As human beings, we all have some conception of ourselves and what we are about. Our choice, therefore, is whether we want to accept one view of reality as true (and reject all others as false), or whether we want to critically examine our own view in the light of competing views and decide for ourselves which is closest to the truth.

We may, if we wish, simply accept as true what we are told by our parents, peer groups, or churches, or by George Bush and the Reader's Digest, or even by the Communist Party, USA, and let it go at that. Although this may provide a sense of intellectual and emotional security, this is largely illusory for it is obtained by wearing intellectual blinders.

A more fruitful option, I suggest, is to try to understand what these different "blind men" are telling us and to take from each of their views what we can use to develop our own conception of the truth. While this latter course may have its risks in that it leads through a confusion from which we may never emerge, it also has its rewards. It gives us the basis for better understanding of our fellow human beings and for a more secure understanding of ourselves. Socrates said that the unexamined life is not worth living. Although this may be extreme, it is true that we will lead fuller and richer lives through a critical examination of our varied options.

In pursuing this option, our tendency is to turn to science. If we are confused about the nature of galaxies, photosynthesis, or the love life of Guatamalan tree frogs, we can turn to discussions of these things by scientists with fair confidence of obtaining unbiased answers to our questions. This is not the case, however, with the social sciences. If we ask social scientists about human societies, we will end up right back with the blind men—functionalists, structuralists, symbolic interactionists, conflict theorists, ethnomethodologists, supply-side economists, Keynesians—all with differing ideas about the nature of human society and the significance of human social life. And then, of course, there are the Marxists who keep talking about class struggle.

Why don't social scientists get their act together and provide us with answers comparable to those of the natural sciences? To answer this question, we must review the nature and historical development of social science in relationship to the changing structure of society. We shall then be in a better position to evaluate the different perspectives of the social science.
2.1. THE NATURE OF SOCIAL SCIENCE

2.1.1. What Is Science?

The term, science, comes from the Latin word, scire, "to know." Science, then, is an attempt to understand reality. As such, science responds to a universal human need, for all people in all societies have some understanding of reality. But when we think of science we think of much more than this. The term science conjures up images of men in white coats surrounded by expensive equipment. Science is a source of unquestioned authority in our society, providing for modern Americans what priests and magicians provided for ancient Babylonians. Science not only cures our ills, devises new weapons, and sends men to the moon, science tells us the latest truths about far flung galaxies, sub-atomic particles, and the secrets of DNA. Science essentially defines reality for us. The hegemony of science is so complete that even fundamentalist Christians appeal to science for validation of their views of "scientific creationism."

What is it that gives science its tremendous power and authority in our society? To answer this question, we must look at science as an institution. We must examine both the institutional framework within which scientific activity takes place and the sources of support for such activity. Science, first of all, is a product of human labor, the social productive activity of scientists. Scientists, such as astronomers, marine biologists, or nuclear physicists, are people with expert knowledge of some particular aspect of reality who are paid to preserve, transmit, and extend that knowledge. Scientists work within scientific communities, groups of scientists who are linked together through reading and writing for scholarly journals and books, through membership in professional organizations, and through participation in scholarly meetings.

Now, since scientific communities devote themselves to the mental labor of scientific activity, they must be supported by society, or more precisely, by the ruling class. Such support comes primarily through salaries at Universities or research organizations, through research grants from the government or private foundations, and through consultant fees for businesses or government agencies. Through such support, the ruling class is able to control scientific activity.

Science is very much a modern phenomenon. Although incipient forms of science may be found among the ancient Sumerians, Egyptian, Greek, Chinese, Indian, Islamic and Native American civilizations, modern science is closely associated with the rise of the bourgeoisie in European civilization. The natural sciences give the bourgeoisie domination over nature; the social sciences provide domination over society.

Science, then, is a social activity. Rather than seeing science as some kind of disembodied intellectual activity, it is better seen as the social productive activity of a group of human beings that are members of society and are supported by society. Their position in society and their sources of support necessarily influences the nature of the scientific enterprise. Although this may seem less important in the physical sciences (although it certainly helps us understand why there is more research on the technology of fossil fuels and nuclear power, which are very profitable, than on solar
power, which is less so), it is vital in the social sciences as will become clear in our discussion.

In examining the nature of social science, we need to look at the scientific method of multiple working hypotheses, at the concepts of scientific paradigms and scientific revolutions, at the conservative and radical traditions in social science, and at the class base of social science.

2.1.2. Multiple Working Hypotheses

In one of the classic essays on the scientific method, Chamberlain observed that there have been three phases of intellectual development, which he terms "the method of the ruling theory," "the method of the working hypothesis," and "the method of multiple working hypotheses" (1897:395).

In the method of the ruling theory, we assume that we already know the essential nature of the phenomena in question and simply need to explain or interpret specific features in terms of what we already know. Thus, for example, if our ruling theory is the world according to Reagan and the Reader's Digest and we wish to explain what is happening in Central America, we do so in terms of the drive of the Evil Communist Empire toward world domination and the attempts of the United States to preserve Freedom. With this ruling theory, we can explain the entirety of world politics and we can also explain opposing views as misguided (peaceniks), wrong (liberals), or evil (communists).

The problem with the ruling theory, however, is that it tends to filter evidence in a highly selective manner. Data tend to be accepted or rejected not on the basis of their reliability, independently established, but rather on how well they fit the theory. Worse, the method of the ruling theory tends to breed intolerance and argumentativeness. If our ruling theory is right, others must be wrong. The validity of our theory must therefore be proved through its acceptance by everyone else. Those who refuse to accept our ruling theory must be, at best, perverse, and at worst, evil.

The method of the working hypothesis, sometimes presented as the scientific method, is a decided improvement. With this method, we develop a working hypothesis to explain phenomena and seek evidence which will either support or disprove our hypothesis. Thus, we may develop a hypothesis that U.S. activities in Central America are designed to prevent a Communist takeover. We they look for evidence that will allow us to either accept or reject this hypothesis.

This method has a number of advantages. It focuses our attention on the matter at hand and encourages us to gather all the relevant data before accepting or rejecting our hypothesis. The working hypothesis, therefore, is a means to seek the truth, rather than the embodiment of truth. The method of the working hypothesis, then, tends to encourage a tentative outlook and the dispassionate weighing of evidence.

The method of the working hypothesis, however, also has its disadvantages. It tends to limit the field of our vision to the pros and cons of one hypothesis in one particular area. We thus tend to ignore alternate explanations and the broader implications of the hypothesis. Further, the working hypothesis may easily become a ruling theory as a hypothesis which seems to fit one set of data is gradually extended beyond its original scope.
Chamberlain proposes the method of multiple working hypotheses as a corrective to the shortcomings of both the ruling theory and the working hypothesis. With this method, we attempt to develop all the hypotheses that can reasonably account for the phenomena in question and weigh all these hypotheses against the available data. Thus, to continue with our example, we examine simultaneously the hypotheses that U.S. involvement is to prevent a Communist takeover, that it is to protect business interests, that it is to prevent the Nicaraguans from determining their own destiny, that it is due simply to misunderstanding, and so on.

The advantages of the method of multiple working hypotheses include a broadening of the scope of inquiry and a systematic examination of alternative explanations. Further, through the use of multiple hypotheses, the risk of one evolving into a ruling theory is minimized.

An additional advantage of continual use of this method, according to Chamberlain, is that it leads to "the habit of complex thought," which

is contradistinguished from the linear order of thought which is necessarily cultivated in language and mathematics because their modes are lineal and successive. The procedure is complex and largely simultaneously complex. The mind appears to become possessed of the power of simultaneous vision from different points of view. The power of viewing phenomena analytically and synthetically at the same time appears to be gained. It is not altogether unlike the intellectual procedure in the study of a landscape. From every quarter of the broad area of the landscape there come into the mind myriad's of lines of potential intelligence which are received and co-ordinated simultaneously, producing a complex impression which is recorded and studied directly in its complexity. If the landscape is to be delineated in language, in must be taken part by part in linear succession. (Chamberlain 1897:401)

Thus, looking again at the complex landscape of Central America, we must break the ruling theory of Reaganism down into its components which in turn must be analyzed through multiple working hypotheses. A central feature of Reagan's view, for example, is that the Sandinista government is totalitarian and expansionist. This view must be subjected to multiple working hypothesis. Are there indeed "totalitarian" features in Sandinista Nicaragua (and what do we mean, "totalitarian")? If so, are they the result of Russian influence, a reaction to U.S. threats, a response to contra attacks, or simply a fiction of Reagan's propaganda? Do the threats to neighboring governments come from fears of Sandinista (or Cuban, or Russian) invasion, or do these threats come from the poverty and oppression of their own people? More than this, additional lines of inquiry from other areas of the Central American landscape. What is the historic role of the U.S. in Central America? How is this related to U.S. activity in South Africa, the Middle East, and Southeast Asia? Ultimately, we are forced to examine the nature of U.S. society itself, as well as the nature of the Soviet Union.

Chamberlain proposed the method of multiple working hypotheses as peculiarly well suited to the complex studies of the geologist, but clearly, the method is equally well suited to the complex studies of social scientists. It is also well suited to understanding the Human Adventure.

Growing up in the United States, we are likely to view our human adventures in the individualistic terms of capitalism. But if we grew up in the Soviet Union, we would be equally determined communists. If we were medieval English villagers, we
see things through the theological views of Christianity, while if we were medieval
Japanese villagers, we would be Buddhists.

Even within the United States, of course, there are a variety of options, ranging
from the consumerism of Madison Avenue and the careerism of many business and
professional schools to the evangelicalism of fundamentalist Christians or the political
activism of leftists. We may treat each of these views as so many working hypotheses
about how we should lead our lives and from them develop our own version of our
individual human adventures.

An essential component of this process is our attempt to understand the larger
Human Adventure within which our individual human adventures are embedded. Each
of the blind men telling us how to lead our lives has a larger view about the nature of
humanity and of the Human Adventure. Is humanity formed in the image of God, or a
giant slug? Is human society a smoothly functioning organism, or simply a dung heap?

In attempting to make sense of the Human Adventure, then, we may employ the
method of multiple working hypotheses and examine the different views set forth by
social philosophers and social scientists as so many working hypotheses about the
nature of the Human Adventure. Although each philosopher and scientist has a
somewhat different view, it is possible to group these views into broad categories.
When we do this, we find that there are a relatively limited number of fundamentally
different views about the nature of the Human Adventure. These include the
theological determinism of medieval Christianity and many contemporary Christians,
the biological determinism of the Social Darwinists and contemporary sociobiologists,
the secular scientism of the Enlightenment, the historical materialism of Marx, and the
ideological determinism of much of contemporary social science. Our review of the
history of social science, then, will focus on these views, how they developed, and
how they are related to our changing modern society.

2.1.3 Scientific Paradigms and Scientific Revolutions

We generally think of the history of science as a process of growth in which
scientists learn more and more and penetrate more deeply into the nature of exterior
reality. While this has certainly occurred, the actual history of science is more
complex. As T. S. Kuhn has pointed out, the history of science has been marked by
periods of revolution as well as normal evolutionary development (1962). According
to Kuhn, normal science takes place within a scientific paradigm, which may be
thought of as a theoretical framework of assumptions about the nature of reality, of
concepts for analyzing reality, of model solutions to problems, and of ideas about
what constitutes proper scientific questions. But as scientists accumulate more and
more data, anomalous facts begin to appear which do not conform to established
assumptions. This begins a period of extraordinary science, when fundamental
assumptions about the nature of reality are questions. This period lasts until a new
paradigm, that can account for the new facts, is found and accepted by the scientific
community. This is the process of scientific revolution, and the history of science,
according to Kuhn, can be seen as a history of scientific revolution, with newer and
better paradigms replacing old and no longer useful ones.

The Copernican Revolution in astronomy is a good example. During the Middle
Ages, astronomers were able to accumulate, within the geocentric Ptolemaic view of
the universe, considerable data about the motion of planets and stars and were able to make fairly reliable predictions about astronomical events. But as their observations improved, certain facts appears which were hard to account for within the Ptolemaic view. The planet Mars, for example, appears to move backwards against the backdrop of the fixed stars at certain periods. Although this could be explained by postulating additional assumptions, for example, that Mars was on a sphere that was located on a larger sphere rotating about the earth, such assumptions made the basic paradigm unduly cumbersome. Then Copernicus proposed a heliocentric view, that the sun, not the Earth, was the center of the universe, and the planets, including Earth, revolved about the sun. In this view, the apparent backward motion of the planet Mars is simply to the fact that Earth overtakes Mars in its more rapid motion about the sun. The new Copernican paradigm is thus superior from a scientific standpoint in that it accounts for the observed data in a more parsimonious manner.

The revolutionary change from one paradigm to another, however, is not accomplished smoothly, and Kuhn notes several forms of resistance to the new paradigm.

First, there is a kind of intellectual inertia. Since the old paradigm which has proved its usefulness over generations, scientists are reluctant to abandon it for an unproven paradigm.

Second, there is resistance from within the scientific community itself. Astronomers who have devoted their careers to working within the Ptolemaic paradigm, for example, are unlikely to abandon their assumptions simply because Mars moves in a strange manner every now and then. For this reason, it is not until the old generation of astronomers dies off and is replaced by a younger generation that has grown up with the new paradigm that the process of scientific revolution is completed.

Third, social forces outside the scientific community may resist the new paradigm for reasons completely external to science. The history of Western science has been a history of struggle with the established authority of the Church. One can, of course, still believe in God and Christ even without believing the Earth is the center of the universe or that God created the world in 4004 B.C.. But once the Church has lent its authority to certain views of the universe, it defends these views through extra-scientific means.

In spite of these conservative barriers, science has developed by the force of its own inner logic, and we have seen, in both the physical and biological sciences, the progressive development of paradigms with greater explanatory power. In each of the physical and biological sciences, there is a modern paradigm that is generally accepted within the scientific community.

2.1.4. The Causes of the Paradigmatic Confusion in the Social Sciences

In the social sciences, however, this is not the case. There is no overarching paradigm that commands the allegiance of all social scientists. Rather, there are a number of competing paradigms within each of the social and behavioral sciences, no one of which enjoys hegemonic status. Although some say this is because the social sciences are less developed than the physical or biological sciences, or that social
phenomena are too complex to allow the development of a single paradigm, there is
another explanation for the paradigmatic confusion of contemporary social science.
This explanation lies in the nature of the subject matter of social science. Quite
simply, there are powerful forces in society that resist being studied in a scientific
manner. As Marx and Engels noted, as Marx and Engels noted,
class
tended to reflect the interests of the ruling classes. As Marx and Engels noted,
class
ruling class, so the ideas used by social scientists are ruling class ideas. Generally
class
in conservative tradition, accordingly, has been dominant and represents the mainstream
radical
of so so. The conservative tradition has been carried on by members, or representatives,
radical
of perspective that they interpenetrate and influence each other. Individual social scientists usually
radical
there has been a continuing dialogue, or ideological class struggle, between them, so
radical
that they interpenetrate and influence each other. Individual social scientists usually
radical
embody elements of both traditions in their thinking, but usually one or the other
radical
perspective predominates.

Although Lenski does not relate these traditions to social class, it is important to
social
so so. The conservative tradition has been carried on by members, or representatives,
social
of the ruling classes and serves the interests of the rich and powerful in society. The
social
radical tradition, by contrast, serves the interests of the poor and oppressed. The
social
conservative tradition, accordingly, has been dominant and represents the mainstream
social
in the history of social thought.

Just as the ideas that exist within society at large are largely determined by the
conservative
ruling class, so the ideas used by social scientists are ruling class ideas. Generally
conservative
speaking, through most of history, social theorists have been members of the ruling
class
class or at least supported by the ruling class. For this reason, social theory has
class
tended to reflect the interests of the ruling classes. As Marx and Engels noted,
class

The ideas of the ruling class are in every epoch the ruling ideas; i.e. the class, which is the
class
ruling material force of society, is at the same time its ruling intellectual force. The class
class
which has the means of material production at its disposal, has control at the same time
class
over the means of mental production, so that thereby, generally speaking, the ideas of
class
those who lack the means of mental production are subject to it. (Marx and Engels
class
1846:39)

But the relationship between a social class and its literary and theoretical
representatives is not a simple one. As Marx elaborates elsewhere,
representatives

The peculiar character of Social Democracy is epitomised in the fact that democratic-
representatives
capital-republican institutions are demanded not as a means of doing away with both the
capital
extremes, capital and wage labour, but of weakening their antagonism and transforming it
wage
into harmony. However different the means proposed for the attainment of this end may
be, however much it may be trimmed with more or less revolutionary notions, the content remains the same. This content is the transformation of society in a democratic way, but within the bounds of the petty bourgeoisie. Only one must not form the narrow-minded notion that the petty bourgeoisie, on principle, wishes to enforce an egoistic class interest. Rather, it believes that the special conditions of its emancipation are the general conditions under which modern society can alone be saved and the class struggle avoided. Just as little must one imagine that the democratic representatives are all shopkeepers or enthusiastic champions of shopkeepers. According to their education and their individual position they may be separated from them as widely as heaven from earth. What makes them representatives of the petty bourgeoisie is the fact that in their minds they do not go beyond the limits which the latter do not go beyond in life, that they are consequently driven theoretically to the same tasks and solutions to which material interest and social position practically drive the latter. This is in general the relationship of the political and literary representatives of a class to the class they represent. (Marx 1852a:43-44)

Thus, the relationship between class and ideology, which at one level is quite simple and direct—ideology reflects the interests of the ruling class—becomes, on closer analysis, quite complex. One must consider, first of all, of course, the general hegemony that the ruling class exerts in all aspects of life. Secondly, one must consider the class position of social scientists and intellectuals in general. Historically, social theorists have tended to be members of the ruling class, for only members of the ruling class have enjoyed the leisure to indulge in systematic social theorizing. In the modern epoch, by contrast, many social scientists earn their livings as professional scientists and are, in this sense, workers. But they are elite workers, who enjoy relatively high salaries, secure jobs, and relatively privileged benefits and pensions, all of which makes them identify with the status quo. Third, teaching jobs and the sources of research support are controlled by the ruling class. All of this means that social scientists do not go beyond the limits imposed by the ruling bourgeoisie. Consequently, their theories objectively serve the interests of the ruling class, if not directly—by providing explicit legitimation for the status quo—then indirectly, by failing to challenge bourgeois rule. For these reasons, most social theory within bourgeois society is conservative and fails to provide fundamentally critical views of society.

There are powerful groups within society that do not want to be studied in a critical, scientific manner. If one wants to analyze the price of oil and the reasons for the dramatic increase in gasoline prices in the early '70s, for example, one needs to explore the hypothesis that the oil companies artificially created an oil shortage in order to drive prices up. To do this, one would have to examine the internal memoranda and account books of Exxon, Shell, Mobil Oil, and other oil companies, but even the CIA can't do this. Further, one of the largest funding sources for social scientific research, the Rockefeller Foundation, is itself controlled by the same people that run the oil companies. It is as if the sun did not want to be studied, and could prevent astronomers from even mentioning its existence. Under such conditions, a science of astronomy would be impossible. But it is under such conditions that social scientists work. Rather than wondering why there is such confusion in social science, we need to explain why social science has accomplished anything at all. How is a science of society possible?

To answer this question, we need to look at class struggle, for the emergence of social science is very largely a product of the complex class struggles of the modern epoch.
For our purposes, the complex class struggles of the modern epoch may be seen as passing through three phases. During the medieval phases of feudalism, the ruling class was the feudal nobility that owned the agricultural means of production (land) and lived by exploiting the serfs through rent and labor services. With the growth of commerce and urbanization, a new exploiting class began to emerge, the bourgeoisie. The bourgeoisie lived by commerce, exploiting both producers and consumers. The second phase of class struggle was characterized by struggles between the old feudal ruling class that sought to retain and extend its feudal privileges and the rising bourgeoisie, that had been an oppressed class under feudalism but was now contesting for state power. After the victory of the bourgeoisie in a series of bourgeois revolutions (the English Civil War and the American and French Revolutions), a new social order was built, capitalism, that served the interests of the new ruling class, the bourgeoisie. During the third phase, class struggles are primarily between the new ruling bourgeoisie, or capitalists, and the new oppressed class, the proletariat, or working class.

Modern social science developed within this framework of class struggle. The ruling paradigm during the feudal period was promulgated by the Church and saw the existing social order as an expression of the will of God. In its contest for state power, however, the rising bourgeoisie needed a new social science that would enable it to change society. This was found in the Enlightenment.

The ideological struggle between rulers and ruled, however, goes back to the dawn of recorded history, and can be seen clearly in both the Old and New Testaments.

2.II. THE PROPHETS, JESUS, AND EARLY CHRISTIANITY

Perhaps the earliest clear expression of the radical tradition in social thought may be found in the prophets of the Old Testament, in writers such as Isaiah, Jeremiah, Amos, and Micah. The prophets lived during a period when Israel was torn by civil war and the common people were suffering from severe class oppression:

See how the faithful city
has become a harlot!
She once was full of justice;
righteousness used to dwell in her—
but now murderers!
Your silver has become dross,
your choice wine is diluted with water.
Your rulers are rebels,
companions of thieves;
they all love bribes
and chase after gifts.
They do not defend the cause of the fatherless;
the widow's case does not come before them.
Isaiah 1:21-23

The prophets spoke out forcefully against the injustice and oppression of the times. Underlying their critique of Hebrew society was a view of society and the universe as governed by moral law. was a view of the world as a moral universe. Men and women had been created in the image of God, and therefore deserved to be valued equally, and treated with justice. This moral imperative of justice for the poor and
oppressed is the central organizing concept of the prophetic tradition. Consider the following:

Hear this, you heads of the house of Jacob
and rulers of the house of Israel,
Who abhor justice
and pervert all equity,
Who build Zion with blood
and Jerusalem with wrong.
Its heads give judgment for a bribe,
it priests teach for hire,
it prophets divine for money;
yet they lean upon the Lord and say,
"Is not the Lord in the midst of us?
No evil shall come upon us."
Therefore because of you
Zion shall be plowed as a field;
Jerusalem shall become a heap of ruins,
and the temple hill a wooded thicket.

Micah 3:9-12

We see here a clear statement of the operation of moral law. Because the rulers do not recognize God's moral law, Zion shall be destroyed.

Woe unto him that buildeth his house by unrighteousness, and his chambers by wrong; that useth his neighbor's service without wages, and giveth him not for his work;
That saith, I will build me a wide house and large chambers, and cutteth him out windows; and it is cied with cedar, and painted with vermilion.
Shalt thou reign, because thou closest thyself in cedar? did not thy father eat and drink, and do judgement and justice, and then it was well with him?
He judged the cause of the poor and needy; then it was well with him: was not this to know me? saith the Lord.
But thine eyes and thine heart are not but for thy covetousness, and for to shed innocent blood, and for oppression, and for violence, to do it....
I spake unto thee in thy prosperity; but thou saidst, I will not hear. This hath been thy manner from thy youth, that thou obeyest not my voice.
The wind shall eat up all thy pastors, and thy lovers shall go into captivity: surely then shalt thou be ashamed and confounded for all thy wickedness.

Jeremiah 22:13-22

Here again, the operation of moral law is the same. Since people do not listen to the word of God, they shall come to an unhappy end. Prophecy, here, is not simply a Nostradamus-like prediction that a certain thing will happen at a certain time, for example that the world will come to an end at a particular time. Prophecy instead is a statement of the operation of moral law, that there will be certain consequences for forsaking the will of God.

Jesus was heir to this prophetic tradition. He began his ministry by quoting the words of the prophet Isaiah:

The Spirit of the Lord is upon me,
because he has chosen me to bring good news to the poor.
He has sent me to proclaim liberty to the captives
and recovery of sight to the blind,
to set free the oppressed
and announce the acceptable year of the Lord.

Luke 4:18-19
The only "Good News" for the poor and oppressed is that they will be freed from their poverty and oppression. But what is good news for the poor will seem like bad news for the rich, for they will no longer be able to live by oppressing others.

In the view of Jesus and the early Christians, there was a fundamental opposition between wealth and justice. This is seen clearly in the response of Jesus to a rich ruler who sought eternal life:

Sell everything you have and give to the poor, and you will have treasure in heaven.…
How hard it is for the rich to enter the Kingdom of God. Indeed, it is easier for a camel to go through the eye of a needle than for a rich man to enter the kingdom of God. (Luke 18:22-25)

The spread of early Christianity shook the foundations of the decaying Roman Empire. But when Christianity became the state religion under the Emperor Constantine it was transformed from a radical critique of society into a mainstream defense of the status quo.

2.III. THE RISE OF SOCIAL SCIENCE

Modern social science is a product of the Enlightenment of the 18th Century, a period of struggle against Church dogma and popular superstition. The new scientific attitude which had developed during the scientific revolution of the 17th century was perhaps the major weapon in this struggle. This earlier revolution, led by such men as Nicolaus Copernicus, Johannes Kepler, Roger Bacon, Rene Descartes, and Galileo Galilei, involved a "radical change in educated common sense about the world", a change "from the notion of a living cosmos of earlier times to that of a dead universe:"

The main target of attack by the revolutionaries was the traditional higher education that was called Scholastic. Scholasticism assumed a living world, created and guided by God quite simply for man's benefit, and its study was largely accomplished by citing authorities, either philosophical or scriptural. The function of this knowledge was to rationalize sense experience in harmony with revealed religion. . . . Thus, in 1600 an educated man knew that the Earth was in the center of the cosmos, the seat of change, decay, and Christian redemption, while above it circled the planets and stars, themselves pure and unchanging but moved by some sort of intelligent or divine spirits and also signalling and influencing human events by their locations and aspects. One hundred years later, his equally Christian descendant knew (unless he lived in a church-controlled Catholic country) that the Earth was but one of the planets moving through unimaginable distances in empty space and that God could still operate. Similarly, the earlier man, as a reasonable person, would accept the overwhelming evidence for the working of enchantments and the prevalence of witches; while the latter one, with equal certainty, would dismiss all these stories as the effects of charlatanry, in the one case, and torture, in the other....

In spite of their difference in style and contribution, these three prophets shared a common commitment about the natural world and its study. Nature itself was seen by them as devoid of spiritual and human properties. There could be no dialogue with it, whether using mystical illumination or inspired authority. Rather, it had to be investigated soberly and impersonally, using sense experience and reason. Strange and prodigious phenomena, such as earthquakes, wonder cures, and monstrous births, which had been important subjects of speculation over the ages, were seen to be of less significance than regular, repeatable observations. Care and self-discipline were necessary in observation as well as theorizing, and cooperative work was important for the steady accumulation and testing of results.

The goals of inquiry still retained an influence from magic in that the traditional philosopher's ideal of contemplative wisdom was replaced by that of domination over
nature for human benefit. But the loss of belief in magical powers entailed changes in methods and also in responsibilities. In the absence of potent enchantments and elixirs, knowledge of nature was either beneficial when applied to marginal improvements of industry and medicine or was innocent. The moral optimism of modern European science was thus built into its foundations and became unquestioned common sense, until the hour when atomic bombs were dropped on the civilians of Hiroshima and Nagasaki. (Ravetz 1983:369-370)

The culmination of this revolution was found in the work of Isaac Newton, which in turn inspired philosophers such as Voltaire to apply the new scientific attitude to human society.

The central organizing idea of the Enlightenment was progress: human society was capable of improvement. Subsumed in the idea of progress were the ideas that human society was a product of human activity rather than God's will, that there were natural laws of society, just as of nature, that these laws were discoverable by scientific inquiry, and that by understanding these laws, men could build a better society, more accord with reason rather than superstition and dogma. Humanity, in short, had progressed in the past and would continue to do so in the future, provided men were free to apply their reason to human affairs.

Another important Enlightenment idea was an egalitarian conception similar to the modern culture concept. People come into the world, to use John Locke's formulation, as "blank slates" upon which experience writes its messages.

Reason thus became the yardstick by which existing society was measured, and found wanting. The arbitrary authority of kings, the privileges of the nobility, and the superstitions spread by the priests were subjected to critical scrutiny and found unsuitable for a society of free men who wished to live according to the dictates of reason and natural law. The social science of the Enlightenment, in short, served as an ideological weapon of the rising bourgeoisie which desired to be free from the restrictions of feudalism.

The Enlightenment thus provided a legitimizing ideology for both the American Revolution of 1776 and the French Revolution of 1789. The American Declaration of Independence clearly shows the influence of the Enlightenment:

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness. That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its power in such form, as to them shall seem most likely to effect their Safety and Happiness. (as quoted in Garraty 1979:805)

Similarly, the French Revolution was carried out under the proud slogan of "Liberty, Equality, Fraternity." In both cases the result was similar: the destruction of feudalism and the establishment of a new order more suited to the bourgeoisie in which the only inequalities were the inequalities of wealth.

The social theory of the Enlightenment saw society as a product of human activity, and therefore changeable by human activity, and saw history in terms of progress. All of this legitimated the efforts of the bourgeoisie to build a new society according to its own interests, which were seen as the interests of humanity in general.
Through the scientific revolution of the 17th century, the bourgeoisie gained dominion over nature. Through the social theory of the Enlightenment and the political revolutions of the 18th century, the bourgeoisie gained dominion over humanity. The society built by the bourgeoisie was modern bourgeois society, capitalism.

The Enlightenment, then, was based on the ideas that society is a product of human activity and people are products of society, and on the positive values of equality, human rights, progress, and reason. Such ideas were profoundly corrosive of the social order of feudalism. They were also corrosive of the inequalities and irrationalities of capitalism. For this reason, the social thought of the Enlightenment had to be replaced with something more supportive of capitalism. This something was found in Social Darwinism and Racial Determinism.

2.IV. SOCIAL DARWINISM AND RACIAL DETERMINISM

Once the bourgeoisie attained state power, it no longer needed a critical, materialist social science, and bourgeois social theory became conservative. The two dominant bourgeois social theories after the French Revolution were racial determinism and Social Darwinism, both of which legitimated the new status quo, but in different ways.

In contrast to the 18th century belief in human equality, the 19th century developed the idea of human inequality. Differences between peoples and between individuals were not simply the result of education, as the 18th century had assumed, but reflected innate, biological differences. With the exception of Marxism, social theory in the 19th century approved of inequality and saw it as rooted in nature as well as culture. The most important theories of inequality were Social Darwinism and racial determinism.

The impact of Darwin on the social science of the 19th and 20th centuries was comparable to that of Newton on the social science of the 18th century. Darwin's idea that species evolved through a "struggle for survival" in which the "fittest" survived and developed the race seemed to justify economic competition of capitalism. The most influential proponent of Social Darwinism was Herbert Spencer. As Harris notes, Spencer was overtly dedicated to the defense of private property and free enterprise, warning of the biocultural disasters that will befall mankind if government is permitted to intercede on behalf of the poor…. He was opposed to free public schools, libraries, and hospitals, compulsory sanitation; the licensing of doctors and nurses; compulsory smallpox vaccination; "poor laws" and public welfare system of all sorts. He deemed such manifestations of state planning to be against the laws of nature and predicted that they would increase the suffering of the weak and the underprivileged. (Harris 1968:125-126)

It should be noted that Spencer and Social Darwinism actually predates Darwin, and that Darwin himself drew upon social scientific models, especially the Malthusian theory of population, in developing the theory of natural selection. Harris goes so far as to suggest that Darwin's evolutionary theory should properly be called "Biological Spencerism" (Harris 1968:122-129).

The belief in the superiority of the white race was an important component of Social Darwinism and nearly all 19th century social thought (with the exception of Marxism). Perhaps the most influential theory of racial determinism was that of the French aristocrat, Count Joseph Arthur de Gobineau (1816-1882). Gobineau
advanced the theory that races vary in their mental abilities and moral character and that the rise and fall of civilizations is to be explained in racial terms (1853). Civilizations rise when superior races, especially the Aryan (white, north European) race, conquer inferior ones; civilizations fall when racial purity is lost through race mixture and interbreeding. Gobineau's ideas reflected the 19th century stress on racial inequality and were influential both in Nazi Germany and in legislation imposing immigration quotas in the United States. Although such ideas continue to be influential in some sectors of society, they have been thoroughly discredited by the scientific research of the 20th century.

Bourgeois social thought in the 19th century, then, transformed the radical paradigm of the 18th century Enlightenment into the conservative paradigms of Social Darwinism and Racial Determinism. This was accomplished by changing certain of the fundamental assumptions made by Enlightenment thinkers. It was no longer assumed that people were equal and the differences between people are products of social conditions. Rather, people were biologically unequal: ruling classes and ruling races were biologically superior, and that was why they ruled. Only the strong were to enjoy liberty, the weak had no rights. Human solidarity was replaced by an individual struggle for survival in which only the fittest could survive and enjoy life. Distasteful though this may seem, it was the law of nature and the law of God. Social thought, in short, became apologetic for the bourgeois status quo.

2.V. MARXISM

The new social orders which emerged from the historic revolutions of the seventeenth and eighteenth centuries, however, did not live up to their promise. The demand for liberty, equality, and fraternity was realized only for the rich; for the majority of society, there was toil, poverty, ignorance, and oppression. Why was this? This was a question that engaged many thinkers of the nineteenth century. The most persuasive answer was that provided by Karl Marx.

Marx began as a philosopher, attempting to understand the ideas and ideals of the Enlightenment thinkers and, in Germany, of the philosopher Hegel. But he soon came to realize that the problems of society did not flow from philosophy but rather economics. The problem was not simply that people were thinking wrong thoughts, but rather that they were enmeshed in economic relations that condemned them to poverty, ignorance, and oppression. To free humanity from its oppression, and to enable all individuals to develop their human potentials, it was necessary to understand these economic relations, and change them. "The philosophers have only interpreted the world in various way," Marx wrote, "the point, however, is to change it."

In the 1840s Marx began his study of political economy, critically examining the works of Adam Smith, David Ricardo, the utopian socialists, the Chartists in an attempt to understand the economic basis for human oppression. As a result of this study, he developed what is known as the materialist conception of history. As Marx himself describes this process,

My investigation led to the result that legal relations as well as forms of state are to be grasped neither from themselves nor from the so-called general development of the human mind, but rather have their roots in the material conditions of life, the sum total of which Hegel, following the example of the Englishmen and Frenchmen of the eighteenth
century, combines under the name of "civil society," that, however, the anatomy of civil society is to be sought in political economy. The investigation of the latter, which I began in Paris, I continued in Brussels, whither I had emigrated in consequence of an expulsory order of M. Guizot. The general result at which I arrived and which, once won, served as a guiding thread for my studies, can be briefly formulated as follows: In the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage in the development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness. (Marx 1859:4)

Humanity has progressed from a lower to a higher existence—in this Marx agreed with the Enlightenment thinkers. But the engine of progress was not simply human reason but rather two forces: the progressive development of humanity's forces of social production and class struggle.

The forces of social production are the tools, technology, knowledge, and skills used to produce the goods necessary to satisfy human needs. These have become increasingly powerful and sophisticated, from the digging sticks, clubs, and spears of the earliest hunters and gatherers to the more sophisticated techniques of agriculture, the plow, draft animals, irrigation, architecture, wind and water power, and, in the modern period, with the application of science to industry, machines, the steam engine, railroads, and the other powerful productive instruments of the modern epoch. (Marx wrote before the invention of automobiles, airplanes, radio and TV, and computers, but these, of course, are merely extensions of this basic principle of human development, the progressive development of the forces of social production.)

This progressive development of social production led to an increase in the total wealth available to society, what is known as the social product, or the totality of goods and services produced by a particular society. But this wealth was not equally distributed. Indeed, those that actually produced the wealth through their own labor did not enjoy the fruits of their labor. This was a result of the division of society into opposing classes, rulers and ruled. The ruling class lived by appropriating the surplus product of the direct producers, over whom they ruled. Between these two classes, the rulers and the direct producers, there was a class struggle. As Marx and Engels described it in the Communist Manifesto:

The history of all hitherto existing society is the history of class struggles.

Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary re-constitution of society at large, or in the common ruin of the contending classes.

In the earlier epochs of history, we find almost everywhere a complicated arrangement of society into various orders, a manifold gradation of social rank. In ancient Rome we have patricians, knights, plebeians, slaves; in the Middle Ages, feudal lords, vassals, guild-masters, journeymen, apprentices, serfs; in almost all of these classes, again, subordinate gradations.

The modern bourgeois society that has sprouted from the ruins of feudal society has not done away with class antagonisms. It has but established new classes, new conditions of oppression, new forms of struggle in place of the old ones.
Our epoch, the epoch of the bourgeoisie, possesses, however, this distinctive feature: it has simplified the class antagonisms: Society as a whole is more and more splitting up into two great hostile camps, into two great classes directly facing each other: Bourgeoisie and Proletariat. (Marx and Engels 1848:2-3)

The development of humanity, then, can be briefly described in terms of the interrelationship between these two processes, the progressive development of the forces of social production and class struggle.

It should be stressed that the Marxian conception of class, and of class struggle, is quite different from that of bourgeois social thought. According to the mainstream tradition in social science, inequality is viewed in terms of stratification: society is divided into lower, middle, and upper "classes," with only quantitative differences between them. The upper classes have more wealth, power, and prestige than the lower.

Now, this view of inequality has some merit, and does describe some aspects of inequality fairly well. We all know workers who are lazy, and have heard stories about lazy slaves. We are told how hard doctors and lawyers work. Every homeless person can tell stories about poor choices or bad luck. In our conventional thinking, which is also the view of bourgeois social science, people are placed on the structure of inequality based upon their own history of work (industrious or lazy), choice (wise or foolish), and luck (good or bad), but one person's good fortune is not related to any other persons poor fortune. In short, the class system is benign.

From a Marxist perspective, however, these bourgeois views only describe the surface of social life. Underlying these superficial aspects of human social behavior there is an objective class structure which is independent of the subjective feelings and beliefs of the people themselves. However complex systems of inequality may become, they are fundamentally two-class systems in which each class is dialectically defined in terms of the other. You cannot be a ruler unless you have other people over whom you rule. You cannot be a master unless you have slaves. If you are a slave, this means someone else is your master. You cannot be a noble unless you have peasants who labor for you. If you are a landlord, your ownership of land means nothing unless there are other people who pay you rent. If you are a capitalist, you must employ workers. You cannot have a society made up entirely of capitalists, any more than you can have a society of all nobles, and no peasants, of all masters, and no slaves, of all chiefs, and no Indians. One's class position, in short, defines a social relationship. For Marx, this social relationship was fundamentally one between those who own the means of production, and are thereby able to control the labor of others, and those who do not own the means of production, and therefore must labor for those who do. The relationship, in short, is an exploitative one.

People do not submit freely to exploitation. They resist, and must be coerced. This is the basis of class struggle. Slaves attempt to flee, and conspire to overthrow their masters. Peasants rebel. Workers go on strike for higher pay and better working conditions. This class struggle between rulers and ruled is, for Marx, the motive force of progressive social change.

The forms of class struggle, of course, are intimately tied to the level of development of the forces of production. The intertwining of these two factors accounts for the changes which are seen in historical development.
In the earliest period, that of hunting and gathering, the forces of production were weakly developed so that everyone had to work at food production tasks and society was unable to produce a surplus. This, therefore, was a classless society, primitive communism.

After the development of agriculture, the productive system became more powerful, capable of producing a surplus over and above the immediate needs of the food producers. This opened the way for the development of class society, as some people developed techniques for living off the labor of others. These people became the earliest ruling class.

The first form of class society was the slave society of ancient Greece and Rome, where the ruling class of masters lived off the product of slave labor. The contradictions of slave society led ultimately to its downfall and the revolutionary reconstitution of society on a new basis.

This new society was feudalism which was created by the new class of warriors that came to power after the collapse of the Roman Empire. The warriors became the new ruling class of nobles and landowners, while the direct producers were peasants, tied to the land, but not owning the it, and therefore forced to pay rent to the nobles.

As the economy developed with trade and commerce, a new class of merchants developed. The merchants were outsiders in feudalism, since they neither owned the land nor produced anything, but lived by buying and selling. They were oppressed by the landowning nobles, and, as their wealth and power increased, began to struggle against the restrictions of feudalism. The class struggles between the merchants, or bourgeoisie, and nobles were the underlying cause of many of the wars of the sixteenth and seventeenth centuries. Ultimately, the merchants were able to overthrow feudalism in a series of bourgeois revolutions: the English Civil War of 1640-1660, the American War of Independence of 1776, and the French Revolution of 1789.

As they gained state power, the bourgeoisie built a new society to their own liking—capitalism. The bourgeoisie became capitalists who owned the means of production—the factories of industrial society. The peasants had been driven from the land became workers, who did not own any productive property and were therefore economically compelled to sell their labor power to the capitalists and work in the factories for wages.

For Marx, then, modern society, capitalism, was not a reflection of human nature but rather the latest form of class rule. It was a social order established by the capitalist class after the revolutionary overthrow of feudalism. Although Marx criticized the exploitation, oppression, and suffering of capitalism, he also regarded it as a progressive step forward in the development of humanity, since it was a necessary precursor of socialism. According to Marx and Engels,

The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more colossal productive forces that have all preceding generations together. Subjection of Nature's forces to man, machinery, application of chemistry to industry and agriculture, steam-navigation, railways, electric telegraphs, clearing of whole continents for cultivation, canalization of rivers, whole populations conjured out of the ground. What earlier century had even a presentiment that such productive forces slumbered in the lap of social labor? (Marx and Engels 1848:10)

At the same time they were developing the engines of production, the capitalists were also creating the conditions which would lead to their own overthrow. "What the
bourgeoisie produces above all, wrote Marx and Engels in the Communist Manifesto, are its own gravediggers, the proletariat." By tearing the direct producers, the peasants and craftsmen, free from their feudal relationships, by driving them out of what Marx called "the idiocy of rural life" and into the cities, by organizing them into ever larger productive units, the bourgeoisie were creating a new class, the proletariat. As this new class became aware of itself as a class, and organized as a class, it would overthrow the bourgeoisie just as the bourgeoisie had overthrown the feudal nobility.

Just as the bourgeoisie had created a new social order—capitalism—that served its interest, so the proletariat would create a new social order to serve its interest. This new order would be socialism. This new socialist system would be a classless society in which the means of production would be socially owned and democratically controlled to serve the needs of society, not the private profit of the capitalists.

In this way, Marx transformed the utopianism of the early socialists, who merely devised blueprints of an ideal society without specifying how this new society would be built, into scientific socialism. Through a scientific analysis of capitalism, Marx showed how the contradictions of capitalism would lead to its negation and specified the agent—the working class—which would build socialism. The entire life-work of Marx was devoted to developing the class consciousness of the working class and to providing them with a social science that would enable the working class to realize its historic mission.

It was not mere blind faith, or wishful thinking, that led Marx to attribute this role to the working class, however. It was, rather, the actual class situation of the proletariat.

If socialist writers attribute this world-historical role to the proletariat, this is by no means, as critical criticism assures us, because they regard the proletarians as gods. On the contrary. Since the fully formed proletariat represents, practically speaking, the completed abstraction from everything human, even from the appearance of being human; since all the living conditions of contemporary society have reached the acme of inhumanity in the living conditions of the proletariat; since in the proletariat man has lost himself, although at the same time he has both acquired a theoretical consciousness of this loss and has been directly forced into indignation against this inhumanity by virtue of an inexorable, utterly unembellishable, absolute imperative need, that practical expression of necessity—because of all this the proletariat itself can and must liberate itself. But it cannot liberate itself without destroying its own living conditions. It cannot do so without destroying all the inhuman living conditions of contemporary society which are concentrated in its own situation. Not in vain does it go through the harsh but hardening school of labour. It is not a matter of what this or that proletarian or even the proletariat as a whole pictures at present as its goal. It is a matter of what the proletariat is in actuality and what, in accordance with this being, it will historically be compelled to do. Its goal and its historical action are prefigured in the most clear and ineluctable way in its own life-situation as well as in the whole organization of contemporary bourgeois society. There is no need to harp on the fact that a large part of the English and French proletariat is already conscious of its historic task as is continually working to bring this consciousness to full clarity. (Marx and Engels 1845:134-135)

Unlike the bourgeoisie, which is defined by its wealth, the proletariat is defined by its oppression, by its "abstraction from all that is human." The bourgeoisie, further was a minority within feudal society. The working class, by contrast, constitutes the majority of modern society. This majority, therefore, cannot liberate itself "without destroying all the inhuman living conditions of contemporary society which are concentrated in its own situation."
Further, the nature of the industrial production of the proletariat stood in contrast to the rural agrarian production of the peasantry. An oppressed peasantry may be quite revolutionary. But a peasant revolution merely seeks the redistribution of individual property rights, as each peasant family simply desires its own land to carry own its own production without oppression. This petty agrarian production, however, carries the seeds for the re-emergence of class relations as the peasantry becomes differentiated into rich and poor peasants, and ultimately into landlords and tenants. A working class revolution, by contrast, seeks to abolish private property and create collective ownership of the means of industrial production since industrial production is necessarily social and collective. It makes no sense for workers to claim segments of an assembly line as their private property. The demand for social ownership of the means of production, therefore, flows from the nature of industrial production itself.

Finally, the tremendous productivity of industrial production has, for the first time in history, abolished the scarcity basis of class rule. Class rule itself only emerged after the development of the forces of production had reached a certain level. In the phase of hunting and gathering society, everyone had to work in order for society to survive. The productive system was incapable of supporting an unproductive class. With the development of agriculture, society was capable of producing a surplus, and the ruling class lived by appropriating this surplus. Throughout the history of civilization, society was capable of supporting some of its members in leisure and affluence. But the affluence and leisure of this minority had to be paid for by the poverty and oppression of the majority. Industrial production, for the first time in history, was capable of producing enough for everyone to live in affluence without having to exploit others. The scarcity basis of class rule is thereby abolished.

Thus, during the earliest phase of human society, that of primitive communism, equality was an equality of poverty. During the middle phases of human society, the wealth of the minority was purchased by the poverty of the majority. The future society, socialism, equality will be an equality of affluence. The communism of our descendants, thus, will be a return to the communism of our ancestors, but on a higher plane, a plane of affluence rather than of poverty.

But this new society would not emerge without struggle. Contrary to what his critics claim, Marx did not believe that a working class revolution would solve all of humanity's problems, immediately and automatically. Instead, Marx criticized those who would "substitute the catchword of revolution for revolutionary development":

While we say to the workers: You have 15, 20 or 50 years of civil wars and international conflicts to go through, not just in order to change prevailing conditions but also to change yourselves and to qualify for political control, you say, on the contrary: 'We must immediately come to power, or we can go to sleep.' (Marx 1852c:105)

For Marx, the revolution was not an event but a process occurring over a long historical period during which the proletariat would gain the political maturity to rule as a class. During this time, the organization of the proletariat would take the form of a class dictatorship:

Between capitalist and communist society lies the period of the revolutionary transformation of the one into the other. Corresponding to this is also a political transition period in which the state can be nothing but the revolutionary dictatorship of the proletariat. (Marx 1875:538)
This concept, the dictatorship of the proletariat, has perhaps been more systematically misunderstood than any of Marx's ideas, and many well meaning socialists have suggested that it be dropped from the Marxist lexicon. Marx himself, however, regarded it as among his most important contributions to the science of socialism:

And now as to myself, no credit is due to me for discovering the existence of classes in modern society or the struggle between them. Long before me bourgeois historians had described the historical development of this class struggle and bourgeois economists the economic anatomy of the classes. What I did that was new was to prove: 1) that the existence of classes is only bound up with particular historical phases in the development of production, 2) that the class struggle necessarily leads to the dictatorship of the proletariat, 3) that this dictatorship itself only constitutes the transition to the abolition of all classes and to a classless society. (Marx 1852b:104)

Some words of clarification are in order. The term dictatorship of the proletariat refers to the class content of the state during the transitional period, not necessarily its form. Athenian democracy, like the later Jeffersonian democracy, was a dictatorship of the slavocracy. It was democratic for the slaveowners, not for the slaves. Similarly with our own bourgeois democracy, which is democratic in form, but protects the class interests of the capitalists in a quite dictatorial fashion. After the revolution the bourgeoisie will want to restore their class privileges by whatever means necessary. The purpose of the dictatorship of the proletariat is to prevent the restoration of capitalism and protect the emerging socialist order. Whether this is done democratically or otherwise is of course a very important question, but it must be done.

Further, although the ultimate aim of the revolution would be to abolish inequality and establish a classless society, this could not be done overnight. Inequality and injustice would continue even after the revolution. For, as Marx explains.

What we have to deal with here is a communist society, not as it has developed on its own foundations, but, on the contrary, just as it emerges from capitalist society; which is thus in every respect, economically, morally and intellectually, still stamped with the birth marks of the old society from whose womb it emerges.…

But these defects are inevitable in the first phase of communist society as it is when it has just emerged after prolonged birth pangs from capitalist society. Right can never be higher than the economic structure of society and its cultural development conditioned thereby.

In a higher phase of communist society, after the enslaving subordination of the individual to the division of labour, and therewith also the antithesis between mental and physical labour, has vanished; after labour has become not only a means of life but life's prime want; after the productive forces have also increased with the all-round development of the individual, and all the springs of cooperative wealth flow more abundantly—only then can the narrow horizon of bourgeois right be crossed in its entirety and society inscribe on its banner: From each according to his ability, to each according to his needs! (Marx 1875:531)

Marx's vision, it should be stressed, was not simply theorizing, but was based on his analysis of capitalism as a social order and of the actual revolutionary development in Marx's life. Marx grew to maturity during the aftermath of the French Revolution of 1789, when revolutionary change was very much on people's minds. In 1848, the year the Communist Manifesto was published, another wave of revolutions broke out throughout Europe, and these revolutions were increasingly taking on a proletarian character. In 1871, following the French defeat in the Franco-Prussian war, the
workers of Paris rose up and established the Paris Commune, the first working class
government in history. The Paris Commune was crushed, after three months, by the
international bourgeoisie using the French and German armies and killing some thirty
thousand communists. Marx and Engels were influential in the formation, in 1864 of
the International Workingmen's Association which included representatives from
England, France, and other leading European nations, as well as the United States.

The International was disbanded in 1871, but soon socialist parties were organized
in most of the leading European nations. In 1889, Engels took part in the founding of
the Second International, an association of socialist parties that were becoming
increasingly powerful and electing their members to parliaments.

By the time of their deaths in 1883 and 1895, Marx and Engels could see the
correctness of their theories being confirmed in the actual struggles of the working class
in the leading European nations. The working class was becoming increasingly class
conscious and powerful, socialist parties were becoming more respectable and
successful.

But these very successes tended to blind the followers of Marx and Engels to
important changes that were occurring within the capitalist system. It began to appear
as though socialism could evolve gradually, through peaceful electoral methods, rather
than through a working class revolution which would necessarily involve violence. It
further appeared as though the nations that had led the world into
capitalism—England, France, Holland, Germany—would also lead the world into
socialism. All that was necessary was for the workers to elect their representatives to
parliament, and use their political and economic power to wrest ever greater reforms
from the capitalists. As Engels himself noted, "We, the 'revolutionists,' the
'overthrowers'—we are thriving far better on legal methods than on illegal means and
overthrow" (Engels 1895:571).

But history, which Engels said turns everything upside down, had decreed
otherwise. With the outbreak of the first world war in 1914, the representatives of the
leading socialist parties in Germany, France, and England voted to support the war, to
support their capitalists, and to send their workers off to kill each other. Only the
Italian and U.S. socialist parties opposed the war. The outcome of the war was a
socialist revolution, not in the leading capitalist nations of Europe, but in backward
Russia. How was this possible?

The answer was provided by Lenin.

Lenin was born in Russia, a land ripe for revolution against the oppressiveness of
Tsarist rule and in fact teeming with revolutionary ideas and practices. After his older
brother was executed for attempting to assassinate the Tsar, Lenin promised that "we
will follow a different path." Lenin studied Marxism, helped found the Russian Social
Democratic Party, and became the leader of the Bolsheviks, the majority faction of the
party. In his polemics with the social-democratic Mensheviks, Lenin creatively
applied Marxism to the changed conditions of the early twentieth century.

Before proceeding, it should be noted that Lenin himself never developed
"Leninism" in a systematic manner; his writings are all directed toward particular
theoretical, practical, tactical, and organizational struggles. Marx stated quite flatly
that he was not a "Marxist." Lenin was a Marxist, but never described himself as a
"Leninist." The work of providing a systematic exposition of "Leninism" was
accomplished by Stalin, whose *Foundations of Leninism* (1924) held a hegemonic position for decades. This is still a useful work that must be read and understood, but the Party's Truth, it isn't. It is quite likely, indeed, that much of what we think of as "Leninism" is not the product of Lenin at all, but rather Stalin. This does not, of course, mean that it should be rejected, merely that we need to sort these things out.

The first of Lenin's contributions was his defense of the teachings of Marx and Engels on the class nature of the state and the need for working class revolution against the revisionists who argued that a peaceful, democratic transition to socialism was possible. In *State and Revolution*, written in 1917 during the period between the February and October Revolutions in Russia, Lenin re-examined the writings of Marx and Engels to demonstrate that the state in capitalist society, however democratic it may appear, was in fact a dictatorship of the bourgeoisie, that the workers could not simply "take over" the machinery of bourgeois rule but would rather have to forcefully transform it into an instrument for proletarian rule, and that this "dictatorship of the proletariat" was the essential mechanism for building socialism (Lenin 1917).

The second contribution of Lenin is his theory of imperialism, which accounts for the changes in capitalism that had occurred since Marx's time (Lenin 1916). When Marx was writing *Capital*, he based his analysis on England, which was the leading capitalist nation, and his analysis focused on competitive capitalism, which was dominant at that time. By Lenin's time, capitalism had matured into monopoly capitalism, dominated by large corporations and finance capital. In addition to exporting commodities, the leading capitalist nations were also exporting capital to their colonies. This export of capital gave them control over the resources and labor of the colonies. Thus capitalism had become transformed into an international system covering the entire world. Within this world imperialist system, there were kinds of nations, the imperialist nations and the oppressed nations. The capitalists of the imperialist nations of England, France, and later, Germany, were able to thereby exploit not only their own workers, but also the workers and peasants of the oppressed nations in the colonial world.

This transformation in the nature of capitalism necessarily led to a transformation in the revolutionary activity. It was no longer practical to talk of revolution occurring within each capitalist nation according to the degree of development of capitalism within that nation, as did the revisionists of the Second International. Rather, one had to work for an international revolution in which the entire imperialist system would undergo a revolutionary transformation into socialism. This revolution would not necessarily break out first in the imperialist nations where the capitalists were strongest, but in the oppressed nations, where the chain of world imperialism was weakest. And, in fact, the tide of revolutionary activity had shifted in the twentieth century to the oppressed nations: the Russian Revolution of 1905, the Mexican Revolution of 1910, the Chinese Revolution of 1911, the Persian Revolution of 1905-11 (Manfred 1974:1, 541-569). This was the changed reality which Lenin had to explain and to which Leninism had to adapt.

The third of Lenin's contributions was his development of the vanguard party. The shift in the locus of revolution necessitated a shift in revolutionary tactics. In the oppressed nations the working class was not the majority of the population. For this reason, the working class had to ally itself with other oppressed classes, specifically
the peasants who formed the majority of the population in the oppressed nations. This worker-peasant alliance, symbolized by the hammer and sickle, became the basis for revolutionary activity in the oppressed nations.

Further, the oppressed nations lacked the institutions of parliamentary democracy and political freedoms which had emerged from the class struggles in the imperialist nations in the eighteenth and nineteenth centuries. This necessitated a different form of struggle than had developed within the imperialist nations themselves. In order to conduct class struggle under these conditions, the proletariat needed a vanguard party, of professional revolutionaries recruited from the most class conscious members of the working class and organized around the principle of democratic centralism (Lenin 1902). Within the party, decisions would be reached by open debate and democratic processes. Once these decisions were reached, however, they would be binding on all members. Strict discipline, and even secrecy, was necessary under the oppressive conditions of Tsarist rule. The vanguard party is thus the instrument through which the working class struggles against imperialism. It is not separate from the working class but rather is an organic part of the proletariat, organically tied to it and to the other organizations of working class struggles, such as the trade unions.

In the imperialist nations, by contrast the struggle of the working class becomes deflected by the development of an aristocracy of labor. The imperialists are able to use the superprofits gained by the oppression of their colonies to bribe a sector of the working class. This imperialist bribe becomes the material basis for the opportunism displayed by the social democratic parties of the Second International which are committed to reform rather than revolution. This is the source of the strength of the bourgeoisie within the imperialist nations.

Thus, Leninism sees capitalism, revolution, and socialism in global terms. The change from capitalism to socialism involves a global transition, not simply individual nations choosing capitalism or socialism. Two further concepts are essential in thinking about this global transition: the global crisis of capitalism and the world revolutionary process.

The global crisis of capitalism is manifest in inter-imperialist rivalries, the two World Wars, the Great Depression, and the rise of socialism. The world revolutionary process is unfolding along three lines: the emergence of socialism in the formerly oppressed nations such as the Soviet Union, China, and Cuba; continuing struggles for national liberation in the oppressed nations; and continuing working class struggles in the imperialist nations themselves.

With the victory of the Russian Revolution in 1917, Leninism became an international movement, and posed a real threat to imperialism. The international bourgeoisie countered this threat economically, politically, militarily, and ideologically. We shall discuss the economic, political, and military aspects of the struggle between capitalism and socialism in a later chapter. What needs to be considered at this point is the ideological class struggle, particularly the manner in which this was waged within social science.
2.VI. THE COUNTERREVOLUTION IN SOCIAL SCIENCE

Within social science, the bourgeoisie countered the ideological threat of Marxism and Leninism in three ways. First, Marx was consistently misunderstood, in ways that can only be intentional. Second, social science was divided into separate disciplines (Economics, Political Science, Sociology, Psychology, Anthropology) each of which dealt only with a part of social reality and could therefore ignore crucial aspects of class struggle. Third, the anti-Marxist theoretical frameworks of bourgeois eclecticism were promulgated. These enabled social scientists to study social while ignoring the reality of class rule and class struggle. We shall examine each of these aspects of the bourgeois counterrevolution in social science.

2.VI.1. Intentional Misunderstandings of Marxism

Most scholars do not want to accept Marxism, for if they do so, they cannot in good conscience support the bourgeois status quo. Reasons must be found, therefore, for rejecting Marxism. This is the social psychological source of what Miranda has called "intentional misunderstandings"—misreadings of Marx whose purpose is to discredit his critique of capitalism. This procedure, in which excuses are sought to justify a position which has been arrived at for extra-scientific reasons, is diametrically opposed to that of science, but nevertheless has dominated scholarly discussions of Marx.

The mental processes underlying these intentional misunderstandings, of course, need not be conscious to operate effectively. Indeed, they may operate all the more effectively for being unconscious. For this reason, it is essential to deal with them openly and explicitly.

If one's purpose, then, is to reject Marxism, one may find ample criticisms by bourgeois scholars to justify such rejection. That such criticisms are based on misinterpretations of Marx's thought is, given this purpose, beside the point. But for those who seek the truth, it is very much to the point. It is important, therefore, to examine, however briefly, some of the major distortions of Marx's thought.

Thus, Marx is criticized as an economic determinist, and rejected as overly simplistic. Marxism should not, however, be confused with economic determinism. According to economic determinism, economic considerations determine, purely and simply, peoples thought and behavior. Marxism also rejects this as too simplistic. Both Marx and Engels explicitly dealt with the differences between their historical materialism and economic determinism. As Engels put it,

According to the materialist conception of history the determining element in history is ultimately the production and reproduction in real life. More than this neither Marx nor I have ever asserted. If therefore somebody twists this into the statement that the economic element is the only determining one, he transforms it into a meaningless, abstract and absurd phrase. The economic situation is the basis, but the various elements of the superstructure—political forms of the class struggle and its consequences, constitutions established by the victorious class after a successful battle, etc.—forms of law—and then even the reflexes of all these actual struggles in the brains of the combatants: political, legal, philosophical theories, religious ideas and their further development into systems of dogma—also exercise their influence upon the course of the historical struggles and in many cases preponderate in determining their form. There is an interaction of all these elements, in which, amid all the endless host of accidents (i.e., of things and events whose inner connection is so remote or so impossible to prove
that we regard it as absent and can neglect it), the economic movement finally asserts itself as necessary. Otherwise the application of the theory to any period of history one chose would be easier than the solution of a simple equation of the first degree. (Engels 1890:204)

Clearly, the historical materialism of Marx and Engels is not simply economic determinism, and Marx and Engels were fully aware of the importance of other "factors" in historical causation. Even the most superficial reading of their work will confirm this, and scholars who continue to criticize Marx as an economic determinist are guilty of what can best be called an intentional misunderstanding (for fuller discussion, see Plekhanov 1895, 1897, 1898).

On the other hand, Marx's mode of thought, dialectics, has been criticized as either too rigid, or too nebulous. Many view dialectics in terms of the "triads" of thesis, antithesis, and synthesis, but this is misleading. As Plekhanov notes,

Not once in the eighteen volumes of Hegel's works does the "triad" play the part of an argument, and anyone in the least familiar with his philosophical doctrine understands that it could not play such a part. (Plekhanov 1895:81-82)

Dialectics, as Engels points out, is simply a recognition of the inevitability of change and of the necessary interconnectedness of social phenomena. Many refuse to understand dialectical modes of thought, but that is scarcely Marx's fault. Marx is also criticized for "advocating violence," but this criticism, too, is a gross oversimplification. Marx was of course fully aware of the crucial role of violence and force in all class divided societies, but this is a scientific assessment of reality, not a statement of how things ought to be. To the best of my knowledge, no serious social scientist has denied that violence and force does in fact play a key role in maintaining class structures, although many would prefer to ignore this and focus on other aspects of the social system.

Marx did argue that the proletariat would need to use force to establish socialism. But Marxists have always stressed that a peaceful road to socialism is desirable, but unlikely in view of the fact that the bourgeoisie used force to establish and maintain capitalism and would continue to use force against a proletarian revolution, however peaceful and democratic.

The Catholic Church believes that private property should be protected by the state and also has a doctrine of "just war," but few accuse the Pope of "advocating violence" for this reason. Nearly everyone, pacifists included, believe that murderers and rapists should be restrained from their activities, using whatever force is necessary, but again, few chastise the human race for "advocating violence" because of this. The simple fact is that Marx and Marxists are no more enamored of violence than anyone else. To suggest otherwise is simply another intentional misunderstanding.

Another line of defense against Marxism is to argue that, although Marx's criticisms of capitalism may have some merit, his solutions are unrealistic. No social order is perfect, it is argued, and inequality cannot be eliminated, at least in the foreseeable future. Of course, there is no such thing as a perfectly germ-free room either, but this is not a justification for performing heart surgery in the gutter. In fact, Marx did not foresee the complete elimination of inequality and other social ills immediately after the revolution. Instead, he saw the construction of socialism as a long, drawn-out process involving generations of struggle. Criticisms of Marx to the
effect that he expected revolution to solve all of humanity's problems are thus wide of the mark.

If the Marxian critique of capitalism is acknowledged to be correct, the final line of defense is to attack the Soviet Union and other socialist nations. There is, in fact, a whole industry devoted to the fabrication of misrepresentations of Soviet society. We will attempt to deal with the Soviet Union more realistically in a later chapter. For now, we will merely mention this as one additional form of the intentional misunderstanding of Marxism.

It is difficult to discuss adequately all these intentional misunderstandings, for as soon as one is answered, another appears to take its place. As one deals with the various objections to Marxism in turn, it soon becomes clear that they cannot be taken at face value. The purpose behind them is not the search for truth, but rather the rejection of Marxism regardless of whether or not it is true.

2.VI.2. The Disciplines of Social Science

Under the threat of the unified science of Marxism, bourgeois social science divided into separate disciplines. As Eric Wolf notes, "the several academic disciplines own their existence to a common rebellion against political economy, their parent discipline" (Wolf 1982:19). As Wolf describes this process:

We seem to have taken a wrong turn in understanding at some critical point in the past, a false choice that bedevils our thinking in the present

That critical turning point is identifiable. It occurred in the middle of the past century, when inquiry into the nature and varieties of humankind was split into separate (and unequal) specialties and disciplines. This split was fateful. It led not only forward into the intensive and specialized study of particular aspects of human existence, but turn the ideological reasons for that split into an intellectual justification for the specialties themselves. Nowhere is this more obvious that in the case of sociology. Before sociology we had political economy, a field of inquiry concerned with "the wealth of nations," the production and distribution of wealth within and between political entities and the classes composing them…. The rising tide of discontent pitting "society" against the political and ideological order erupted in disorder, rebellion, and revolution. The specter of disorder and revolution raised the question of how social order could be restored and maintained, indeed, how social order was possible at all. Sociology hoped to answer the "social question." It had, as Rudolph Heberle noted, "an eminently political origin…. Saint Simon, Auguste Comte, and Lorenz Stein conceived the new science of society as an antidote against the poison of social disintegration." ...

These early sociologists did this by severing the field of social relations from political economy. They pointed to observable and as yet poorly studied ties which bind people to people as individuals, as groups and associations, or as members of institutions. They then took this field of social relations to be the subject matter of their intensive concern. They and their successors expanded this concern into a number of theoretical postulates, using these to mark off sociology from political science and economics….

This severance of social relations from the economic, political, and ideological contexts in which they are embedded and which they activate was accompanied by the assignment of the economic and political aspects of human life to separate disciplines. Economics abandoned its concern with how socially organized populations produce to supply their polities and became instead a study of how demand creates markets…. this new economics is not about the real world at all…. It is an abstract model of the workings out of subjective individual choices in relation to one another.

A similar fate befell the study of politics. A new political science severed the sphere of the political from economics and turned to consideration of power in relation to government. By relegating economic, social, and ideological aspects of human life to the status of the "environment," the study of politics divorced itself form a study of how the
organization of this environment constrains or directs politics, and moved instead to an
inquiry into decision making…

Underlying all these specialties is the concept of an aggregate of individuals, engaged
in a contract to maximize social order, to truck and barter in the marketplace, and to
provide inputs for the formulation of political decisions. Ostensibly engaged in the study
of human behavior, the various disciplines parcel out the subject among themselves.
Each then proceeds to set up a model, seemingly a means to explain "hard," observable
facts, yet actually an ideologically loaded scheme geared to a narrow definition of subject
matter. Such schemes provide self-fulfilling answers, since phenomena other than those
covered by the model are ruled out of the court of specialized discourse. If the models
leak like sieves, it is then argued that this is either because they are merely abstract
constructs and not expected to hold empirical water, or because troublemakers have poked
holes into them. The specialized social sciences, having abandoned a holistic perspective,
thus come to resemble the Danae sisters of classical Greek legend, ever condemned to pour
water into their separate bottomless containers. (Wolf 1982:7-11)

Within this academic division of labor, Anthropology carved out for itself the
study of primitive and exotic societies, leaving the study of modern industrial societies,
of capitalism and socialism, to sociology, economics, and political science.

2.VI.3. Anti-Marxist Social Scientific Paradigms

As the various disciplines of social science consolidated themselves in the late 19th
and early 20th century, they did so by developing new paradigms, with new sets of
assumptions and new methodological tools, to serve the interests of the ruling class.
Typically, within each discipline, there are two or more paradigms competing with one
another (thereby providing the illusion of free inquiry and debate), and many of the
paradigms appear in two or more different disciplines, sometimes under different
guises (thereby providing a basis for "interdisciplinary work"). Lip-service continues
to paid to the desirability of a single, unified conceptual framework for the social
sciences comparable to that of the biological or physical sciences. Such a framework,
of course, already exists: Marxism-Leninism. Bourgeois social sciences, of course,
must deny this fact and consequently are founded on a common rejection of Marx and
Lenin, a rejection rooted in the intentional misunderstandings discussed above. These
misunderstandings form the implicit, and frequently explicit, assumption of all
bourgeois social thought. Thus, all of these new paradigms share a common anti-
Marxist bias.

The illusion of free inquiry and debate is maintained by the existence of a
multiplicity of paradigms, or schools, within each of the disciplines of bourgeois social
science. Thus, for example, within Anthropology we have symbolic anthropologists,
ethnoscientists, structuralists, historical particularists, cultural relativists, cultural
ecologists, cultural evolutionists, cultural materialists, the substantivist and formalist
"schools" within economic anthropology, various schools studying culture and
personality, and so on. To maintain the illusion of impartiality, some even include
"Marxist Anthropology" as one of the schools of anthropology, but the "Marxism"
allowed within the academy is a structuralist deviation, not Leninism (Ruyile 1987).

It is beyond the scope of this work to consider all of these competing bourgeois
theories in any detail. Nor is it really necessary, for many of these schools share
underlying assumptions and differ only slightly from each other. What we shall do,
therefore, is examine the four major paradigms in contemporary bourgeois social
science, with the understanding that within each of these paradigms, there are various "schools" that differ in emphasis and detail. In examining the four major conservative paradigms—Rationalism, Functionalism, Cultural Idealism, and Empiricism—we can better understand the major fallacies which characterize bourgeois social science.

2.VII. BOURGEOIS ECLECTICISM

In rejecting the scientific approach of Marxism, bourgeois social scientists still had to study society in something like a scientific manner. To do so, they developed alternative theoretical frameworks which, although they are strikingly different from each other, are unified in their common rejection of historical materialism. There are many alternative "theories" of society, but they may be grouped into four basic categories: rationalism, functionalism, idealism, and empiricism.

Rationalism sees society as made up of individuals, each attempting to satisfy his own needs. Within this framework, there are different emphases. Neoclassical economists see the individual as attempting to allocate his scarce resources to unlimited ends in a process of economic maximization. Political scientists see the individual as attempting to maximize his power. Sociobiologists see the individual pursuing various strategies designed to maximize his genes in future generations. The specific frameworks and conceptual tools may differ somewhat between these various disciplines, but they are unified first, in their common rejection of historical materialism, and second, in taking the individual as their basic unit of analysis.

Functionalism sees society as an entity in its own right, a "superorganism" sui generis which has needs of its own and behaves according to its own principles which cannot be simply deduced from the behavior of individuals. In Anthropology, the dominant form of functionalism has been Radcliffe-Brown's structural-functionalism. In Sociology, the dominant form has been Parson's general theory of social action. In both of these, and in other variants, the underlying approach has been to focus on society, not the individual, and examine how society maintains order and functions in a harmonious manner.

Idealism sees human behavior, and human social structures, as determined by ideas. The primary aim of social science, accordingly, is to understand what goes on in the heads of human beings or, alternately, to understand the nature of human thought itself. Cultural idealism has tended to dominate American Anthropology, from Ruth Benedict's cultural configurationalism to Geertz's more recent symbolic anthropology. Levi-Strauss's structuralism must also be considered a form of idealism.

Finally, empiricism is marked by a rejection of theory. All that we know, it is argued, is what we can observe, and the primary aim of social science must be to collect as much data as possible, without worrying overmuch about theory. Empiricism tends to be eclectic when it comes to theory, and simply use whatever theory seems to work with whatever body of data is being analyzed. Although this masquerades as a form of hard-headed pragmatism, it is in fact a denial of the possibility of a unified theory of human society.

These categories do not exhaust the variety of bourgeois theory, but they do illustrate the major avenues followed by bourgeois social theories in their attempt to carry on their work while avoiding Marxism.
What unites these paradigms is their common opposition to Marxism, and especially Leninism, and their rejection of the scientific premises and methodology of historical materialism. In each case, however, this rejection takes a distinctive form. Neoclassical economics rejects the Marxian notion that the individual is a product of society in favor of the assumption that society is composed of individuals each more or less rationally seeking their own self interest. Functionalism rejects the Marxian notion of class struggle in favor of the idea that society exists sui generis, and examines how the various parts of society function harmoniously to maintain social order. Cultural idealism rejects the Marxian notion that human ideas are products of definite material conditions in favor of looking at the ideas themselves, and how the ideas in people's heads determine their behavior.

The problem with each of these, of course, is not that they are wrong, for, as we noted above, each of these "blind men" can provide important insights about the sociocultural elephant. The problem is not even that they are very limited views of the human condition, for within their limitations they may operate effectively, perhaps even more so than Marxism–Leninism. The problem, rather, is that they do not accept their limitations. The practitioners of each of these paradigms regard themselves as disciples of a superior science. It is this failure to recognize their limitations and the resulting exaggerated claims made by these "blind men" that the weakness of bourgeois social science lies.

Once this is recognized, there is nothing to stop historical materialists from studying bourgeois social science and learning from it. Indeed, this is an essential undertaking if Marxism–Leninism is to remain a living science and retain its ability to not only interpret the world, but to change it. Far from disproving Marxism, the bourgeois social sciences can enrich it. The valid insights of each of these paradigms can—and must—be incorporated within the framework of historical materialism. To accomplish this, we must examine each of these paradigms in greater detail, looking at both their positive and negative aspects.

2.VII.1. Rationalism

The underlying assumptions of the rationalist approach are that human behavior may be understood purely as individual behavior and that human societies are composed of individuals more or less rationally seeking their own, individual, self-interest. This contrasts with, and is a clear rejection of, the Marxian proposition that the human essence is no abstraction inherent in the individual, in fact it is the ensemble of his social relations. For Marx, as for the classical political economists, the proper study of political economy was production and the distribution of the product of human labor among the various classes. To this end, the classical political economists recognized that wealth was produced by human labor, that labor was therefore the measure of value, and that society was divided into classes with opposing interests.

By the middle of the nineteenth century, the radical implications of this perspective had led to its rejection. The basic tools of Marxian political economy—production, the labor theory of value, surplus value and exploitation, and class struggle—were similarly rejected. In their place, the founders of neoclassical economics, Jevons, et al, made new assumptions and developed new methodological tools which did not challenge existing property relations. The subject matter of
political economy was re-defined, from the social relations of production and
distribution to the problem of individual choice. The study of economics became, as
Robbins later defined it in his classic essay, the study of choice, how scarce resources
are allocated to unlimited ends. New methodological tools were developed to replace
the labor theory of value: marginal utility, marginal costs, comparative advantage, and
so on. The field of vision was narrowed to the study of market behavior, pure and
simple.

Neoclassical economics thus developed largely as a reaction to the unpleasant
vision of Marxism. The result was an intellectual achievement of unparalleled utility
to the bourgeoisie. It allowed economists to study the economy without challenging
the status quo. More than this, it legitimated the status quo since it viewed the
market, not as one particular, historically limited way of meeting human needs, but as a
universal feature of human existence itself. It also provided the methodological tools
that enabled economists to find employment by telling capitalists how to price their
goods in order to maximize profits.

The tools of neoclassical economics are indeed useful in analyzing individual
behavior within a market economy, but are woefully inadequate in understanding the
nature and laws of motion of the economy itself (Sweezy 1942). As Joan Robinson
has observed:

The orthodox economists have been much preoccupied with elegant elaborations of minor
problems, which distract the attention of their pupils from the un congenial realities of the
modern world, and the development of abstract argument has run far ahead of any
possibility of empirical verification. Marx's intellectual tools are far cruder, but his sense
of reality is far stronger, and his argument towers above their intricate constructions in
rough and gloomy grandeur. (Robinson 1960:2)

The largely undeserved prestige of orthodox economic analysis has led to similar
modes of analysis in other disciplines, such as the formalist school of economic
anthropology and exchange theory in sociology. Within its limitations, formal
economic theory is indeed useful in analyzing market behavior. Once these limitations
are understood (and they are not understood by bourgeois economists), the
incorporation of the conceptual tools of bourgeois economics into historical
materialism presents no particular problems.

Whatever its usefulness in helping corporations set prices in a free market
economy, neoclassic economics proved unable to account for monopoly and the
periodic crises to which capitalism is prone. John Maynard Keynes (1883-1946)
provided the theoretical basis for governmental regulation of the economy.
Government spending, by increasing aggregate demand, can help overcome the
tendency of a capitalist economy toward stagnation. Keynesianism thus forms an
important component of the economic policies of the modern state.

One of the major variants of rationalism is what has been called the Great Man
theory of history. Perhaps the clearest exposition of this view was expressed by
Thomas Carlyle whose book, On Heroes, Hero-Worship, and the Heroic in History,
sees the deeds of great men as :the soul of the whole world's history":

Universal history, the history of what man has accomplished in this world, is at bottom
the history of the great men who have worked here. (Carlyle 1901, as quoted by Malinin
1974)
In a similar vein, and making his opposition to the Marxist view of history clear, the American author C. Sulzberger wrote:

The greatest lesson I have learned is that, despite Marxist worship of events and trends, it is men who influence history by their will. . . . The giant . . . can make history, but the pretender is overwhelmed by it. (as quoted by Malinin 1974:554)

The field of political science is also dominated by the rationalist view of individuals rationally pursuing their self-interest, but for political science self-interest is defined in terms of power rather than money. Power is the central concept of bourgeois political science.

2.VII.2. Functionalism

Functionalism develops around the organizing idea that society is a smoothly functioning entity that exists prior to the individual, and examines cultural traits and institutions in terms of their role in maintaining social harmony. Such views came to dominate both Sociology and Anthropology by midcentury.

Much of the theoretical work in modern Anthropology and Sociology goes back to the ideas of two bourgeois sociologists.

The French sociologist Emile Durkheim (1858-1917) was an early proponent of the functionalist approach. One of Durkheim's primary concerns was the problem of maintaining social order, a not unreasonable concern given the revolutionary ferment in 19th century France. Durkheim believed that social phenomena could best be analyzed in terms of their functions in maintaining social solidarity and social order - a clear reaction to the Marxian stress on class struggle. In The Elementary Forms of Religious Life he analyzed religious beliefs and rituals in terms of their function in expressing and enhancing social solidarity and in integrating individuals into a normative order. In The Division of Labor in Society, he argued that the division of labor contributed to the evolution of society from mechanical solidarity (between essential similar parts) to organic solidarity (a unity of unlike parts). In Suicide he explained suicide in terms of anomie, a sense of normlessness resulting from an individual's failure to be integrated into society.

The German sociologist Max Weber (1864-1920) argued against what he incorrectly saw as Marx's economic determinism. His "Protestant Ethic" thesis suggested that Protestantism had been an important factor in the development of capitalism (a point which both Marx and Engels had already made). Weber also introduced the idea of a "value-free" social science, again in contrast to Marx's pro-working class stance. For Weber, the key process in the modern world was not the conflict between capitalists and workers but rather the process of "rationalization," the process of substituting formal, calculated rules for the earlier traditional, rule-of-thumb methods.

Both Durkheim and Weber made important contributions to social science. Their contributions, however, in no way contradict the basic Marxian paradigm. Instead, they may be seen as useful additions to the materialist conception of history and society.

Functionalism provides a number of useful insights for social science, bourgeois or proletarian. For example, a number of functionalists have discussed the "functional requisites" of society. Such requisites include: 1. recruitment of new members (since
old members are continually dying off); 2. socialization of new members; 3. meeting the biological needs of members of society; 4. providing goods and services for members of society; 5. maintaining social order; and 6. providing a sense of meaning to motivate members of society. In meeting these requisites, social phenomena may have both manifest functions (recognized by members of society) and latent functions (not recognized by members of society).

One of the major ideas of functionalism is the "functional theory of social stratification," which argues that inequality is not a result of exploitation and conflict as Marxism would argue, but is rather society's way of ensuring that the best qualified individuals fill the most important roles. This is clearly a way of legitimizing the inequality existing in society.

Stressing harmony and stability over conflict and change, functionalism not only legitimates the existing social order, it provides a way of conducting social science while ignoring unpleasant realities. For example, one of the model "puzzle solutions" of functionalism is Radcliffe-Brown's paper on the mother's brother in South Africa, written while the oppressive system of apartheid was being established. In Radcliffe-Brown's view, functionalism was a "practical science" which was worthy of governmental support because of its utility to colonial administrators in maintaining social order (Stauder 1972).

2.VII.3. Idealism

Cultural idealism takes a variety of forms, ranging from ethnoscience in Anthropology (Sturtevant 1964) to ethnomethodology in Sociology (Garfinkel 1967). All of these share a common view that the essence of the sociocultural elephant lies in the ideas which exist prior to and independently of individuals. One of the most eloquent, and hence most seductive, forms of cultural idealism is the symbolic anthropology of Geertz. For Geertz, the essence of humanity lies in the human capacity for self-definition:

Believing, like Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning. (Geertz 1973:5)

The purpose of Geertz's analysis is simply more and better analysis, what Geertz calls "thick description":

Anthropology, or at least interpretive anthropology, is a science whose progress is marked less by a perfection of consensus than by a refinement of debate. What gets better is the precision with which we vex each other. (Geertz 1973:29)

Geertz's model "puzzle solutions" include his analysis of Balinese cock-fighting (1971) which is indeed a fine example of cultural analysis. But one must ask not only what is analyzed but what is not analyzed. Geertz's study was conducted during a period of intense class struggle in Indonesia, leading up to a CIA backed coup which involved the slaughter of hundreds of thousands of Communists and suspected communist sympathizers (Chomsky and Herman 1979). Symbolic analysis, in this case, provides a way of conducting social science while avoiding a too close examination of the impact of "existing property relations" (i.e. American imperialism) on the biological functioning of the native society.
The idealism of Geertz and others may be called "subjective idealism," because it focuses on the ideas in the heads of people. Levi-Strauss represents a somewhat different form of idealism, which focuses on the nature of thought itself, and hence might be called "objective idealism."

Structuralism also stresses the priority of society over the individual and sees social life as the expression of underlying structures which, ultimately, inhere in the nature of human thought (Leach 1976, Levi-Strauss 1963). Although structuralists claim descent from Marx, their structures are essentially mental while Marx's were material. This difference is reflected in the choice of subject matter, as structuralists increasingly turn to analysis of myth (Leach 1967).

The objective of structuralism is to gain an understanding of the nature of human thought which involves sets of binary oppositions. Thus "life" necessarily entails its negation, "death," "man" is in binary opposition to "woman," "culture" is in binary opposition to "nature," and so on. Social systems, according to the structuralists, are best analyzed in terms of such binary oppositions which exist not only at the superficial level of everyday existence, but at the deep level of underlying structures as well.

When social systems which others might see as oppressive, such as the Hindu caste system, are analyzed, the whole purpose is to deny the validity of Marxian analytical tools such as class and exploitation (Dumont 1970). For a more realistic view of caste, see Mencher (1974).

The problem with structuralism is not that it is incorrect - no one, least of all Marx, has ever denied the importance of human thought in sociocultural systems. The problem is rather than it reduces the material sphere of existence to mere epiphenomenal status. Although structuralism has been characterized as "Zen Marxism," Harris has suggested that it may more properly be seen as French Hegelianism (Harris 1968:513).

Both functionalism and structuralism, then, provide very narrow views of the sociocultural elephant, but views which enable their practitioners to avoid critical examination of existing property relations.

2.VII.4. Empiricism

Another important approach within the social sciences is to abandon theory completely. Franz Boas, one of the founders of modern anthropology, argued that scientists should just collect facts without bothering about theory. This approach, known as historical particularism, is unsatisfactory because it is impossible to collect all the facts and in selecting what facts to collect one is necessarily guided by some theory, even if one is unaware of it or denies it.

A related argument is that society and history are too complex to be understood at all. Consider, for example, the following:

Search as we may, there seems to be little hope of ever discovering any plan or law of historical development. Human destiny appears to be determined by countless, varied factors working in multifarious combinations, to say nothing of the element of chance, which cannot be discounted entirely. There is still something alluring in the venerable proposition that if Cleopatra's nose had been a little smaller, Marc Antony might not have fallen in love with her and the whole history of Rome might have taken a different turn.
Of course, it is not so much the length of Cleopatra's nose as her social position that is important. If it had been one of Cleopatra's slaves with the beautiful nose that enchanted Marc Antony, this would have been of very little historical significance (Plekhanov 1898:40).

Finally, empiricism simply selects what is believed to be useful from whatever theory it wishes. Although masquerading as a kind of intellectual tough-mindedness, eclecticism is unsatisfactory from a scientific standpoint. It is as if one were to use Newton's laws of motion and gravity to understand the motion of planets, but to say they don't really apply to the flight of birds. Such a position simply misunderstands the theory of gravitation and the laws of motion of physical objects.

2.VIII. NEW RADICAL PARADIGMS

Our discussion so far has indicated that Marx developed a fundamentally correct scientific paradigm for understanding the Human Adventure. Just as Darwin provided the basic theoretical framework for all subsequent biological science, so Marx provided the basic theoretical framework for all subsequent social science. But no one would suggest that either of these frameworks is complete. Darwinism required the additional work of Mendel and a host of other scientific investigators in the development of the modern synthetic theory of biological evolution. Similarly, Marxism requires the additional work of Lenin and a host of other revolutionary thinkers in the development of modern Marxism, not only towering figures such as Mao Zedong, Antonio Gramsci, "Che" Guevara, and Amicar Cabral, but also a variety of other people who have made significant contributions to understanding the modern world within the Marxist framework.

Most, but not all, of these people have been Leninists, for Leninism, as the application of Marxism to the complex reality of imperialism and proletarian revolution in the twentieth century, forms the basis for any serious attempt to understand the modern world. Marx interpreted the world in a very profound and liberating way, Lenin, however, changed it. Those who have been most successful in changing the world in the historic revolutions in Asia, Africa, and Latin America have done so using the theoretical and practical tools developed by Lenin. The difficulties faced by Leninists during the past decade must not blind us to the historic contributions of Leninism.

After the Russian Revolution, however, the Bolsheviks were forced to take many harsh measures which offended the sensibilities of many of their supporters in the West. The social and political policies initiated by the Bolsheviks in the 20s and 30s, together with the particular interpretation of Marxist theory developed during this period, have become known as Stalinism. The role of Stalinism in the history of socialism is too complex to be considered here, but it may be noted that for many non-Marxists and Marxists alike, Stalinism is seen as a kind of intellectual AIDS, to be condemned and avoided without any effort to understand it in scientific terms.

Although many Marxists (for example, Trotsky) have criticized Stalinism without abandoning Marxism, the excesses of Stalinism have led many radicals to propose new, non-Marxist, radical paradigms. It is not only the excesses of Stalinism, however, but very real shortcomings in the theory and practice of Marxism that have contributed to
the emergence of these new radical paradigms. There are several interrelated areas that require consideration: gender relations, ecology and the environment, the role of violence, Eurocentrism, and religion (good summaries of the competing models within Marxism and of the feminist and Green critiques may be found in Barratt Brown 1985).

The pervasive oppression of women in modern and premodern societies, and the male chauvinist behavior of many radical men, have led women to develop feminism as a new radical paradigm. Where Marxism sees class oppression as the fundamental feature of history, feminists see the oppression of women by men as a more basic phenomenon, underlying all other forms of oppression. Feminist theory and practice has made important contributions to the radical tradition in social science. The include the concept of patriarchy, the idea that the personal is political, and the practice of consciousness-raising groups (for fuller examinations of feminism, see Barrett 1980, Eisenstein 1979, Freeman 1984, Reiter 1975, Rowbotham 1973, Snitow, Stansell, and Thompson 1983).

The relationship between Marxism and feminism has been variously termed a "curious courtship" (Weinbaum 1978), an "unhappy marriage" (Hartmann 1981), and an "impossible marriage" (Burnham and Louie. 1985). Clearly it will be difficult to reconcile the seemingly opposed perspectives of Marxism and feminism, but the feminist critique of male centered thinking in both mainstream and Marxist theory has provided important insights which must be incorporated into our thinking about the Human Adventure.

Many Third World peoples not unreasonably see the oppression of Latin America, Africa, and Asia by Europeans as the fundamental feature of the modern world, and see Marxism as merely another form of White Rule, destructive of both the environment and native cultures. Thus, Maulana Karenga, speaking from an African-American perspective, suggests that

racism as an ideology conditions or affects in varying degrees both liberalism and Marxism. For if social conditions create social consciousness, and American society is marked by racism, then liberalism and Marxism, as ideological products of American society, are necessarily affected by the racist conditions under which they evolve. Racism, as a competing construction of reality, challenges cultural pluralism by denying the value of Third World cultures and by establishing structures to insure their deformation and ultimate destruction. . . .

Racism is here viewed as more than racial prejudice, which is simply an attitude. It is more definitely a system of denial and deformation of a people's history and humanity and right to freedom, based exclusively or primarily on the concept of race. . . .

Shades of economic determinism and related theoretical assumptions in Marxism also resist the nationalism and ethnicity which cultural pluralism demands and assumes. The nation for Marx, Lenin, and Stalin is a capitalist category, an economic category, a context for the bourgeoisie's control of its market. Its subjective and cultural content are reduced to formulations by the bourgeoisie, mere mystification to hide the real economic content and concern. The problem with this one-dimensional interpretation was dealt with brilliantly by Antonio Gramsci with his concept of cultural hegemony, which sought to identify the force of culture as a fundamental shaper of human practice and method of rule. Giving such great and exclusive weight to economic forces not only resists cultural interpretations of nation and society but also brings about an embarrassing convergence of Marxists and imperialists. They both believe religiously in the value of economic progress, regardless of human costs, and the constructive, civilizing role of capitalist exploitation. . . .

For the dogmatic Marxist, then, it is class or nothing, and all other factors affecting
and shaping the social process must be reduced to that dimension, regardless of the
theoretical deformities this mechanical materialism produces. The need, however, is
clearly one of a new theoretical model that recognizes and responds critical and creatively
to the reality of both the class and racial-ethnic structure of society. Such a model would
logically lead to an analysis of ethnicity and racial consciousness not a prehistoric
hangovers, but as fundamental factors in the social process—sociohistorical forms of
consciousness which have played and will continue to play a major role in human history.
Once this is accomplished, cultural pluralism will receive a more critical appreciation
among Marxists, for it will then become clear through a more critical Marxist analysis
that human diversity is not the source of human division, but the basis of human
richness. (Karenga 1981:231-242)

In a somewhat different vein, Russell Means, a leader of the American Indian
Movement, argues:

Revolutionary Marxism, like industrial society in other forms, seeks to "rationalize"
all people in relation to industry, maximum production. It is a materialist doctrine that
despises the American Indian spiritual tradition, our cultures, our lifeways. Marx himself
called us "precapitalists" and "primitive."…

So, in order for us to really join forces with Marxism, we American Indians would
have to accept the national sacrifice of our homeland: we would have to commit cultural
suicide and become industrialized and Europeanized…

All European tradition, Marxism included, has conspired to defy the natural order of
all things. Mother Earth has been abused, the powers have been abused, and this cannot
go on forever. No theory can alter that simple fact. Mother Earth will retaliate, the whole
environment will retaliate, and the abusers will be eliminated. Things come full circle,
back to where they started. That's revolution. And that's a prophecy of my people, of
the Hopi people and of other correct peoples. (Means 1980:14-15)

Like Means, many environmentalists see the major problem as industrialization
itself. Socialist industrialization, it is argued, is no better than capitalist
industrialization. Both are equally destructive of the fragile ecological systems upon
which human life depends. Such views, which characterize both the European Green
movement and the anti-nuclear movement in the U.S., fail to examine the underlying
social structures of capitalism and socialism (Bookchin 1990). Nonetheless,
sensitivity to ecological and environmental concerns must be incorporated into the
framework of historical materialism.

Liberation theology grows out of the poverty and oppression of the Catholic
peasantry of Latin America and involves a re-interpretation of the gospels in light of
modern experiences. The God of the Bible is understood as a God whose central act in
history is the liberation of the oppressed. Accordingly, if the Church is to be true to
the teachings of Jesus it must side with the poor and oppressed, instead of with the
rich and powerful, as so often has been the case. While liberation theology is thus
clearly a school of biblical interpretation and theology, its interpretations of scripture
draw heavily on social science, specifically Marxist social science (White 1988). The
new views developed by the liberation theologians constitute a revolutionary
development in Christianity, as significant as the Protestant Reformation (or an
excellent overview of these ideas, see Shaull 1984). I have attempted to incorporate
some of the insights of liberation theology into my Concluding Remarks.

In the last few decades, especially under the radicalizing impact of the Vietnam
war, radical schools have developed within the various mainstream academic
disciplines. Good discussions of the Marxist scholarship in the various academic
disciplines may be found in the essays in *The Left Academy* (Ollman and Vernoff 1982, 1984, 1986).

Since WWII, a new school of Anthropology has emerged which is both evolutionary and materialist. Cultural evolutionism and cultural materialism draw very heavily on Marx in attempting to understand cultural similarities and differences. Although the cultural materialism of Harris can be quite critical of the capitalist status quo, it is also consciously anti-communist. As Harris has stressed in his book, *The Rise of Anthropological Theory*, "It may be said that one of the central purposes of the present volume is to decontaminate, so to speak, the materialist approach to history" (Harris 1968:4). Harris does this by attacking the dialectical and revolutionary components of Marx's thought and by attacking the Soviet Union as a "Communist Despotism." In spite of the anti-communist tone, there is much worthwhile material in the work of Harris and other anthropologists of the evolutionary and materialist schools (for fuller evaluation, see Ruyle 1987, 1988a).

There is thus a considerable corpus of both empirical and theoretical work in the radical tradition since Marx and since Lenin. The synthesis of Marxism-Leninism which provided the impetus for the historic revolutions of the twentieth century is no longer adequate as we move toward the twenty-first century. The criticisms that Marxism is gender-blind, color-blind, and environmentally naive must be taken seriously. The moral and ethical issues raised by the liberation theologians must also be considered.

2.IX. THE NEED FOR A SYNTHESIS

In this chapter, we have examined what must seem to be a bewildering variety of theoretical approaches within the social and behavioral sciences. The sociocultural "elephant" is indeed very complex and the various "blind men" all seem to have something worthwhile to say about it. To choose between these various approaches may seem overly difficult and, indeed, unnecessary.

But it is necessary. If we were simply studying an elephant in a zoo it would make little difference how we went about our task, and we could have great fun debating whether the elephant was like a snake, slug, or dung heap. But if we confront an elephant in the wild, we have no such luxury. We cannot simply say that an elephant is like a slug and, however distasteful, slugs can't hurt anyone. Or the elephant is like a dung heap, and its every beetle for itself. We must understand the elephant in materialist terms, as mass and energy, and must understand the damage the elephant can wreak upon us.

Our contemporary sociocultural "elephant" does not exist in a zoo but in the wild. It's normal functioning is such as to trample on human rights and well being and it periodically goes on rampages that inflict untold damage and suffering on humanity. It is currently threatening a "nuclear winter" which may destroy not just humanity, but life itself.

Under these conditions, social science cannot simply be debate. The primary goal of social science must be to provide the sort of understanding of sociocultural systems that will enable us to bring the system under human and humane control. What we need, in short, is a materialist understanding of the laws of motion of our sociocultural
system and of the cause and effect relationships that exist within it and between it and the environment. We need, in short, a practical science of, by, and for humanity.

The theoretical framework of historical materialism is capable of not only providing the practical understanding that will enable us to control our destinies but also providing the theoretical understanding that will enable us to incorporate the positive insights of the various varieties of idealism into a larger, more inclusive whole. That this point has not been generally appreciated is due to a dual neglect. On the one hand, bourgeois social scientists have almost deliberately misunderstood historical materialism. On the other hand, materialists have failed to appreciate the potential contribution of bourgeois social science. For both groups, disputation is frequently an end in itself, preferred over understanding. We can no longer afford, however, the luxury of scholarly disputation for its own sake; we must get on with the serious business of providing the kind of understanding on which the very survival of our species depends.

The purpose of the next section is to develop the materialist paradigm by incorporating within it the valid insights of alternative paradigms. As set forth by Marx, materialism is by far the most powerful paradigm in social science. But Marx never claimed that it was complete nor perfect. Marx's materialist paradigm must be taken apart, re-thought, and re-built in light of positive achievements since Marx's day.

This task can best be accomplished by viewing human societies in natural history terms, as living systems that are embedded in larger, more inclusive natural systems. Such human ecosystems are composed of material, thermodynamic, and informational components. A truly scientific social science must understand these components and how they interact. The proposed model combines the biological, social, and cultural aspects of the Human Adventure and may thus be termed biocultural or sociobiological. Since the term sociobiology has been appropriated by a particular conservative paradigm, some further discussion is necessary.

Sociobiology, as usually practiced, represents a recent expression of the conservative tradition. Bourgeois sociobiology developed rapidly in the late '70s with the publication of E.O. Wilson's *Sociobiology: The New Synthesis* (1975). According to its practitioners, sociobiology is defined as "the systematic study of the biological basis of social behavior and the organization of societies in all kinds of organisms, including human beings" (Wilson 1980:295), and as "the application of evolutionary principles to the social behavior of animals - and of human beings as well" (Barash 1979:1). Few things are more biological than food and health, and one would expect, therefore, that sociobiology would systematically examine such questions as the causes of hunger and disease in the Third World (Lappe and Collins 1978) and the impact of different social systems such as capitalism and socialism on feeding and meeting the biological needs of humans (Cereseto 1982, Cereseto and Waitzkin 1986). One would expect, further, that sociobiology would examine Marxian ideas on the relationship between how people meet their biological needs and the rest of their social behavior.

Those who call themselves sociobiologists, however, have shown little interest in such questions. Rather, they equate "biology" with "genetic" and indulge in what Plotkin and Smee (1981) have called genetic mysticism. Accordingly, I will refer to them by this more appropriate term. Sociobiology, or the attempt to understand the behavior of animals and humans within a common framework, is a valid field for
scientific inquiry. Genetic mysticism, unfortunately, adds little to our understanding. Sociobiology, as usually practiced, appears to be simply a throwback to Social Darwinism.

Although the genetic mystics claim to be applying scientific methods to the study of humans, critics have pointed to the lack of rigor in the explanations offered by the genetic mystics, accusing them of telling "just-so stories" (Gould 1980), of "gene-juggling" (Midgley 1980), and of having a "disease": "genitis" (Washburn 1978:65). Although they claim to present new scientific ideas and methods, the genetic mystics have in fact returned to what Chamberlain (1897) has called the "ruling theory" stage of scientific inquiry. Facts are accumulated and fitted into a pre-established theory with no real attempt to question the theory itself or to consider alternatives. The genetic mystics thus represent a scientific throwback, and are not harbingers of a new age of science.

The questions raised by the genetic mystics are significant ones, but by no means new. Both anthropologists and sociologists have long looked at the relations between biology and culture. Although there are many in both disciplines who neglect the issue (see, e.g., the complaints of Lenski 1982), the biological nature of our species has received full treatment in standard textbooks (Beals and Hoijer 1971, Bierstedt 1970, Cohen 1968, Cohen 1971, Kroeber 1948, Lenski 1970). The genetic mystics systematically ignore this literature.

Genetic mysticism has been properly criticized as leading to racist, sexist, and anti-working class speculations, such as the theory of the "naked ape" and the "biological basis of the double standard" of sexuality. Critics have noted the political use of genetic mysticism as a weapon against those who wish to change our system of capitalist patriarchy. As Lewontin points out,

Sociobiology is basically a political science whose results may be used, eventually, as the scientific tools of "correct" social organization. Yet, the world to be made will be pretty much the aggressive, domination-ridden society we live in now... Of course, it is all put in a hypothetical mode, but the message is clear: the only safe thing to do is to leave things as they are, at least for the present. Don't rock the boat until the sociobiologists tell you how. (Lewontin 1977:16)

The "naked ape", in other words, turns out to be wearing the "emperor's new clothes."

Nonetheless, the emergence of genetic mysticism provides us with a welcome opportunity to re-examine a number of hoary issues in anthropology and the other social sciences. Like the genetic mystics, I am critical of established social science. But the problem lies not with the fact that social science has ignored Darwin, for it hasn't. Rather, it has ignored and repudiated Darwin's great contemporary in the social sciences, Karl Marx.

Of course, science has advanced since Marx's day. Unfortunately, however, these advances have been piecemeal and have not fed into a single overarching paradigm which informs our understanding of human society and human behavior. Consequently, orthodox social science remains vulnerable to the attacks of the genetic mystics. The response of orthodox social science has been to counterattack (see, e.g., Sahlins 1976). This is necessary and important, but not completely adequate.

What is needed is an alternate sociobiological framework which is not wedded to the erroneous assumptions of the genetic mystics. I have made a number of efforts to
develop a unified theory of biocultural evolution and a thermodynamic model for understanding social systems (Ruyle 1973a, Ruyle 1973b, Ruyle 1975, Ruyle 1976, Ruyle 1977a, Ruyle 1977b, Ruyle 1981), but these have been fragmentary. In the next chapter I will attempt to integrate these into a single conceptual whole, a Marxist sociobiology within which the issues raised by the genetic mystics, as well as a host of others with which the genetic mystics refuse to deal, can be more usefully addressed.

It may be stressed that, although my own sympathies and values are clearly in the radical tradition, the proposed theoretical framework need not commit one to these values, or to any particular set of solutions to social problems. The framework, rather, provides a way to organize data about significant (or insignificant) social questions and issues, and is thus an essential intellectual tool for thinking about the Human Adventure. To the extent that objectivity is possible, the framework provides an objective view of social reality.