" (Smith, 1759, pp. 276, 112). According to this conception of human behavior, then, the individual's struggle for income, wealth, fame, or excellence is motivated by the individual's need for the approval of others.⁴ This might be termed an approbation theory of human behavior. The core argument is that beyond the basic and purely physically-defined needs for food, clothing, and shelter, the dominant force guiding human behavior is the need for social approbation.

But not only are humans social in that they seek the approval of others, what it is that gains that approval is to a substantial extent the consequence of education or socialization. As
Smith put it, "The great secret of education is to direct vanity to proper objects" (1759, p. 417). That which is approved is discovered in a number of different manners: through instruction by mentors and in the institutionalized form of maxims, parables, and fables; by trial and error as our specific acts are rewarded by the approval of others or punished by their disapproval; and by observing the responses, including our own, to the behavior of others. These lessons are internalized and generalized and thus what constitutes one's standards of judgment concerning behavior is the individual's conscience. Consequently, individuals do not seek just any approval whatsoever. To be praised is not quite sufficient; the individual yearns to be praiseworthy as well, or as Smith expressed it: "Man naturally desires, not only to be loved, but to be lovely; or to be that thing which is the natural and proper object of love" (1759, p. 208)

Could Smith's approbation theory of human behavior be correct? Could humans naturally be this way? This question will be pursued in the next section.

NATURAL SELECTION AND HUMAN NATURE

Mainstream economists might feel confirmed in their “self-interested” conception of human behavior by the fact that the dominant view within the disciplines of ethology and evolutionary biology is that from a genetic point of view, selfishness must be the case, altruism is not possible. Richard Dawkins, a leading spokesperson for ethology and mainstream evolutionary biology, defines altruism as follows: "An entity ... is said to be altruistic if it behaves in such a way as to increase another such entity's welfare at the expense of its own" (p. 4). He then goes on to demonstrate that a logically coherent and empirically consistent theory of evolution must rule out the possibility of altruism. In the struggle for survival and reproduction, organisms guided by selfish genes would out-compete those guided by altruistic genes so that
altruistic genes would be condemned to disappear. Consequently, Dawkins notes, "if you wish, as I do, to build a society in which individuals cooperate generously and unselfishly towards a common good, you can expect little help from biological nature" (1976, p. 3).

Suppose for the moment that human behavior is guided solely by selfish genes. What then would we expect such behavior to be like? Humans would be interested in sex and healthy food. They would be interested in security, especially that of their children. But insofar as humans are a social species and their very survival as individuals depends upon social coordination, how might they be expected to behave toward each other? The answer is that they would act so as to elicit the support of others in their struggle to pass on their own genes. One strategy would be to exploit others. The most successful manner of doing this, given that humans are social beings, might be to strive to join a group that exploits yet another group. But how, then, would we expect those within the exploiting group to behave toward each other? They could, of course, attempt to exploit others within the group. However, such behavior could potentially weaken the group's cohesion and thus its ability to survive. Indeed, one would expect a member found guilty of exploiting the group to pay a high personal cost, such as suffering the loss of the group's support, exile, or worse. Consequently, a more successful, and therefore likely, strategy might be for each member to act toward others so as to be liked, approved of, found worthy of being supported. That is, we would expect natural selection to favor those individuals who struggle for social approbation.

If, as is being suggested here, humans are genetically instructed to seek the approbation of others, then much of their behavior might well appear altruistic. Many of their specific acts to gain the approval of others will involve a degree of self-sacrifice for the others' well-being. The
strategy would be that by helping others, one is appreciated and consequently more readily made
the recipient of others' assistance. This is generally referred to as "reciprocal altruism." Reciprocal altruism is, of course, a somewhat misleading term since what is referred to is the
sophisticated manner in which selfishness works itself out socially.

Yet apparently some biologists still hold out hope for authentic altruism. The dominant
understanding within evolutionary biology does not appear fully to rule out the possibility of
altruism within species where culture exists. But whether altruism is "pure" or merely
"reciprocal," it would appear that the specific content of altruistic behavior is socially learnt,
while the proclivity for altruism is determined genetically. The link between the two is the
struggle for social approbation. What is being suggested here is that as the human species
evolved, the trait of striving for the approbation or approval of others was naturally selected.
The most highly approved would have an advantage in mating. They would be more readily
shielded or protected. Thus, it is suggested that this trait serves as the principal glue that coheres
humans socially one to another. Genuine self-sacrifice for the other (assuming that this is
possible) would stand at the top of the list of behaviors that would achieve the approbation of the
species. Thus, the form that human altruism takes is learned, whereas the proclivity for
altruism is biologically directed by the genetically-given struggle for approbation. If the above
is correct, then it helps us understand why the age-old debate surrounding self-interest and
altruism has been so inconclusive. It can be argued that humans are capable of being altruistic
and it is in their self-interest as approbation maximizers to be so.

Even should pure altruism not exist, is it so very disagreeable to picture individuals
performing good services for others in order to achieve self-interestedly, or even selfishly, the
social approbation that they are genetically programmed to pursue? These humans may be self-interested, but they are also other-directed. They are giving and sharing beings. Is it too disappointing that they give and share in order to be appreciated? Indeed, could there be a superior social cement to that of humans striving to be generous so as to acquire the approbation of others?

**HUMAN BEHAVIOR AND ECONOMIC INSTITUTIONS**

Since well before Smith's *Wealth of Nations* the pursuit of wealth has been depicted as a basic human motivation, and modern economics accepts uncritically that self-interested individuals pursue it. But Smith's argument is that humans pursue wealth, and indeed all things beyond basic survival needs, not as ends themselves, but instead as means of gaining the approbation of others. Again Smith appears to be correct from an evolutionary perspective. During ninety-nine percent of human history -- until the Neolithic revolution 10,000 years ago -- humans lived as nomadic hunter-gathers, a mode of existence that made the accumulation of material wealth all but impossible. Because they were continually on the move, they could carry little beyond clothing, jewelry, tools, and hides for shelter. Consequently, as Charles Lumsden and Edward O. Wilson note, "In hunter-gatherer societies such as the !Kung of the Kalahari, conspicuous attempts to improve personal status and to accumulate large quantities of personal goods are met with ridicule and hostility" (pp. 150-51). Moreover, where wealth is sought, it is to the end of giving it away in search of approbation. Evolutionary biologists do not believe that substantial genetic change has occurred since humans existed as hunter-gatherers.

The human behavior model that modern economics drew from Adam Smith's *Wealth of Nations* depicts humans as principally asocial, self-interested, and thus competitive with all
others in the accumulation of ever more goods and services. This model appears to support the institutions of contemporary capitalist society. In its most extreme form it is a Hobbesian world of a war of one against all.

The approbation theory of human behavior drawn from Smith's *Theory of Moral Sentiments*, by contrast, views humans as both competitive and cooperative. The individual's struggle for approbation is of course competitive. However, it is through cooperative behavior that the individual stands the greatest chance of obtaining and maintaining social approval. Ideal social institutions would enable the individual's proclivity for both competitiveness and cooperativeness to serve the best interest of the individual and society as a whole. An economic science grounded on the approbation theory of human behavior would focus upon the creation and behavior of those institutions that would grant individuals the greatest potential for gaining the approbation of others.

Of course, an individual might be able to obtain the approbation of others through increased personal consumption. But this capacity is severely limited when consumption becomes overly conspicuous, competitive, and a potential source not of approbation but of envy and resentment. It would appear more likely that approbation might be forthcoming from the realm of production. After all, it is in production that humans possess the greatest potential for contributing to the well-being of others and thereby acquiring their approval.

A substantial body of work in psychology, especially in what has come to be called “happiness research,” finds that above a fairly low threshold, subjective well-being does not correlate with higher incomes and thus higher levels of consumption. Although it has been found that average levels of satisfaction are considerably lower in very poor countries than in
rich ones, after a certain income level has been attained, further increases in income and consumption do not seem related to higher levels of subjective well-being (Diener and Diener 1995; Veenhoven 1993; Easterlin 2001, 2002).

Research in this domain also finds that above a certain material threshold, it is in the realm of work that well-being is most readily achieved. As Robert Lane has put it, “It is in work, not in consumption and, as research reports show, not even in leisure, where most people engage in the activities that they find most satisfying, where they learn to cope with their human and natural environments, and where they learn about themselves” (p. 235).

Unfortunately, however, conventional capitalist firms (or socialist ones, for that matter) are not well-structured to enable workers to readily achieve the esteem of others. Workers are ordered about from above, with little control over either the product or the workplace. They too infrequently find the occasion to be creative at work. And because of the constant threat of being released, workers are pitted against each other.

The social ideal, then, is obvious: enable workers to democratically control their workplaces. This would dramatically increase the potential for individuals to attain that for which they stand in great need – the social approbation of others. Fortunately, this would also be supportive of other forms of social progress. Given appropriate social institutions, the individual's pursuit of approbation would be supportive of the greatest welfare for society as a whole.

MAKING OURSELVES

The argument above has been that Smith's full theory of human behavior suggests that workplace democracy is an important economic ideal. The argument is based upon what humans
are by nature. But human behavior is not fully given naturally. Much is socially determined. Mainstream economics ignores the socialization of humans. It takes their wants and desires -- their "preference functions" -- as given. But because it does so, it ignores one of the most important aspects of our economic existence: How our economic institutions participate in making us what we are? This neglect has serious costs not just for what it is that makes us happy, but also for the sustainability of the world’s ecology.

To the extent that our economic institutions are important in our socialization, in making us who we are, what traits and values would we wish them to reinforce? Although any answers to this question might be debatable, there are a number of character traits and values within the modern Western tradition that have broad support. For instance, it is widely desired that individuals be self-reliant, responsible for their own actions, tolerant, democratic, egalitarian, generous in their relations with others, and generally creative. It is also widely desired that individual behavior be supportive of the growth of knowledge and economic dynamism.

To a substantial extent, contemporary capitalist institutions inculcate many of the above character traits and values. Yet the nature of property rights and the accompanying hierarchical structure of authority within most capitalist firms reinforce character traits and values that are contrary to what is typically viewed as the Western ideal. The foremost of these negative traits are authoritarianism, passivity, and mistrustfulness. Because workers must bow to the authority of the owners of the firms in which they work, their workplace socialization is in subservience rather than in self-reliance and democracy. Because they are denied free and democratic control over their work process, they passively receive and execute orders given from above. And because during hard times for the firm, some workers might be let go, the interests of each
worker are pitted against those of all others. Workers become mistrustful of each other.

In a worker-managed firm, by contrast, workers would be socialized in self-reliance, democracy, and solidarity. Because authority would reside with the workers themselves, a sense of self-determination would be cultivated. Workers would develop deeper appreciation of the importance of tolerance, free expression, and attention to the needs of fellow workers.

Workplace democracy would also reinforce character traits that are conducive to economic dynamism. Because the firm would be theirs, workers could be expected to be more highly motivated. No longer would they fear sharing knowledge with their fellow workers. Indeed, they would have a strong interest in all workers in the firm being as advanced in productive knowledge as possible. Indeed, this would constitute one of the most attractive consequences of workplace democracy. From the bottom up, there would be a pervasive interest in learning, in self-development, in the technological strengthening of the firm.

In recent decades, there have been increasing laments of a decline in community in modern societies. For instance, in a much discussed article, Robert Putnam found that participation in local groups has been falling over recent decades (1995). Greater participation in the workplace would encourage community in two broad ways. Such participation would generate a greater sense of community within the firm, reducing the gulf in the divided interests of capital and labor. And the firm’s workplace meets the three most common characteristics that sociologists have offered in definitions of community: area, common ties, and social interaction (Lyon, p. 5; see also Karp, et. al., p. 65).

Second, greater participation could be expected to increase workers’ commitment to the firm, and by extension, the larger community. Greater democratic participation in the workplace
might augment social capital - the civic organizations and social networks that generate higher levels of trust that in turn facilitates greater cooperation for mutual benefit. Much like human capital, when a certain level of social capital is attained, it tends to be self-reinforcing and cumulative (Coleman 1988). People's willingness to "invest" in their communities could be expected to be inversely proportional to the likelihood that they will leave the community or directly proportional to the length of time they are likely to remain (Verba and Nie, 1972; Elden, 1981). If greater worker participation results in more stable firms, then communities would be less vulnerable to the twin enemies of plant closings and worker mobility.

Finally, it is often argued that the low personal savings rate among Americans helps account for the sluggish performance of the U.S. economy. It is possible that the stultifying nature of much employment might work against saving. If workers are unable to grow or express their creativity in work, perhaps consumption becomes a substitute outlet. More satisfied workers might be less attracted to "conspicuous consumption," making a greater portion of their incomes available for investment.

**THE CHALLENGE**

Modern economics and capitalism were born together. The rise of capitalism entailed the separation of workers from the means of production. They were pushed and pulled from their feudal communities and villages. Their organic ties to their means of livelihood were replaced by the impersonal market. They stood increasingly alone, struggling for material survival at dirty, often dangerous, and stultifying jobs in factories where they were bossed about. It is not surprising that they would be depicted as alone, self-interested, disliking work and preoccupied with consumption. But that modern economics would continue still to depict humans in this
manner is surprising, and unfortunately this impairs its ability to enlighten society as to how it might best live socially and economically. The argument here is that if economic science were to give adequate attention to the question of human behavior, it would be led to Adam Smith's other great work and his approbation theory of human behavior. This theory would then lead the discipline to an investigation of the institutional structures that would both best enable individuals to achieve the approbation which they need, and those which would socialize humans to become not only more productive, but more conformable to our ideals. Economics, it is here argued, would be led to embrace workplace democracy with much the same enthusiasm as it embraces the institutions of the market and private property.

Unfortunately, however, there are reasons to expect that mainstream economics will not take up the question of human behavior in the required manner. The most important of these is that the discipline is locked into a sort of formalism, a self-delusion that it is or might become a science like physics. Its simplistic assumption of human behavior is serviceable to this mistake. Thus it seems likely that the lesson will have to be carried forth by the "underground," by those not intoxicated by the heady vapors of arcane formalism, and by those carrying out in practice the construction of worker empowerment.21

BIBLIOGRAPHY


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**NOTES**

1 The arguments have been both polemical and theoretical. Polemically, it has been argued that mainstream economics has always served as an *apologia* for capitalism and that it has never given serious attention to issues which challenge classical capitalism’s institutional structure of labor separated from any control or ownership of the tools and resources with which they work. Theoretically, and from a neoclassical perspective, two arguments stand out: a labor-managed firm would produce less and employ fewer workers than its conventional capitalist counterpart; and worker-controlled firms would self-destruct. Both of these theoretical arguments have been challenged. For a brief survey of this literature, see Fusfeld 1983; Wisman 1992; Ellerman 2006.

2 Tibor Scitovsky suggested that the
“...effects of work are completely missing from the economist’s numerical index of economic welfare...work which produces market goods may be an economic activity, but the satisfaction the worker himself gets out of his work is not an economic good because it does not go through the market and its value is not measurable” (p. 90).

However, mainstream economics may also be mirroring a cultural prejudice. As [Error! Main Document Only.] psychologist Mihaly Csikszentmihalyi puts it:
“...in our culture the aversion to work is so ingrained that even though it provides the bulk of the most complex and gratifying experiences, people still prefer having more free time, *Error! Main Document Only.* although a great deal of free time is in fact relatively boring and depressing (p. 202).

*Error! Main Document Only.* Or, economics reproduces the motivational orientation generated by capitalism. As [Error! Main Document Only.] Robert E. Lane has put it:
“...There is a deep reason for the undervaluation of the psychic income and enjoyment of work: In market accounting work is a cost, whereas consumption is a source of benefit. Making workers happier and work more pleasing is likely to be a charge on profits, whereas making goods pleasanter and consumption more pleasing is probably a source of profits...[and] worker satisfaction has almost no effect on productivity” (p. 162).

3 Although *The Theory of Moral Sentiments* was first published 17 years before the *Wealth of Nations*, a later revised edition came forth well after the latter, clearly suggesting that Smith had not changed his mind.

4 The compelling need for social approval finds support in psychological testing. For instance, Symbaluk et alia report an experiment in which participants would not endure longer periods of physical pain for higher payments, but they would do so for social approval (1997).

5 “The love and admiration which we naturally conceive for those whose character and conduct we approve of, necessarily dispose us to desire to become ourselves the objects of the like agreeable sentiments, and to be as amiable and as admirable as those whom we love and admire the most” (1759, p. 208).
Guilt within this framework would be the fear of being found out and reprimanded for having committed an act that one knows is not approved by others, especially those who are deemed to know "right" from "wrong." This would help explain why the ritualization of forgiveness provides such psychological relief.

Smith expressed this more fully as follows: "Respect for what are, or for what ought to be, or for what, upon a certain condition, would be the sentiments of other people, is the sole principle which upon most occasions overawes all those mutinous and turbulent passions into that tone and temper which the impartial spectator can enter into and sympathize with" (1759, p. 423).

Richard Leakey, the noted paleoanthropologist, and science writer Roger Lewin write on this in the following terms:

"...the tendency to like people who are not necessarily closely related is essential if such altruistic bonds are to remain intact; we are usually altruistic to people whom we like, and we usually like those people who are altruistic. But when someone refuses to reciprocate, the "injured" partner is suffused with what American biologist Robert Trivers calls moralistic aggression: anger at such outrageous behavior" (p. 166).

Thus Dawkins can suggest that "It is possible that yet another unique quality of man is a capacity for genuine, disinterested, true altruism.... (that) We, alone on earth, can rebel against the tyranny of the selfish replicators" (p. 215).

In nomadic foraging societies where meat is shared with all within the group, the most productive hunters typically have more offspring (Smith 2004).

Military historian S. L. A. Marshall wrote that "When a soldier is ... known to the men who are around him, he ... has reason to fear losing the one thing he is likely to value more highly than life -- his reputation as a man among other men" (Cited in Keegan 1977: 73). Similarly, Smith wrote that "Men have voluntarily thrown away life to acquire after death a renown which they could no longer enjoy. Their imagination, in the meantime, anticipated that fame which was in future time to be bestowed upon them" (1759, p. 211).

This is similar to Peter Danner's point that

"What people are concerned about or interested in is some good they seek or some evil they would avoid. Thus all human acts in this basic sense are self-interested. But not all are selfish....Between selfishness and ...pure altruism are many gradations of self-interest and considerations of other's good" (p. 158).

Marvin Harris reports on the classic example of "bigmanship" among the Siuai on Bougainville in the Solomon Islands as follows:

"to achieve mumi ['big man'] status is every youth's highest ambition. A young man proves himself capable of becoming a mumi by working harder than everyone else and by carefully restricting his own consumption of meat and coconuts. Eventually, he impresses his wife, children and near relatives with the seriousness of his intentions, and they vow to help him prepare for his first feast. If the feast is a success, his circle of supporters widens and he sets to work readying an even greater display of generosity....[His followers] remain loyal as long as their mumi continues to maintain or increase his renown as a 'great provider'" (pp. 104-105).

However, as Danner put it, "Smith saw what many miss today: that self-interest, while it can be selfish, in itself only means an agent has some concern and stake in the act and sees some good forthcoming for self, others, or both. Self-interest, therefore, is not radically egoistic but easily embraces both altruism and benevolence" (p. 112).

Competitive consumption is a form of what Fred Hirsch calls "positional" competition. It represents "a zero-sum
game: what winners win, losers lose” (p. 52). It is hardly surprising that often the consequence is envy and resentment.

16 Being ordered about is frequently an affront to self-esteem, which John Rawls suggested is “perhaps the most important primary good” such that without it nothing else has much value (p. 440).

17 Adam Smith's metaphors of a Beneficent Nature or of an Invisible Hand are poetic attempts at capturing this concordance of individual and group interests. Another way of putting the argument of this essay is that for the purposes of both social science and our vision of the future, the human struggle for approbation can fruitfully be taken as the mechanism that translates the behavior of the individual into that which is functional for the social whole.

18 Error! Main Document Only. New technology, especially computerized production, requires constant learning on the job. Such learning requires that workers keep up with more than just specific skills in a limited domain. In addition, they need to become "generalists," capable of grasping the source of, and intervening to correct a vast array of ever-occurring problems. For this to occur, the distinction between managers and workers needs to be dramatically lessened. Larry Hirschhorn (1984) is one of the first to recognize the leveling character of computer technology.

19 For an extended discussion, see Wisman 2006.

20 The late Error! Main Document Only. Christopher Lasch argued that "Consumerism is only the other side of the degradation of work -- the elimination of playfulness and craftsmanship from the process of production" (p. 27). On the causes of low U.S. household saving, see Wisman 2009.

21 For a discussion of the challenges facing the movement toward greater workplace democracy, see Ellerman 2006.