

# From Das Capital to DOS Capital: A Look at Recent Theories of Value

By Jerry Harris Chicago / Third Wave Study Group

A number of schools of thought have recently developed which place society in a new age. One common thread is the current mania for "post" isms, i.e., post-industrialist, post-modernist, post-structuralist, post-Fordist, even Peter Drucker's post-capitalist. But these only say what the emerging society isn't, not what it is. It's as if the last two hundred years had been labeled post-feudalism, rather than industrial capitalism.

But what the new schools all recognize is that a revolutionary transformation has taken place. What has yet to be determined is whether society is still in a capitalist stage of development, or whether it has entered an era for which we have no proper descriptive name.

What is crucial in naming a society? For Marx, identifying the economic base was key to understanding the stage of development. Central to his theory of history was his analysis which uncovered capitalism's laws of motion, and how they were qualitatively different from feudal and ancient society. This analysis hinged on his theory of value and accumulation.

Alvin and Heidi Toffler's historic perspective is very similar to Marx's. Their three waves theory also keys in on the economic base as the most fundamental way to identify human development and different historic eras. For the Tofflers, agrarian society, industrial society, and today's information society are the three waves of civilization.

For both Marx and the Tofflers, when the economic base changes, so does the rest of society. The key to this transformation is how wealth is created. If today is a historic period of revolutionary change then a new theory of value, labor and accumulation is needed. This article will review how Marx treated this question, and then discuss fundamental shifts in the third wave economy.

## Marx's Theory of Value

For Marx, a key difference between feudal-agrarian and industrial production was the commodification of labor and products. Agrarian labor mainly consumed what it produced, and bartered for what it needed. Markets, usually in the form of the medieval fair, were a secondary adjunct to the local economy. They were not driven by competition, but a simpler mode of exchange which sought to buy low and sell high. Marx summed-up agrarian commercial exchange as Money for Commodities in exchange for greater Money, or  $M \rightarrow C \rightarrow M1$ . Small merchant production was explained as Commodities in exchange for Money, for which you could purchase greater amounts of Commodities, or  $C \rightarrow M \rightarrow C1$ .

But these formulas changed qualitatively with industrial capitalism. Marx explained it as the following:  
$$M \rightarrow C \rightarrow (mp) \rightarrow P \rightarrow C1 \rightarrow M1.$$
$$(lp)$$

That is, Money in exchange for a Commodity to which is added the means of production and labor power transforms the Commodity through Production into a New Commodity with greater value than the first, which then is sold for greater Money.

Therefore, capitalism places money as both the initiator and goal of production. The commodity and its use are no longer the purpose of production. As Marx explained this transformation:

"The development of commerce and commercial capital brings about everywhere an orientation of production towards exchange values, increases its volume, multiplies and universalizes it, develops money into world money. Commerce therefore has everywhere a dissolving influence on the existing organization of production which, in all its different forms, is primarily oriented towards use value." (Capital III, VA III/pp. 362-4)

The Tofflers also pay close attention to this difference between agrarian and industrial society. They explain it as a split between producer and consumer. In agrarian society the producer mainly consumed his or her own product, so production was based on use value. But industrial society splits this relationship, making everyone dependent on the market to fill their needs. A fundamental shift occurs whereby society becomes organized around exchange value. Everything is for sale, including labor itself.

Capitalism's focus on profit takes place within a competitive market. Competition for greater and greater market share drives the system to accumulate and expand. But unrestricted expansion also leads to destruction. Here lay its core contradiction, and the duality of the system.

The competitive drive causes capitalism to seek new markets, develop new products, and create new technologies, which lower costs and speed production. Technology plays a key role in creating surplus value. Greater profits are not generated simply by lowering wages, but more importantly through the higher productivity of advanced technology. This is the basis for the tremendous creative impulse inherent in the system.

But Marx maintained that value is created only through human labor. The addition of labor, whether intellectual or physical, applied to the original commodity in the process of production, is what makes it possible for the capitalist to sell the new product for more money. Therefore the capitalist must always strive to lower the cost of labor through economic, social and technological means to increase his profits. The greater his accumulation of capital the better he is able to compete. Therefore labor can never possess everything it produces because that undermines profit maximization. What follows is the crisis of overproduction, factory closures, unemployment, and all the social ills that are familiar. In effect, this is the destructive side of capitalism.

This contradiction forms specific social property relations and a mode of exploitation in which workers are reduced to commodities, bought and sold on the labor market. The labor power bought by the capitalist has no value unless applied to the means of production, which is also the property of the capitalist. This social form of production trapped inside private property ownership is the basis for the alienation and exploitation of labor. Therefore the true potential of the productive system can only be liberated when labor is freed from the domination of capital, and the full creative force of production is no longer hindered by capital's need for accumulation. If labor received the value of what it creates, poverty would be eliminated.

### **Work Without Workers**

But what if the worker is eliminated from production? The capitalists, who are always at the cutting edge of economic change, have begun to consider this question. The cover of Fortune magazine in October 1994 declared: "Your company's most valuable asset, Intellectual Capital, new ways to build it and measure it."

Fortune's main focus is on the relationship between labor and capital. Leif Edvinsson, director of intellectual capital at Skandia AFS has theorized about two basic types of intellectual capital: human and structural. The task of the corporation is to capture and transform a dynamic human intellect into a stable, usable and reusable structural form, to make "individual know-how into the property of the group." Preferably, this knowledge is stable and orderly enough to be on call in your hard drive. As Edvinsson argues, structural capital is the most important: "It doesn't go home at night or quit and hire on with a rival; it puts new ideas to work; and it can be used again and again to create value, just as a die can stamp out part after part."

Of course once a worker's knowledge is captured as structural capital, you can then do away with the worker. In industrial capitalism the worker's surplus labor was expropriated, but you had to retain the worker as long as you wanted to make use of his labor. The worker still owned his labor power, and sold it for his wages. But in the new economy, knowledge is both labor and the means of production, both of which are expropriated and turned into structural capital for the exclusive use of the corporation. Thus, intellectual capital can be totally alienated from the worker. Not only is the value of the labor stolen, but the labor itself.

This process is the basis for growing unemployment and the increase in temporary and part-time work. A hard drive can hold the knowledge of thousands of workers, and be accessible to one worker whenever the company needs it. Turning knowledge into the key productive component impacts all industries, and all levels of employment, not only white collar work. Business Week's cover story, "Rethinking Work," (Oct. 17, 1994), gives the example of Cummins Engine Company, a producer of heavy-duty engines. The old plant is run by union labor with wages at \$17.60 an hour. "Those at the new plant average \$8.75. They're trained in statistical process control and engine technology and maintenance, and tested for math ability and communication skills. Pay increases are predicated on completing course work." Says chairman Henry Schact; "We have fewer people doing much more work, much of which is knowledge based and we're paying people less."

The productive power of intellectual capital, made possible by the new tools of cybernetic production, is thus changing both blue and white collar jobs. All work has become increasingly knowledge based, and this is revolutionizing the relations of production. Both of two recently published books, *The End of Work* by Jeremy Rifkin, and *The Jobless Future* by Stanley Aronowitz and William DiFazio, focus on this important process. As Rifkin notes; "We are entering a new phase in world history one in which fewer and fewer workers will be needed to produce the goods and services for the global population."

But entering this new era with old capitalist values will spell disaster. Viewing knowledge as a capital asset in a competitive market drives corporations to try to own and control information as they did with other commodities. In the industrial period, owning your assets meant machinery and physical commodities. Today it means surrounding your intellectual capital in secrecy and hiring lawyers to protect intellectual property rights. This overriding tendency of capitalism undermines the tremendous productive potential of intellectual capital. Knowledge expands most rapidly, and therefore in value, only with its greatest use. Unlike physical commodities which are consumed with use, knowledge is generative it expands with use. Therefore the best way to create wealth is to fully liberate the productive potential of information by sharing knowledge through universal democratic access.

Control, ownership, and secrecy drastically limit this growth, and destroy the possibility of a broad economy. Entering the new economy with the rules of the old capitalist market will only deepen the social crisis rapidly developing around us. In a knowledge-based economy, education becomes the key

factor for growth and employment. Yet today only 10 percent of U.S. corporations pay for worker retraining. Fortune argues for a retreat even from this limited involvement. Citing Canadian Imperial Bank of Commerce, Fortune explains that instead of spending \$30 million a year on training; "Now the bank puts the monkey on employees' backs: Armed with their lists of competencies, employees are responsible for learning. ...Department heads track how fast their crew is learning, or whether it is weak in any particular area data that provides a far better picture of human capital development than the amount of time or money spent in training."

This "monkey on the employees' back" is another form of social control of the labor force. What is even more cynical is the further observation offered by Fortune that "Growth in human capital . . . through training and education . . . is bootless if it cannot be exploited. That requires structural intellectual assets." With this strategy corporations can externalize the cost of education onto the worker, capture the knowledge using information technologies, and then cut their labor force resulting in cost savings while increasing productivity and profits.

Making education into an individualized market fits nicely into the Third Wave Republicanism of Newt Gingrich. Broadside attacks on school funding and student aid will build the new economy into a society increasingly divided between "info-rich" and "info-poor." Free or low cost, lifelong learning opportunities are needed to generate the type of labor force necessary in an information economy.

Education should not only be a right, but a social responsibility underwritten by government taxation on corporations. If corporations plan to expropriate intellectual capital, let them at least pay for its development.

### **No Cost Production**

Another fundamental shift in the information economy is that digital and fiber technology is lowering the cost of production to almost zero. Business Week (March 6, 1995) calls this the "technology paradox." As it reports; "The new rules . . . are redefining value in an economy where the cost of raw technology is plummeting toward zero. Sooner or later, this plunge will obliterate the worth of almost any specific piece of hardware or software." The same article observes that this "cheap technology has crossed an invisible threshold to assume a central role in economies around the world."

Cheaper, faster and smaller has become the mantra of silicon engineering. When power goes up, prices come down. Chip making technology is able to double its performance with no increase in prices every eighteen months. These chips are being inserted into everything from cars, to lathes and home computers. This is also true with software, an essential tool of production. The actual price of producing an additional diskette amounts to pennies, while its productive worth can be enormous.

The same pattern has developed in fiber optics. The ability to increase pulse rates and split light beams has made the carrying cost of one more phone call practically zero. How then do you price a call, and what does this all mean for the commodity market? As Eastman Kodak CEO George Fisher worries; "How will I be competitive in a world [in which] technology will be virtually free?"

### **End of Commodity Production?**

Virtually free technology produced with virtually no human labor it's certainly not on our doorstep today, but just as certainly, it's within view over the next century. The implications are the end of commodity production and the capitalist market, as we know it.

This is the conclusion reached by Marxist economist Vojin Dakovic in his book, *Anti-Capital*. Dakovic sees cybernetics and automation as the final stage of industrial capitalism. He argues that; "technology in the process of production also takes part as labor-power," creating a surplus or free form of labor which he terms "use-labor." Use-labor is cheaper, faster, and more efficient than human labor, and thereby replaces the worker.

In effect, this is what *Business Week* recognized when it discussed "near zero production." Marx viewed the amount of "socially necessary labor" as determining price, or the exchange value, of a commodity. But how do you price a commodity produced with essentially free use-labor? Dakovic takes this to argue that commodity pricing is at an end and use value should become dominant. "As use labor replaced living labor in commodities, its form of use value became dominant as the form of value of the product. The point of no return has been reached. Machines are well on the way to replacing human labor once and for all as a determinant of value, and by doing so they are making the system of commodity production obsolete."

Dakovic thus differs with Marx in two key areas. He argues that technology contains a form of labor independent of the worker, and that this labor adds a greater amount of surplus value than the worker. This not only undermines the commodity market, but also the labor market. Use-labor being superior to human labor means countries are facing permanent employment stagnation. Dakovic maintains that technology has become the driving force in the global economy. As he explains: "Bringing unlimited quantities of cheaper labor . . . technology has set the stage for the final battle for capital on the world market . . . [Not only] permanent stagnation in employment in the most competitive economies, but also each national market . . . has been superseded for all times as a framework in which economic growth is possibly based on a growth of employment." This onset of global stagnation and the elimination of human labor is the "coupe de grace to capital and the capitalist mode of production."

## **Knowledge as Value**

Capitalism's answer to the crisis of global stagnation is to move into speculative financial manipulation. Today the development of commercial capital has so increased as to totally overshadow productive capital. Capital has fled to global speculation because investment in manufacturing is limited by global wage structures, which constrain consumption, and the growing unemployment produced by the technological revolution.

Although speculation has existed from the beginning of capitalism, today its use and size has reached an historic leap. The international money market by itself is forty times greater than the exchange of physical commodities, and this is just one of the dozens of speculative markets. The revolution in telecommunications and computer technologies is what makes this possible, creating a geosynchronized world market.

Because speculative markets operate on information and not production, they are part of the new knowledge economy, rather than the industrial economy of Marx. After all in Marx's formula, value was added to a commodity through the application of labor and the tools of production. Yet here we have wealth created with no use value there is no new commodity at the end of the process. Only increased wealth. Therefore capital has moved into totally unproductive and socially useless activity.

In speculation, money buys a very specific form of commodity, information, which is then turned into greater money. Since the information is enhanced by the new tools of production in telecommunications and computer technologies, the formula may be expressed as:

M -> I -> (il) -> I1 -> M1.  
(mp)

That is Money buys Information to which is added the means of production and intellectual labor to produce enhanced Information which is used to make more Money. It seems clear we are looking at a different form of value than that produced in industrial capitalism. This applies not only to the speculative markets, but to the dynamic and growing sector of the economy where the exchange of information, knowledge and design is dominant. But when information is used to enhance a physical commodity or social service, then use value, rather than speculative value, is produced.

World financier and ex-chairman of Citicorp Walt Wriston argues that currency is no longer tied to physical commodities but to information on the global electronic infrastructure. Based on the reading of a nation's diplomatic, and monetary policies, international traders place a value on a country's currency. Therefore information, not the sale of assembly line products, actually determines speculative markets. These new markets are at the center of global capitalism. Wriston therefore argues that a new calculation of wealth is needed, one based on intellectual capital rather than on the production of things. Assets are no longer a drill press and lathe, but information. The power of this new economy was demonstrated by the recent crisis in Mexico, which overnight was driven into depression by the electronic removal of money based on an analysis of information by global financiers.

## **Globalization**

Globalization of the world economy is one of the main results of the technological revolution. Some Marxists have begun to look at this as; "a new contradiction . . . insurmountable under capitalism." So argues Samir Amin in *Monthly Review* (April 1995). Amin approaches the question along similar lines as the Tofflers did in their 1980 book, *The Third Wave*. Both writers see an eroding of the national state as a result of the growth in a single world economy and culture. Amin observes that capitalism; "is inconceivable without a social and political dimension, which implies a state . . . Now, however, have we entered a new era characterized by a separation between the globalized space of capitalism's economic management and the national spaces of its political and social management?" Amin sees the current anti-government movement as part of imperialism's drive to dominate the world economy. There will be no borders or independent states, only vast areas of accumulation. Capital undermining itself in the mad pursuit of profits.

The Tofflers see the anti-state discourse as part of the Third Wave revolution. Economies, cultures, and borders cease to function as part of nation states as regions connect to each other through telecommunications. Cultural and economic networks create a global exchange no longer dependent on any centralized government.

For Dakovic the world economy is moving to a new stage based on the historic flowering of technological labor, destroying commodity production, profit rates, and wage slavery. He argues this sets the stage for communism, and a world economy based on use value.

Wriston also sees a single global market where "money is asserting its control over government, disciplining irresponsible policies, and taking away free lunches everywhere." This type of "disciplining" of the Mexican government has produced a disaster for people throughout the nation. But Wriston maintains that an economy run by global financiers is the best of all possible worlds

because; "the ability to move capital is fundamental to the continuous efforts of mankind to live a better life." Of course guerrillas in Chiapas maintain a different point of view.

**Outmoded Capitalist Market** What is being recognized across the board is that fundamental changes are rapidly developing all around us. From capitalists like Wriston, to Marxists like Dakovic, and futurists like the Tofflers all agree something new is being born. These revolutionary shifts are occurring in five essential ways:

- Knowledge has become the most important element in the production of value, rather than physical inputs.
- Technological labor is dominant over human labor, and will continue to replace workers on a massive scale.
- Speculative finance dominates productive capital as the largest sector of the global economy.
- Globalization will undermine nation states as the basis of economic markets, ending the era of national capitalist development with the rise of a global bourgeoisie.
- Economic shifts are creating social tensions which result in anti-government movements seeking to deconstruct the centralized state.

As we can see, fundamental changes are occurring in the mode of accumulation, the production of value, labor, markets and the political superstructure. But if Third Wave society is designed with the same values as capitalism, the above changes will reproduce existing inequalities. In fact, the dominant trends reveal growing dangers. Ethnic wars instead of local empowerment, the destruction of social programs rather than grassroots democracy, unemployment instead of shorter workweeks, and speculation instead of social wealth. The new society can only develop its positive potential within a new paradigm. The outmoded capitalist market will act as a straitjacket on the new forces of production. The ownership and monopoly control of information will be destructive to the growth of knowledge. The socialization of information, (in effect the new means of production), through free and democratic access is the only way to expand the new economic base in the most dynamic manner.

Only this can insure source of knowledge, and the productive use of information technology. Business Week is already seeking to define what the new market may look like. In a society overloaded with information they suggest an "attention economy" where competition centers on a consumer focus. Roger Nagel, deputy director of Lehigh University's Iacocca Institute argues that since cost will be incidental to price, companies need to sell service. Says Nagel; "Tomorrow's factories will sell customer gratification, not things."

We can let the new era be structured by speculative greed, or we can struggle to define it from a cyber-socialist perspective. Visions of an ever-expanding consumer market where human gratification is defined by an array of products and services, crashes on the crisis of unemployment and poverty. Near zero production is only possible with near zero labor. You can't disconnect the two. The "attention economy" for the majority may be where to find food and shelter, while 20 percent of the population looks for new software. Only if technology is used to enrich us all can the crisis be avoided. A new historic era is being born, but class struggle will still determine its shape. The Third Wave market must be based on equity, social wealth, and valuing the worker who produces intellectual capital. If we approach the new society with the values and methods of industrial capitalism, a fundamental contradiction will be produced between the economic base and civil society. The results will poverty and political crisis. The future can and should be better.

