Capitalism, Socialism, and Behavioral Theory

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Abstract

My personal observations of the conditions in and behaviors emitted by citizens in several socialist states and their capitalistic neighbors are first described and compared. I then discuss the applicability of behavioral theory to individual behavior in all environments and how those principles can be applied to an understanding of the emergence of capitalistic relationships. I suggest that behavioral theory is highly consistent with capitalistic arrangements, but quite problematic for socialistic ones. The difficulties include restricted variety of reinforcers, lack of response-reinforcer contingency, stimulus and response generalization, and modeling effects. The implications of the analysis are then briefly discussed.

Capitalism and socialism[1], the two major economic systems currently dominating the global political arena, rarely, if ever, have been analyzed from the behavioral perspective. The central question from a behavior analytic framework concerns the extent to which each system is consistent with the nature of human beings. "Human nature", of course, is frequently identified as the explanation for many behavioral phenomena, usually in the context of a hereditarian argument, with its implications of inflexibility and support for the status quo (what is, not only is, but *should* be; it is the genetic nature of human beings). Behaviorists will recognize the use of human nature in this manner as an instance of circular reasoning, providing an example of an "explanatory fiction" (Skinner, 1971). A rigorous scientific explanation of human nature requires an analysis of the descriptive label: which operations characterize human nature, and how do they affect human responding. In this context, behavior theory suggests that a fundamental aspect of human nature is the susceptibility of humans to learn response-reinforcement contingencies and to alter their pattern of responding so that they are consistent with those contingencies (Skinner, 1953). Such an understanding of "human nature", unlike the genetic perspective, can lay the basis for significant social change — the possibilities and the limitations — at least as readily as it could marshall arguments for maintenance of the status quo.

Social change, of course, has been engineered countless times in the history of civilization, generally on the basis of economic or political rationales. Socialism is one of the more recent attempts to restructure societal relationships. In such a system, the social, economic, and political relations are designed to achieve the idealistic goals of engaging each citizen in a non-alienating and meaningful life and of providing adequate levels of material goods to all members of the system (Marx, 1906). Since these goods are not unlimited, and perhaps even scarce, the economic system places ownership and control of the means of production in the public domain and restrictions on which, and how much, of these goods an individual is permitted to acquire. Critics of socialism imply or state that restrictions on economic freedom constrain human potential and result in restrictions on political freedom. They point out that the history of the implementation of socialism has resulted in aversive contingency arrangements: people work to escape from them, avoid them, or terminate them, resulting in systems that are generally unstable or require authoritarian (nondemocratic) political control. Such aversive control leads to more aversive control. Conversely, the critics also assert that freedom from aversive control leads to more freedom, i.e. economic freedom is said to lead to political freedom (Friedman, 1962; Kristol, 1978). And herein lies the fundamental issue: does socialism really arrange the environmental contingencies in a manner counter to "human nature" so that human responding is limited, unproductive, disrupted and disruptive? The *scientific analysis* of this question, and its answer, is necessary if we are to develop and implement workable, humane, and just social systems.

In the past several years, I have taken the opportunity to travel to the socialist countries of Czechoslovakia, Hungary, Yugoslavia, and the People's Republic of China, as well as their geographically proximate capitalistic neighbors of West Germany, Austria, Italy, and Hong Kong. All of the countries evidenced varying degrees of affluence and poverty, contentment and dissatisfaction. But the differences were striking.

Czechoslovakia, for example, was depressing: drab streets, drab clothing, drab food. Shops and stores had little variety and mostly empty shelves. The people seemed to be

[1] *"Pure" capitalism and socialism are difficult to define as well as being nonexistent in the world today. My use of these terms is meant to identify the two general poles of the continua encompassing state versus private ownership of society's means of production and restricted versus unrestricted commerce. My argument, as will become clear, is that a behavioral analysis of the extant contingencies operating within each system is more enlightening than politcal or economic analyses.*

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going through the motions: little laughter, little entertainment. At night, the center square of Prague teemed with people, mostly young. But there was nothing to do except for a few movies, so the young people literally walked around the huge square, and around, and around, occasionally stopping to talk, buy some food, or gather around a fancy car or motorcycle. It was obvious that few were hungry in Czechoslovakia. But it was equally obvious that few were happy either.

Crossing the Czech border into Hungary was akin to entering a different world. Within a few hundred feet of the border, vegetable stands with abundant produce flourished. In Budapest, people wore brightly colored and marginally fashionable clothing. The grocery stores were richly stocked with an appealing variety of foods and nightspots were open fairly late. The people chattered incessantly, walked briskly, and laughed frequently. It was easy to infer that most people's behavior was goal-directed. I have relatives in Hungary, and we talked openly and honestly: they were proud of, and excited about, their lifestyles, and in addition, disdainful of Czechoslovakia — thankful that they were no longer in the same situation. However, from 1956 until the mid-1970's, they had been. It is only the most recent "liberalization" which has permitted a modest, but significant, amount of nonstate controlled commerce: shops with trendy clothing have appeared, cabbies have struck out on their own, and food stores have opened. The people, in general, seemed happy and content, and the "feel" of Budapest was clearly different from that of Prague. My relatives could not contain their excitement in taking us around, showing us their reinforcers, those only recently available: artist colonies, resorts, synagogues, striking architecture in the ubiquitous new construction, and what they called "villas", second homes in the country, which were now being acquired by increasing numbers of city dwellers. The only thing they needed that we had was Western currency to use for travel. As we changed Deutschmarks and dollars for forints, it was clear that one aspect of Hungary was strikingly similar to Czechoslovakia: the black money market.[2]

Yugoslavia is booming: construction everywhere, either financed by firms in capitalistic countries or funded by exports to capitalistic countries. This is a country undergoing remarkable transition, but its heritage of cultural and geographic fractionation, and the current mix of controlled and uncontrolled economic relations, leaves the outcome unclear. But it is surely a country to watch in the next couple of decades.

The People's Republic of China is changing rapidly, and meeting needs of its citizens that have been neglected for centuries. But the imposition of socialism on a society that functioned through cultural and religious tradition has only been partially successful.[3] Hunger has certainly decreased, education increased, and many more of the people's basic material needs have been met. But a stagnant economy forced China, like Hungary and Yugoslavia, to introduce elements of the free-market system into the state controlled economy. The result has been an increase in agricultural and industrial production. Communes are no longer being constructed as China searches for the right mix of controlled and uncontrolled economic relations. But at least during *this* search, the system is still not functioning in a way that permits many of its citizens to lead fulfilling lives. A young man whom we met on our tour of China provides a graphic example of the current situation. His parents are old guard communists, important contributors to the Revolution. He is bright, energetic, and possesess an insatiable desire to learn. But he is very frustrated:

> ...When I got back home, I was officially informed that I had finished my country assignment. I have started in the office this week. I am glad that I have come back from the hard life. But I am not happy to return to work in the bureaucracy. I feel very depressed in the office. Though life was bad in the country, I felt very pleasant. I could do whatever I liked. Here in my office, I come to the office at the exact time, doing nothing. I am a bit tired of working in this situation. As you know, it is hard to move from place to place, or even from job to job. I am thinking about changing places. But at present I'll just wait an see. There are some changes in China recently. Some are not so positive. Especially the old people are still conservative and closed minded. Like our agency, leaders ignore the young people. They regard the young as their own property. They will not let young people quit. They just keep you here wasting life. On the other hand, our Party or government calls again and again that people are free to move or change according to their own will and skills. That call does not make any difference in the grassroot. Now I think I am in a dilemma here. Many people in the office — most of them young — indulge themselves by gossiping, playing cards all day, smoking, etc. They are so satisfied with the present situation. They have become cynical and impassive. It is obvious that everyone hates it, but no one wants to change it or oppose it. Many young people like me used to be very energetic and enthusiastic about their future. But the reality destroyed their hopes very soon, when they entered the society. I do not think I will get myself involved in this bad system, at least in the near future. I will keep plugging away and hoping for the best. I am sorry that I am free to tell you something unhappy. I have to pour out what is in my mind to someone I trust. Mostly I do some reading — Readers Digest, Time, and some English novels. There is hardly any entertainment for me. After work, I usually listen to music and

[2] *I have recently analyzed the Hungarian economy in some detail from the behavior analytic perspective (Rakos, 1988).*
[3] *Lamal (1984) has discussed some of the reinforcement contingencies, and their effect on behavior, in China.*

> watch T.V...Sometimes I have a strange idea that I will be happy to work, but not happy to sit there doing nothing. People should have something to do to make their life meaningful...

I predict that this person's infectious smile, bright eyes, and brisk stride will disappear in the near future, and be replaced by the types of behaviors that seem to characterize the Czechs. And when I think of the border crossings, and the changes in the people depending upon which side we were on: West Germany or Czechoslovakia, Austria or Hungary, Italy or Yugoslavia, Hong Kong or the People's Republic of China, I find myself challenging my belief in socialism as a system that provides social justice by ensuring that all citizens, not only the wealthy, can share in its bounty. And I am forced to ask: why does socialist experiment after socialist experiment only achieve its most limited short-term goals, occasionally reach modest intermediate goals, but never achieve the long-term idealistic goals, including that of an egalitarian society? So I come back to my fundamental question: is socialism incompatible with "human nature?" Or have the contingencies in the extant experiments been poorly conceived and implemented? And from the opposing perspective, I ask, is capitalism consistent with "human nature?".

In wrestling with these questions, I recently read a book called *The Battle for Human Nature: Science, Morality, and Modern Life* (Schwartz, 1986). Schwartz has previously asserted that behavior theory's principles are specific to artificially controlled environments, such as the Skinner box or the modern industrial factory, and therefore do not describe general principles of behavior (Schwartz & Lacey, 1982). In this book, he expands his argument to include two other modern Western scientific theories concerning human nature, economic rationality and sociobiology, and tries to demonstrate that all three theories are bound to the present sociohistorical context. After demonstrating what he believes to be the limits in the explanatory power of each theory, he tries to identify the dangers in accepting these "amoral" approaches to understanding and changing society. Specifically, he argues that all three approaches tell us what *is* but fail to tell us what *ought* to be, save for the tautology that what *is* is what *ought* to be. He then argues that as contemporary society continues its rapid technological change, historical sources of behavior control — of morality — are being increasingly usurped by economic sources. For Schwartz, economic imperialism — which can be interpreted from the perspective of economic rationality, sociobiology, or behavior theory — has come to guide our behavior without the constraints of morality, traditionally taught by family, religion, community, education, etc. These modern scientific theories have *taught* us to value only the external outcome of a behavior (what it produces), thereby replacing traditional sources of value which are intrinsic to the behavior (how and why it produces). Consequently, all our social relations, including work, education, marriage, recreation, status, etc., have become characterized by money as the dominant reinforcer. Schwartz offers a vaguely articulated solution that involves a return to traditional sources of morality. He maintains that we must preserve distinct spheres of social life, and restructure them so that they have a powerful and predominantly noneconomic character. Thus, education must be valued by the knowledge it provides rather than by the cost of schooling relative to the potential future earnings it makes possible; marriage must be assessed by caring and intimacy rather than by economic security and communal financial assets; work must be judged by its intrinsic rewards rather than by its income potential. Schwartz (1986) offers few specific suggestions as to how society might be restructured to permit such noneconomic reinforcers to exert a dominant influence, but his point is clear. He argues that science has *created* an economically-oriented way of valuing our behavior and social relations, and that capitalism is a natural by-product of this value system. He concludes that capitalism and the three scientific theories do not describe human nature or the ways things must be — only the way that they are. Thus, he argues that the three theories seem to have such great explanatory power precisely because they are applied to a world they themselves have made over the past 300 years, not because they describe the world as it must be, or even as it is in less industrialized areas. But, says Schwartz, we will pay a tremendous price for this self-deception: the selfish behavior produced by modern society, operating by the amoral scientific theories, will ultimately undermine the system itself, and lead to diminishing external rewards and increasing social problems. Therefore, the limits of these seductively alluring but deceptive and erroneous scientific theories must be recognized, and society must return to a focus on morality, since science cannot teach morality.

Schwartz's thesis is provocative, but in my view, flawed: undermined by the very criticism he directs toward the scientific theories. He, too, is operating from a perspective limited to one sociohistorical context: modern Western society, which translates basically to modern capitalism. Nevertheless, he fails to directly challenge capitalism as the general system by which societal relations will be structured, despite his assertion that it is basically an artificial social arrangement. Furthermore, as noted earlier, he asserts that the scientific principles, including those of behavior theory, do not account for behavior in less artificial environments. This, of course, can be strongly challenged on theoretical grounds and constitutes the first flaw in his argument. In addition, a second flaw emerges in his argument that capitalism is a natural by-product of science, yet as artificial an environment as is the Skinner box. This is probably more an error of logic than of theory.

These two flaws demand a more detailed analysis. In the first flaw, that of the limits of behavior theory, Schwartz argues that reinforcement principles do a good job of accounting for modern life — and only modern life — precisely because they *created* modern life, and he relies on the factory as his prime example. In the factory, as in the Skinner box, the environment is limited so that only repetitive, stereotyped, "mindless", and increasingly refined behaviors will occur; and in such an environment, with other cultural influences eliminated and genetic ones minimized, reinforcement principles will indeed gain control of behavior and do a nice job of explaining it. But how much of modern life is really analogous to the factory? Very little. Most of our behavior is comprised of long chains of behavior, with the early behaviors maintained by intermediate conditioned reinforcers that ultimately derive their value through their association with the terminal reinforcer. These, not factory work, are the behaviors behavior theory must explain if it is to have utility. In fact, it *has* made a fairly good start in demonstrating how the consequences of complex behavior influence the future probability of the behavior. Principles such as contingent reinforcement and intermittent reinforcement, molar views of the effects of reinforcement as correlated with the outcome of behavior over long periods of time (Epling & Pierce, 1983), shaping, stimulus control, etc. provide tremendous explanatory power. But more germane to Schwartz's argument, behavior today is not so fundamentally different from behavior in feudal or ancient times. Behavior occurred mostly in chains, then as now. What has changed is the type of reinforcement that behavior produces. Today, it is true, behavior often produces relatively immediate, frequent reinforcement that is often extrinsic to the task, such as money, grades, and social approval, compared to the past, when reinforcement was less frequent, more delayed, and more intrinsic to the task, such as the finished product or knowledge for its own sake. But even in earlier times, reinforcement was not totally intrinsic: consequences like social approval, status, respect, material goods and avoidance of noxious stimuli were still either directly contingent upon the performance of certain responses, correlated over time with the emission of particular responses (cf. Epling & Pierce, 1983), or specified by rules (Painter, 1960). For example, in the Middle Ages, these stimuli shaped the behavior of children with their parents, of apprentices with their master craftsmen, vassals with their lord, and in general, of those in servitude with their masters (Keen, 1967; Lacroix, 1963; Morrall, 1970; Thompson, 1928). Gifts to the Church were contingently reinforced with priviledges (Lacroix, 1963). The exalted status of wives of lords permitted them to display a wide range of competent behaviors that resulted in social and material reinforcement (Lacroix, 1963). The rise of towns and guilds in the later Middle Ages was a consequence of, and a means toward, greater reinforcement through trade and commerce (Keen, 1967; Morrall, 1970; Thompson, 1928). Indeed, the power of material reinforcers was so great in all classes of feudal society that laws regulating the luxuries an individual of a particular status was permitted to acquire were futilely enacted in 1294 and 1306 (Lacroix, 1963). The shamen of preindustrial society provides another example: she was contingently paid for her healing services and often sufferred tremendous loss of social reinforcement as a contingent consequence of failure (Levi-Strauss, 1963). Furthermore, even in instances when intrinsic reinforcement was dominant, it is erroneous to assert that reinforcement principles in general were not operating: they were effective, but the delayed, infrequent, correlational, and rule-governed nature of the consequences shaped and selected different patterns of responding. The way the environment affects individual behavior today does not appear to be so fundamentally different from, say, 800 years ago, as Schwartz would have us believe. Rather, the reinforcers themselves, their manner of delivery, and the rules governing behavior have changed. Behavioral principles can, therefore, make important contributions to the understanding of behavior in earlier times as well as of behavior in contemporary society.

The second flaw in Schwartz's analysis is his assertion that capitalism is an artificial product of the implementation of scientific approaches to society. This assertion rests on the demonstration that extrinsic reinforcement is less influential in controlling behavior in environments that are less scientifically created than today's capitalistic ones. Behavior theory asserts, and Schwartz seems to agree, that the behavior emitted in any particular environment tells us only what the organism will do under these conditions, not what it can do or might do under other circumstances. Thus, in ancient, feudal, and pre-industrial times, "capitalistic" behavior was emitted relatively infrequently because such behavior was not prompted or reinforced by the social structure. But people nevertheless had the potential capacity to be controlled by capitalistic contingencies (cf. Kunkel, 1985); the prerequisite skills and environmental supports simply were not yet in place, so control of behavior, and the resulting patterns of behavior, were noncapitalistic in nature. Through stimulus and response generalization and other principles , such as modeling, that account for the emission of behavioral variations, people began to learn different ways of relating to each other, socially and economically. And through the principle of reciprocal control, they learned to change their environment to achieve certain ends. Some of the most prominent of these changes in the environment have been labelled *technology*, but such descriptive classification does not alter the fact that these changes are merely the consequences of operant behaviors — behavioral variants — that have been selected by the environment due to their adaptive value in the environment. Moreover, these technological changes did more than produce immediate positive consequences. They produced profound and lasting changes in the environment it-

self by prompting and then reinforcing a wide variety of novel and increasingly diverse behavioral variants which then further altered the environment so that it was even more supportive of additional new behaviors. In other words, the new environments permitted and encouraged novel and increasingly complex behaviors to be produced and reinforced, or selected (cf.Kunkel, 1986). But there is nothing mystical or nonscientific about this alteration of the environment. Schwartz would have us believe that in 1200 we had feudal societies and then suddenly in 1800 we had industrial ones. To the contrary, the process that exerted a gradual effect over the years was one of reciprocal control: behavior changed the environment; some of those behavior changes were selected because of their adaptive value and, not surprisingly, some of those produced reinforcers that profoundly changed the environment. This altered environment prompted still new variants of behaviors, some of which were selected and some of which, in turn, produced profound changes in the environment. To understand this is to understand the dynamic character of the evolution of social relations. In this view, *science* did not create capitalism; *behavior* created it because it *worked:* an initially small, but consistently growing, percentage of the people could acquire increasingly greater amounts of reinforcement at each stage of the process. Behavior theory describes capitalism well not because it created capitalism but because capitalism is a natural outcome of expanded behavioral competencies made possible by a continually changing environment. There is nothing unnatural about being able to behave more skillfully in a supportive environment as compared to a barren environment. So in this sense, there is nothing artificial about the capitalistic arrangement of social relations. It is as natural as was the organization of feudal societies.

Therefore, my analysis is quite different from Schwartz's, and to me, more disturbing. Schwartz says capitalism, though a natural by-product of science, is basically an artificial environment that requires the reintroduction of traditional noneconomic sources of reinforcement. This is what will provide morality to an amoral scientific society, that is, tell us what we *ought* to do with science and technology. I see capitalism as a natural consequence of general behavior principles operating within a specific sociohistoral context, or to state it differently, I see capitalism as thoroughly consistent with an operationalized conceptualization of human nature. Furthermore, if capitalism is an expression of human nature, then socialism probably is not, in the sense that the contingencies it specifies in the current sociohistorical context ultimately fail to *maintain* (as opposed to initiate) productive behavior and the positive feelings that are correlated with competent, reinforced behavior. The question then becomes: can socialism be modified to be consistent with human responsiveness to reinforcement principles? Can a technological environment impose contingencies of reinforcement that by definition limit the amount and variety of reinforcement and still succeed in maintaining behavior at a high, steady rate?

These questions cannot be answered at the present time. But the identification of several of the behavioral principles that seem to cause problems for socialism is a first step toward developing answers. Socialist systems often seem to work best for some relatively short period of time after they are implemented. Generally, economic, social, and political conditions are abysmal at the point of implementation, and the new system immediately removes aversive stimulation and reorders priorities to produce positive stimulation (e.g. Gorbachev, 1987). Thus, the initial socialistic behaviors are negatively and positively reinforced. The process is probably facilitated by a behavioral contrast effect, in that conditions have been so aversive, and behavioral responding so depressed, that the introduction of modest reinforcement maintains behavior at a higher rate than that level of reinforcement would if it was consistently present. Unfortunately, a socialistic system soon encounters problems from at least three sources predicted by a behavioral analysis: satiation, lack of contingency between response and reinforcer, and stimulus and response generalization combined with modeling effects. I will discuss each of these briefly.

When social and economic conditions are very poor, the primary reinforcers offered by a socialist revolution are powerful, as already noted. Food, shelter, and the termination of pain are often the reinforcers that become immediately available. But these reinforcers do not appear to be sufficient to maintain behavior over long periods of time. Part of the answer, often couched in terms of "human nature" (i.e., people want "more out of life") is in reality a problem of satiation. Once basic needs are met, the primary reinforcers lose their potency due to satiation. The maintenance of behavior then requires a wide variety of continually changing secondary reinforcers. These conditioned reinforcers include activities and services, material goods, and abstract, verbally mediated stimuli commonly thought of as values. Socialist systems emphasize the primary of values ("moral incentives") in the maintenance of behavior and do provide a limited array of cultural, artistic, recreational, and spiritual reinforcers. But many other conditioned reinforcers are not available: larger living accomodations, diverse food[4], money for nonessential material goods and services, extensive travel, professional education, and often, high probability behaviors (Premack, 1965) such as nonconformist or deviant artistic, intellectual, religious, and political expression. Thus, participants in a socialist system experience satiation to the available reinforcers and come to feel unmotivated, or even deprived. This will obtain if they have learned to value many secondary reinforcers (which they in fact will, as discussed below), yet are provided the opportunity to acquire only a limited number of them. Although this may be the only way the state has adequate resources to meet the basic

[4] *"Diverse food" could be a primary reinforcer in some instances, and a secondary reinforcer in others, depending on the specific food and the individual.*

needs of the entire populace , this does not change the fact that many individuals may experience the arrangement as nonreinforcing or aversive, thereby producing associated emotional responses, such as frustration, anger, and depression. These conditions are likely to prompt undesirable behaviors, such as aggression, avoidance, and helplessness as well.

However, in theory, a socialist environment could also produce enough wealth that its citizens could experience many, if not all, of the above unavailable reinforcers. Unfortunately, the second problem, that of lack of contingency between response and reinforcement seems to prevent socialist systems from achieving their material production goals. The area where this is most apparent is in work productivity. Almost invariably, the long-term functioning of the agricultural and industrial sectors falls significantly short of the targeted level (Kornai, 1980; 1986). While it is fashionable, and no doubt partially correct, to blame this situation on external exigencies and interferences, such as loan requirements of the World Bank or International Monetary Fund, or defense expenditures arising from hostile action of unsympathetic countries, a more fundamental and endemic reason resides in the idealism of socialism itself (cf.Kornai, 1986). While people have the right to goods and the responsibility to produce goods, the former is not really contingent upon prior emission of the latter; it is contingent upon the inhibition of disruptive behavior and upon showing up for work — but not on *working*. Thus, low productivity and shortages of goods plague most socialist systems (Kornai, 1980), leading to the introduction of controlled capitalistic elements of "free enterprise", as exemplified by Hungary, Poland, and Yugoslavia in Eastern Europe (Gomulka, 1986), the People's Republic of China (Lamal, 1984), and the Soviet Union (Gorbachev, 1987). These modifications of "pure" socialism demonstrate that work behaviors increase dramatically when reinforcement is directly related to labor (Kornai, 1986). In the absence of such implementation of reinforcement and shaping principles ("material incentives"), socialist systems are forced to rely on the fundemental assumption that people will work hard because that is what they want to do ("moral incentives"); because, in other words, of conditioned reinforcers of values related to the desirability of socialism. This assumption of values, rather than material goods, as stimuli maintaining work behavior is problematic: for conditioned reinforcers to maintain their power, they occasionally must be paired with other potent reinforcers. If the values of socialism are paired with reinforcers to which the individual has satiated, socialism — the socialist ideal — is losing, rather than gaining power as a positive stimulus. This loss of power may be intensified by comparisons with other contingency arrangements, a third factor to which I now turn.

Citizens of socialist countries live in an increasingly global and technological environment, a fact that ensures that stimulus and response generalization and modeling will also attentuate the power of socialist arrangements. First, generalization processes and observation of capitalistic functional relationships increase the probablity that many individuals responding in a socialistic system will learn to emit behaviors that are prohibited (since they are incompatible with socialist ideals) but which nonetheless produce some, and perhaps great, additional reinforcement. Second, observational learning, through increased travel, communication, and media exposure, teaches people in socialist countries that a wide variety of conditioned reinforcers are both theoretically available and apparantly desirable. This, of course, compounds the problems caused by restricted reinforcement and satiation. Socialist systems consistently manifest a specific consequence of these fundemental behavioral processes: the "black market" (Heinrich, 1986; Kornai, 1986), which is essentially a completely unregulated capitalistic system. Many individuals allocate a high proportion of their responses to the discriminitve stimuli associated with the contingencies established by "black market" capitalism since they will acquire significantly greater amounts and variety of reinforcers than they would with their behavior under the control of S^Ds related to the socialist contingency. Since capitalistic behavior is incompatible with socialistic behavior, as the former increases in frequency the latter will decrease, and socialism will fail to function smoothly.

A behavioral analysis thus begins to suggest why socialism has consistenly failed to provide an acceptable alternative to capitalism: restricted variety of potentially available reinforcement and satiation produce verbal and motor behavior called "boredom" and "frustration", the lack of response-reinforcer contingency produces extinction ("laziness"), and stimulus and response generalization and modeling produce behavior described as "selfish", "envious" and "greedy." Of course, this analysis is far from comprehensive. Socialist systems typically develop massive bureaucratic structures that result in the inability of citizens to effect changes in aspects of their environment with which they are dissatisfied (Gorbachev, 1987; Kornai, 1986). The absence of such a contingency would be expected to result in learned helplessness — and indeed, many individuals in socialist systems have ceased emitting active responses which might alter the undesirable conditions, and consequently, feel powerless and depressed. On the other hand, the vast potential capacities of humans increases the probability that a wide variety of behaviors will be emitted as countercontrolling responses in aversive situations, in an effort to change the environment and acquire desired reinforcers. In this regard, an especially important part of humans' behavioral repertoire is cognitive skills in general, and symbolic and stimulus equivalence skills in particular. It is through such abilities that humans can analyze their environment,

identify the reinforcment contingencies in effect, and plan countercontrolling responses. Thus, while some individuals will manifest learned helplessness, numerous others who experience the socialist contingencies as aversive will respond with a wide variety of oppositional behaviors, many of which are likely to undermine the socialist contingencies.

My analysis, admittedly rudimentary, suggests that capitalism seems to be quite consistent with behavioral theory because the contingencies it specifies permits humans to acquire diverse reinforcers through the development of expanded behavioral options fostered by technological advances. Furthermore, I have asserted that in such a world — one characterized by sophisticated information, communication, travel, industrialization, and agricultural techniques — the contingencies established by socialism violate many of the behavioral tenets. I have given a few examples of those transgressions but offered no solutions or alternatives. But if socialism is to become a viable alternative to capitalism in the *real world*, one that naturally is and forever will be technological, it must creatively address these theoretical difficulties and implement modifications so as to be consistent with the behavioral theory of "human nature."

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