Capitalism is not an inevitable reflection of human nature. It is only one of a number of possible ways of organizing human affairs, and it is only within the last few hundred years that capitalism has come to be the dominant mode of economic life. Those features which characterize economic life under capitalism, such as self-regulating markets, the profit motive, and wage labor, were absent or unimportant prior to the rise of capitalism. Instead, economic life was organized according to completely different principles, which Karl Polanyi has called reciprocity, or the sharing of goods among kinsmen, with no conscious calculation of benefits given and received, redistribution, or the movement of goods to and from a common center, based upon status, householding, or production for use by the producers and their immediate family (Polanyi 1944).

For the first few million years of human existence, people organized their economic lives through the principle of reciprocity. Men and women simply produced and shared the product of their gathering, hunting, fishing, collecting, and handicraft activities with their immediate kinsfolk. The social order of hunters and gatherers can correctly be described as both "familistic" and "communistic" (Fried 1967:27-107).

Even after the break up of the primitive commune and the emergence of class rule, economics continued to be submerged in social relations. In the archaic and historic empires of Asia, Africa, and the New World, redistribution came to be the dominant pattern. The direct producers (farmers, fishers, herders and artisans) turned over the bulk of their product to a central authority who stored them and redistributed them according to status. This was a hierarchal social order, with the temple priest, feudal lord, or emperor at the apex, and goods were differentially redistributed according to social position.

Householding, a la Robinson Crusoe, has never been the dominant way of organizing economic life, and only appears as an adjunct to other principles.

From the very beginning of humanity, then, human beings have been economically interdependent. Individuals have always been dependent upon the social order that produced and reproduced their existence.

Significantly, the dominant economic principle of capitalism, that of profit, was consciously excluded from these earlier social orders. Ancient philosophers such as Aristotle condemned profit and individual gain as "unnatural" and destructive of the social bonds linking humans together.

Contrary to many commonly-held views, these precapitalist social orders were viable and technologically progressive. Most of the technological and economic inventions upon which modern industrial civilization is based (agriculture, the plow, the wheel, harnessing of wind, water, and animal power, writing, Arabic numerals, paper, printing, and money) were achievements of precapitalist societies. Capitalism could only appear after the forces of production had already reached a very high degree of development. Capitalism developed within the womb of advanced agrarian empires. Only after its development reached a certain stage was capitalism born as a dominant social order, and its birth-pangs destroyed the precapitalist world.
Before examining the embryonic development of capitalism, however, it is necessary to examine certain basic features of the market.

6.I. MARKETS AND THE LABOR THEORY OF VALUE

The fourth of Polanyi's principles of economic integration, market exchange, is characterized by conscious efforts to maximize benefits and minimize costs, by what Polanyi calls "higgling-haggling" over price. It is, of course, market exchange which is the dominant form of integration in our own capitalist society.

For Marx, the "cell" of capitalist society is the commodity, defined as any useful thing that is produced for sale on the market. All commodities have some use value, or utility, that makes them able to satisfy some human need or want. Without use value, no one would buy them. Commodities also have a price, or exchange value, which is the amount of money required to purchase the commodity. Now, although a commodity must have use value in order to be sold for a price, the price itself is not determined by use value, for the use values of different commodities are not commensurable. There is no way to measure the utility of a cheeseburger, a pair of Levis, a Porsche, and a diamond ring in common units. Yet they all command different amounts of the same thing, money, on the market. What is it, then, that determines price?

For Marx, as for the classical political economists, price is ultimately determined by another characteristic all commodities have in common: they are all products of human labor and therefore embody definite, but different, amounts of society's total labor time. The price of a commodity, then, is determined by its value, the amount of social necessary labor time required for its production. This relationship was noted by other early political economists. Adam Smith, for example, wrote:

If among a nation of hunters, of example, it usually costs twice the labour to kill a beaver which it does to kill a deer, one beaver should naturally exchange for or be worth two deer.
It is natural that what is usually the produce of two days' or two hours' labour should be worth double of what is usually the produce of one day's or one hour's labour. (Smith 1776:47).

This relationship between price and value is maintained by the supply and demand mechanism of the market. If the price of beaver is more (or less) than twice that of deer, hunters will stop hunting deer and hunt beaver (or vice versa). The result will be the overproduction (or underproduction) of beaver and a fall (or rise) in price, to the point where equivalent labor times exchange. (It should be pointed out that Smith was incorrectly projecting the market principle back onto hunting and gathering society. In fact, hunters share according to the principle of reciprocity. Although the example is anachronistic, the principle it illustrates is valid.) As Marx put it:

At the moment when supply and demand equilibrate each other, and therefore cease to act, the market price of a commodity coincides with its real value, with the standard price round which its market prices oscillate. (Marx 1865:26)

Thus, if the value of shoes is $10, and they are selling for $25, the additional income of shoemakers will cause handbag makers to switch to making shoes rather than handbags. This will increase the supply of shoes and therefore the price will fall. Conversely, if the price of shoes is $5, shoe makers will switch to making handbags, thereby reducing the supply of shoes, causing the price of shoes to rise. Only when equal labor times exchange as equivalents will there be no incentive for producers of different commodities to change occupations. The labor theory of value is diagramed in Figure 6.1.

In the model developed by Adam Smith, the supply and demand mechanism of the market acts as an "invisible hand," that 1. regulates production, allocating labor and resources so that the production of commodities corresponds to consumer needs, and 2. regulates distribution (causing prices to approximate values). For all this to occur, of
course, there has to be perfect competition and free mobility of labor between spheres of production. These conditions are not always met, but to the extent that they are, there will be a tendency for prices to correspond to values, as is evidenced by a considerable body of historical and ethnographic evidence (Mandel 1968:1, 60-65).

It is important to stress that value is an objective, measurable quality of commodities and is quite distinct from the subjective valuation by individuals as to their worth. In measuring value, it is essential to include not only the labor time involved in producing the commodity itself, but also the labor time embodied in the raw materials and in the tools that need to be replaced from time to time. Further, it is not actual labor time, but socially necessary labor time, given average levels of skill and labor intensity within a certain set of social conditions including the general level of technological development and generally accepted patterns of work (Marx 1867:38-41, 186-89). The phase, "socially necessary labor time," is essential, therefore, for otherwise a commodity produced by an inefficient, slow, and lazy worker would contain more labor and hence be worth more than an identical commodity produced in less time by a skilled, efficient worker—an obvious absurdity.

Since prices are always fluctuating according to supply and demand, they only rarely equal values. But market forces do cause prices to fluctuate near values. In analyzing capitalism as a system, therefore, Marx makes the simplifying assumption that prices do equal values. For the sake of analysis we will assume that one dollar is always equal to one hour of labor time, unless otherwise noted.

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**Figure 6.1. The Labor Theory of Value.**

This figure illustrates the forces at work regulating prices and allocating labor to various spheres of production. Low prices increase demand [1] and/or reduce production [5], but increased demand [2] and reduced production [6] drives prices up. On the other hand, high prices [3] stimulates increased supply, and [7] reduces demand, but increased supply [4] and reduced demand [8] drives prices back down. In this way, the market regulates both prices and allocates labor.

It should be stressed that, for Marxist economics, the labor theory of value is not primarily intended as a method for determining prices. Rather, it is a methodology for analyzing social relationships (Sweezy 1942:35, 128-130). The significance of the labor theory of value is that it permits Marxian economics to cut through what Marx called the "fetishism of commodities:"

There . . . is a definite social relation between men, that assumes, in their eyes, the fantastic form of a relation between things. In order, therefore, to find an analogy, we must have recourse to the mist-enveloped regions of the religious world. In that world the productions of the human brain appear as independent beings endowed with life, and enter into relations both with one another and the human race. So it is in the world of commodities with the products of men's hands. This I call the Fetishism which attaches
itself to the products of labour, so soon as they are produced as commodities, and which is therefore inseparable from the production of commodities. (Marx 1867:72)

In our daily lives, we are concerned primarily with the prices and utility of commodities. When we buy a "Big Mac," we are concerned with how much it costs, relative to other hamburgers, and with how it tastes, its nutritional value, and other aspects of its use value. But in purchasing and consuming the Big Mac, we are entering into definite social relations with the owners, managers, and employees of McDonalds, and with the producers of the ingredients out of which the hamburger is made. This ensemble of relationships forms the economic substratum that exerts a powerful influence on our daily lives. All the more powerful since we are unaware of it.

It is only when we view commodities as values, that is, as embodiments of human social labor and as embodiments of a portion of society's total labor time, that we are able to penetrate the underlying social relationships that have such a powerful influence on our lives. The labor theory of value, then, is an analytic tool, and not primarily a method of price calculation as it is usually misunderstood by bourgeois economists (e.g., Samuelson 1970:27-28).

6.II. THE EMBRYONIC DEVELOPMENT OF CAPITALISM

Capitalism develops within the womb of agrarian societies and only emerges as a dominant economic organization after it has gone through an embryonic development. It is essential, therefore, to analyze the phases of this development.

In a system in which individuals own their own means of production and produce directly for sale on the market, exchange follows the pattern:

\[ C - M - C \]

The producers produce commodities (C), sell them for money (M), and use this money to buy different commodities (C), for their own consumption. The motive force behind such simple commodity production is the desire for use values to satisfy human needs and wants. Producers make commodities for which they have no need, and sell them for money which has no use value in itself. But this money is used to buy other commodities which do satisfy their needs and wants. Profit is not significant in simple commodity production. To be sure, the producers may try to maximize their monetary gain, and the consumers may try to minimize their expenditures. But, as we have seen, market forces cause prices to approximate values, so exchanges tend to involve equivalent labor times.

It may be noted that simple commodity production, although common enough in precapitalist societies, always occurs as an adjunct to other forms of economic integration and is not, in itself, a stage of economic development.

Embedded in simple commodity production, however, is another pattern of exchange. In merchant capitalism the merchant begins with money (M), buys commodities (C), and sells these commodities again for money (M). But since the merchant begins and ends with money, which has no utility in and of itself, this sort of circulation only makes sense if the second sum of money is larger than the first. The formula for merchant capitalism, then, is:

\[ M - C - M' \]

For this process to make sense, \( M' \) must be greater than M. The increment in M is profit.

Capital, then, is a store of value that augments itself in circulation through profit. The thirst for profit is the defining feature of capitalism. Marx quotes one T.J. Dunning on this inner drive of capital:

"Capital is said . . . to fly turbulence and strife, and to be timid, which is very true; but this is very incompletely stating the question. Capital eschews no profit, or very small profit,"
just as Nature was formerly said to abhor a vacuum. With adequate profit, capital is very bold. A certain 10 per cent. will ensure its employment anywhere; 20 per cent. will produce eagerness; 50 per cent. positive audacity; 100 per cent. will make it ready to trample on all human laws; 300 per cent. and there is not a crime at which it will scruple, nor a risk it will not run, even to the chance of its owner being hanged. If turbulence and strife will bring a profit, it will freely encourage both. Smuggling and the slave-trade have amply proved all that is here stated. (Marx 1867:760)

Profit, however, must come from somewhere. The value of commodities is not increased by buying and selling, so if the capitalists bought and sold commodities at their value, they would not make a profit. Their profits come, then, by buying commodities cheap (below their value) and selling them dear (above their value). Through their knowledge of market conditions and their monopoly control over money, mercantile capitalists are able to skim surplus value off the market. They create no new value, however, but simply exploit either the consumer or the producer, or both.

A more elaborate form of capitalism is represented by the following formula:

\[ M - C[1] + C[2] \ldots C' - M' \]

In this formula for capitalist production, the capitalist begins with money, \( M \), buys commodities of two sorts: 1. raw materials and the means of production (\( C[1] \)), and 2. labor power (\( C[2] \)). The capitalist combines these commodities in the labor process (...) and produces other commodities (\( C' \)) which are sold for more money (\( M' \)). A capitalist may begin with two hundred thousand dollars, spend one hundred thousand on a textile factory and another hundred thousand on wages for workers to make clothing. This clothing is then sold for three hundred thousand dollars, a profit of one hundred thousand, or 50%. Not bad.

With the emergence of capitalist production, the embryonic development of capital is complete. Capitalism has emerged into the world as a dominant system. In order to analyze this system, we need to examine more closely the formula for capitalist production itself. The formula is very abstract, but it illustrates a number of important points about capitalism: 1. the profit motive, 2. exploitation as the source of profit, 3. the necessity of unemployment in capitalism, 4. the class nature of capitalism, and 5. the primitive accumulation of capital. We shall consider each of these in turn.

### 6.III. THE NATURE OF THE CAPITALIST SYSTEM


The motive force of capitalist production remains the thirst for profit, as in all other forms of capitalism. Without the expectation of profit, nothing would be produced in a capitalist society. Further, anything that is profitable will be produced. The profit motive—and not human need—is the organizing force for the productive system. This forces production into areas that are economically wasteful, environmentally destructive, and unjust. Thus, the housing industry produces luxury homes while millions are homeless, because there is no profit in low-cost housing. Mexican farms produce lettuce and tomatoes for North Americans rather than corn for Mexicans, because that's where the money is. In an infamous example, the Ford Motor Company knowingly sold millions of Pinto automobiles with a potentially fatal design flaw (the gas tanks, placed behind the read axle, tended to explode in a rear end collision) because it calculated it would be cheaper to settle with the few dozen victims than move millions of gas tanks.

#### 6.III.2. Exploitation: The Source of the Capitalist's Profit

Second, the formula illustrates the nature of exploitation in capitalist production. Unlike the mercantile capitalist, the industrial capitalist need not depend upon market
fluctuations because new value is created in the process of capitalist production. Even when all commodities are bought and sold for their values, the industrial capitalist is still able to realize a profit. But how is this possible?

The answer lies in the peculiar nature of one of the commodities the capitalist buys, labor power. Like all other commodities, labor power has both value and use value. The value of labor power is the amount of socially necessary labor time necessary to produce the commodities consumed by the worker and the workers family, to support them at a socially acceptable level. The term, "socially acceptable," here refers to what Marx called a "historical and moral element" in the value of labor power:

the number and extend of (the worker's) so-called necessary wants, as also the modes of satisfying them, are themselves the product of historical development, and depend therefore to a great extent on the degree of civilization of a country, more particularly on the conditions under which, and consequently on the habits and degree of comfort in which, the class of free labourers has been formed. In contradistinction therefore to the case of other commodities, there enters into the determination of the value of labour-power a historical and moral element. Nevertheless, in a given country, at a given period, the average quantity of the means of subsistence necessary for the labourer is practically known. (Marx 1867:171, cf. Sweezy 1942:59-60)

In our earlier discussion (in Chapter One), we examined the three levels of subsistence defined by the Bureau of Labor Statistics for workers in the United States. It seems reasonable to regard the middle standard as representing the value of labor power in the contemporary United States. As indicated in Chapter 1, in 1983 this was $28,547. But the average production worker was paid only $17,400, or $11,147 less than what was needed to maintain a family. The average production worker, then, is paid less than his or her value (and may be said to be not just exploited, but superexploited). In order to maintain itself, therefore, the average family must send more than one member into wage-slavery.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>[1]</th>
<th>[2]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>4.16</td>
<td>3.16</td>
</tr>
<tr>
<td>1982</td>
<td>4.02</td>
<td>3.02</td>
</tr>
<tr>
<td>1981</td>
<td>3.95</td>
<td>2.95</td>
</tr>
<tr>
<td>1980</td>
<td>3.91</td>
<td>2.91</td>
</tr>
<tr>
<td>1977</td>
<td>3.71</td>
<td>2.72</td>
</tr>
<tr>
<td>1972</td>
<td>3.36</td>
<td>2.36</td>
</tr>
<tr>
<td>1967</td>
<td>3.22</td>
<td>2.22</td>
</tr>
<tr>
<td>1963</td>
<td>2.90</td>
<td>1.90</td>
</tr>
<tr>
<td>1958</td>
<td>2.84</td>
<td>1.84</td>
</tr>
<tr>
<td>1954</td>
<td>2.60</td>
<td>1.60</td>
</tr>
</tbody>
</table>

[1] Value added per dollar of worker's wages
[2] Race of surplus value (s' = s/v)

Value added per production worker, 1983: $72,400
Wages per production worker, 1983: $17,400

**Table 6.1. Value Added per Dollar of Worker's Wage.**

This Table illustrates the increasing rate of exploitation in U.S. capitalism. While in 1954, the worker produced goods worth $2.60 for each dollar he or she was paid, in 1983, the worker produced $4.16 for each dollar of wages.

Source: (United States Bureau of the Census 1985:744)
The use value of labor power, on the other hand, is its ability to work and create value. The average production worker in the U.S. produces $72,400 worth of value per year, as we discussed in Chapter 1. The difference between what the worker produces ($72,400) and is paid ($17,400) is surplus value ($55,000), which belongs to the capitalist because he owns the worker’s labor power. The ratio between surplus value and the worker’s wage is the rate of surplus value, the measure of exploitation in capitalism (in 1983 this was 3.16, see Table 6.1).

Thus, assuming a standard work-week of 40 hours, less than ten hours are spent reproducing the value of the worker's wages. But since the capitalist has become the owner of the worker's labor power, he wants to obtain the full use value of "his" property and forces the worker to continue working a full 40-hour week. The remaining thirty-plus hours are devoted to producing surplus value for the capitalist. Surplus value is thus produced in the process of capitalist production itself.

6.III.3. The Distribution of Surplus

Now, the industrial capitalist must divide this surplus value with other members of the ruling class and their agents, with bankers, landlords, managers, lawyers, the advertising industry, and so on. For capitalists, typically, must borrow money from the bankers, rent land from the landlords, hire managers to control their workers, hire lawyers to evade taxes and legal suits, and, since their shoes are no better than anyone else’s, hire the advertising industry to convince consumers to buy their wares. From the standpoint of production and of the working class, this is all unnecessary. But from the standpoint of the capitalist, all of these are necessary costs of doing business, so interest, rent, high managerial salaries and lawyer fees, and advertising costs appear as part of the original investment rather than as profit. Nonetheless, none of these things create value, so they must be paid for out of the surplus value stolen from the working class.

Table 6.2. shows how the surplus value extracted from the worker is parceled out among various sectors of the bourgeoisie, as high managerial salaries (9.1%), advertising and sales (23.6%), interest (18.2%), and so on, leaving only 23.6% as the capitalist's after-tax profits.

<table>
<thead>
<tr>
<th>Amount</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$55,000</td>
<td>100.0%</td>
<td>total surplus value per worker</td>
</tr>
<tr>
<td>$3,400</td>
<td>6.2%</td>
<td>supplements to wages</td>
</tr>
<tr>
<td>$5,300</td>
<td>9.1%</td>
<td>high managerial salaries</td>
</tr>
<tr>
<td>$13,300</td>
<td>23.6%</td>
<td>advertising and sales</td>
</tr>
<tr>
<td>$5,000</td>
<td>9.1%</td>
<td>legal and financial services</td>
</tr>
<tr>
<td>$10,000</td>
<td>18.2%</td>
<td>interest</td>
</tr>
<tr>
<td>$5,000</td>
<td>9.1%</td>
<td>taxes</td>
</tr>
<tr>
<td>$13,000</td>
<td>23.6%</td>
<td>after-tax profits</td>
</tr>
</tbody>
</table>

Table 6.2. Distribution of Surplus Value.
The capitalist does not keep all the surplus value he extracts from his workers, but rather distributes this surplus to other members of the ruling class, the bankers, the managers, the lawyers, etc.

It should be stressed that the capitalist does not calculate profit in the same way that Marxists do. From the standpoint of the capitalist, interest, advertising and sales, high managerial salaries, and the like, are all necessary costs of doing business and counted as costs rather than as profits. The rate of profit calculated by the capitalist, therefore, would be less than one quarter of that calculated using a Marxist framework. This, of course, represents the class perspective of the bourgeoisie. For workers, by contrast, it
makes little difference which section of the bourgeoisie—bankers, lawyers, managers, or entrepreneurs—receives the surplus stolen from them.

Regardless of who receives it, the source of surplus value is the same: the working class. Whether extracted through the market mechanism as in mercantile capitalism, or in the productive process itself, as in capitalist production, the surplus value which capital uses to expand itself must come from the direct producer. As Marx observed:

Capital is dead labour, that, vampire-like, only lives by sucking living labour, and lives the more, the more labour it sucks. (Marx 1867:233)

As Table 6.3. indicates, capital sucks considerable labor indeed. These statistics, computed on a somewhat different basis, indicate that over one half of GNP is surplus in one form or another—property income, advertising, military spending, or just waste.

<table>
<thead>
<tr>
<th>GNP (in billions of $)</th>
<th>1929</th>
<th>1963</th>
<th>1983</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0%</td>
<td>104.3</td>
<td>582.9</td>
<td>3304.8</td>
</tr>
<tr>
<td>Property Income, Total</td>
<td>28.1</td>
<td>104.6</td>
<td>591.6</td>
</tr>
<tr>
<td>Business Profits</td>
<td>17.3</td>
<td>66.6</td>
<td>376.7</td>
</tr>
<tr>
<td>Rental Income of Persons</td>
<td>2.7</td>
<td>5.4</td>
<td>29.7</td>
</tr>
<tr>
<td>Net Interest</td>
<td>6.4</td>
<td>24.4</td>
<td>135.5</td>
</tr>
<tr>
<td>Profits in Salaries</td>
<td>1.7</td>
<td>8.3</td>
<td>46.3</td>
</tr>
<tr>
<td>Waste</td>
<td>5.7</td>
<td>29.7</td>
<td>168.5</td>
</tr>
<tr>
<td>Corporate Advertising</td>
<td>1.8</td>
<td>7.7</td>
<td>43.0</td>
</tr>
<tr>
<td>Surplus Employee Comp.</td>
<td>3.1</td>
<td>17.6</td>
<td>99.1</td>
</tr>
<tr>
<td>Government Expenditures</td>
<td>10.2</td>
<td>168.0</td>
<td>951.8</td>
</tr>
<tr>
<td>Military Spending</td>
<td>-</td>
<td>na</td>
<td>209.9</td>
</tr>
<tr>
<td>Total Surplus</td>
<td>48.9</td>
<td>327.7</td>
<td>1854.0</td>
</tr>
</tbody>
</table>


Of course, workers are also exploited in the marketplace, by having to buy overpriced goods and pay exorbitant rents. As the Communist Manifesto notes:

No sooner is the exploitation of the laborer by the manufacturer, so far at an end, that he receives his wages in cash, than he is set upon by other portions of the bourgeoisie, the landlord, the shopkeeper, the pawnbroker, etc. (Marx and Engels 1848:15)

Thus, as indicated in Table 6.4., out of wages of $17,400 the worker must pay the landlord roughly $3,000, the tax collector over $3,000, and the usurer $600. In short, over half of the worker's wages goes to other portions of the bourgeoisie, leaving less than half for the reproduction of the worker's family.

This sort of exploitation is most severe for unemployed workers, especially blacks and other minorities (Caplovitz 1963). Although perhaps most visible, the exploitation that occurs in the marketplace is, however, secondary from the standpoint of the system itself. The primary exploitation in capitalist society is the exploitation of the worker in the workplace, not the marketplace.
6.III.5. The Necessity of Unemployment In Capitalism

What enables capitalist exploitation to continue, then, is the difference between what the worker is paid and what the worker produces. Wages must be kept to a subsistence minimum; otherwise they would encroach upon profits. But what prevents wages from rising? Why do workers not demand the full value of their product, rather than merely selling themselves as wage slaves to produce surplus value for the capitalist?

Our assumption that prices would correspond to values, it will be recalled, was based upon the supply and demand equilibrium model of the market: if prices exceed values, production increases, and this brings prices back down to values. But is this true of the commodity, labor power? Is more produced when wages rise? Obviously not, for labor power is not produced for sale; it simply exists as part of human existence. As Polanyi (1944) argues, labor power is a "fictitious commodity" which is treated like a commodity by capitalism but which is not really a commodity at all. Further, since it requires over a decade to raise new workers, the supply and demand mechanism would operate too slowly to effectively control wages. What, then, keeps wages at the value of labor power?

The answer, for Marx, was unemployment. Marx spoke of the Industrial Reserve Army, the reserve army of unemployed workers, that acts as a continual drag on wages, keeping them at their subsistence minimum, or lower. In addition to this economic function of keeping wages low, unemployment also plays vital psychopolitical functions. It enforces labor discipline since employed workers fear losing their jobs. It creates feelings of dependence and gratitude among employed workers who see their employers as benefactors rather than exploiters. Unemployment, therefore, is absolutely essential to the functioning of capitalism.

<table>
<thead>
<tr>
<th>$17,400</th>
<th>100.0%</th>
<th>worker's annual wage (v)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3,045</td>
<td>17.5%</td>
<td>personal taxes</td>
</tr>
<tr>
<td>$1,166</td>
<td>6.7%</td>
<td>retirement, Social Security</td>
</tr>
<tr>
<td>$2,975</td>
<td>17.1%</td>
<td>shelter (rent or mortgage)</td>
</tr>
<tr>
<td>$603</td>
<td>3.5%</td>
<td>interest on credit</td>
</tr>
<tr>
<td>$992</td>
<td>5.7%</td>
<td>medical</td>
</tr>
<tr>
<td>$174</td>
<td>1.0%</td>
<td>life insurance</td>
</tr>
<tr>
<td>$174</td>
<td>1.0%</td>
<td>contributions</td>
</tr>
<tr>
<td>$9128</td>
<td>52.5%</td>
<td>total surplus in v</td>
</tr>
<tr>
<td>$4,002</td>
<td>23.0%</td>
<td>food</td>
</tr>
<tr>
<td>$1,618</td>
<td>9.3%</td>
<td>transportation</td>
</tr>
<tr>
<td>$818</td>
<td>4.7%</td>
<td>household operation and furniture</td>
</tr>
<tr>
<td>$905</td>
<td>5.2%</td>
<td>clothing</td>
</tr>
<tr>
<td>$348</td>
<td>2.0%</td>
<td>personal care</td>
</tr>
<tr>
<td>$348</td>
<td>2.0%</td>
<td>gifts, etc.</td>
</tr>
<tr>
<td>$818</td>
<td>4.7%</td>
<td>other (recreation, education, tobacco, etc.)</td>
</tr>
<tr>
<td>-603</td>
<td>-3.5%</td>
<td>less interest (included in consumption)</td>
</tr>
<tr>
<td>$8860</td>
<td>47.5%</td>
<td>worker's consumption</td>
</tr>
</tbody>
</table>

Table 6.4. Elements of Surplus in Worker's Wage.  
This Table shows the degree of marketplace exploitation in contemporary America. Over one half of the wages of the worker is extracted by one or another element of the exploiting classes. Source: Percentages were calculated from BLS Intermediate Budget (United States Bureau of Labor Statistics 1982:Table 2) and are reasonably close to the actual family expenditures given in the Statistical Abstracts (United States Bureau of the Census 1985:443).

Furthermore, the capitalist system has built-in mechanisms which maintain unemployment. These include:
1. the introduction of labor-saving machines which throw workers out of work;
2. the recruitment of workers from outside the system to compete with those inside;
3. the export of capital to areas where labor is cheaper; and
4. the capitalist crisis, which results when rising wages threaten profits.

These are all "feedback" mechanisms which operate with greater strength when wages rise and relax when wages fall. Thus, rising labor costs cause capitalists to buy labor saving machines, to recruit workers from Mexico or elsewhere, and to export capital to Latin America, Taiwan, or Korea. The capitalist crisis acts as a "fail safe" mechanism. If wages rise to the point where profits are threatened, the capitalists simply stop investing since they are only in business for profit. If capitalists don't invest, workers can't find work. The resulting unemployment, however, brings wages back down so that business conditions improve and capitalists can again make profits.

Thus, out of the countless hiring and firing decisions of individual capitalists, there emerges a systemic tendency to regulate the level of unemployment. But as the English economist John Maynard Keynes has argued, this systemic tendency in itself may be unable to adequately regulate unemployment. If unemployment rises too high, total demand may be reduced to the point that private investment is unable to bring the economy out of its slump. Hence, Keynes argued, government spending is necessary to regulate aggregate demand, business conditions, and unemployment. As we note below, the Great Depression of the 1930s confirmed Keynes' pessimism on this point, and contemporary bourgeois governments do indeed regulate the economy through their spending and fiscal policies. Such regulation, it must be stressed, is in the interest of the capitalist class, not the working class. Unemployment is not eliminated but kept within "acceptable" limits. If unemployment rises too high, there will be depression and social unrest which threatens the system. If unemployment is too low, it threatens profits. Hence, governmental fiscal policies are directed toward keeping unemployment at an acceptable limit, a limit which has risen steadily since WWII and now stands at eight or nine per cent.

The third point that emerges from our formula, then, is the necessity for unemployment in capitalism. While the unemployed are not directly exploited by the capitalists in the strict sense (since no surplus value is extracted from them), they are nonetheless the worst victims of the system of capitalist exploitation.

6.III.5. The Class Nature of Capitalism

Our formula for capitalist production, then illustrates first, the profit motive as the sole force behind capitalism. Second, it reveals the secret of capitalist exploitation. Third, it shows that unemployment is an essential feature of capitalism.

Finally, the capitalist mode of production generates two classes that stand in dialectical relation to each other. The capitalist class, or bourgeoisie, owns the means of production and lives off income from this property ownership. The working class, or proletariat, does not own the means of production and therefore must sell its labor power for wages or a salary. The relationship is a predatory one in that the income of the bourgeoisie comes from the surplus value extracted from the direct producers, the workers. Like all other forms of class society, capitalism is based on exploitation and the interests of capitalists and workers are antagonistic.
6.IV. THE PRIMITIVE ACCUMULATION OF CAPITAL

How does a system of capitalist production become established? Where do the capitalists get their capital? How did workers lose their land and become wage slaves? How, in short, did the original class distinction arise between the capitalists, the owners of the means of production, and the workers, the sellers of labor power?

Bourgeois ideology, of course, provides a readymade answer, which runs somewhat as follows. In the beginning, there were two kinds of people: thrifty, industrious people who worked hard and accumulated property, and lazy spendthrifts, who consumed all they produced, and more. The former became the capitalists, who are now reaping the just rewards of their hard work and foresight. The latter are now the workers, who, if the capitalists did not provide jobs for them, would be living little better than animals.

Now, this idyllic myth reflects the actual processes of capital accumulation about as well as the origin myths of the Australian aborigines reflect the actual processes of the creation of the universe, and plays about the same role vis-a-vis the social order. It serves to legitimate and thereby reinforce the status quo.

In fact the actual processes of the emergence of capitalism were quite different. Some of the most powerful passages in Capital are those in which Marx describes what he called the "primitive accumulation of capital." In Marx's analysis, the primitive accumulation has two aspects: 1. a financial aspect, the accumulation of money in the hands of the capitalist, and 2. an institutional aspect, the separation of the laborer from the means of production. Let us examine each of these in turn.
6.IV.1. The Accumulation of Money

Although some capital may have been accumulated by thrifty artisans and merchants, by far the most typical method of accumulating money are capitalist production has been plunder and outright theft. As every schoolchild knows, the period during which bourgeois civilization was emerging in Europe was precisely the period during which Europe was systematically conquering and plundering the rest of the world. As Marx put it:

The discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins, signalled the rosy dawn of the era of capitalist production. These idyllic proceedings are the chief momenta of primitive accumulation. (Marx 1867:751)

Thus, the Industrial Revolution was a world-historical event, in both its causes and effect. First, the basic inventions upon which industrial capitalism is based were largely made elsewhere, as we have already noted. Second, the money which financed the Industrial Revolution came from the plunder of Latin America, Africa, and Asia [Mandel, 1968 #159:1, 102-20; II, 441-47].

For Europe, the effect was to increase tremendously the productive potential of society, leading to the emergence of modern industrial societies. The rest of the world, however, was also transformed, into "underdeveloped" nations that exported surplus and raw materials to the Euro-American nations. This will be discussed more fully later.

6.IV.2. The Separation of Labor from the Means of Production

But money, by itself, is not capital. It is merely dead labor that can become capital and live only by sucking living labor. Money can only become capital when there are workers from whom surplus value can be extracted. But these workers must not have their own independent access to the means of production. How, then, do the direct producers, the peasants of feudal society, lose their access to the means of production?

The answer, again, lies in extra-legal violence. The peasants were forcibly driven from the land. As Marx described the process:

The spoilation of the church's property, the fraudulent alienation of the State's domains, the robbery of the common lands, the usurpation of feudal and clan property, and its transformation into modern private property under circumstances of reckless terrorism, were just so many methods of primitive accumulation. They conquered the field for capitalist agriculture, made the soil part and parcel of capital, and created for the town industries the necessary supply of a 'free' and outlawed proletariat. [There follows a four page discussion of laws permitting vagabonds to be whipped, branded, mutilated, and even enslaved.] . . . Thus were the agricultural people, first forcibly expropriated from the soil, driven from their homes, turned into vagabonds, and then whipped, branded, tortured by laws grotesquely terrible, into the discipline necessary for the wage system. (Marx 1867:732-37)

Thus, the history of the rise of capitalism is written in the annals of mankind in letters of blood and fire. . . . If money, according to Augier, 'comes into the world with a congenital bloodstain on one cheek,' capital comes dripping from head to foot, from every pore, with blood and dirt. (Marx 1867:715, 760, cf. Polanyi 1944)

6.IV.3. The Rise of the Bourgeois Nation-State

In addition to these twin aspects of the primitive accumulation, a third factor must be noted, a political one. The capitalist will not invest in anything as durable and visible as a factory unless they are sure their investments will not be expropriated and their profits unduly taxed. Therefore, before capitalist production can become dominant, the
bourgeoisie must rise to the position of a ruling class so that it can control the taxation policies of the state. The history of the bourgeoisie is the history of its attempts first, to escape from autocratic state control, and then to conquer state power for its own ends. In the words of the *Communist Manifesto*:

> Each step in the development of the bourgeoisie was accompanied by a corresponding political advance of the class. An oppressed class under the sway of the feudal nobility, it became an armed and self-governing association in the medieval commune; here independent urban republic (as in Italy and Germany), there taxable 'third estate' of the monarchy (as in France); afterwards, in the period of manufacture proper, serving either the semi-feudal or the absolute monarchy as a counterpoise against the nobility, and, in fact, cornerstone of the great monarchies in general, the bourgeoisie has at last, since the establishment of Modern Industry and of the world-market, conquered for itself, in the modern representative State, exclusive political sway. (Marx and Engels 1848:4-6)

Important bourgeois revolutions, through which the bourgeoisie was able to wrest state power from the feudal nobility, include: the Dutch War of Independence (1566-1609), the English Civil War (1649-1660), the American Revolution (1776), and, above all, the French Revolution (1789), which, with its aftermath in the Napoleonic Wars, has the world historical significance of marking the end of feudalism and the triumph of the international bourgeoisie. Further consolidation occurred in the French Revolutions of 1830 and 1848, the American Civil War, the unification of Italy and Germany, and the Meiji Restoration in Japan (1868). The establishment of bourgeois society, then, was a process marked by centuries of violent political struggle.

Nationalism is not, therefore, an autonomous force in the modern world. It is generated by underlying class struggles. The nation-state is a product of these bourgeois revolutions, established by the bourgeoisie to protect their interests. The nation-state did not occur in ancient or feudal times, and it will disappear with the abolition of bourgeois rule.

6.V. ACCUMULATION AND THE INNER CONTRADICTIONS OF CAPITALISM

6.V.1. Consequences of Accumulation

Capitalism is distinguished from all other social orders by the dominance of the profit motive. Without profit, nothing will be produced under capitalism. But the capitalists are not left to enjoy their profits in peace. The competitive nature of capitalism forces the capitalists to continually reinvest their capital so that it accumulates into ever larger amounts. Capitalists who fail to do this will be eliminated in the competitive struggle. From this perspective, the capitalist is no less a slave to capital than is the proletarian. To capital,

> the proletarian is but a machine for the production of surplus-value; on the other hand, the capitalist is in its eyes only a machine for the conversion of this surplus-value into additional capital. (Marx 1867:595)

The capitalist system, therefore, does not flow from the greed of the individual capitalist. Capital has become an immanent force which itself cultivates this greed.

In becoming the creature of capital's thirst to expand itself, the capitalist is led into a contradictory, topsy-turvy world in which the results of human activity are frequently the direct opposite of those intended. To understand this, it is necessary to look more closely into the processes of capitalist production and the accumulation of capital.
6.V.2. Value Analysis of Capitalist Production

The value components of the finished product of capitalist production are:

1. *constant capital* \([c]\), or the value embodied in the raw materials and means of production that are used up in capitalist production (constant because this value is merely passed on to the finished product);

2. *variable capital* \([v]\), or the value embodied in the wages the capitalist pays the workers (variable because the workers not only recreate their own value, but go on to produce additional value); and

3. *surplus value* \([s]\), the additional value created by the workers over and above their wages.

The ratios between these value components are extremely important for understanding the functioning of the system. These ratios are:

1. *the composition of capital* \([o = c/v]\).

2. *the rate of surplus value* \([s' = s/v]\).

3. *the rate of profit* \([p' = s/(c+v)]\).

Now, capitalists are only interested in the last of these, the rate of profit. This must be as high as possible. But simple algebraic computation tells us that the rate of profit is intimately related to the other two ratios, as follows:

\[
p' = s/(c+v) = \frac{s}{v}\left(1 + \frac{c}{v}\right) = \frac{s}{v}\left(1 + \frac{1}{o+1}\right)
\]

This formula, \(p' = s'/(o+1)\), expresses in a highly abstract form the basis for class conflict in bourgeois society. The capitalists attempt to increase the rate of profit (\(p'\)) as much as possible. This involves increasing the rate of surplus value (\(s'\)), that is, increasing the exploitation of the working class (assuming that the organic composition of capital is constant).

6.V.3. Increasing the Rate of Exploitation

The rate of surplus value can be increased in a variety of ways:

1. by lengthening the working day;

2. by reducing the real wage, thereby lowering the living standard of the working class; and

3. by increasing the intensity of labor, so the workers produce more value in the same time.

All of these methods run up against physical constraints. Workers need time to sleep and eat, and there is a bare minimum of food, clothing, and shelter below which life cannot be sustained (the actual subsistence wage is ordinarily well above this level). Workers can only work so fast, however hard-driven. Furthermore, as exploitation increases, countervailing tendencies emerge which protect the workers, of which the most important are labor unions and legislation.

Thus, the length of the working day during the medieval period was not much different from what it is today (Mandel 1968:1, 135). As capitalism was emerging from the fifteenth to the eighteenth centuries, the working day was gradually increased to 12 hours, and, in the early nineteenth century when factory manufacture became prevalent, there was a rapid increase to 15 hours. But in the late nineteenth century, after labor unions formed and grew in strength, the length of the working day was reduced by pressure from the organized working class. In the U.S., this resulted from the 10-hour day movement of the 1830s and the 8-hour day movement of the 1880s.

Similarly, the real wages and living standards of the working class fell throughout the early period of capitalist development, so that by the turn of the nineteenth century it was only half its medieval level. It did not approach medieval levels again until the emergence of labor unions in the late nineteenth century (Mandel 1968: I, 148–49).
The rate of surplus value, then, is a primary focus of class struggle. The capitalist attempt to increase exploitation in order to maximize their profits, while workers attempt to protect their living standards through labor unions and protective legislation.

6.V.4. Money Wage, Real Wage, and Relative Wage

At this point, it is necessary to clarify three interrelated concepts: money wage, real wage, and relative wage. Money wage is the actual amount of money received by the workers. Real wage is what this money will buy, after allowance has been made for inflation. In 1970, for example, a dollar would buy less than a third of what it would in 1900. Relative wage is the share the workers receive of the total product they produce. When Marxists speak of the declining position of the working class, they are speaking of declining relative wages, which, as we have seen, can occur even with rising money wages and rising real wages. Unfortunately, although fairly reliable statistics exist on money wages and real wages, almost none are gathered on relative wages. Thus, empirical confirmation of this point is difficult, and usually involves rather elaborate calculations and inferences.

6.V.5. The Development of the Forces of Production

However, there is another way of increasing profits which does not run up against these constraints. This is by increasing the productivity of labor through mechanization and rationalization of the labor process. This, however, leads to additional problems. These may be discussed with reference to Table 6.5., which illustrates a hypothetical situation in, say, the shoe industry.

In time period I, the prevailing conditions are such that the capitalists invests $200, $150 in raw materials and the means of production (c) and $50 in wages (v). The rate of surplus value (c/v) is 100 percent, so that the workers work 100 hours, half of this to reproduce their wages, the other half to produce surplus value (s). In these 100 hours, workers produce 100 pairs of shoes which sell at their value, $2.50. The capitalist realizes a money return of $250, which includes $50 profit. The rate of profit (s or $50 divided by c+v or $200) is 25 percent.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>c</th>
<th>v</th>
<th>s</th>
<th>V</th>
<th>U</th>
<th>.p</th>
<th>M'</th>
<th>P</th>
<th>o</th>
<th>s'</th>
<th>p'</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>200</td>
<td>150</td>
<td>50</td>
<td>50</td>
<td>250</td>
<td>100</td>
<td>2.50</td>
<td>250</td>
<td>50</td>
<td>3</td>
<td>100%</td>
<td>25%</td>
</tr>
<tr>
<td>II</td>
<td>300</td>
<td>250</td>
<td>50</td>
<td>50</td>
<td>350</td>
<td>1000</td>
<td>2.00</td>
<td>2000</td>
<td>1700</td>
<td>5</td>
<td>100%</td>
<td>567%</td>
</tr>
<tr>
<td>III</td>
<td>300</td>
<td>250</td>
<td>50</td>
<td>50</td>
<td>350</td>
<td>1000</td>
<td>.35</td>
<td>350</td>
<td>50</td>
<td>5</td>
<td>100%</td>
<td>17%</td>
</tr>
<tr>
<td>IV</td>
<td>300</td>
<td>250</td>
<td>50</td>
<td>50</td>
<td>350</td>
<td>1000</td>
<td>.375</td>
<td>375</td>
<td>75</td>
<td>5</td>
<td>100%</td>
<td>25%</td>
</tr>
<tr>
<td>V</td>
<td>275</td>
<td>225</td>
<td>75</td>
<td>75</td>
<td>350</td>
<td>1000</td>
<td>.35</td>
<td>350</td>
<td>75</td>
<td>10</td>
<td>300%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Table 6.5. Development of the Forces of Production.
This Table illustrates how the drive for profit leads capitalists to invest in more productive machinery, but this fails to provide lasting higher profits in the long run. Explanation: The capitalist begins with money (M), which he invests in constant capital (c) and variable capital (v). The workers add surplus value (s), so that the value of the finished product (V) is equal to c+v+s. This value, divided by the number of articles produced (U), gives the price per unit (.p). When the goods are sold, the capitalist ends with his money return (M'), which includes his original capital and his profit (P). The organic composition of capital (c/v) is represented by o, the rate of surplus value (s/v) by s', and the rate of profit (P/M) by p'.

Assume, now, that in time period II, one capitalist learns of a new machine which will cut the labor time required to produce a pair of shoes to 6 minutes, one tenth the usual time. (This is not unrealistic for such increases in productivity were common in the
nineteenth century. The labor time required to produce 100 pairs of men's shoes fell from 86,200 minutes in 1859 to 9,200 in 1895; for 100 pairs of women's shoes, it fell from 61,500 minutes to 4,800 minutes, see Table 6.6.) The capitalist now invests $300, $250 in raw materials and the new machine (which is more expensive than the old) and $50 in wages. The organic composition of capital has increased from 3 to 5, but the rate of surplus value remains the same. In 100 hours of labor, however, workers now produce 1,000 pairs of shoes, which are sold at somewhat below the prevailing price, say $2.00 in order to realize profit quickly. The money return of the capitalist is now $2000 on an investment of $300, or $1700 profit. The rate of profit is now 567 percent!

6.V.6. The Falling Rate of Profit

But other capitalists see the fantastic rate of profit made by our entrepreneur and also buy the new machinery. In time period III, as the use of this new machinery becomes general, competition brings the price of shoes down to their new value, or $.35. This causes the rate of profit to fall, with the capitalists now receiving $50 profit on their investments of $300, a rate of profit of 17 percent.

Thus, the collective result of the capitalists' attempts to maximize their profits by introducing labor saving machinery has caused the organic composition of capital to rise and the rate of profit to fall. Capitalists appear to be pursuing a will-o-the-wisp!

Many see this as the fundamental contradiction of capitalism. The competition between capitalists inevitably drives up the organic composition of capital, but as o increases in our formula p' = s'/(o+1), p' must fall, assuming that s' stays constant.

6.V.7. Further Considerations

There are, however, a variety of other considerations. The first is the principle of the equalization of the rate of profit. Competition between capitalists would not drive prices down to their new values, but rather would stop when the rate of profit had fallen to the general level of 25 percent, because capitalists would not invest below this level. Consequently, commodities tend to exchange at above their values in spheres of production where the organic composition of capital is above average and below their values in spheres of production where the organic composition of capital is below average. In this way, the rate of profit in different spheres of production is equal. Thus, in time period IV, the price of a pair of shoes would be $0.375, in order to maintain profits at the general level of 25 percent.

Secondly, the rise in the organic composition of capital has increased the productivity of labor and thereby lowered the value of commodities. The value of labor power, which depends on the value of the commodities consumed by workers and their families, also falls. Thus, in time period V, wages have fallen to $25, since the value of labor power has fallen by one half due to the increased productivity of labor. The hours of labor remain constant, so that variable capital (v) is 25 and surplus value (s) is 75, a rate of surplus value (s') of 300 percent. The organic composition of capital (o) also increases, to 10. The profit is now $75 on an investment of $275, a rate of profit (p') of 27 percent.

Even though wages, working hours, and the rate of profit remain about the same, the system has become more exploitative, since the rate of surplus value (s') has increase from 100 percent in time period I to 300 percent in time period III. If there has also been general inflation, so that one hour of labor equals $8 (as in time period VI) instead of $1 (as in time periods I-V), this would not change the actual economic relationships, but it would serve to conceal the inner operation of the system from the actors, workers and capitalists alike. For the workers, money wages would have increased (fourfold rather than eightfold), but real wages (that is, what their money wage would buy) would remain about the same. For the capitalists, everything would be more expensive, but the rate of profit would remain about the same.
Table 6.6. Reduction of Necessary Labor.
This Table shows the dramatic reduction in labor time, in thousands of minutes, necessary for making various articles from the manual work of the early Nineteenth Century to the machine work of the late Nineteenth Century. This reduction, of course, has intensified in the Twentieth Century. Source: (Mandel 1968: I, 138).

<table>
<thead>
<tr>
<th></th>
<th>Manual Work</th>
<th>Machine Work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date</td>
<td>Time</td>
</tr>
<tr>
<td>100 pr. men's shoes</td>
<td>1859</td>
<td>86.2</td>
</tr>
<tr>
<td>100 pr women's shoes</td>
<td>1859</td>
<td>61.5</td>
</tr>
<tr>
<td>100 dozen collars</td>
<td>1855</td>
<td>81.0</td>
</tr>
<tr>
<td>12 dozen shirts</td>
<td>1853</td>
<td>86.3</td>
</tr>
<tr>
<td>100 dozen corn boxes</td>
<td>1865</td>
<td>6.5</td>
</tr>
<tr>
<td>25,000 lb. soap</td>
<td>1839</td>
<td>25.9</td>
</tr>
<tr>
<td>12 tables</td>
<td>1860</td>
<td>33.8</td>
</tr>
<tr>
<td>50 doors</td>
<td>1857</td>
<td>83.1</td>
</tr>
<tr>
<td>100,000 envelopes</td>
<td>1855</td>
<td>26.1</td>
</tr>
<tr>
<td>Transporting 100 tons of coal</td>
<td>1859</td>
<td>7.2</td>
</tr>
</tbody>
</table>

6.VI. THE LAWS OF MOTION OF CAPITALISM

Table 6.6., as we have seen above, illustrates one of the most basic laws of motion of capitalism, its tendency to increase the productive potential of society. In the words of the Communist Manifesto:

The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more colossal productive forces than have all preceding generations together. Subjection of Nature's force 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)

And this was written before the invention of the airplane, automobile, radio and television, computers, automation, and the beginning of interplanetary exploration!

Some further complexities of the accumulation of capital are illustrated in Table 6.7. The accumulation of capital into larger and larger sums, coupled with the increasing productivity of labor, makes the competitive struggle between capitalists more fierce. Large capitalists have a distinct advantage in this struggle. Consequently, capital is not only accumulated into larger and larger masses, it is concentrated into fewer and fewer hands. Thus, the 500 capitalists, each employing 10 workers, in time period I have been reduced, in time period V, to 5 capitalists each employing 100 workers. Accumulation and concentration, then, improves the position of some capitalists at the expense of others, who are driven out of their class and fall into the ranks of the proletariat.

Accumulation also involves a worsening of the economic position of the proletariat, again illustrated in Table 6.7. If society's total demand for shoes is 10,000,000 pairs, in time period I the satisfaction of this demand requires 10,000,000 hours of labor and provides employment for 5,000 workers. In time period V, however, after the introduction of labor saving machinery, the same demand for shoes only requires 1,000,000 hours of labor and provides employment for only 500 workers. The remaining 4,500 workers are forced into the ranks of the unemployed (as, for that matter, are the 495 surplus capitalists eliminated in the competitive struggle in the shoe industry). The pay of the 500 remaining workers employed in the shoe industry may
remain the same or even improve, but their relative wages as a portion of what they produce has fallen. Further, their insecurity has increased in that they must now compete with the 4,500 unemployed workers for jobs. Moreover, the work process has become transformed and their previous skills have become obsolete. As they lose control over the process of production, the workers' subjugation to capital becomes ever greater. Finally, the misery of the workers thrown out of capitalist production, "bearing the stigmata of wage labor," but no longer employable, of course also increases. As Marx sums up the results of accumulation:

within the capitalist system all methods for raising the social productiveness of labour are brought about at the cost of the individual labourer; all means for the development of production transform themselves into means of domination over, and exploitation of, the producers; they mutilate the labourer into a fragment of a man, degrade him to the level of an appendage of a machine, destroy every remnant of charm in his work and turn it into a hated toil; they estrange from him the intellectual potentialities of the labour-process in the same proportion as science is incorporated into it as an independent power; they distort the condition under which he works, subject him during the labour-process to a despotism the more hateful for its meanness; they transform his life-time into working-time, and drag his wife and child beneath the wheels of the Juggernaut of capital. But all methods for the production of surplus-value are at the same time means of accumulation; and every extension of accumulation becomes again a means for the development of these methods. It follows therefore that in proportion as capital accumulates, the lot of the labourer, be his payment high or low, must grow worse. The law, finally, that always equilibrates the relative surplus-population, or industrial reserve army, to the extent and energy of accumulation, this law rivets the labourer to capital more firmly than the wedges of Vulcan did Prometheus to the rock. It establishes an accumulation of misery, corresponding with accumulation of capital. Accumulation of wealth at one pole is therefore, at the same time accumulation of misery, agony of toil, slavery, ignorance, brutality, mental degradation, at the opposite pole, i.e., on the side of the class that produces its own product in the form of capital. (Marx 1867:645)

This is Marx's absolute general law of capitalist accumulation which is as universally operative in capitalist systems as the law of gravity is in physical systems. But, "like all other laws, it is modified in its working by many circumstances," as will be discussed shortly.

<table>
<thead>
<tr>
<th>D/S</th>
<th>D/L</th>
<th>H/W</th>
<th>#W</th>
<th>W/C</th>
<th>#C</th>
<th>W/W</th>
<th>TWWC</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>2,000</td>
<td>5,000</td>
<td>10</td>
<td>500</td>
<td>1,000</td>
</tr>
<tr>
<td>V</td>
<td>1,000,000</td>
<td>1,000,000</td>
<td>2,000</td>
<td>500</td>
<td>100</td>
<td>5</td>
<td>500</td>
</tr>
</tbody>
</table>

Table 6.7. The Fundamental Contradiction of Accumulation. This Table shows how capitalism increases the productivity of labor but constricts the buying power of the working class. Explanation: D/S is the demand for shoes, D/L is the demand for labor, H/W is the hours worked per worker per year, #W is the number of workers, W/C is the workers per capitalist, #C is the number of capitalists, W/W is the wages per worker, TWWC is the total wages of the workers. Note that as the productivity of labor increases, the total wages of the workers must fall. The question is, "Who will buy the shoes?"

6.VI.1. The Impoverishment of the Working Class

It should be emphasized that Marx is not saying that employed workers necessarily become poorer in an absolute sense. The theory of the absolute impoverishment of workers is not part of Marxism although it is attributed to Marx by his opponents (see Gillman 1957:145-52, Mandel 1968:1, 150-54, Sweezy 1942:19). The impoverishment
is a relative and social impoverishment that occur even with rising wages. As Marx warned:

A rise in the price of labour, as a consequence of accumulation of capital, only means, in fact, that the length and weight of the golden chain that the wage-worker has already forged for himself, allow of a relaxation of the tension of it. (Marx 1867:618)

6.VI.2. The Fundamental Contradictions of Capitalism

Another feature of the capitalist system is the growing contradiction between society's continually expanding ability to produce and its continually constricting ability to consume. This may be seen in Appendix 23, where in time period I, 5,000 workers are earning $1,000 each, providing an effective demand of $5,000,000. But in time period V, there are only 500 workers earning $500 each, so that effective demand has fallen to $250,000, or one-twentieth of before. Now, who will buy the shoes? While capitalist competition expands society's powers of production, the social relations of capitalism constrict society's power to consume. It is not enough for capitalists to produce commodities, they must sell these commodities in order to make profits, and they must re-invest these profits in order to accumulate. If commodities cannot be sold they will not be produced, capital cannot be accumulated, and the expanding productive system will collapse in upon itself.

Since the workers can no longer buy back what they produce, the capitalist system must expand into new markets. In the words of the Communist Manifesto:

The need of a constantly expanding market for its products chases the bourgeoisie over the whole surface of the globe. It must nestle everywhere, settle everywhere, establish connections everywhere. (Marx and Engels 1848:7)

The system also expands into such totally new spheres of production as machinery, railroads, automobiles, airplanes, electronics, and fast food chains. This expansion, however, is uneven, and the pushes and strains of the expanding system generate crises, conflicts, and catastrophes, the "lovely alliteration" of the capitalist mode of production (Sweezy 1942:200). This cyclical development of expansion and contraction, of business prosperity and depression, itself expands, and each new crisis is only overcome by paving the way for a worse crisis in the future.
Figure 6.3. Contradictions of the Capitalist System,
This flow chart illustrates some of the processes discussed in the text.