The Development of Keynes's Economics: From Marshall to Millennialism

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One long-standing interpretation of the *General Theory*, which has been growing in influence recently, emphasizes that Keynes's sociopolitical vision was formulated long before and, in fact, inspired the heterodox economic analysis and policy prescriptions that were served up in his most influential work. One of the earliest proponents of this interpretation, Joseph Schumpeter ([1951] 1965, p. 268) writes that "In those pages of the *Economic Consequences of the Peace* [published in 1919] we find nothing of the theoretical apparatus of the *General Theory*. But we find the whole of the vision of things social and economic of which that apparatus is the technical complement. The *General Theory* is the final result of a long struggle *to make the vision of our age analytically operative*."

More recently this interpretive thread has been taken up by scholars who can be classified mainly, though not exclusively, as opponents of textbook Keynesian economics. For example, in a recent article on "The Sociopolitical Vision of Keynes," the late Karl Brunner reaches a conclusion similar to Schumpeter's. According to Brunner (1987, p. 32), "The general direction of Keynes's sociopolitical thoughts had . . . already emerged many years before he wrote the *General Theory*. . . . [The latter work] provided the underlying vision of the socioeconomic process in an extensive analytic context. The sociopolitical program outlined over the prior decade naturally fitted with the *General Theory* into a coherent story of modern Western society."

In another recent contribution, Allan Meltzer (1988, p. 5) declares that "[i]t is nearer the truth to say that the *General Theory* provided

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the analytic framework for Keynes's long-standing policy views than to conclude that the books' [sic] policy recommendations are the derived implications of his theory." Finally the post-Keynesian Hyman P. Minsky may be cited. Echoing Schumpeter, Minsky (1975, p. 145) writes:

> In an interpretation of Keynes's views on the implications of *The General Theory* for broader social issues and on the appropriate structure of policies designed to implement the new theory, his writings on politics and social policy prior to *The General Theory* are relevant. While *The General Theory* marks a sharp break in economic theory, the "social philosophy" implications he drew from the work are consistent with his earlier views. In fact, *The General Theory* can be viewed as giving an economic theoretic rationalization for views that Keynes's ethics and intuition had led him to, even as he was a practicing "classical" economist.

Textbook Keynesians, on the other hand, who generally are wont to emphasize the Great Depression as the main intellectual stimulus to the formulation of the "vision" underlying the *General Theory*, strongly demur from the Schumpeterian interpretation. For instance, in discussing Brunner's contribution cited above, Lester Thurow (Brunner 1987, p. 52) flatly states that "The *General Theory* would not have been written without the Great Depression." In his comment on Brunner, James Tobin (Brunner 1987, p. 53) expresses agreement with Thurow that the *General Theory* was presented as "a diagnosis of the world economic crisis of the Great Depression."

In this paper I shall argue that when the nature and evolution of Keynes's "vision" is fully grasped, the Schumpeterian and neo-Keynesian views of the *General Theory* are complementary rather than antithetical. It is indeed true that Keynes's ethical and sociopolitical views were formulated long before the writing of the *General Theory* and inspired and suffused the heterodox vision of the economic system presented in the book. But it is also true that prior to the onset of the Great Depression and up through 1931, in theorizing about the capitalist economy, Keynes proved to be a rigidly orthodox and parochial Marshallian economist, despite the idiosyncratic refinements and contrivances he introduced into Cambridge monetary theory in his *Treatise on Money*. It was not until 1932, at the earliest, that Keynes set himself to the task of overturning the Marshallian orthodoxy by undertaking the construction of a deliberately heretical economics explicitly based upon and embodying concepts and precepts derived from his ethical and social philosophy.

Keynes's social philosophy, the rudiments of which can already be found in *The Economic Consequences of the Peace* and which was expounded in widely scattered articles, book reviews, and speeches throughout the 1920s and early 1930s, can be classified as "millennialist." Although there are numerous variants of social millennialism or chiliasm, including those based on Christian theology and Hegelian philosophy (Rothbard 1990), what is common to all is the view that social evolution is teleological and, from a specific starting point, progresses along a necessary and definite course to a pre-ordained end. All millennialist theories are therefore presented as theories of historical stages in which human history is foretold as coming to a close in a paradisiacal final stage or millennium.

The teleological aspect of social millennialism has been well-described by Ludwig von Mises ([1936] 1951, p. 287):

> The teleological view describes the course of [social] evolution in all its windings and deviations. Thus it is typically a theory of stages. It shows us the successive stages of civilization until one is reached which must necessarily be the last, because no other follows it. When this point has been reached it is impossible to foresee how history is to proceed.

As a consequence of their teleological orientation, millennialist theories are inherently esoteric, gnostic, and antirationalist, involving the explicit or implicit assumption that the theorist or prophet alone possesses gnosis or direct intuition of the truths of social evolution.

Before examining Keynes's specific theory of social evolution, it is useful to broadly contrast this general characterization of millennialist theories with the approach to social evolution that I have elsewhere designated as "social rationalism" (Salerno 1990). The rationalist approach is methodologically individualistic and seeks for the ultimate explanation of social evolution in the perceived benefits which accrue to individuals as a result of their participation in the social division of labor. The rationalist approach is thus nonteleological and eschews any attempt to foretell the exact course of human history. Social progress is identified with the intensification and extension of the social division of labor, which proceeds from the recognition by ever-increasing numbers of individuals and groups that it is advantageous to endeavor to satisfy a growing number of wants by consciously organizing their productive activities in accordance with the law of comparative advantage (Salerno 1990, pp. 27–31). As Mises ([1936) 1951, p. 287) points out, in the rationalist view, "[t]he end of social evolution can be no other than that of society itself." The law of comparative advantage which is "the law of social evolution" yields "insight, not into man's destiny, but into man's doings" (Mises [1936] 1951, pp. 287–88).

Because the rationalist theorist relies only on ratiocinative processes in formulating his explanation of the evolution of society, his theory is exoteric and subject to critical examination and refutation by other reasoning beings. Indeed, in order for much progress to be made toward the formation of a world-embracing division of labor and market society, the law of comparative advantage requires conscious affirmation by human reason. In history, this affirmation takes the form of the deliberate development and popular acceptance of a coherent ideology of social life which supports human liberty, private property, and a market economy, while abhorring political omnipotence, privilege, and warfare (Salerno 1990, pp. 46–53). The millennialist approach, on the other hand, posits the existence of a metaphysical and supra-rational force which, through "the cunning of History," drives human beings to those actions which are necessary to the achievement of humanity's final goal.

In the next section, I provide a brief overview of Keynes's most important intellectual influences. These influences are small in number and relatively parochial, involving two Cambridge dons and a British political theorist. In creating his sociopolitical vision, Keynes drew mainly upon the ethical philosophy of G. E. Moore, the political philosophy of Edmund Burke, and the economics of Alfred Marshall. From Marshall, Keynes also adopted the millennialist theoretical framework which the former constructed as a prop for his "preaching of mid-Victorian morality, seasoned by Benthamism" (Schumpeter [1951] 1965, p. 104).

In section 3, I trace the development of Keynes's millennialist theory of social evolution, upon which, I argue, his sociopolitical vision is based. I also suggest that, during the decade of the 1920s, in which this development mainly occurred, Keynes viewed Marshallian economics as a tool for guiding a dynamic and useful but unsteady and unethical capitalist economy toward the impending post-scarcity millennium and that his *Treatise on Money* (Keynes [1930] 1958) was intended as a handbook for just this purpose.

Section 4 contains an account of Keynes's apostasy from Marshallian economics in consequence of the Great Depression and his endeavor, beginning in 1932, to formulate a heretical body of economic analysis and policy, which was designed to effect a rapid transition to the millennium. In the fifth and concluding section of the paper, I present the case that the basic building blocks of the *General Theory*, including the theories of effective demand and liquidity preference and the concept of the marginal efficiency of capital, are fashioned out of the Moorite ethical precepts that Keynes presumed would guide action in his imagined millennial state.

Keynes's Intellectual Influences

G. E. Moore served as Keynes's guide in his conception and pursuit of the ethical good. In Keynes's interpretation of Moore, ethical goodness or "the Good" is an attribute uniquely related to "states of mind," which are the only things valuable in and of themselves. In elaborating upon his version of the Moorite "religion," Keynes (quoted in Skidelsky [1983] 1986, p. 141) writes:

> Nothing mattered except states of mind. . . . These states of mind were not associated with action or achievement or with consequences. They consisted in timeless passionate states of contemplation and communion, largely unattached to "before" and "after." . . . The appropriate subjects of passionate contemplation and communion were a beloved person, beauty and truth, one's prime objects in life were love, the creation and enjoyment of aesthetic experience and the pursuit of knowledge. . . . [The Moorite] religion was altogether unworldly—with wealth, power, popularity or success it had no concern whatever, they were thoroughly despised.

According to Keynes (quoted in Skidelsky [1983] 1986, p. 142), he and the other early proselytes of Moore's religion:

> lived entirely in present experience, since social action as an end in itself and not merely as a lugubrious duty had dropped out of our Ideal, and not only social action, but the life of action generally, power, politics, success, wealth, ambition, with the economic motive and economic criterion less prominent in our philosophy than with St. Francis of Assisi, who at least made a collection for the birds.

Thus the Moorite contribution to Keynes's thought is a concept of the highest good as consisting in a succession of timeless states of consciousness to be experienced in the present moment. There is further a tendency in Moore to treat these internal states of goodness as wholly independent of any external means for their achievement. As Skidelsky ([1983] 1986, p. 146) points out, not only is economic welfare not the same as ethical goodness, "there is nothing in Moore's argument to show that it is a necessary condition of it." Thus Keynes absorbed a radical present orientation from Moore's thought and a related tendency to denigrate "economizing" or purposeful behavior associated with scarcity, since attainment of ethical goods did not directly depend upon—indeed was inhibited by—the undertaking of time-consuming processes of production employing scarce means.

On two crucial points, however, Keynes broke with Moore. First, while he accepted the sharp distinction drawn by Moore between economic welfare and ethical goodness, Keynes struggled mightily to forge a logical link between economic, social, and political goods on the one hand and the Moorite ethical good on the other. Keynes supplies this link by conceiving the existence of society as an absolute and necessary precondition for the realization of the individual's "good states of mind." The overall social good, including economic welfare, while not intrinsically good, is therefore to be sought after as a "useful" and "valuable" means to the ultimate end of the ethical good (Skidelsky [1983] 1986, p. 154). For Keynes, however, because the ethical quality of the end could never be imputed to or reflected by the means, the Good is always to be valued absolutely above its means of attainment, thereby precluding the logical development of a universal principle on which resources are to be allocated between the immediate attainment of good states of mind and the securing of conditions that may be useful for their attainment in the future. Thus the claim of the ethical good on behavior appears to be absolute, indivisible, and beyond the pale of scarcity and economic science. Of course, Keynes did believe that non-ethical ends had a claim on behavior in certain circumstances, but, as Skidelsky ([1983] 1986, p. 154) states, "the connection [between economics and ethics] for Keynes was never mechanical, always problematic."

For guidance in identifying the social good and the proper method for its achievement, Keynes turned to the political philosophy of Edmund Burke. As Skidelsky ([1983] 1986, p. 154) states, "[i]f Moore was Keynes's ethical hero, Burke may lay strong claim to be his political hero."

Keynes (quoted in Skidelsky [1983] 1986, p. 155) broadly characterized Burke as a utilitarian, for whom politics and government were the essential means to securing the "happiness of the people" in the form of "physical calm, material comfort, and intellectual freedom." For Keynes these qualities are, in turn, the "great and essential means" for the attainment of the ultimate Moorite "good things" in life, which flow from the cultivation of the "tastes and emotions, good feeling and right judgment."

According to Keynes (quoted in Skidelsky [1983] 1986, p. 155), one of the most important corollary principles of Burkean utilitarianism is an "extreme timidity in introducing present evils for the sake of future benefits." In support of this principle, Keynes argued that:

> Our power of prediction is so slight, it is seldom wise to sacrifice a present evil for a doubtful advantage in the future. Burke ever held, and held rightly, that it can seldom be right to sacrifice the well-being of a nation for a generation, to plunge whole communities in distress, or to destroy a beneficent institution for the sake of a supposed millennium in the comparatively remote future. . . . It

> is the paramount duty of governments and of politicians to secure the well-being of the community under the case in the present and not to run risks overmuch for the future.

Keynes (quoted in Skidelsky [1983] 1986, p. 157) summed up Burke's political philosophy in the following terms:

> His goods are all in the present—peace and quiet, friendship and affections, family life, and those small acts of charity whereby one individual may sometimes help his fellows. He does not think of the race as marching through blood and fire to some great and glorious good in the distant future; there is, for him, no great political millennium to be helped and forwarded by present effort and present sacrifice.

Thus, Keynes derived two things from Burke: (1) the belief that government and politicians are competent to directly secure the material conditions that foster "general happiness" or "the wide dissemination of comfort" and that are also the means for attaining the spiritual or mental states that constitute the ultimate good; and (2) a strong present orientation in policy matters which dovetails with the severely foreshortened time horizon that is entailed by acceptance of Moore's notion of the ethical good.

The second point on which Keynes disputed his mentor on ethics involves probability theory. As a utilitarian, Moore contended that it is rational to pursue one's own immediate good only if this pursuit will, on balance, increase or at least not decrease the good of the Universe. However, in attempting to judge which course of action is rational in this sense, the individual actor is confronted with the daunting task of correctly forecasting and assessing the myriad consequences of his action, which may ramify into every corner of the remote future. The insuperable difficulty of this task leads Moore (quoted in Skidelsky [1983] 1986, p. 152) to argue that "[o]ur utter ignorance of the far future gives us no justification for saying that it is even probably right to choose the greater good within the region over which a *probable* forecast may extend." Moore concludes, therefore, that, in most cases, an individual rationally pursuing the ethical good can do no better than to conform to general rules of conduct, such as those embodied in the dictates of conventional morality.

Keynes reacted to this argument by challenging Moore's underlying approach to probability, which Keynes identified as a frequency theory of probability involving certain knowledge of the distribution of outcomes. In Keynes's view, the concept of probability which is relevant to action is one which refers to the available evidence regarding alternative actions. A proposition about the outcome of a contemplated action is more probable than a proposition regarding an alternative outcome, if, however slight the presently existing evidence, it indicates that the first outcome is more likely than the second. As Keynes ([1921] 1962, pp. 307, 310) states:

> Given as our basis what knowledge we actually have, the probable . . . is that which it is rational for us to believe. . . . To believe one thing *in preference* to another, as distinct from believing the first true or more probable and the second false or less probable, must have reference to action and must be a loose way of expressing the propriety of *acting* on one hypothesis rather than another. . . . We might put it, therefore, that the probable is the hypothesis on which it is rational for us to act. . . . The results of our endeavors are very uncertain, but we have a genuine probability, even when the evidence upon which it is founded is slight. . . .

With this theory of probability, Keynes is able to free the Moorite pursuer of good mental states from the shackles of conventional rules of correct conduct that were clamped on by Moore himself as a utilitarian concession to the uncertain future. According to Keynes ([1921] 1962, pp. 309–10): "If good is additive, if we have reason to think that of two actions one produces more good than another in the near future, and if we have no means of discriminating between their results in the distant future, then by what seems a legitimate application of the Principle of Indifference we may suppose that there is a probability in favor of the former action." Thus, the claims of the immediate good upon action are even stronger for Keynes than for Moore, because Keynes's theory of probability permits him to ignore the unforeseeable future ramifications of present action.

The final major influence on Keynes's social philosophy is his mentor in economics, Alfred Marshall. Marshall's influence on the early Keynes is difficult to overestimate. From all accounts, Keynes the economist was steeped in Marshall. Dating from his academic appointment to Cambridge in 1909, Keynes "taught straight Marshallian doctrine . . . the doctrine he mastered as few people did and with which he remained identified for twenty years to come" (Schumpeter [1951] 1965, p. 263).

Revelations of Keynes's astonishing parochialism in economic theory are provided by Harrod, his disciple and authorized biographer. In urging the young Harrod to attend Cambridge, Keynes "brushed aside" the London School of Economics and rejected the alternative of a foreign university because, according to Keynes, "they knew nothing at all of Economics on the Continent" (Harrod 1951, p. 319). Harrod (1951, p. 322) refers to "Keynes's dictum that there wasn't any place but Cambridge where one could learn economics."

After enrolling at Cambridge, Harrod was impressed by Keynes's view that "the content of economic theory was extremely small" and that "wide reading in economic theory" was not necessary. Keynes believed, as Marshall had, that "there was not much further work to be done" in the field of economic theory, and Keynes's "recipe for the young economist was to know his Marshall thoroughly and read his *Times* every day carefully, without bothering too much about the large mass of contemporary publication in book form" (Harrod 1951, p. 324).

More recently, Moggridge (1976, p. 153) has affirmed that "broadly Marshallian modes of analysis pervade all Keynes's work, even when Marshall and his successors were the objects of attack, as in the *General Theory*."

In the judgment of his fellow Cantabrigian, A. C. Pigou (quoted in Keynes 1973, p. 22), even after he discarded some of the technical apparatus of Marshallian theory in the 1930s Keynes remained, in terms of his philosophical approach to economics as a branch of applied ethics, "a firm disciple of the 'Master.'" As late as 1938, for example, Keynes defended Marshall's view, as against Robbins's, that economics is "a moral science" which "employs introspection and judgments of value" (Moggridge 1976, p. 22).

Writing in 1941, Keynes (quoted in Hession 1984, p. 326) described the doctrinal filiation of his own intensely ethical approach to economics in the following terms:

> Along one line of origin, at least, economics more properly politico-economy is a side of ethics. Marshall used always to insist that it was through ethics he arrived at political economy, and I would claim myself in this, as in other respects, to be a pupil of his. I should have thought that nearly all English economists in the tradition, apart from Ricardo, reached economics that way. There are practically no issues of policy as distinct from technique which do not involve ethical considerations.

Accordingly, one of the main props for Keynes's social philosophy is the value-laden theory of wants developed by Marshall. Marshall's classification of wants is threefold. "Natural" human wants refer to the biological needs for, e.g., food and shelter, which characterize both the lower animals and uncivilized man. According to Marshall ([1920] 1949, p. 86), the wants in this class "are countless in number and very various in kind: but they are generally limited and capable of being satisfied." As civilization progresses, however, there emerges a second class of "artificial" wants, which are not capable of satiation. Marshall ([1920] 1949, p. 88) includes in this class the craving for distinction among one's fellows which, for example, in the case of women's dress, gives rise to "the evil dominion of the wanton vagaries of fashion."

Marshall's third category encompasses "wants adjusted to activities." In the early stages of social evolution, wants are the prod to human "activities," which are aimed almost exclusively at satisfying these wants. In the higher stages, in which natural wants have been satisfied, "higher" activities begin to be undertaken for their own sake leading to the creation of wants. Marshall's example of this inverted relationship between wants and activities is the pursuit of science, literature, and art for their own sake, generating a demand for the labor of those who pursue these activities professionally (Marshall [1920] 1949, pp. 88–89). The rapid increase in the consumption of tea, while the consumption of alcohol stagnates, affords another illustration, because, according to Marshall ([1920] 1949, p. 89 1n), tea is desired to "stimulate the mental activities," just as alcohol serves to "merely gratify the senses." As the pursuit of higher activities becomes increasingly widespread in society, there emerges a pervasive "desire for excellence for its own sake" causing the processes of production, heretofore seen as merely a means to want satisfaction, to be transformed into higher activities pursued as ends in themselves. Thus the work of the fisherman begins to take on the character of the "activities" of a Newton or a Stradivarius (Marshall [1920] 1949, p. 89). For Marshall (quoted in Parsons [1937] 1968, p. 141 1n), then, "[w]ork in its best sense, the healthy energetic exercise of faculties is the aim of life, is life itself."

Marshall's theory of wants and activities serves as the basis of his theory of social evolution, which also deeply influenced Keynes. Thus Marshall ([1920] 1949, p. 85) tells us that "it is to changes in the forms of efforts and activities that we must turn when in search for the keynotes of the history of mankind." The reason is that "man's character has been molded by his every-day work, and the material resources he thereby procures, more than any other influence unless it be that of his religious ideals" (Marshall [1920] 1949, p. 1). Human character is thus developed in the very process of economic and social evolution in which, in the later stages, "each new step upwards is to be regarded as the development of new activities giving rise to new wants" (Marshall [1920] 1949, p. 89).

Most important for Marshall, economic and social progress is expressed in a "rising standard of life," a term which Marshall never clearly defines but which can be understood as "some kind of index of human quality: a scalar function of a vector of attributes or 'activities,' physical or mental, such as energy, dexterity, rationality, foresight, honesty, unselfishness, striving for self-improvement and social improvement, and so on" (Whitaker 1977, p. 180). An increase in the standard of life implies, e.g., a reduction of expenditure on debilitating alcoholic beverages and an increase of expenditure on healthful food and drink and children's education, as well as an increase in saving and therefore capital accumulation. The resulting improvement in the laborer's health, morale, and human capital as well as in the material structure of complementary capital goods will tend to increase labor efficiency and real wage rates. Increased wage rates will, in turn, provide the wherewithal, including the greater opportunity for the enjoyment of leisure, which is needed to satisfy the wants induced by the pursuit of "higher activities" (Whitaker 1977, 179, pp. 184–85).

Marshall's almost obsessive emphasis on leisure—albeit leisure to pursue ennobling or "higher" activities—as a prerequisite of character development and social progress should be noted. In his own words, "Some free time from the fatigue of work that tires without educating, is a necessary condition of a high standard of life." For the young, in particular, it is "an essential condition" for developing "their higher nature" and making them "efficient producers" that they be given "long-continued freedom from mechanical toil; together with abundant leisure for school and for such kinds of play as strengthen and develop the character" (Marshall [1920] 1949, p. 720).

The improvement of character that results from higher activities pursued during leisure time will further heighten the standard of life and lead to a further round of improvement in consumption habits and of increased investment in material and human capital, with the consequent increase in real wages starting the whole process over again. Marshall ([1920] 1949, p. 690) implies, however, that this development process may be short-circuited if an increase in real wage rates is squandered on increasing the "standard of comfort," by which he means "a mere increase of artificial wants, among which perhaps the grosser wants may predominate."

And if the masses persist in wallowing in a degraded standard of life, thereby obstructing social progress, Marshall ([1920] 1949, p. 714) suggests a two-pronged solution. The "residuum," or those who are "physically, mentally or morally incapable of doing a good day's work with which to earn a good day's wage," are to be prevented from perpetuating themselves by rearing up children "in their own patten." To this end, those with young children are to "come under a paternal discipline" and to incur "a more strict subordination of personal freedom to public necessity." As a last resort, Marshall ([1920] 1949, pp. 714–15 1n) advocates that "the homes might be closed or regulated with some limitation on the freedom of the parents."

Marshall's second method of "causing the residuum to cease from the land" and hastening social progress involves "the application of the principles of Eugenics to the replenishment of the race from its higher rather than its lower strains. . . ." (Marshall [1920] 1949, pp. 714, 248). Theodore Levitt (1976, p. 429) perceptively refers to this second method as "the ultimate solution," because "ultimately what Marshall preached was not so much economics as it was moral and aesthetic development."

Although Marshall advocated a political solution to the problem of the residuum, "It was free enterprise, softened and modified by altruism and chivalry, which was to be the main agent of human evolution" (Whitaker 1977, p. 181). According to Marshall, as society progressed, men in the realm of business would increasingly fore-swear the single-minded pursuit of the coin of pecuniary gain and substitute competition for the coin of chivalric achievement and the social acclaim and approbation it purchased. In this way business activities would come to resemble the arts and sciences. Such "chivalrous competition," to use Marshall's term, would be undertaken primarily as a "higher activity," which, as Whitaker (1977, p. 173) describes it, unites "public spirit and conscientiousness with a delight in doing noble and difficult things and a desire for full exercise of one's own abilities."

As members of the middle and upper classes come to exert themselves more and more for chivalric motives, the supply prices of the various kinds of managerial and professional effort, especially of what Marshall ([1920] 1949, p. 618) calls "business ability in command of capital," decline absolutely and relative to the wage rates of the more common grades of labor, and this effects a spontaneous redistribution of income toward the working class. As Marshall (quoted in Whitaker 1977, p. 174) puts it, "if society could award . . . honor, position, and influence by methods less blind and wasteful; and if it could at the same time maintain all that stimulus which the free enterprise of the strongest business men derives from present conditions, then the resources thus set free would open out to the mass of the people new possibilities of a higher life." Thus does chivalrous competition promote social evolution, permitting members of the working class to attain to the "society of gentlemen" wherein "no one is to do in the day so much manual work as will leave him little time or little aptitude for intellectual and artistic enjoyment in the evening" (Marshall quoted in McWilliams-Tullberg 1975, p. 102).

As noted above, all millennialist social theories are essentially teleological, typically attempting to describe the precise course of evolution by positing a series of well-defined historical stages through which society must evolve before reaching its final goal in the culminant stage of human history. Now this is certainly typified by Marshall's theory of social evolution. This theory is centered upon what Talcott Parsons ([1937] 1968, p. 158) has identified as "Marshall's belief in an absolute goal of evolution, the development of character in his peculiar sense." Marshall (quoted in Whitaker 1977, p. 183) himself describes the final stage of social evolution as a state with "no rights but only duties; where everyone shall work for the public weal with all his might expecting no further reward than that he in common with his neighbors shall have whatever is necessary to enable him to work well, and to lead a refined and intellectual life." In a more mature work, Marshall (quoted in Levitt 1976, p. 439) posits a "distant goal where the opportunities of the noble life may be accessible to all."

In the *Principles*, Marshall ([1920] 1949, p. 752) gives a decidedly Hegelian cast to his desiderated millennium, referring to "an order of social life, in which the common good overrules individual caprice, even more than it did in the early ages before the sway of individualism had begun. But unselfishness then will be the offspring of deliberate will; and, though aided by instinct, individual freedom will develop itself in collective freedom. . . ." Thus, for Marshall, human history is to culminate in what we may call the Era of the Noble Life, in which all human activities, from sipping tea to mining coal, are completely transformed into "higher activities" not driven by wants but undertaken as an aid to or an exercise of the higher human faculties.

Before society can enter into this paradisiacal state, however, humanity and the human character must be prepared by passing through two earlier stages. In the first stage, let us call it the "Era of Scarcity," almost all human activities are directed toward solving the problem of scarcity, conceived of in Marshall's peculiar and narrow sense of satisfying *basic* human wants. The transitional stage or the "Era of Chivalry" dawns with the arrival of the Victorian gentleman upon the scene: the solution of the economic problem for at least some segments of the population yields the leisure and material resources necessary to an enhanced "standard of life" marked by the pursuit of character-developing and productivity-improving higher activities. The resulting character development effects a progressive transformation of the motive, from pecuniary to chivalric, for which capital is invested and business activities are undertaken, thereby lowering the supply price at which "business ability in command of capital" is forthcoming and raising the real wages of the working class. In this way, free enterprise conducting itself in accord with chivalrous competition will insure that the resources and opportunities for character development and a rising standard of life trickle down to the working classes.

To the extent that members of the working class invest the newly won additions to their incomes in the acquisition of higher skills for themselves and for their offspring, the supply of unskilled labor will eventually diminish, augmenting the rise in the real wages of the unskilled and offering increased access to a higher standard of life. The residuum who, due to defect of will or ability, do not avail themselves and their children of this opportunity for character improvement will be eventually suppressed by compulsory State education and supervision of child rearing and, in the last resort, of reproductive activities. Thus will the chivalrous and duty-bound Victorian businessman, abetted by a bracing dose of State paternalism and eugenics administered to the physically and morally unfit, usher humanity into the Era of the Noble Life.

Marshall's theory of social evolution leads to a peculiar conception of the economic problem confronting humanity. Construed conventionally as the confrontation between virtually limitless human wants and limited resources, scarcity is not the permanent problem burdening humanity. For Marshall, the central problem of economic science and of social evolution is the devising of a framework for society's business and productive activities which promotes the unimpeded development of human character. To put it another way, once the Era of Scarcity has been transcended, consumption is no longer the *end* of production but the *means* which permits men to "work well" and improve their standard of life. Thus Marshall ([1920] 1949, pp. 530, 193) proclaims that the "end of all production" is to "raise the tone of human life" and that "the chief importance of material wealth lies in the fact that, when wisely used, it increases the health and strength, physical, mental and moral of the human race."

What Marshall ([1920] 1949, p. 85) calls the "keynote of the history of mankind," therefore, is not the struggle against scarcity, which is an ephemeral condition capable of resolution, but the proper development of human character. Marshall (quoted in McWilliams-Tullberg 1975, p. 93) is emphatic on this point, declaring that "I have always held that poverty and pain, disease and death are evils of greatly less importance than they appear, except in so far as they lead to weakness of life and character. . . ." The *raison d'être* of economic science is therefore to study the evolutionary process of human character formation in order to guide it to its fruition in the millennium of the Noble Life. In Marshall's words (quoted in Whitaker 1977,

p. 179): "[The] progress of man's nature . . . is I conceive, the center of the ultimate aim of economic studies. . . . human will, guided by careful thought, can so modify circumstances as largely to modify character; and thus to bring about new conditions of life still more favorable to character; and therefore to the economic, as well as moral well-being of the masses of the people."

In a revealing comment, Keynes (quoted in Whitaker 1977, p. 185) observes that "[t]he solution of economic problems was for Marshall, not an application of the hedonistic calculus, but a prior condition of the exercise of man's higher faculties." In fact, as we shall now see, Keynes adopted Marshall's view of the economic problem as well as the latter's millennialist vision of social evolution.

The Development of Keynes's Sociopolitical Vision

Keynes's social philosophy and particularly his theory of social evolution are not coherently stated in any one of his works but must be pieced together from scattered discussions in articles and books written over the span of more than a decade. Nevertheless, this endeavor does lead us to view Keynes as a consistent and thoroughgoing millennialist in his approach to social evolution.

We get an early and brief glimpse of Keynesian themes in this area in *The Economic Consequences of the Peace*, first published in 1919 (Keynes [1920] 1971). In a chapter on "Europe before the War," there appears a section blandly entitled "The Psychology of Society." In little more than four pages, Keynes suggests the fundamental irrationality of abstaining from present consumption, emphasizes the importance of capital accumulation and compound interest to social evolution, delineates a teleological approach to human history whose goal is inexplicably known to him, and speculates on an evolutionary solution to the problem of scarcity. All of these themes were absorbed from his mentors and were to become hallmarks of Keynes's later works.

To begin with, Keynes ([1920] 1971, p. 19) points to the "immense accumulations of fixed capital" which occurred, "to the great benefit of mankind," in the fifty years leading up to the World War I and attributes these to the inequality of the distribution of wealth in favor of that class least likely to consume it. Thus the maintenance and accumulation of capital depends on what Keynes ([1920] 1971, p. 19) calls "a double bluff or deception." On the one hand, the laboring classes were deceived into accepting "a situation in which they could call their own very little of the cake that they and Nature and the capitalists were cooperating to produce" (Keynes [1920] 1971, p. 20). The capitalists, on the other hand, were equally deceived because, although the greatest part of the national income "cake" accrued to them, it could remain in their possession only "on the tacit underlying condition that they consumed very little of it in practice" (Keynes [1920] 1971, p. 20). Any attempt by the capitalists to exercise their *de jure* right to expend their vast accumulation of wealth on present consumption would provoke the wrath of the much more numerous laboring class and result in the capitalists' expropriation.

But how was this elaborate deception maintained, by whom, and to what end? According to Keynes, the deception was maintained by ordaining saving as a virtue and the consequent growth of the capital structure and national income as "the object of true religion." Says Keynes ([1920] 1971, p. 20), "There grew round the non-consumption of the cake all those instincts of puritanism which in other ages has withdrawn itself from the world and has neglected the arts of production as well as those of enjoyment." But, clearly, saving or "the non-consumption of the cake" is, from the individual's point of view, without reason or purpose. The conventional motives of saving for one's dotage or for one's offspring, Keynes ([1920] 1971, p. 20) suggests, were based on a self-delusion, for "the virtue of the cake was that it was never to be consumed, neither by you nor by your children after you."

Who is the perpetrator of this grand deception and the founder of the false religion of saving? Keynes's answer is a hypostatized Society, which is wisely propelling humanity forward to the millennium through the actions of the deluded savers and investors. Writes Keynes ([1920] 1971, pp. 20–21):

> In the unconscious recesses of its being Society knew what it was about. The cake was really very small in proportion to the appetites for consumption, and no one, if it were shared all round, would be much the better off by the cutting of it. Society was working not for the small pleasures of today, but for the future security and improvement of the race. . . .

The progressive accumulation of capital insures that, eventually, Society reaches its pre-ordained goal, the problem of scarcity is resolved and the millennium is at hand. As Keynes ([1920] 1971, p. 21) prophesies, "[i]n that day overwork, overcrowding, and underfeeding would have come to an end, and men, secure of the comforts and necessities of the body, could proceed to the nobler exercises of their faculties." Note that Keynes's brief description of the millennial state reflects the narrow Marshallian conception of scarcity as the inability to provide for the basic human wants of food, shelter, and clothing. Once such biological needs are adequately met, humanity is freed from the shackles of scarcity to pursue, if it only will, ennobling activities.

Note also that, for Keynes, the primary force propelling humanity toward its destiny is not Marshallian free enterprise rendered pure and chivalrous but capital accumulation pure and simple. This is why, as Brunner (1987, p. 37) has recognized, "Keynes was very much concerned with the accumulation of real capital in modern economies." As we will see, Keynes never wavered in his belief that capital is the foremost agent of social transformation.

Also noteworthy is Keynes's view that the accumulation of capital and, hence, the progress of society toward the millennium depends on a thoroughly irrational propensity of human beings to save. This poses a conundrum of great moment which Keynes, at this early stage, attempts to resolve by reference to mysterious social forces that perpetrate a "double bluff." The bluff misleads two classes of individuals, capitalists and laborers, whose interests are irrevocably opposed, into undertaking activities and entering into social arrangements that are in the interests of neither class. But Keynes was understandably uneasy with this resolution and, as I shall argue below, the evolution of Keynes's technical economics can be viewed as a long struggle to unravel the conundrum.

In a series of articles written in the 1920s, Keynes further transformed Marshall's millennialist vision by incorporating additional elements of Moore's philosophy into it. In particular, Keynes called into question what was firmly averred by Marshall: the intrinsic value of the activities and mental states inspired by competitive capitalism. Keynes also emphatically rejected Marshall's belief that humanity's millennium lay in the distant future and that progress toward this desideratum still demanded stiff present sacrifices. For Keynes, the millennium was close at hand, and humanity would be wise to sample its fruits in the present.

In "A Short View of Russia," first published in 1925, Keynes ([1931] 1963, pp. 297–311) favorably contrasts the religious spirit at the core of Russian communism to the spiritual poverty that attends the pursuit of money-making under modern capitalism. According to Keynes ([1931] 1963, pp. 302–03),

> [the] *emotional and ethical essence* [of Leninism] *centers about the individual's and the community's attitude toward the Love of Money.* . . . [I]n the Russia of the future it is intended that the career of money-making, as such, will simply not occur to a respectable young man as a possible opening, any more than the career of a gentleman burglar or acquiring skill in forgery and embezzlement. Even the most admirable aspects of the love of money in our existing society, such as thrift and saving, and the attainment of financial security and independence for one's self and one's family, whilst not deemed

> morally wrong, will be rendered so difficult and impracticable as to be not worth while.

Even in the contemporary Russia he was observing, Keynes ([1931] 1963, p. 304) detected evidence of the denigration of money-making, remarking that "[t]he private trader is a sort of permitted outlaw, without privileges or protection, like the Jew in the Middle Ages—an outlet for those who have overwhelming instincts in this direction, but not a natural or agreeable job for the normal man." Keynes ([1931] 1963, p. 304) deems a society which treats money-making in this manner "a tremendous innovation."

In comparison to communism, Keynes ([1931] 1963, pp. 306–07) portrays capitalism as "absolutely irreligious, without internal union, without much public spirit, often, though not always, a mere congeries of possessors and pursuers." In order to survive in the face of its profound spiritual poverty and in the teeth of "religious Communism," capitalism must prove itself to be not merely more efficient than communism but many times more efficient. In Keynes's estimation, however, capitalism at the beginning of the twentieth century had proven itself to be only "moderately successful." In fact, in breach of another tenet of the Marshallian faith, Keynes wonders whether capitalism is losing its efficacy, and therefore its limited value, as a means of economic progress and social transformation.

Keynes ([1931] 1963, p. 307) confesses his doubts in the following terms:

> We used to believe that modern capitalism was capable, not merely of maintaining the existing standards of life, but of leading us gradually into an economic paradise where we should be comparatively free from economic cares. Now we doubt whether the business man is leading us to a destination far better than our present place. Regarded as a means he is tolerable; regarded as an end he is not so satisfactory.

If capitalism is not leading toward the millennium, then Keynes ([1931] 1963, p. 307) questions "whether the material advantages of keeping business and religion in different compartments are sufficient to balance the moral disadvantages." He explicitly rejects the "Protestant and Puritan" view that business and religion naturally belong to different domains, as well as the view of the Marshallian "believer in progress," who affirms capitalism "as the means to the establishment of heaven upon earth hereafter." In their place, Keynes counsels a radically present-oriented, Moorite "third state of mind," which exalts the pursuit and enjoyment of the ethical good in the here and now.

According to Keynes ([1931] 1963, pp. 307–08), those who have attained to this third state of mind:

> do not fully believe either in a heaven which is elsewhere or in progress as a sure means towards a heaven upon earth hereafter; and if heaven is not elsewhere and not hereafter, it must be here and now or not at all. If there is no moral objective in economic progress, then it follows that we must not sacrifice, even for a day, moral to material advantage—in other words, that we may no longer keep business and religion in separate compartments of the soul.

Whether or not capitalism remains a useful means for further amelioration of the economic problem, Keynes affects no doubt as to its degraded moral quality, because it distracts men from the immediate enjoyment of exalted mental states, while absorbing their minds and lives in the love and pursuit of money and in its accumulation for an ever-receding future. Thus Keynes ([1931] 1963, p. 308) concludes that "it seems clearer every day that the moral problem of our age is concerned with the love of money, with the habitual appeal to the money motive in nine-tenths of the activities of life, with the universal striving after individual economic security as the prime object of endeavor, with the social approbation of money as the measure of constructive success, and with the social appeal to the hoarding instinct as the foundation of the necessary provision for the family and for the future."

In "Am I a Liberal?" also first published in 1925, Keynes ([1931] 1963, pp. 323–38) embraces the theory of stages of economic development outlined by the American institutionalist, Joseph R. Commons. Commons's first epoch, the Era of Scarcity, is marked by very little individual liberty and a great deal of coercive control exercised by governmental and other institutions. This, Keynes (1925, p. 334) tells us, was "the normal state of the world up to (say) the fifteenth or sixteenth century." The transition to Commons's Era of Abundance occurred in the seventeenth and eighteenth centuries and culminated "gloriously in the victories of *laissez-faire* and historic Liberalism" in the nineteenth century (Keynes [1931] 1963, pp. 334–35). In this epoch, individual liberty is given its full head and coercive political control is minimized.

The contemporary world, according to Keynes and to Commons, was in transition to the third stage, characterized by Keynes as the Era of Stabilization. Keynes ([1931] 1963, p. 335) argues that progress into this stage requires "[t]he transition from economic anarchy to a regime which deliberately aims at controlling and directing economic forces in the interests of social justice and social stability. . . ." No longer can "the economic Juggernaut [be] allowed to crash along the highway of Progress without obstruction and even with applause," as it was allowed to do in the nineteenth century (Keynes [1931] 1963, p. 337). For Keynes ([1931] 1963, p. 335), "*laissez-faire* individualism and the free play of economic forces" have outlived their usefulness while socialism offers no better alternative because both are "Sprung from the presuppositions of the Era of Abundance."

Like Moses, capitalism had gotten society within sight of the promised land but was morally unfit to enter. Now, Keynes believed, an alternative system must be devised and readied to secure humanity in its impending enjoyment of millennial bliss. Yet a more immediate source of concern for Keynes involved certain defects which he perceived in the technical operation of *laissez-faire* capitalism, particularly in the area of money, and which needed to be remedied to assure a smooth transition to the millennium. It was the task and destiny of what Keynes ([1931] 1963, pp. 335, 337) referred to as the "New Liberalism" to prepare the solutions to the immediate technical problems of the transition as well as to "invent new wisdom for a new age."

Unlike Marshall, Keynes did not foresee a spontaneous remedy for capitalism's technical shortcomings and moral failings in the replacement of the profit motive by Victorian chivalry. It was on this issue that Keynes abandoned Marshall for Burke.

Keynes's Burkean tract "The End of Laissez Faire," which first appeared in print in 1926, proposes an "Agenda of State," which is aimed at effecting "improvements in the technique of modern Capitalism by the agency of collective action" (Keynes [1931] 1963, p. 319). The criterion governing these agenda, according to Keynes ([1931] 1963, p. 317), is not to replace private decisionmaking with State decisionmaking but relates "to those decisions which are made by *no one* if the State does not make them." Three examples of the applicability of State agenda are given by Keynes.

First there are the "economic evils" associated with risk, uncertainty, and ignorance, including inequality of wealth, unemployment of labor, and reduction of efficiency and production. The State agendum in this matter lies in "deliberate control of the currency and of credit by a central institution" and "the collection and dissemination on a great scale of data relating to the business situation," including the legally coerced publication of all useful business facts (Keynes [1931] 1963, pp. 317–18). (Regarding the latter, business secrecy had been an especial bugbear of Marshall's.)

The second example Keynes ([1931] 1963, pp. 318–19) offers refers to saving and investment. In this area, the State agendum is to provide "a co-ordinated act of intelligent judgment" regarding how much the nation should save, what proportion of aggregate savings should be invested abroad, and whether the private capital market is channeling domestic investment to the most productive uses.

The third agendum of State mentioned by Keynes ([1931] 1963, p. 319) is control of the quantity and quality of the national population. Keynes still has enough of the classical economist in him to fear that the Malthusian devil may forever bar the door to the millennium by wasting the fruits of capital accumulation on sustenance for an ever-expanding population. Keynes's reference to the Marshallian devil of a genetically incorrigible residuum is veiled and tentative: "The time may arrive . . . when the community as a whole must pay attention to the innate quality as well as to the mere numbers of its future members" (Keynes [1931] 1963, p. 319).

Having contrived Burkean expedients for overcoming problems in its technique, Keynes once again expresses satisfaction, if only half-heartedly, that capitalism is capable of producing steady progress toward the millennium. Nevertheless, he is even more firmly convinced that a new system, which is consistent with Moorite ethical precepts, must be excogitated as a final replacement for the spiritually desolate capitalism. Donning the mantle of the millennialist prophet, Keynes boldly proposes to undertake this task by consulting his internal gnosis. Thus, he (Keynes [1931] 1963, pp. 321–22) concludes that:

> capitalism, wisely managed, can probably be made more efficient than any alternative system yet in sight, but that in itself it is in many ways extremely objectionable. Our problem is to work out a social organization which shall be as efficient as possible without offending our notions of a satisfactory way of life.
>
> The next step forward must come, not from political agitation or premature experiments, but from thought. We need by an effort of the mind to elucidate our own feelings. . . . We need a new set of convictions which spring naturally from a candid examination of our own inner feelings in relation to the outside facts.

Apparently, Keynes took seriously the task he set himself in 1926 and he pondered long and hard on the problems of social evolution in the next few years. In 1930 he published "Economic Possibilities for Our Grandchildren," which is based on ideas expressed in a speech in early 1928 and wherein is presented a fully developed theory of humanity's path to "our destination of economic bliss" (Keynes [1931] 1963, p. 373). In particular, Keynes provides answers to some of the questions he raised in previous articles. Most importantly, he foretells the process by which human nature will be spontaneously purged of the pecuniary motive without the necessity of institutional transformation.

While some of Keynes's disciples, including Harrod (1951, p. 399), discount its significance as a serious expression of Keynes's ideology, Hession (1984, p. 242) has insightfully characterized this article as "an important statement of his personal philosophy or *Weltanschauung*. . . . Indeed, this essay may be regarded as analogous to Marshall's 'Possibilities of Economic Chivalry' or to John Stuart Mill's speculations on the 'Stationary State,' both well-known examinations of the future of Western Society."

Significantly, in 1930, Keynes ([1930] 1958) also published his *Treatise on Money*, which he had been working on during the previous five years and which can be seen as a technical guide for carrying out the State's agenda with respect to the "gaps" in modern capitalism caused by uncertainty, foreign investment, and the lack of a mechanism for equating saving and investment. As I shall argue below, the *Treatise* was intended by Keynes to be a handbook to guide Burkean policymakers in their charge of keeping society on course and on time in the last leg of its journey to the millennium.

Keynes begins "Economic Possibilities" by emphatically reaffirming his faith in the continuation of economic progress in the face of widespread and growing doubt attributable to the slowdown of economic activity that was beginning to take hold in the world economy in 1930. In fact, Keynes regards the downturn, quite sanguinely, as evidence of the transition to the next stage of history. Opines Keynes ([1931] 1963, p. 358): "We are suffering, not from the rheumatics of old age, but from the growing-pains of over-rapid changes, from the painfulness of readjustment between one economic period and another. The increase of technical efficiency has been taking place faster than we can deal with the problem of labor absorption; the improvement in the standard of life has been a little too quick. . . . "

As merely a problem of the transition, the downturn can be remedied by the implementation of the appropriate State agendum. However, Keynes's express purpose in this essay is not to treat short-term problems of economic management but "to take wings into the future" and to reveal his new intuitions regarding the course of the long-term evolution of British economy and society (Keynes [1931] 1963, p. 360). He begins by presenting a more detailed stage theory of history, which focuses almost exclusively on capital accumulation as the agent of social transformation. The first stage of history spans the period from 2,000 B.C. to 1,700 A.D. and is characterized by a stagnant standard of life for the average man dwelling in the centers of civilization due "to the remarkable absence of important technical improvements and to the failure of capital to accumulate" (Keynes [1931] 1963, p. 360). Keynes's intuition leads him to speculate that, during some epoch before the dawn of recorded history, "there must have been an era of progress and invention comparable to that in which we live today" (Keynes [1930] 1963, p. 361).

Following, then, what we might call the pre-historical and pre-modern eras is the third stage or "modern age." Keynes ([1930] 1963, p. 361) holds that the transition to the modern age was precipitated by "the accumulation of capital which began in the sixteenth century" with the influx of gold and silver from the Americas into Spain. Once begun, the process of capital accumulation begets its own continuous growth through the wondrous power of compound interest. Gone is Keynes's belief, expressed in the *Economic Consequences of the Peace*, that capital accumulation depends on psychologically unstable and irrational motives to save. The link between saving and investment is explicitly severed in the *Treatise* and Keynes is already halfway to the views of the *General Theory* that saving actually impedes the process of capital investment and destroys its fruits. Thus, in the latter work, saving is considered the enemy of social evolution and of the ethical good, to be shown no quarter and hounded unto death polemically.

For now, Keynes ([1931] 1963, p. 361) writes: "From that time [of the influx of the precious metals into Spain] until today the power of accumulation by compound interest, which seems to have been sleeping for many generations, was re-born and renewed its strength. And the power of compound interest over two hundred years is such as to stagger the imagination."

The modern age is also "the great age of science and technical inventions," the beginning of which Keynes ([1931] 1963, p. 363) dates from the sixteenth century and which has been "in full flood" since the start of the nineteenth century. Keynes estimates that a one-hundredfold increase of the capital stock combined with rapid technological advance have worked to raise the contemporary standard of life in Europe and the United States fourfold since the end of the pre-modern era. So rapid has been the advance of labor-saving technology in the decade of the 1920s in Europe, and especially in the United States, that it has unleashed a new economic affliction which Keynes ([1931] 1963, p. 364) labels "technological unemployment." Thus, for the Keynes ([1931] 1963, p. 364) of 1930, the contemporary employment situation is only "a temporary phase of maladjustment" and is, in fact, a welcome harbinger of the impending dawn of the millennium. According to Keynes ([1931] 1963, pp. 364–65), "All this means in the long run [is] *that mankind is solving its economic problem*. I would predict that the standard of life in progressive countries one hundred years hence will be between four and eight times as high as it is today."

For support of his assertion that scarcity is a transitory historical stage, rather than a fundamental and categorial precondition of human life and action, Keynes draws on the Marshallian classification of wants. He distinguishes between two classes of wants, which he designates as "absolute" and "relative" respectively. Wants of the second class, which are based on a desire to attain superiority over one's fellows, very well may be insatiable "for the higher the general level, the higher still are they" (Keynes [1931] 1963, p. 365). However, in the case of absolute wants, "a point may soon be reached, much sooner perhaps than we are all of us aware, when these needs are satisfied in the sense that we prefer to devote our further energies to non-economic purposes" (Keynes [1931] 1963, p. 365). With his typical gnosticism, Keynes ([1931] 1963, p. 366) then reveals to his readers that, assuming no significant wars or growth in population, the economic problem will be solved or "in sight of solution" within one hundred years and that, therefore, the economic problem is not "the permanent problem of the human race."

Echoing Marshall, Keynes ([1931] 1963, p. 367) characterizes the "real" and "permanent" problem confronting man as "how to use his freedom from pressing economic cares, how to occupy the leisure, which science and compound interest will have won for him, to live wisely and agreeably and well." In other words, the problem is one of adjusting human nature to the millennium, and, not surprisingly, it is a problem to which Moore's philosophy is the ready-made solution.

The problem stems from the fact that, from its very creation, humanity has been in a death match with scarcity and, thus, has been "expressly evolved by nature" to solve the economic problem. The impending solution of the latter problem therefore deprives humankind "of its traditional purpose." The consequence is that the "ordinary man" will be required to cast aside, within the space of a few decades, inbred habits and instincts that have served him for centuries (Keynes [1931] 1963, p. 366).

Failure to come to grips with this problem will result, according to Keynes ([1931] 1963, p. 366), in a "general 'nervous breakdown,'" quite like the condition afflicting the wives of the well-to-do in the United States and England of Keynes's time. In fact, it is these women who are humanity's vanguard in the millennium. It is they "who have been deprived by their wealth of their traditional tasks and occupations—who cannot find it sufficiently amusing, when deprived of the spur of economic necessity, to cook and clean and mend, yet are quite unable to find anything more amusing" (Keynes [1931]

1963, p. 367). In general, the wealthy are humanity's "advance guard" in the millennium, "who are spying out the promised land for the rest of us and pitching their camp there," and, for the most part, they have "failed disastrously . . . to solve the problem which has been set them" (Keynes [1931] 1963, p. 368).

Despite the failures of the vanguard, Keynes is confident that right thinking can serve as a guide in the millennial "age of leisure and of abundance," and he maps out the steps that must be taken in this direction. In general, his plan involves abandoning the long-accepted attitudes toward activities and morals that evolved in response to the economic problem and inculcating Moorite attitudes in their stead. In particular, attitudes toward work, money, purposefulness, and futurity must undergo radical transformation.

In the case of work, it is to be recognized as an activity which, in small doses, is necessary to human contentment or will be for ages to come. Keynes ([1931] 1963, p. 369) recommends that the work still to be performed in the millennium be spread very thinly so that everyone might content himself with a fifteen-hour work week carried out in three-hour shifts.

There must also be great changes in the code of morals. This is to be purged of the "pseudo-moral principles" which " have exalted some of the most distasteful of human qualities into the position of the highest virtues" but which were nonetheless necessary to foster the accumulation of capital (Keynes [1931] 1963, p. 269). For example, the desire to possess money, valueless and irrational in itself and finally rendered useless as a means, will be seen for what it is: according to Keynes ([1931] 1963, p. 369), "a somewhat disgusting morbidity, one of those semi-criminal, semi-pathological propensities which one hands over with a shudder to the specialists in mental disease." The same reappraisal will take place with regard to customs and practices involving the distribution of wealth and income, which while "distasteful and unjust in themselves," are "tremendously useful in promoting the accumulation of capital" (Keynes [1931] 1963, pp. 369–70).

Moreover, for Keynes, the individual's pursuit and accumulation of wealth is only a subspecies of purposive behavior. Such behavior, as Keynes recognizes, implies the logical and temporal separation of means and ends: all action employs means in the present and is aimed at achieving an end in the more or less remote future (Mises 1966, pp. 100–01). The elements of futurity and teleology inherent in purposive action, however, offend Keynes's Moorite notion of the good, involving as they do the sacrifice of immediate and direct experience of timeless, self-contained, and intrinsically valuable mental states. As Mises (1966, p. 100) points out, "[f]or contemplative meditation, time is only duration," with no distinction between present and future; it is purposeful action "that provides man with the notion of time and makes him aware of the flux of time. . . . [I]t is not recollection that conveys to man the categories of change and of time, but the will to improve the conditions of his life."

Thus, as Keynes also recognizes, the very notion of present and future is ineluctably bound up with purposiveness. From the insight that action is necessarily aimed at the future, however, Keynes ([1931] 1963, p. 370) incorrectly deduces a non-marginal or absolute preference to postpone present consumption *forever* into the future or, in the terminology of the later *General Theory*, a "propensity to save." This leads him to lash out at the seeming irrationality of purposeful activity:

> For purposiveness means that we are more concerned with the remote future results of our actions than with their own quality or their immediate effects on our own environment. The "purposive" man is always trying to secure a spurious and delusive immortality for his acts by pushing his interest in them forward into time. He does not love his cat but his cat's kittens; nor, in truth, the kittens, but only the kittens' kittens, and so on forward for ever to the end of cat-dom (Keynes ([1931] 1963, p. 370).

If Keynes had fully grasped the time preference theory of interest, he would have been aware that acting man does not demonstrate an *absolute* preference for future satisfactions (which, of course, implies forever postponing consumption in the present) but *discounts* future vis-à-vis present satisfactions. All other things equal, human beings, acting in isolation or on the market, will only save and invest resources in provision for the future, if such investment promises a level of future consumption that exceeds the sacrificed present consumption by an amount that overcomes their subjective time preferences. The rate of interest, then, is the catallactic reflection of the universal phenomenon of time preference.

At this point in time, however, Keynes construes capital as an independently productive factor, coordinate with land and labor and automatically generating an interest return (a view which he was to renounce in the *General Theory*). Keynes thus sees the phenomenon of compound interest, not as a categorial implication of action, but as simply another rationalization for the delusive future orientation of purposive action. For Keynes, interest serves to reinforce and reward an innate or evolved propensity to wealth accumulation present in human beings of the "modern age." This explains Keynes's strange and oblique reference to the Jews in the following terms: "Perhaps it is not an accident that the race which did the most to bring the promise of immortality into the heart and essence of our religions has also done the most for the principle of compound interest and particularly loves this most purposive of human institutions" (Keynes [1931] 1963, p. 371).

Once the burden of scarcity and the need for capital accumulation have been eliminated, the human race will at long last be free to return to what Keynes ([1931] 1963, p. 371) calls "some of the most sure and certain principles of religion and traditional virtue" as its guide in the millennium. Keynes ([1931] 1963, pp. 371–72) recites and extols these Moorite virtues, while condemning the vices associated with purposiveness, in terms worthy of the Sermon on the Mount:

> avarice is a vice, . . . the exaction of usury is a misdemeanor, and the love of money is detestable, . . . those walk most truly in the paths of virtue and sane wisdom who take least thought for the morrow. We shall once more value ends above means and prefer the good to the useful. We shall honor those who can teach us how to pluck the hour and the day virtuously and well, the delightful people who are capable of taking direct enjoyment in things, the lilies of the field who toil not, neither do they spin.

But, counsels Keynes ([1931] 1963, p. 372), a century yet must pass before such values can be embraced and, so, "[a]varice and usury and precaution must be our gods a little while longer." Even so, Keynes ([1931] 1963, p. 373) encourages "mild preparations for our destiny" in the form of experiments in "the arts of life" as well as in "the activities of purpose."

The Renunciation of Marshallian Orthodoxy

As the 1930s wore on and the world economic crisis deepened, however, Keynes began to doubt that capitalism as constituted could ever bring about the ripening of the modern age into the millennial. Beset by this growing doubt, Keynes was inspired to rethink the economics of capitalism and the implied State agenda as these were presented in the *Treatise on Money* in 1930. His exhortation—as expressed in his popular writings—to experiment in the "activities of purpose," i.e., in the institutions and organization of the economy, became more insistent.

As his thought evolved during this period, Keynes came increasingly to believe that the sins of "avarice, usury, and precaution" (which, in the language of the *General Theory*, became "liquidity preference, interest payments to the *rentier*, and saving"), not only were evil and had no use in the paradisiacal age of leisure and abundance, but were at the root of the economic instability and stagnation of the present age of economic scarcity and therefore must be expunged by the State. It was at this point that Keynes's intuition suggested the extension of the Moorite perspective from personal ethics and social philosophy to technical economics.

In fact, we already see this beginning to occur in the *Treatise*. Here, Keynes breaks the link between saving and investment, theorizing that investment and capital growth can occur without necessitating saving to an equal extent and, conversely, that saving can occur without generating equal investment, an insight which Keynes, under the influence of Dennis Robertson, incorporated into his thought as early as 1926 (Patinkin 1976, pp. 36, 46, 50, 124). However, while Robertson and the early Keynes argued that excess investment and excess saving were the consequences of and equal to bank credit expansion and contraction, respectively, the later Keynes explicitly and emphatically repudiates this view in controversy with Robertson and Hayek (Patinkin 1976, pp. 28, 30–31). From the later perspective of the *Treatise*, Keynes (1973, p. 251) argues that "[s]aving and investment can get out of gear without any change on the part of the banking system from 'neutrality' as defined by Dr. Hayek, merely as a result of the public changing their rate of saving or the entrepreneurs changing their rate of investment, *there being no automatic mechanism in the economic system to keep the two rates equal*" [Emphasis added].

Thus Keynes in the *Treatise* identifies saving-investment disequilibria as arising from within the capitalist economy itself, and therefore necessitating a Burkean State agendum to match decentralized decisions to save and to invest. Moreover, these disequilibria create instabilities in prices and output, causing what Keynes calls "credit cycles." Taking direct aim at the sinful "love of money as a possession," Keynes ([1930] 1958, pp. 2, 347) attributes such disequilibria to the increased "bearishness" of a public, which, in the grip of heightened uncertainty about the future, is suddenly possessed of an increased "propensity to hoard" savings deposits and forego ownership of securities. This irrational behavior drives the long-term rate of interest above its equilibrium level thereby driving down "the value and volume of new investment."

In fact, the *Treatise* was written with the primary purpose of setting out detailed State agenda for "the control of the rate of investment," and, therefore, of capital accumulation and the *pace* of the approach to the millennium. This is consistent with Keynes's statement at the end of "Economic Possibilities for Our Grandchildren" (Keynes [1931] 1963, p. 373) that "[t]he pace at which we can reach our destination of economic bliss will be governed" by, among other things, "the rate of accumulation as fixed by the margin between our production and our consumption."

Not surprisingly, as Patinkin (1976, pp. 125–26 6n) has pointed out, the *Treatise* is infected with a "magic-formula mentality." Surely someone who is blessed with knowledge of history's final goal can be presumed to have the formula for reaching that state. Thus, Keynes (1973, p. 354) himself refers to the *Treatise*'s "fundamental equations" of price-level determination as "my secret" to the explanation and, presumably, to the remedy of booms and slumps. The remedy Keynes advocates in the *Treatise* for disequilibrium between saving and investment is bank rate and Treasury bill policy. Especially during a slump, Keynes believed that central bank action designed to lower interest rates and spur investment must be complemented by international central bank cooperation or, if cooperation is either not forthcoming or not successful, supplemented by government borrowing for expenditures on public works (Patinkin 1982, pp. 205–07).

Patinkin (1976, p. 55) characterizes the development of Keynes's technical economic thought between the publication of the *Treatise* and the publication of the *General Theory* as progressing through three stages. These stages can be related to the progressive shattering of Keynes's Marshallian faith, under the impact of the Great Depression, in the efficacy of contemporary capitalism to maintain a rate of capital accumulation sufficiently high to see society through the transition to the millennium within a reasonable period of time, i.e., Keynes's prophesied one hundred years. In the face of his lapsing faith in the Marshallian orthodoxy, Keynes began to formulate a deliberately "heretical" economics which emphasized the Moorite value of radical present orientation in private and governmental spending decisions as the key to restarting and maintaining the engine of capital accumulation on the road to the age of leisure and abundance. Conversely, the new faith sought to "criminalize" saving, particularly the piling up of idle and barren money balances, and the taking of interest as the main impediments to capital accumulation.

In 1930, although he declared that the desire to possess money as an end in itself would be recognized as a "semi-pathological, semi-criminal propensity" in the coming age of abundance and leisure, Keynes did not dissent in the slightest from the orthodox Marshallian economic doctrine that such a propensity was necessary to the achievement of permanent victory over economic scarcity. However, by the time the *General Theory* was published in 1936, the moral crimes of "liquidity preference" and "the propensity to save" stood indicted by Keynes, the Moorite heretic, as the main obstructions on the road to the solution of the economic problem. In explicit opposition to

Marshall's belief that the constraint on capital accumulation is to be explained by "the preference which the great mass of humanity have for present over deferred gratifications," Keynes ([1936] 1964, p. 242), writing in the *General Theory*, propounded the doctrine that the paucity of accumulated capital "after several millennia of steady individual saving . . . is to be explained . . . neither by the improvident propensities of mankind, nor even by the destruction of war, but by the high liquidity-premiums formerly attaching to the ownership of land and now attaching to money."

Let us now examine the process by which, during the crucial period of 1930-36, Keynes transformed his technical economics by the infusion of Moorite insights. In the first stage of this transformation, (which by Patinkin's account lasted through 1931), Keynes was engaged in what Patinkin (1976, p. 55), borrowing Moggridge's terminology, calls the "arguing out of the *Treatise*." During this time Keynes continued to adhere to the technical economics and policy prescriptions of the *Treatise* and, on the broadly philosophical side, to his earlier belief that current institutional arrangements would continue to produce steady progress to the millennium. Nonetheless, toward the end of this period, Keynes waxed increasingly critical of the role of saving in perpetuating Britain's slump and was perfervid in his advocacy of a massive increase in public and private spending as the cure for the depression.

In an article published in January 1931, Keynes ([1931] 1963, pp. 152–54) declaimed against increased thrift and in favor of unleashing "the improvident propensities" of both consumers and government as a remedy for depression:

> The best guess I can make is whenever you save five shillings, you put a man out of work for a day. Your saving that five shillings adds to unemployment to the extent of one man for one day—and so on in proportion. On the other hand, whenever you buy goods you increase employment—though they must be British, home-produced goods if you are to increase employment in this country. . . .
>
> Therefore, oh patriotic housewives, sally out tomorrow early into the streets and go to the wonderful sales which are everywhere advertised. . . . Lay in a stock of household linen, of sheets and blankets to satisfy all your needs. And have the added joy that you are increasing employment, adding to the wealth of the country because you are setting on foot useful activities. . . .
>
> For what we need now is not to button up our waistcoats tight, but to be in a mood of expansion, of activity—to do things, to buy things, to make things. . . . Now is the time for municipalities to be busy and active with all kinds of sensible improvements. . . .
>
> Nationally, too, I should like to see schemes of greatness and

> magnificence designed and carried through. . . . For example, why not pull down the whole of South London from Westminster to Greenwich, and make a good job of it—housing on that convenient area near to their work a much greater population than at present, in far better buildings with all the conveniences of modern life, yet at the same time providing hundreds of acres of squares and avenues, parks and public spaces. . . . Would that employ men? Why, of course it would.

The great weight placed on current spending in the foregoing passage and the lack of reference to techniques of monetary policy in the balance of the article from which it is extracted represents a departure, at least in emphasis, from the agenda Keynes elaborated in the *Treatise* for righting a capitalist economy in a slump. Also, in this passage the view is clearly expressed—which is at the core of the technical economics of the *General Theory* and is not to be found in the *Treatise*—that, in depression conditions, spending *per se* is productive of income.

Despite all this, however, Keynes ([1931] 1963, pp. 155–56), at the end of the article, is at pains to demonstrate that labor productivity and national income are continuing to grow at a healthy clip. He concludes with a stirring reaffirmation of his Marshallian belief that the slump is evidence of an ongoing transition to the millennium:

> Be confident, therefore, that we are suffering from the growing pains of youth, not from the rheumatics of old age. We are failing to make full use of our opportunities, failing to find an outlet for the great increase in our productive powers and our productive energy. Therefore we must not draw in our horns; we must push them out. Activity and boldness and enterprise, both individually and nationally, must be the cure. (Keynes [1931] 1963, p. 156)

In a series of lectures presented in June 1931 and published the same year, it is evident that Keynes (1973, pp. 343–67) is still analyzing the depression from the philosophical perspective and using the theoretical apparatus of the *Treatise*. Thus, he draws attention to the worldwide investment boom which occurred in the lustrum 1925 to 1929, speculating that "[a] very few more quinquennia of equal activity might, indeed, have brought us near to the economic Eldorado where all our reasonable economic needs would be satisfied" (Keynes 1973, p. 348).

In a polemical swipe at supporters of the Mises-Hayek theory of the business cycle, represented in Great Britain by Lionel Robbins and other economists associated with the London School of Economics, Keynes (1973, p. 349) chastises those "austere and puritanical souls" who hold that the investment boom was inflationary and unsound and, therefore, requires a period of liquidation. For Keynes, any acquiescence in a period of "prolonged liquidation" of previous capital investments postpones or even reverses progress toward the millennium. The thing is to get the aborted investment boom restarted as quickly as possible. What is required, according to the "magic formula" of the *Treatise*, is to restore business confidence and profits via "a drastic fall in the long-term rate of interest" (Keynes 1973, p. 359).

Striking a Burkean note, Keynes (1973, p. 365) emphasizes that it is "the prime object of financial statesmanship" to insure that the long-term rate of interest is properly adjusted to "the technical possibilities of [the] age," so as to produce equality between the volume of savings and the demand for new capital. Failure to achieve such equality will not only produce cyclical fluctuations but runs the risk of throwing society off its long-run course to economic bliss.

Keynes (1973, p. 369) concludes:

> Thus we need to pay constant attention to the long-term rate of interest for fear that our vast resources may be running to waste through a failure to direct our savings into constructive uses and that this running to waste may interfere with that beneficent operation of compound interest which should, if everything was proceeding smoothly in a well-governed society, lead us within a few generations to the complete abolition of economic want.

It is thus clear that Keynes's vision of capitalism during the period of "arguing out the *Treatise*" was stili a fundamentally Marshallian one of a self-steering vehicle carrying humanity forward along the road to the millennium. Although this vehicle proceeded unsteadily in fits and starts, Keynes did not doubt that its direction on balance was forward and that it would eventually reach its destination. Extending the metaphor, what the vehicle lacked, according to Keynes, was not so much a pilot as a governor to steady and maximize its rate of speed in order to expedite its journey. In particular, saving and investment rates needed to be governed and equilibrated at the margin by means of continual political manipulations of the long-term interest rate.

As the world and Britain's economic crisis deepened, however, Keynes began to doubt the accuracy of this vision. The vehicle had stopped dead in its tracks and was even threatening to reverse its course. Capitalism had ceased to deliver the goods, now or in the future, as both consumption and investment shrank to drastically low levels. By 1932, Keynes entered into what Patinkin (1976, pp. 55, 61) calls "the formative stage of the *General Theory*." It was during this period that Keynes consciously set out to overturn the Marshallian orthodoxy and found a self-proclaimed heretical religion based on Moorite ethics.

In an unpublished two-page note, probably written in 1932, Keynes (1973, pp. 406–07) confesses his apostasy, at the same time revealing the central tenets of his new faith. First, he denies that the capitalist economy embodies "natural forces" which operate to restore output to its "optimum level" whenever it is disturbed. Second, Keynes) singles out "the strength of the forces in the community which tend toward saving" as the factor which causes real output to achieve an equilibrium at a level below the optimum. Contrary to the "orthodox theory," which emphasized "the importance of saving as the means of making a community wealthy," Keynes stresses the primacy of investment. He also denounces orthodox policy prescriptions, revealing that "it now seems to me that the economists, in their devotion to a theory of self-adjusting equilibrium, have been, on the whole, wrong in their practical advice and that the instincts of practical men have been, on the whole, sounder."

Keynes (1973, p. 407) also upholds certain policies favored by "uninstructed public opinion and the common sense of the business world" as "tending towards optimum output." These include: "Mercantilist and protectionist policies," which tend to foster foreign investment by improving the balance of trade; "Anti-usury laws and principles and cheap money policies," which reduce the rate of interest thereby spurring domestic investment; and "Expenditure as a thing in itself 'good for trade'" since it decreases saving in excess of investment. These "popular policies" are economically justified, declares, because, under modern capitalism, "it is a normal thing . . . for output to be below the optimum level."

Keynes concludes with the suggestion, which was to become a central insight of the *General Theory*, that an increment in investment will generate the saving necessary to finance itself. Writes Keynes (1973, p. 407): "Thus so far from its being true that, if we look after saving, output and investment will look after themselves, the opposite is more nearly true, namely that, if we look after investment, output and saving will look after themselves. For it is frequently the case in practice that a deliberate increase in saving will diminish investment and hence output . . . while a deliberate increase in investment will increase output and hence saving."

Now, it is true that in 1932, Keynes had not yet elaborated the theoretical structure to properly house these insights. As Patinkin (1973, p. 72) says of this among, other fragments of Keynes's writings in 1932, "[t]he voice is that of the *General Theory*: but the analytical framework is still largely that of the *Treatise*." And, it might be added, the voice is clearly calling for economic salvation through renunciation of the sin of saving. For Keynes, at long last, the precepts of economic rationality have become one with those of virtuous behavior. Virtue receives its reward in this age as well as in the next, after all; and one can have one's economic pie in the millennium and still consume it in the here and now.

In 1933, Keynes published an article entitled "National Self-Sufficiency," whose significance has been downplayed by his followers. Generally, if it is alluded to at all, it is treated as a temporary deviation by Keynes from his internationalist principles in a desperate and ill-advised search for an expedient to alleviate domestic unemployment (Harrod 1951, p. 446; Harris 1955, pp. 186–87; Harris ([1947] 1973, pp. 319–22). One of the few to grasp its true import was the neglected international monetary economist Michael A. Heilperin (1962, pp. 111, 116), who referred to the article "for all its brevity, as one of Keynes's most significant writings" and as representing "far more than a passing mood."

Indeed, the article represents much more than Keynes's profession of disbelief—spewed forth in desperation and soon to be retracted—in the classical arguments in favor of free trade and the international division of labor. When considered in the context of the development of his *Weltanschauung*, it is nothing short of Keynes's public declaration of a loss of faith in the ability of capitalism ever to solve the problem of scarcity and deliver society to the promised land. Accordingly, the article also sends forth a clarion call for experimentation with alternative economic institutions and arrangements.

Until this point, Keynes had been unwavering in his view that, despite its intrinsic viciousness, capitalism was tolerable and even indispensable as the means to a future age of abundance in which virtue could be cultivated in comfort and leisure. In this article, Keynes signals a radical departure from this view, arguing now that capitalism is intolerable because it is unable to deliver humanity from scarcity and that it is precisely its lapses from virtue that prevent it from doing so.

Thus Keynes (1933, pp. 760–61) declares that "[t]he decadent international but individualistic capitalism . . . is not a success. It is not intelligent, it is not beautiful, it is not just, it is not virtuous—and it doesn't deliver the goods. In short, we dislike it, and we are beginning to despise it." However, Keynes does confess to perplexity about what to put in its place, while noting that "the world is embarking on a variety of politico-economic experiments." Russia, Germany, Italy and other countries are or will be seeking "after new economic gods." Keynes (1933, p. 761) expects "many mistakes" to be made in these bold experiments in Bolshevism, Nazism, and Fascism, but "[n]o one can tell which of the new systems will prove itself best."

As Heilperin (1962, p. 114 30n) has pertinently remarked on this passage, "[t]he fact that the 'new economic gods' of Russia, Italy and Germany were totalitarian despotic gods, destructive of human dignity and human rights did not, it seems, appear worthy of note. They were experimenting—that was the wonderful thing about it!" Heilperin's judgment on the implications of Keynes's unbounded zeal for politico-economic experimentation is certainly borne out by Keynes's own revelation in the article that he is "one whose heart is friendly and sympathetic to the desperate experiments of the contemporary world, who wishes them well and would like them to succeed, who has his own experiments in view, and who in the last resort prefers anything on earth to what the financial reports are wont to call 'the best opinion in Wall Street'" (Keynes 1933, p. 766).

Keynes's almost exclusive concern at this point is that capitalism be gotten rid of, so that the world will be free to experiment. What replaces it depends on one's "own fancy." In Keynes's millennialist terminology, "[n]ot believing that we are saved already, we each should like to have a try at working out our own salvation. We do not wish, therefore, to be at the mercy of world forces working out, or trying to work out, some uniform equilibrium according to the ideal principles, if they can be called such, of *laissez-faire* capitalism." Accordingly, Keynes proclaims the dawning of a "transitional, experimental phase" during which "we all need to be as free as possible of interference from economic changes elsewhere, in order to make our own favorite experiments toward the ideal social republic of the future."

While Keynes's "favorite experiment," at least in its economic aspect, must await full elaboration in the *General Theory*, he does offer suggestive hints in this article. In particular, although he favors "retaining as much private judgment and initiative and enterprise as possible," Keynes (1933, p. 762) reveals that he has "become convinced that the retention of the structure of private enterprise is incompatible with that degree of material well-being to which our technical advancement entitles us, unless the rate of interest falls to a much lower figure than is likely to come about by natural forces operating on the old lines. Indeed, the transformation of society, which I preferably envision, may require a reduction in the rate of interest towards vanishing point within the next thirty years." Economic internationalism, by which Keynes means not only the free movement of goods but especially a structure of interest rates determined on a globally integrated capital market, is thus emphatically rejected by Keynes (1933, p. 763), because it "may condemn my own country for a generation to come to a much lower degree of material prosperity than could be attained under a different system."

The conventional view, therefore, is doubly wrong in contending that, for Keynes, economic autarky represented a temporary expedient for palliating a desperate employment situation in Great Britain. To the contrary, Keynes's overriding concern, as expressed in the last paragraph, is not with "full employment" *per se*, but with what he later refers to as "full investment"; and "greater national self-sufficiency and a planned domestic economy" (Keynes 1933, p. 767) is proposed as a necessary and *permanent* framework for an economic experiment—here only alluded to but fully developed in the *General Theory* (Keynes [1936] 1964, especially chapters 16 and 24)—in which the interest rate is reduced to zero and underinvestment and artificial capital scarcity forever banished from the British Isles.

The long-accepted belief that, in writing the *General Theory*, Keynes was seeking to provide a blueprint for "saving capitalism" from its own instability is thus anachronistic at best. In fact, while this was indeed Keynes's objective in contriving the "magic formulas" of the *Treatise*, he abandoned it after 1931 and certainly by the time he came to plump for indiscriminate politico-economic experimentation and national self-sufficiency in 1933. With respect to capitalism, then, the Keynes of the *General Theory* is not a savior in any sense but a vengeful angel come at last to destroy what is immoral and unaesthetic because it has finally proven useless.

Near the end of his article on "National Self-Sufficiency," as if to accentuate the radical and irreversible nature of the "reorientation" of his mind, Keynes (1933, pp. 763–65) undertakes what can only be characterized as a diatribe against capitalist society and culture which is as remarkable for its candor as it is for its unrestrained vituperativeness. In this, Keynes recognizes and seizes upon economic calculation in the form of financial accounting as the intellectual foundation of market economy and the calculating mind as the consummate product of social evolution under capitalism. Thus, he contends that consistently judging action by the criterion of "the financial results" transformed the conduct of life in the nineteenth century "into a sort of parody of an accountant's nightmare" (Keynes 1933, p. 763).

Keynes rails against economic calculation because it represents an artificial constraint on the current use of resources, which is imposed by the illusory notion of futurity inherent in purposive action and, thereby, obstructs the living of a bountiful and cultured life in the present. Thus Keynes (1933, pp. 763–64) declares that:

> Instead of using their vastly increased material and technical resources to build a wonder city, the men of the nineteenth century built slums; and they thought it right and advisable to build slums because slums, on the test of private enterprise, "paid," whereas the wonder city would, they thought, have been an act of foolish extravagance, which would, in the imbecile idiom of the financial fashion, have "mortgaged the future"—though how the construction today of great and glorious works can impoverish the future, no man can see until his mind is beset by false analogies from an irrelevant accountancy. . . . For the minds of this generation are still so beclouded by bogus calculations that they distrust conclusions which should be obvious. . . . We have to remain poor because it does not "pay" to be rich. We have to live in "hovels," not because we cannot build palaces but because we cannot "afford" them.

But once one has "reoriented" his mind to an economics imbued by the ethical verities, as Keynes has already done by this time, he is enabled to pierce through the intellectual fog created by economic calculation and perceive clearly that the active pursuit of virtues and values in the present calls forth and multiplies the bounty of resources necessary to their attainment. In the technical language of the *General Theory*, financing considerations are never a constraint on private (or public) investment, because investment creates the saving needed to finance it and raises present income and consumption into the bargain. As Keynes (1933, p. 764) expresses it here: "If I had the power to-day, I should most deliberately set out to endow our capital cities with all the appurtenances of art and civilization on the highest standards of which the citizens of each were individually capable, convinced of what I could create, I could afford. . . ."

Keynes is especially averse to the "rule of self-destructive financial calculation," when it justifies, for example, through the promotion of free trade, the eradication of activities whose unquantifiable intrinsic value can find no entry into such calculation. Writes Keynes (1933, p. 764): "we have until recently conceived it a moral duty to ruin the tillers of the soil and to destroy the age-long human traditions attendant on husbandry, if we could get a loaf of bread thereby a tenth of a penny cheaper." Such present sacrifices in the name of economic calculation, "this Moloch and Mammon in one," according to Keynes (1933, pp. 764–65), have been carried out with equanimity because of a delusive concern for the future, "for we faithfully believed that the worship of these monsters would overcome the evil of poverty and lead the next generation safely and comfortably, on the back of compound interest, into economic peace."

For Keynes (1933, p. 765), the tragedy of adherence to the old doctrines does not lie in the absolute reduction of the British "standard of life," which, even in 1933, is at a higher level than ever before. It lies mainly in the fact that sacrifices of ethical values and modes of living have been made and made wholly in vain, because capitalism has been unable "to exploit to the utmost the possibilities for economic wealth afforded by the progress of . . . technique." The implication, of course, is the principle of the multiplier by which it is held that, under the normal operation of capitalism, the present "standard of life" need never be diminished and is indeed enhanced by an act of investment, which is aimed at fructifying the future and advancing society closer to the millennium.

Keynes (1933, p. 765) is thus able to conclude that "once we allow ourselves to be disobedient to the test of an accountant's profit, we have begun to change our civilization." This, of course, is tantamount to the call for the progressive socialization of investment, since the State is the only organization, with its almost unlimited power to appropriate scarce resources via taxation and monetary inflation, that is unconstrained by the criterion of economic calculation. This is realized by Keynes (1933, p. 765), who writes that "[i]t is the state, rather than the individual, which needs to change its criterion. . . . Now if the functions and purposes of the state are to be thus enlarged, the decisions as to what, broadly speaking, shall be produced within the nation and what shall be exchanged with abroad, must stand high among the objects of policy."

Keynes's article on "National Self-Sufficiency" thus presents the core of what Patinkin (1976, p. 95) labels the "antivision" of the *General Theory*. This is the "rejection of the traditional view that there existed in the capitalist world an automatic, self-adjusting mechanism that could be relied upon to maintain an acceptable state of employment" and, I would add, investment. In fact, for Keynes, the attainment of full-employment levels of income and consumption is the consequence of and the present reward for expediting progress to the future state of bliss by deliberately optimizing the rate of investment.

In a radio address on "Poverty in Plenty: Is the Economic System Self-Adjusting?" delivered in 1934, Keynes (1973, p. 488) explicitly ranges himself with "the heretics" who would "demolish the forces of nineteenth-century orthodoxy." Bringing his antivision to bear, Keynes argues that the orthodox or "self-adjusting" school assumes that "the rate of interest adjusts itself more or less automatically, so as to encourage just the right amount of production of capital goods to keep our incomes at the maximum level which our energies and our organization and our knowledge of how to produce efficiently are capable of providing. This is, however, pure assumption."

Thus it is the failure of capitalism to provide the optimum level of investment spending, or, what is the same thing for Keynes, the maximum rate of progress toward the millennium (given prevailing consumption habits) which is the root cause of its technical inadequacy. For Keynes (1973, p. 491) the solution is straightforward and closed to all doubt: "The right course is to get rid of the scarcity of capital goods—which will rid us at the same time of most of the evils of capitalism—whilst also moving in the direction of increasing the share of income falling to those whose economic welfare will gain most by their having the chance to consume more." Of course, the solution will not emerge spontaneously from the operation of the capitalist system and must be imposed from without by the State, because "[t]he system is not self-adjusting, and, without purposive direction, it is incapable of translating our actual poverty into our potential plenty."

The positive vision of the *General Theory*, then, emerges out of Keynes's deliberate use of Moorite philosophical insights and doctrines to revolutionize the analytical apparatus of Marshallian economic theory in order to provide an explanation of the capitalist economic process that elucidates the causes and consequences of its failure to achieve adjustment at an employment- and investment-maximizing level of output. According to research by Patinkin (1976, pp. 55, 73), the analytical structure of the *General Theory* was completed by mid-1934, and, in the third and final stage of its preparation lasting through 1935, Keynes was engaged in eliciting detailed criticisms of the galley proofs of the book.

As identified by Keynes himself (Patinkin 1976, p. 66), the analytical components the development of which mark entry into the third stage of transition to the *General Theory* consist in the theory of effective demand, the theory of liquidity preference, and the concept of the marginal efficiency of capital. To these three, I would add the generally overlooked scarcity theory of capital, which Keynes adumbrated in the *General Theory* only partly in response to Hayek's stinging criticism of the *Treatise on Money* for lacking reference to a "clear and definite theory of capital" (Hayek 1931, p. 278). Taken together, these four components form a powerful analytical apparatus that permits Keynes to weave a vision in which the sins of futurity and calculation—which characterize purposive action under capitalism—prove also to be irrational, self-defeating, and socially retrogressive. In particular, according to Keynes, attempts by individuals to make monetary and financial provision for the future cause humanity to be less well-provided for in the present and the future.

The *General Theory* as Millennialist Economics

Let me broadly indicate the millennialist ethical orientation of the technical economic analysis of the *General Theory*.

The theory of effective demand transmutes Keynes's Moorite emphasis on present activities and states of being from a recipe for individual salvation into the true path to the social millennium. Thus, according to Keynes, present employment and income is determined strictly by effective demand which, with the technical conditions of production assumed constant, depends solely upon aggregate spending for consumption and investment activities. While it is evident that consumption is a present activity, investment, as defined by Keynes ([1936] 1964, pp. 62, 104), denotes "the current addition to the value of the capital equipment which has resulted from the productive activity of the period" and therefore involves "present provision for future consumption."

Saving, on the other hand, is defined not in terms of activity but as the passive "residual or margin" between aggregate income and consumption (Keynes [1936] 1964, p. 64). As such, saving in the aggregate cannot be determined independently of the set of decisions relating to consumption and investment (Keynes [1936] 1964, p. 65). In the words of Abba Lerner (1983, p. 394): "With *S* thus almost completely sterilized (as nothing but the conceptual arithmetic difference between actual income and actual consumption) it became easier to concentrate on analyzing only the actual constituents of income and sources of employment, *C* and *I*."

With consumption rigidly determined by the propensity to consume—according to Keynes ([1936] 1964, pp. 96–97), a "fairly stable function" and one of the " more permanent psychological propensities"—investment spending becomes the sole factor determining levels of present as well as of future income and consumption. Hence "employment can only increase *pari passu* with an increase in investment; unless, indeed there is a change in the propensity to consume" (Keynes [1936] 1964, p. 98). Nor does an increase in investment require an antecedent increase in saving because, according to "the fundamental psychological law" governing the marginal propensity to consume, an increment to social income always calls forth a positive but less than equal increment to consumption. Thus, as income increase, it induces an automatic increase in saving in the form of an expansion of the absolute size of the gap between income and consumption. The multiplier sums up the process by which, with a given marginal propensity to consume, an increase of investment results in a rise in the level of income sufficient to generate the additional saving necessary to finance itself.

From Keynes's ethical standpoint, the multiplier apparatus is a masterstroke because it permits him to argue that investment promotes higher standards of income and consumption in the present as well as in the future. The all-important growth in society's capital stock is no longer dependent on the semi-pathological, semi-criminal, and, in any event, unethical propensity to abstain from present enjoyments in order to provide for a chimerical and ever-receding future. The ethical maxim of the Sermon on the Mount is thus transformed into the eminently practicable policy prescription of rational economics: those who would be well cared for, in the present and in the future, are those who do not trouble themselves overmuch about provision for the future.

But Keynes is not satisfied merely with demonstrating that individual efforts to provide for the future by financial accumulation are superfluous to the process by which social income and capital are created; he seeks to portray private saving as self-defeating and socially destructive. Here, again, the concepts of effective demand and the multiplier are ready at hand. Any attempt by an individual to increase saving by accelerating the rate at which he "pile[s] up claims to enjoyment which he does not intend to exercise at any definite time" (Keynes [1936] 1964, p. 131), *ipso facto*, lowers the propensity to consume and causes a slackening of effective demand. The result is a destruction of social income whose size is a determinate multiple of the original reduction in consumption.

However, the social ravages of vicious and irrational precaution do not end with reductions in the current income level; the greater enormity lies in its retardation of the growth of the capital stock, resulting from the circumstance that estimates of the prospective yield rate or marginal efficiency of capital partly depend on "the strength of the existing consumers' demand for goods that require for their efficient production a relatively larger assistance from capital" (Keynes [1936] 1964, p. 147). For Keynes ([1936] 1964, p. 106), therefore, "every weakening in the propensity to consume regarded as a permanent habit must weaken the demand for capital as well as the demand for consumption." Thus, a decline in investment due to a weakening propensity to consume reduces potential future income and living standards at the same time that it aggravates the declines in current levels of effective demand, income, and consumption.

The ultimate and cruel irony, of course, is that the individual's attempt to increase saving is incapable of generating a realized increase of saving in the aggregate and, in fact, serves to reduce aggregate realized saving, since the margin between income and consumption, as determined by the marginal propensity to consume, necessarily narrows as the level of income decreases. As Keynes ([1936] 1964, p. 65) puts it, "A decision to consume or not to consume truly lies within the power of the individual; so does a decision to invest or not to invest." But aggregate saving is merely one of the "*results* of the free choices of individuals whether or not to consume and whether or not to invest. . . ."

Based on his economic analysis of saving as a self-frustrating and socially deleterious activity, Keynes ([1936] 1964, p. 161) contemplates, as "the only radical cure" for economic crises, that saving be outlawed, that is, that the individual be allowed "no choice" between spending his income on consumption or investment in a "specific capital asset" and saving it in the form of cash hoards or debt purchases. As we shall see, however, Keynes ultimately opts for an alternative set of policies involving the socialization of investment and the euthanasia of the rentier via the reduction of the rate of interest to zero.

This brings us to the marginal efficiency of capital (MEC), which Keynes defines as the prospective rate of return on an increment of monetary investment in the current production of capital goods. For Keynes ([1936] 1964, p. 145), the MEC schedule "is of fundamental importance because it is mainly through this factor (much more than through the rate of interest) that the expectation of the future influences the present." In this passage, the parenthetical remark about the rate of interest underscores Keynes's determination to maintain a rigid analytical distinction between the concepts of the MEC and the rate of interest. Indeed, Keynes ([1936] 1964, pp. 192–93) devotes a special excursus to refuting those Austrian-Wicksellian interest theorists, such as Mises, Hayek, and the early Alvin Hansen, who identify the basic rate of interest with the rate of price differentials between the products of successive stages of the structure of production. These writers, as well as Keynes of the *Treatise* (Keynes [1936] 1964, pp. 173–74), stand accused of "confusing the marginal efficiency of capital with the rate of interest."

The apparent eagerness with which Keynes seeks to disentangle the two concepts can be explained by their different standings in terms of his ethical thought. The MEC represents a return to a current and productive activity, investment, which is legitimately, even nobly, future-oriented. In Keynes's words, "[t]he social object of skilled investment should be to defeat the dark forces of time and ignorance which envelope our future" (Keynes [1936] 1964, p. 155). The rate of interest, in contrast, is a sop to avarice, a "bribe" paid to the nonproductive saver to induce him to part with liquidity, an irrational and nugatory provision for the future.

For Keynes, the all-important task of estimating the prospective rate of return on newly-produced capital equipment is apt to be badly done under capitalism, because open markets and monetary calculation tend to promote irrational expectations of the more remote future. Keynes's argument runs briefly as follows: The knowledge which governs our expectations of the outcome of a long-term investment rests on an extremely precarious basis at best and "is usually very slight and often negligible" (Keynes [1936] 1964, p. 149). Thus, were it not for the fact that human beings take direct pleasure in the riskiness and activity of constructing factories and farms, not much investment would be undertaken "merely as a result of cold calculation" (Keynes [1936] 1964, p. 150). However, under modern capitalism, it is precisely considerations of cold calculation which predominate in investment decisions, because the irrational striving for liquidity has led to the emergence of the stock exchange, an organized market on which investments may be resold and revalued on a daily or even hourly basis.

The result is that most investments come to be "governed by the average expectation of those who deal on the stock exchange as revealed in the price of shares, rather than by the genuine expectations of the professional entrepreneur." Hence, for example, if an existing investment can be had on the stock market at a purchase price below the cost of constructing a new investment of a similar type, this class of investment will be discouraged regardless of its prospective yield. Moreover, the average investor, because his knowledge of the factors governing the prospective yield of the various investment opportunities is virtually nil, bases his decisions on an "arbitrary convention," according to which it is assumed that the existing market valuation of the investment reflects the existing knowledge of the facts which determine its yield and is therefore "uniquely correct" (Keynes [1936] 1964, pp. 152–53). A change in the investment's market value will only occur, therefore, as a result of the (presumably slow and orderly) revision of knowledge as new and relevant facts come to light.

However, such "conventional valuation," in actuality, is not based on genuine, if incomplete, knowledge of the future laboriously accumulated by the experts, but on the "state of confidence" of the mass of ignorant investors, which reflects their vague, uninformed, and mercurial doubts, fears, and hopes. Any change in the state of confidence, whether or not in reaction to events reasonably expected to effect long-term investment prospects, brings about a dissolution of the existing conventional valuation and the emergence of a new one. As a consequence, investment markets are inherently volatile and, therefore, divert "the energies and skill of the professional investor and speculator" from attempting to forecast the long-term prospective yield of an investment to contriving to beat the mass of investors in foreseeing and profiting from short-term changes in the conventional basis of valuing stocks (Keynes [1936] 1964, p. 154).

For Keynes ([1936] 1964, p. 153), then, it is ultimately perfidious calculation and irrational convention that account for the "problem of securing sufficient investment." As noted above, both calculation and convention represent serious departures from the ethical code Keynes supposes will prevail in the millennium. The absorption of one's skill and energy in the service of monetary calculation is the very negation of the Moorite notion of the ideal life as the enjoyment of a sequence of good states of mind. The reason is that money, as Keynes ([1931] 1963, p. 356) characterized it, is "the grand substitute motive, the perfect *Ersatz*, the anodyne for those who, in fact, want nothing at all."

Regarding the ethics of relying upon convention as a guide to action in the face of an uncertain future, which was a position espoused by Moore himself, the theory of probability propounded by Keynes in the *Treatise on Probability* implies that such a reliance is irrational, and therefore counterproductive, as a means to attaining the good. As pointed out above, in Keynes's approach to probability, a probability exists in favor of an action as long as the balance of existing evidence, however slight or precarious such evidence is, suggests that it is the most productive of desirable results. Applied to the case of a long-term investment, therefore, although knowledge of the factors affecting the success of its outcome is bound to be precarious, the probability of its success can always be rationally determined as an ordinal ranking in a hierarchy of alternative investment projects.[1] Even where evidence concerning the long-term results of alternative actions or investments is completely absent, as is

[1]The reference to ordinal ranking of probabilities in this case illustrates Keynes's skepticism toward cardinal estimates of probability which is based on his general reluctance to conceive the theory of probability as synonymous with the theory of statistical frequency (Keynes [1921] 1962, esp. chap. 8). I am indebted to an anonymous referee for raising this point.

sometimes bound to be the case, if there is evidence that one will yield greater advantages in the near future than the others, then, according to Keynes ([1921] 1962, p. 310), "by what seems a legitimate application of the Principle of Indifference we may suppose that there is a probability in favor of the former action."

Keynes's opposition to the conventional valuation of investments alleged to occur in the stock market therefore derives ultimately from a deep-seated ethical belief that, in its recourse to convention, humanity abandons rationality and succumbs to "the dark forces of time and ignorance." In organized investment markets, the abandonment of rationality is reflected in the fact that, since conventional valuation is unrelated to long-term yield considerations and rests on no objective foundation at all, continual and wholesale fluctuations in the state of confidence of investors result from random events. These fluctuations provide lucrative opportunities for "speculation," which divert the professional investors away from the activity of "enterprise" or the task of reasonable estimation of long-term yield prospects. The consequence of such recurrent bouts of over-optimism followed by crises of confidence is the collapse in the MEC, which precipitates the dreaded trade cycle (Keynes [1936] 1964, pp. 315–16).

The existence of the trade cycle thus bespeaks a moral as well as an economic failing of financial capitalism, since it is attributable to "the uncontrollable and disobedient psychology of the business world" (Keynes [1936] 1964, p. 317). Regarding the activity of speculation, which feeds on and profits from such "disobedience"—presumably, to the conclusions of his laboriously elaborated probability theory—Keynes ([1936] 1964, p. 359) draws an explicit connection between its degraded moral quality and its pernicious social consequences: "When the capital development of a country becomes a byproduct of the activities of a casino, the job is likely to be ill-done."

By extending the nexus of monetary calculation to include second-hand investments, organized financial markets thus promote the sins of convention and speculation and suppress capital accumulation. These markets further dampen the rate of investment by increasing its risk. By facilitating the differentiation of the saver-lender from the entrepreneur-borrower, the existence of financial markets requires that, before it may be undertaken, a risky investment promise a return that is sufficient to yield, in addition to the pure rate of interest plus a premium for the borrower's or entrepreneur's risk, compensation for "lender's risk." Unlike the entrepreneurial risk premium, the premium accounting for lender's risk is not "a real social cost" which may be diminished by increased skill in forecasting, but "is a pure addition to the cost of investment which would not exist if the borrower and lender were the same person" (Keynes [1936] 1964, p. 144). Moreover, the lender's risk component includes and duplicates a part of the entrepreneur's risk component, because the lender as well as the borrower require a greater premium before committing funds to riskier investments (Keynes [1936] 1964, p. 145).

Keynes ([1936] 1964, p. 164) sees only two remedies for the distorted and volatile MEC schedule and the continually fluctuating and, on average, chronically insufficient level of investment which result from convention, speculation, and the unnecessary and wasteful duplication of risk. The first involves the implementation of a monetary policy designed to manage interest rates in such a way as to elicit continuously the "appropriate volume of investment." But Keynes confesses skepticism toward this alternative. The second, and Keynes's preferred remedy, is to extirpate the root cause of the problem by forthrightly abolishing markets and monetary calculation for investment, i.e., by socializing investment. Writes Keynes ([1936] 1964, p. 164):

> I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage, taking an ever greater responsibility for directly organizing investment; since it seems likely that the fluctuations in the market estimation of the marginal efficiency of different types of capital . . . will be too great to be offset by any practicable changes in the rate of interest.

Given his analysis of the MEC, Keynes ([1936] 1964, p. 378) must be taken very seriously when he concludes that "a somewhat comprehensive socialization of investment will prove the only means of securing an approximation to full employment." This is in contrast to the conventional view, as expressed, for example, by Alvin Hansen (1953, pp. 215–16), which portrays Keynes as advocating short-run fiscal fine-tuning, at the same time discounting lengthy discussions of socialization of investment and the attainment of capital saturation as examples of Keynes allowing "his fancy to roam in an irresponsible manner," "flying his kite," and engaging in "fascinating flights of fancy."

Indeed, it has been definitively established by Meltzer (1988, p. 182), that in the *General Theory* "Keynes's main policy recommendation is for public direction of investment" and "Keynes believed that his main recommendations were policy implications drawn from his theory." Moreover, as Meltzer (1988, p. 295) also shows, Keynes did not originate the basic concept of fiscal fine-tuning or functional finance but learned it from Abba Lerner. After initially rejecting Lerner's ideas, Keynes intellectually accepted and praised them, but never gave any indication that "he accepted functional finance as a basis for policy." Accordingly, in his wartime memos on post-war reconstruction, Keynes "favored policies to stabilize investment and opposed policies to increase consumption on grounds . . . [that] income can be raised permanently by increasing and stabilizing investment" (Meltzer 1988, p. 186).

We now turn to the liquidity preference theory of interest, which may be characterized as the keystone of Keynes's analytical structure. With the interest rate determined solely by the interaction of the liquidity preference function and the quantity of money, rather than by the supply and demand for saving as in the classical theory, the progressive social force of capital accumulation is, at long last, rendered logically and wholly independent of the sin of saving. In the process, the activity of saving is thoroughly criminalized and deprived of its last shred of redeeming social advantage. No longer is an increase in the rate of saving seen as operating to lower interest rates and thereby to induce the additional spending on investment necessary to offset the negative effect on income of the concomitant decline in the rate of consumption expenditure. To the contrary, the attempted allocation of savings to the accumulation of additional cash balances to satisfy heightened preferences for liquidity actually *raises* the interest rate and reduces investment.

In a nutshell, the theory of liquidity preference tells the story of how the interest rate develops as a purely monetary phenomenon, which is rooted in avarice and precaution and determined on a superfluous market ruled by convention and speculation. Once determined, the interest rate confronts an irrationally determined MEC in an arbitrary monetary calculation that serves only to limit investment and to burden society with an artificial scarcity of capital goods.

In explicating his theory, Keynes begins by bifurcating the decisionmaking process which expresses the individual's "psychological time preferences." In the initial stage of the process, the propensity to consume determines what proportion of his current income the individual will consume and what proportion "he will reserve in *some* form of command over future consumption." Once this decision has been made, the individual's liquidity preference dictates how much of his current stock of savings, which includes savings accumulated from past income flows, he holds in the form of money, which yields "immediate liquid command," and how much he invests in debt, which represents "deferred command over specific goods" convertible into money only at an uncertain future market price.

From this *ad hoc* and contrived description of the process by which an individual allocates his monetary assets, Keynes ([1936]

1964, pp. 166–67) deduces that "the rate of interest cannot be a return to saving or waiting as such. For if a man hoards his savings in cash, he earns no interest, though he saves just as much as before. . . . Thus the rate of interest at any time, being the reward for parting with liquidity, is a measure of the unwillingness of those who possess money to part with their liquid control over it."

But why does such a thing as liquidity preference exist, especially when it is considered that the holding of money yields no explicit return? The first reason that Keynes ([1936] 1964, p. 168) gives involves the "transactions motive": the current transaction of business by consumers and producers requires a ready supply of cash and, in a world in which the individual's income receipts and disbursements are not synchronized, this entails that "up to a certain point it is worthwhile to sacrifice a certain amount of interest for the convenience of liquidity."

Two additional factors, unrelated to anticipated transactions, motivate a preference for liquidity: precaution and speculation. According to Keynes ([1936] 1964, p. 168), the necessary precondition of both the precautionary and speculative motives for holding cash "is the existence of uncertainty as to the future of the rate of interest. . . ." The precautionary motive explains the compensation for the sacrifice of interest by the insurance which the possession of liquid wealth provides against the capital loss that may be incurred when an unforeseen need for cash necessitates a hasty liquidation of debt securities. The speculative motive for cashholding emerges in an economy where, in addition to interest-rate uncertainty, there exists "an organized market for dealing in debts," e.g., a bond market (Keynes [1936] 1964, p. 169). Thus the individual "who believes that future rates of interest will be above the rates assumed by the market, has a reason for keeping actual liquid cash" (Keynes [1936] 1964, p. 170).

While liquidity preferences due to the transactions and precautionary motives are assumed by Keynes to depend on income and to be insensitive to fluctuations in the current rate of interest, the demand for liquidity for speculative purposes, where there exists a divergence of expectations among speculators regarding the future, is portrayed as varying inversely with the rate of interest. Thus, concludes Keynes ([1936] 1964, p. 171), "the rate of interest and the price of bonds have to be fixed at the level at which the desire on the part of certain individuals to hold cash (because at that level they feel bearish of the future of bonds) is exactly equal to the amount of cash available for the speculative-motive." Particularly where "the existence of an organized market gives an opportunity for wide fluctuations in liquidity preference due to the speculative motive" (Keynes [1936] 1964, pp. 170–71), changes in the interest rate in a capitalist economy reflect nothing more significant than the irrational migrations of speculators to and fro between the herds of bulls and bears.

From this analysis, Keynes ([1936] 1964, p. 203) is led to conclude that "the rate of interest is a highly conventional . . . phenomenon. For its actual value is largely governed by the prevailing view as to what its value is expected to be. *Any* level of interest which is accepted with sufficient conviction as *likely* to be durable *will* be durable. . . ." Moreover, where the opinion prevails that "the level of the rate of interest is self-adjusting, so that the level established by convention is thought to be rooted in objective grounds much stronger than convention," the interest rate may persist at a level that is too high for full employment. Keynes ([1936] 1964, p. 204) refers to "[t]he difficulties in the way of maintaining effective demand at a level high enough to provide full employment, which ensue from the association of a conventional and fairly stable long-term rate of interest with a fickle and highly unstable marginal efficiency of capital. . . ."

Even if an enlightened monetary authority were determined to drive the gross market rate of interest down in order to create a gap between the MEC and the interest rate sufficiently large to call forth a full-employment or "optimum" level of investment spending, its efforts in this direction would be limited by two factors. First, there is what has come to be termed the "liquidity trap," which raises the possibility that "after the interest rate has fallen to a certain level, liquidity preference may become absolute in the sense that almost everyone prefers cash to holding a debt which yields so low a rate of interest" (Keynes [1936] 1964, p. 207).

While a good case can be made that many commentators on the *General Theory* have routinely misinterpreted and overemphasized the theoretical and practical significance which Keynes attaches to the liquidity trap (Meltzer 1988, pp. 270–80), the same certainly cannot be said of the second factor that Keynes cites as impeding any attempt to reduce the interest rate, which has been virtually ignored. This second impediment consists, according to Keynes ([1936] 1964, p. 208) of "the intermediate costs of bringing the borrower and ultimate lender together, and the allowance for risk, especially for moral risk, which the lender requires over and above the pure rate of interest." Thus, even if the monetary authority were to succeed in reducing the pure rate of interest or the liquidity premium to zero, an insuperable barrier to optimum investment and full employment could still exist in the form of the "effective rate of interest" stuck at too high a level and composed of irreducible costs of financial intermediation plus a risk premium to compensate the lender for moral and other risks of the borrower's default. This factor "may prove important in an era of low interest rates" (Keynes [1936] 1964, p. 208), which, as we shall see, Keynes looks forward to as the precondition of the transition to capital superabundance.

The liquidity preference theory thus represents the perfect instrument allowing Keynes to translate his longstanding ethical prepossessions regarding usury and avarice into scientific policy dicta. Keynes's reference to the impending "euthanasia of the rentier" is not an isolated flight of fancy but the central implication of his program to rid the economy of the baneful effects of usury and avarice by suppressing the rate of interest and thereby abolishing the bond market.

As noted above, for Keynes, the bond market is born out of the irrational and otiose separation between those who finance and those who implement investment projects. This separation serves to create a unique and unnecessary risk, i.e., of the borrower's default, which increases the cost of investment. Furthermore, by providing an arena for speculation on interest-rate uncertainty, the organized bond market promotes avarice in the form of the speculative demand for cash holding. It is this demand which is the active factor in determining and driving the pure rate of interest; that is, the liquidity premium which must be paid to the avaricious for parting with monetary investment funds. Because the existence of the pure interest rate renders the ownership of debts competitive with the ownership of real capital assets, it further raises the cost and retards the rate of investment.

It is because the liquidity preference theory of interest establishes such a clear causal link between vice and economic instability and waste that Keynes steadfastly refused to relinquish it in favor of the scientifically more rigorous, general-equilibrium explanation, which emphasizes the simultaneous determination of the levels of income and the interest rate by saving and investment on the one hand and liquidity preference and the quantity of money on the other. As Patinkin (1976, p. 99) argues: "This tenet [that liquidity preference is the sole determinant of the interest rate] indeed served Keynes as a test of faith for all who wanted to be regarded as true converts to his new theory." In this spirit, Keynes was to "absolve" Harrod of misunderstanding this crucial aspect of his analysis (Patinkin 1976, p. 99).

Hansen (1953, p. 155) characterizes those chapters of the *General Theory* in which Keynes discusses the nature of capital as "another detour which could be omitted without sacrificing the main argument." And it is true that Keynes did not emphasize the "scarcity theory" of capital, which he develops in chapter 16, as a contribution on a par with effective demand, liquidity preference, and the marginal efficiency of capital. Keynes may have downplayed his contribution in this area because his treatment consisted of a series of loosely connected observations rather than a fully integrated theory. Nonetheless, the view of capital which emerges from these observations is crucial to the analytical progression of the main argument of the *General Theory*.

Keynes aims at establishing two fundamental propositions regarding capital. The first is that "an asset offers a prospect of yielding during its life services having an aggregate value greater than its initial supply price . . . because it is scarce; and it is kept scarce because of the competition of the rate of interest on money" (Keynes [1936] 1964, p. 213). The implication is that, given its physical productivity, the less scarce capital becomes the lower its yield in excess of its supply price.

In support of this proposition, Keynes ([1936] 1964, p. 213) alludes to the "pre-classical doctrine" that "everything is *produced* by *labor*," aided by technology, natural resources and capital or "past labor embodied in assets." Like natural resources, then, the price of the latter aid to labor is also determined by its "scarcity or abundance."

Keynes's second proposition holds that at any given moment in time, the opportunity for capital investment is strictly limited. According to Keynes ([1936] 1964, p. 214), while there are admittedly some roundabout processes of production that are physically efficient, probably most are very inefficient due to the phenomenon of "spoiling or wasting with time." This implies a conception of roundaboutness that is restricted to currently used techniques and production functions in which there is little scope for intertemporal substitution among inputs. Thus Keynes ([1936] 1964, p. 217) writes that "[i]n the case of the great majority of articles, it would involve great technical *in*efficiency to start up their input more than a very modest length of time ahead of their prospective consumption."

But the investment of labor in the production of capital assets is even more narrowly limited by the fact that, for any given quantity of labor, there is an optimum proportion between capital and labor, i.e., "between the amount of labor employed in making machines and the amount which will be employed in using them" (Keynes [1936] 1964, p. 214). The structure of production could be advantageously lengthened beyond this limit to exploit the remaining physically more efficient and even some inefficient lengthy processes of production, only if preferences to postpone consumption into the future were strong enough to necessitate a rate of investment so great as to provoke a negative MEC. In this case, short efficient processes must be rendered sufficiently scarce to compensate for the effect on their product price of the relative disagreeableness attending early consumption.

The optimum roundaboutness of the production structure is thus fixed and depends on the given supply of labor in conjunction with the given structure of dates at which consumer demand for the various products is expected to become effective, taking into account the circumstance that the lengthening or shortening of certain processes may so improve the quantity or quality of their products as to induce consumers to postpone or anticipate their prospective demands. Thus, in the case of a zero rate of interest, "there would be an optimal interval for any given article between the average date of input and the date of consumption, for which labor cost would be a minimum" (Keynes [1936] 1964, p. 216). A shorter or longer interval would be technically, as well as economically, less efficient. If the interest rate were above zero, the optimum interval would be contracted, necessitating a curtailment of current investment so as to achieve the greater scarcity of future products necessary to raise their prices enough to absorb the interest charge and the higher costs associated with the employment of technically less efficient shorter processes.

For Keynes, then, the interest rate constitutes the narrowest limit on investment. But even if a zero interest rate prevailed, Keynes's analysis implies that "there is a strict limit to the proportion of consumers' demand which it is profitable to begin providing for in advance" (Keynes [1936] 1964, p. 217).

In terms of practical policy, the conclusion Keynes ([1936] 1964, p. 375) draws from this analysis is momentous: "I feel sure that the demand for capital is strictly limited in the sense that it would not be difficult to increase the stock of capital up to a point where its marginal efficiency had fallen to a very low figure."

Keynes's analysis of capital completely ignores Böhm-Bawerk's seminal insight that capital accumulation permits the adoption of new techniques and production functions which, though previously known, remained unexploited precisely because the prevailing scarcity of capital rendered their implementation uneconomic. Thus, contrary to Keynes, progressive accumulation of capital requires and facilitates, within wide limits, an ever-increasing proportion of the given labor supply to producing capital goods. The growing quantity of labor inputs is applied not merely to "making machines," i.e., replicating existing machinery with existing techniques, but to making different and more efficient machines, to making existing machines more efficiently by building and using machines to make machines, to making the new machines necessary to mass produce luxury goods, e.g., the automobile, and to inventing new production processes and machines intended to supply heretofore latent wants.

It is illuminating to note the subtle connection between Keynes's analysis of the limits to capital accumulation and his Marshallian theory of wants and its key role in his millennialist social vision. It is precisely the assumption that the broad classes of wants are definitely limited, easily identified and enumerated, and capable of being supplied by existing production techniques, which enables Keynes to envisage that human wants will be surfeited and the millennium achieved with an extra generation or two of capital accumulation. However, once the possibility is raised, as it is by Böhm-Bawerkian capital theory, that capital accumulation itself is capable of stimulating the realization and expression of hitherto undreamed of wants, the rat race for progressively increasing living standards is on and the vision of capital saturation amid the blissful stagnation of the millennium recedes into the remote future or dissipates altogether (compare Johnson and Johnson 1978, pp. 80–81, and Minsky 1975, pp. 151–53).

As Minsky (1975, p. 154) perceptively comments, Keynes's world is one "in which 'civilized' standards discipline and control relative needs and move consumption away from capital-intensive patterns. A world in which an endless accumulation of gadgetry and weaponry is the desire of man is not a world in which full investment will soon occur." It is open to speculation whether Keynes's initial hatred of the automobile (Hession 1984, p. 57) and his reported discomfort with the telephone stemmed from his view that such capital-absorbing gadgets represented a departure from the "state of disciplined wants" (Minsky 1975, p. 155) that is necessary to achieve capital saturation.

Indeed, it is precisely because almost all "Keynesian" economists, especially in the United States, have ignored the fourth building block of the strict limitation on the demand for capital that they have been able to regard the analytical technique of the *General Theory* as providing the means for fine-tuning and stabilizing capitalism, instead of, as Keynes intended it, the justification and recipe for its destruction. Thus, no sooner is the fourth and final building block represented by the scarcity theory of capital rolled into place, than Keynes uses his completed theoretical apparatus to deliver the *coup de grace* to capitalism. This is the demonstration that laissez-faire capitalism, given prevailing institutions and psychological propensities, even if it miraculously found itself in the blessed state of capital satiety, would be unable to sustain this economic Eldorado.

For his demonstration, Keynes ([1936] 1964, p. 217) supposes a society that possesses a capital stock of such a magnitude that any further investment would render the MEC negative. In graphical terms, we may envision an MEC schedule which intersects the origin and otherwise lies entirely within the second and fourth quadrants, with any level of positive investment inducing a negative MEC. It is also supposed by Keynes that, in this economy, money does not physically depreciate or involve significant costs of storage, therefore implying that the interest rate can never be negative, and the social propensity to save exceeds zero at the full-employment level of income. In these conditions, effective demand would consist only of expenditures on consumption and would be insufficient to take up the full flow of output forthcoming at a full-employment level of income. The result is that both the level of employment and the capital stock will have to shrink in order to reduce income to a level at which aggregate saving is zero.

Based on this analysis, Keynes ([1936] 1964, pp. 217–18) concludes that thus "for a society such as we have supposed, the position of equilibrium, under conditions of *laissez-faire*, will be one in which employment is low enough and the standard of life sufficiently miserable to bring savings to zero. . . . [T]he equilibrium stock of capital which will have a marginal efficiency of precisely zero, will, of course, be a smaller stock than would correspond to full employment of the available labor; for it will be the equipment which corresponds to that level of unemployment which ensures zero saving." The implication of course, is that pushing the rate of interest to "vanishing point" via government monetary policy may not be sufficient to induce the state of full investment prerequisite to entering the millennium. There is the possibility, however, that the desire of the public to make provision for the future would become satiated, causing the propensity to save out of full-employment income to fall to zero, at some point before the rate of interest reaches zero.

However, this unlikely possibility of spontaneous salvation under capitalism, according to Keynes ([1936] 1964, pp. 218–19), is rendered even less likely when it is considered that there are certain institutional and psychological factors, "in particular, the costs of bringing borrowers and lenders together and uncertainty as to the future of the rate of interest," operating to set a lower limit on the rate of interest significantly above zero.

Ensconced as it is in the generally neglected chapter on capital, most commentators on the *General Theory* have overlooked the most important application of its analytical apparatus. This is to the explanation of how an accumulation of capital, "so large that its marginal efficiency has fallen more rapidly than the rate of interest can fall in the face of the prevailing institutional and psychological factors, can interfere, in conditions mainly of laissez-faire, with a reasonable level of employment and with the standard of life which the technical conditions of production are capable of furnishing" (Keynes ([1936] 1964, p. 219). The ultimate moral and technical perversity of capitalism thus rests on the demonstration that it transmogrifies and diverts the process of wealth creation and progress toward moral perfection to a descent into a permanent state of relative impoverishment wherein vice can never be transcended.

For Keynes ([1936] 1964, p. 219), however, there is a way out, because "This disturbing conclusion [regarding the effects of capital accumulation] depends, of course, on the assumption that the propensity to consume and the rate of investment are not deliberately controlled in the social interest but are mainly left to the influences of *laissez-faire*." The political economy of the *General Theory* is thus primarily addressed not to securing the short-run stability of output and prices but to promoting the long-run, evolutionary goal of solving the economic problem.

Keynes lays out his politico-economic proposals in the final chapter of the *General Theory*, and they are clearly and specifically aimed at "depriving capital of its scarcity-value within one or two generations." The measures elaborated to achieve this aim involve "central controls," a term Keynes ([1936] 1964, pp. 377–79) uses four times within the space of three pages. These measures are designed to enable the State "to determine the aggregate amount of resources devoted to augmenting the instruments [of production] and the basic rate of reward to those who own them" and also "to bring about an adjustment between the propensity to consume and the inducement to invest" (Keynes [1936] 1964, pp. 378–79). In addition to full investment, these measures are designed to achieve the supplementary goals of full employment and equitable distribution of income.

Keynes's primary policy prescription is for a gradual and steady reduction in the rate of interest to zero. Because Keynes is referring to the market or effective rate of interest, which includes, in addition to the liquidity premium, the various costs and risk premiums associated with bringing borrowers and lenders together, he argues that monetary policy is incapable of effecting this outcome on its own. Thus he advocates "a somewhat comprehensive socialization of investment," which is the only way in which the institutional rigidity of the interest rate can be broken and, therefore, "the only means of securing an approximation to full employment" in the conditions of accumulating capital and a secularly declining MEC.

While a longtime advocate of neo-Keynesian fine-tuning, such as Tobin (Brunner 1987, pp. 53–54), downplays the significance of Keynes's use of the term "socialization of investment" by adducing its varied connotations, Keynes is reasonably clear about the economic arrangements he intends to connote by the term. The central controls which Keynes ([1936] 1964, p. 378) advocates do not necessitate the assumption by the State of "the ownership of the instruments of production." Indeed, Keynes ([1936] 1964, p. 374) expatiates, albeit patronizingly, on the social usefulness of "money-making" and "private wealth-ownership" in the pre-millennial world in which men have not yet been "taught or inspired or bred" to take no interest in such activities.

What Keynes does envision in proposing the socialization of investment is the replacement of individual saving and allocation of investment funds via debt and equity purchases on private markets by "communal saving through the agency of the State" ([1936] 1964, p. 376).[2] In this way, the irrational and speculative stock and bond markets will give way to Marshallian owner-entrepreneurs, who, in consultation with Burkean State financiers and using the principles of Keynes's probability theory, will rationally forecast the marginal efficiencies of the various types of capital goods and defeat "the dark forces of time and ignorance" (compare Brunner 1987, p. 38).

The progressive expansion of the capital stock brought about by the policy of continually reducing the interest rate will drive the MEC

[2]There has been recurring and unresolved controversy surrounding the question of whether or not Keynes was an advocate of socialism. Of course, the resolution of this issue turns on the precise meaning to be attached to Keynes's call for "the socialization of investment." If it is interpreted, as I argue it should be, as a scheme to abolish equity and debt markets, then Keynes was indeed advocating the substitution of socialist central planning for a market economy. For as Mises points out, the existence of a stock exchange is precisely what distinguishes a functional market economy from a socialist economy. The retention of nominally private ownership of the means of production without the effective right of alienating such ownership titles in monetary exchanges deprives entrepreneurs of the ability to ascertain production costs, calculate ever-changing profit opportunities, and respond to these opportunities by rearranging existing combinations of capital goods. Centrally controlled investment, therefore, implies centrally planned production processes. Thus, for example, under National Socialism in Germany, although private ownership of business assets was formally retained, all important production activities were carried on under the directives of state officials.

Mises's remark on the existence of a stock exchange as the *sine qua non* of a market economy is reported in Rothbard 1991, p. 59. For the original statement of Mises's classic argument that the abolition of markets and prices for capital goods renders the rational allocation of resources impossible, see Mises [1920] 1990. For a detailed description of the pre-war Nazi economy which emphasizes its essentially socialistic character, see Reimann 1939.

schedule steadily to the left until it reaches its evolutionary terminus at its intersection with the origin point. Actually, the MEC would not quite reach zero but would fall to "a very low figure" which would provide "some margin to cover risk and the exercise of skill and judgment" of the investing entrepreneur. Thus the gross yield on capital goods over their lives would "just cover their labor costs of production *plus* an allowance for risk and the costs of skill and supervision," there being no surplus left over for payment of a scarcity premium for the use of capital (Keynes [1936] 1964, pp. 375–76). In this state of full investment would therefore occur "the euthanasia of the rentier" and "the euthanasia of the cumulative oppressive power of the capitalist to exploit the scarcity-value of capital" (Keynes [1936] 1964, p. 376). Depriving the rentier or functionless investor of an income would also improve the equity of income distribution.

While the goal of an optimum rate of investment is to be insured by the policy of steady reduction of the interest rate, the goal of full employment depends upon the level of aggregate demand, composed of consumption and investment expenditures. Although a declining interest rate also tends to weaken the incentive to save and thus to stimulate consumption, Keynes still requires a second lever adapted specifically to changing the average propensity to consume. According to Keynes ([1936] 1964, pp. 378, 380), "[t]he State will have to exercise a guiding influence on the propensity to consume. . . ." by virtue of its involvement "in the task of adjusting to one another the propensity to consume and the inducement to invest" to generate a full-employment level of income.

For this purpose, Keynes proposes a "scheme of direct taxation" which aims at redistributing income from higher to lower income groups and thereby raising the average propensity to consume. Keynes discounts any adverse supply-side effects of this taxation policy by asserting that the prevailing price of entrepreneurial ability and risk-taking is far in excess of its supply price. According to Keynes ([1936] 1964, pp. 376–77) "the entrepreneur *et hoc genus omne* . . . are certainly so fond of their craft that their labor could be obtained much cheaper than at present. . . ." Thus Marshall's attempt to enlist economic chivalry in the service of his fondest dream of increasing standards of life for the workers by reducing the supply price of "business ability in command of capital" is replaced by Keynes's intuition that the dream is already half true and awaits for its completion only the arrival of the tax collector.

With the interest rate, the rentier, and the speculator on financial markets suppressed by socialized investment and the "economic rent" received by entrepreneurs taxed away and used to subsidize

State-provided benefits for laborers, the monetary expenses of producing goods are effectively reduced to reflect only their "real" costs of production, basically the disutilities of labor and legitimate risk-taking. Thus, for Keynes, the same central controls that secure full investment and full employment also operate to squeeze out from the production process all income payments that are unrelated to labor costs and to establish an equitable distribution of income.

Although sparse in its details, Keynes's scheme for State direction of investment and remuneration for productive activity bears more than a passing resemblance to Hjalmar Schacht's Nazi command economy, which was "based on three main controls: of costs, investment, and international trade" (Woolston [1941] 1968, p. 236). Indeed, as Brunner (1987, p. 38) points out, in order to preclude the inevitable capital efflux induced by the pegging of domestic interest rates below world levels, Keynes recognized the necessity of a system of exchange controls that "would have to be rather far-reaching and also cover domestic transactions related in some manner to international transactions." In the early 1940s, Keynes also vigorously promoted the "Schachtian device" of international barter as an alternative policy for Britain in the post-war world, if some version of his scheme for international monetary reconstruction were not accepted. Keynes (quoted in Hession 1984, p. 331) labelled anyone who signed an agreement to preclude the use of such a device in advance "as great a traitor to his country as if he were to sign away the British navy before he had a firm assurance of an alternative means of protection."

There is some evidence that Keynes himself recognized the similarity between the nationalist system based on socialized investment which he espoused and the National Socialist system of political economy implemented by Schacht in Germany. Thus, in the Foreword to the German edition of the *General Theory* published in 1936, Keynes notes that the aggregative theory of production expounded in the book "can be much easier adapted to the conditions of a totalitarian state than the theory of production and distribution of a given production put forth under conditions of free competition and a large degree of laissez-faire." Keynes also expresses satisfaction if his theory "can contribute a single morsel to a full meal prepared by German economists" (Martin 1971, pp. 203–05).

In the foregoing, I do not intend to tar Keynes with the brush of National Socialism. Far from it, I merely wish to point out that, as a millennialist theorist, Keynes trusted to his own intuition and moral rectitude in choosing and applying policies which, in the hands of the less enlightened or less righteous, would result in a social holocaust.

Keynes himself makes this point in a revealing letter written to Hayek, in which he comments on the latter's critique of planning, *The Road to Serfdom*. Writes Keynes (quoted in Meltzer 1988, p. 191):

> I should say that what we want is not no planning, or even less planning, indeed I should say that we almost certainly want more. . . . Moderate planning will be safe if those carrying it out are rightly oriented in their own minds and hearts to the moral issue. . . .
>
> I accuse you of perhaps confusing a little bit the moral and the material issues. Dangerous acts can be done safely in a community which thinks and feels rightly which would be the way to hell if they were executed by those who think and feel wrongly.

While a great deal more can and should be said regarding the evolution of Keynes's economics under the influence of his sociopolitical vision, I believe that my investigation is sufficient to indicate that the technical economics and the political economy of the *General Theory* have a definite millennialist orientation. The analytical apparatus was developed by Keynes to embody the ethical principles which he believed would govern his envisioned millennium. It was designed *ab ovo* to link up the economic failures of capitalism with the vices it characteristically fosters, "avarice, usury, and precaution."

Moreover, it was Keynes's eagerness to attain the economic precondition of this millennial state, the abolition of capital scarcity and the satiating of "disciplined" wants, which guided his application of this apparatus in formulating policy conclusions. Thus, to emphasize again, the policies which Keynes deduced were not policies of short-run fiscal fine-tuning that have come to be associated with his name. Keynes was single-minded in his politico-economic advocacy: What was required was a socialized investment policy designed to abolish financial markets and the interest rate and achieve capital saturation.

Even when he was specifically addressing the issue of short-run instability in his chapter on the "trade cycle," the tune he was playing never changed or even wavered in pitch. Under *laissez-faire* capitalism, the recurrence of "wide fluctuations in employment" could not be avoided "without a far-reaching change in the psychology of investment markets such as there is no reason to expect." He concluded that ". . . the duty of ordering the current volume of investment cannot safely be left in private hands" (Keynes [1936] 1964, p. 320). Again this is not to deny that Keynes ([1936] 1964, p. 325) supported measures for manipulation of the level of consumption, but it is clear that he viewed such measures as supplementary to his policy of socialized investment.

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