

## Capital volume 1

**Chapters 1 to 7** are fairly abstract, and taken up with developing basic concepts:

- use-value (utility), exchange-value (price), and value (labour-time) of commodities;
- concrete labour and abstract labour
- money
- capital
- surplus-value
- labour-power (as distinct from labour)

The grand conclusion of these seven chapters is that profit and other forms of surplus-value originate from the capitalists extracting more labour from workers than is the equivalent of what our wages buy. This proposition is built on in the rest of the book by analysing how capital shapes and reshapes the labour-process to extract more surplus-value, and the shape that the endless spiral of accumulating more and more surplus value gives to society and its development.

Chapters 8 and 9 are transitional and fairly technical.

**Chapters 10 to 15** are more empirical, and deal with how capital shapes and reshapes labour. Chapter 15 is the longest chapter in the book, and central in many ways. Chapter 10 is also a long and pivotal chapter. These chapters deal with:

- the drive to lengthen the working day, and workers' resistance (this is where the book first starts to deal with class struggle);
- cooperation;
- collective workshop production with handicraft technology (which Marx calls "manufacture");
- factory production with machines. In the course of chapter 15 the book first starts to deal with the socialistic and revolutionary impulse of class struggle.

Chapter 16 analyses labour further, developing the concepts of "the collective worker" and "productive" and "unproductive" labour. It, and chapters 17 and 18, also deal with some more technical stuff.

**Chapters 19 to 22** deal with wages. It is useful to read Marx's "Wages, Price, and Profit", written about the same time, alongside these chapters.

So far the book has been dealing with capitalist production as seen, so to speak, through the cross-section of a single week. **Chapters 23 to 25** deal with the dynamics and patterns of development generated by the continuing movement of capital from week to week and year to year. It broadens out the theory, to some extent, from the workplace to the society as a whole. Chapter 25 is the longest chapter after chapter 15, and almost as central. Chapter 32 could have been placed directly after chapter 25: it sums up from that chapter, and spells out the conclusions about the conflict-ridden nature of capitalism and the socialistic and revolutionary impulse of working-class struggle.

Right from chapter 1, Marx has been at pains to stress that capitalism is a transient, historically specific mode of production. **Chapters 26 to 31** are about how capitalism got going in the first place.

Chapter 33 is an add-on, about Australia, apparently included chiefly so that lazy censors, who skim-read only the first and last chapters, would let the book past the censorship.

## **Week 1: The value problem.**

Chapter 1 sections 1 and 2.

1. What do we mean by:

- commodity
- use-value
- value
- exchange-value
- abstract labour, or average social labour?

2. Why is average social labour the substance of value? What arguments against this theory do you know, and how would you answer them?

3. Can you think of any useful things which are products of human labour but not commodities?

4. What is 'the twofold nature of the labour embodied in commodities'? Why do you think Marx believed that this was 'the pivot on which a clear comprehension of political economy turns'?

## **Week 2. Commodity fetishism**

Chapter 1, section 4

1. Can you think of any examples of commodity fetishism in everyday speech?

2. How does commodity fetishism help to maintain a widespread acceptance of bourgeois ideas in the working class?

3. How does Marx's critical analysis of commodity fetishism contribute to communist politics?

4. Can you prove the labour theory of value?

### Week 3. Chapter section 3 and chapters 2 and 3

SO FAR:

# Wealth in capitalist society takes the form of commodities (things that are bought and sold).

# Commodities are both use-values (things people want) and values (embodiments of chunks of average social labour-time).

# Commodities are numerically compared and exchanged in society as values (embodiments of so many hours or minutes of average social labour-time).

# Labour in capitalist society is two-fold: both concrete labour (a particular work activity producing a particular use-value) and abstract labour (or universal social labour: labour as the employment for this or that many hours of average social labour-power).

NEW IDEAS

# By its own logic, the world of commodities separates into two sections. On the one hand, money, a special commodity which functions as the social approximation of abstract labour; on the other, all other commodities.

# Exchange-value of a commodity is the proportion in which it exchanges with other commodities. In fact it is price: the amount of money it exchanges with. Price is the only social expression of value. (No-one knows the social labour-time embodied in an apple, or a mobile phone, or a pen, without doing long research and calculations).

# The capitalist world, where wealth is commodities, is thus a world where the social relations between different people, producing the different things people want, are expressed as, and in fact become, social relations between things (between commodities and money). This is "commodity fetishism".

NEW QUESTIONS

# How and why money-economy forms hoards of money, rather than money just coming into social life as a technical convenience for exchanging commodities

# How creditor and debtor relations develop, and how they are different from immediate seller-buyer relations

# Why the possibility of economic crisis emerges as money emerges

# Why in economic crises money appears to be in desperate short supply, when in physical fact there is the same quantity of notes and coins that there were in the boom when money seemed plentiful

# Why prices are habitually not exactly proportional to values, i.e. do not express values accurately.



## SOME DISCUSSION POINTS

- # Marx says that Aristotle came close to solving the riddle of value, but was prevented by 'the historical limitation of the society in which he lived'. What do you think Marx meant?
- # List the forms of value that Marx analyses and give a short definition of each one.
- # How does money represent labour?
- # What's wrong with the usual economist's explanation of money as a mere convention to make exchange easier than it would be with pure barter?
- # In what ways would £1000 in money give you more social power than £1000 in (say) bricks?
- # Some people who are multi-millionaires, and so have more money than they could spend on luxurious living for a whole lifetime, still strive hard to get even more money. Why?
- # At the same time as saying that money is a "social power", and quoting Shakespeare to say that it will "place thieves/ And give the title, knee and approbation/ With senators on the bench", Marx also asserts that money is "a radical leveller". How can that be true?
- # The 19th century British socialist Robert Owen printed "labour-notes" (notes worth "40 hours labour", or whatever) and set up an Equitable Labour Exchange (in Grays Inn Rd, then Charlotte St) where products could be exchanged for labour-notes and labour-notes for products. Why do you think it didn't work? (See the first footnote in chapter 3).
- # When it comes to paying your tax bill, or your rent - or your employer paying you wages - only cash will do. Why?
- # Why, in crises, does cash suddenly become in short supply?

## MAIN POINT FOR NEXT SESSION:

That money-economy forms hoards of money, rather than money just coming into social life as a technical convenience for exchanging commodities.

## Week 4: chapters 4-6

### SO FAR:

# Wealth in capitalist society takes the form of commodities (things that are bought and sold).

# Commodities are both use-values (things people want) and values (embodiments of chunks of average social labour-time).

# Commodities are numerically compared and exchanged in society as values (embodiments of so many hours or minutes of average social labour-time).

# Labour in capitalist society is two-fold: both concrete labour (a particular work activity producing a particular use-value) and abstract labour (or universal social labour: labour as the employment for this or that many hours of average social labour-power).

# By its own logic, the world of commodities separates into two sections. On the one hand, money, a special commodity which functions as the social approximation of abstract labour; on the other, all other commodities.



# Exchange-value of a commodity is the proportion in which it exchanges with other commodities. In fact it is price: the amount of money it exchanges with. Price is the only social expression of value. (No-one knows the social labour-time embodied in an apple, or a mobile phone, or a pen, without doing long research and calculations).

# The capitalist world, where wealth is commodities, is thus a world where the social relations between different people, producing the different things people want, are expressed as, and in fact become, social relations between things (between commodities and money). This is "commodity fetishism".

# Money-economy forms hoards of money, rather than money just coming into social life as a technical convenience for exchanging commodities. And it also drives people to try to gather bigger and bigger stashes of money, without limit.

#### THIS SESSION:

# How, in a capitalist market economy, as a regular thing, not through windfalls or cheating, money can be taken through circuits and each time round converted into more money.

#### DISCUSSION POINTS

# What is the purpose of the circuit C-M-C?

# What is the purpose of the circuit M-C-M'?

# Where do profits come from?

# Are workers paid a fair wage? If so, how can we talk about exploitation?

# Why say labour-power is bought and sold, rather than just labour?

# What is wrong with the academic economists' definition of capital? 'Capital, in sum, is any previously produced input or asset of a business firm or any other producer' (Baumol).

#### MAIN POINT TO TAKE FORWARD TO NEXT SESSION:

When labour-power becomes a commodity, it opens the possibility of regular, continuous circuits going from money to more money, by way of the fact that the process of the buyer "using" labour-power she or he has bought is precisely the process of creation of new value.

#### Week 5: Interlude. Wages, Price, and Profit

At the same time as he was writing Capital volume 1, Marx gave an exposition of his view on workers' struggles over wages in a report (in effect a lecture) delivered at two successive meetings of the General Council of the First International, on 20 and 27 June 1865.

The exposition was not published at the time. It was found, and published, only in 1898, after



Sidewalk Bubblegum ©1996 Clay Butler

Engels' death, by Eleanor Marx.

Some of the exposition is a summary of the arguments in Capital volume 1 (and useful to study as such, in order to settle the main points in our minds, after reading the first few chapters of Capital volume 1). But, for whatever reasons, the basic argument in the exposition:

# that a class struggle over wage levels is built in to capitalism;

# that the outcome of that struggle is not set in advance, but varies according to the balance of forces;

# that, therefore, there is no "iron law of wages"; the setting of wages is a very elastic process;

# that, over and above the immediate benefits from wage battles, the organisation of the working class in militant trade unions to improve wages is a central and indispensable stepping stone towards working-class self-assertion

- that basic argument is nowhere sharply spelled out in Capital, where, almost throughout, Marx assumes for the sake of argument that the value of labour-power (the "living wage") is a given magnitude, and wages correspond to the value of labour-power.

Looking over the whole body of Marx's writings, there can be no doubt of his strong view that workers would, should, and could fight for higher wages, and that the trade-union organisation built up in such battles was central to socialist strategy.

However, at times when only a limited range of Marx's writings were available, it was common for socialists to hold to the idea of the "iron law of wages" (wages cannot rise above physical subsistence level) or to argue that almost nothing could be gained by trade-union battles for higher wages.

Less excusably, many orthodox critics of Marx assert that Marx has been "refuted" by capitalist development because Marx asserted that capitalism would push workers down to starvation level, and in fact it has not.

Thus the importance of reading "Wages, Price, and Profit" alongside Capital.

In chapters 1 to 7 of Capital Marx develops the concepts for understanding the basic relations of capitalist society: commodity, use-value, value, price (or exchange-value), abstract and concrete labour, money, capital, labour-power, surplus-value.

The concept of labour is here a starting point, but also a concept reshaped and redefined through the later development of the analysis. Chapters 10 to 15 analyse how the development of capitalist production shapes and reshapes the labour-process.

This happens through class struggle, and from chapter 10 onwards class struggle is integral to the analysis.

In chapter 10 Marx shows that a class struggle over the length of the working day is built in to capitalist relations. No natural or mechanical economic law defines it in advance.

Chapters 13, 14, and 15 are in part about the class struggle for control in the workplace.

Throughout, however, Marx assumes that wages are paid at a rate corresponding to the value of labour-power (a "living wage"). Capital contains a later section about wages (chapters 19 to 22). Those chapters contain some important points, but they are mostly about the forms of payment of wages, and how they tend to conceal the facts of exploitation, rather than about class struggles over wages.

Marx is replying to an old "Owenite" socialist, John Weston, who argues that battles for higher wages are pointless.

First Marx asks: how can there possibly be a fixed limit for wages? The total of output is highly flexible. It increases with every rise in productivity. No iron law says how much of that output will go to the workers, and how much to the capitalists and their hangers-on.

In fact, wages are higher in some countries than in others. (Marx estimates about twice as high in the USA as in Britain. Elsewhere he states that wages are much higher in Britain than in France or Germany). Can there be a different "iron law" for every country?

Second, Marx summarises the argument developed by David Ricardo earlier in the 19th century to show that wage rises, all other things being equal, will not lead to price rises.

On the contrary. Capitalists would wish for higher prices, both before and after a wage rise, but

a wage rise gives them no extra ability to raise prices without losing sales.

All other things being equal, wage rises will lead to a fall in profits and greater share of consumer goods being consumed by workers, or some goods previously being consumed only by capitalists and their hangers-on now being consumed by workers. They will lead to no general price rise, but to a fall in the price of commodities which involve much equipment and materials in their production; a rise in the price of commodities which involve a greater proportion of living labour in their production.

Marx himself gives the example of agricultural wages increasing in England in the 1850s, but food prices not rising.

Bear in mind that Marx is writing at a time when British money was linked to the gold standard (£1 = 0.235420 troy ounces of gold). Once the effect of the new gold discoveries of the 1850s (Australia and California) was absorbed, and while the technology of gold production was fairly stable (i.e. an ounce of gold represented a fairly stable quantum of labour-time), prices were on the whole more likely to fall than to rise.

In 1865, the relative worth of £1 from 1860 was 19s 8d using the retail price index. In 1890, the retail-price equivalent of that same £1 was 17s 1d.

Between 1860 and 1890, average earnings increased while retail prices decreased (on average), yielding a 72% increase in “real” earnings.

These things work a bit differently in the post-1971 era of “fiat money”, money which represents a quota of future labour-time by virtue of being given legal status by the state and people having confidence that less-than-uncontrollable future amounts of currency notes will be issued. In this era states regularly and explicitly plan the expansion of the money supply so as to generate price inflation (at a moderate or more-or-less stable level: for example, the Bank of England aims to generate 2% inflation per year, and the European Central Bank the same).

In periods of militant wage battles, like the 1970s, states can adjust by gearing monetary policy to higher inflation and thus allowing bosses scope for bigger price rises. “Wage-price spirals” can develop, but they depend on state policy as well as the wage rises.

Under either a gold-linked currency or a fiat currency, all other things being equal price rises will tend to generate wage rises, as workers insist on their wage being enough to buy the socially-established necessities. But the converse does not hold.

Third, Marx summarises his theory of value, price, and surplus-value. Price is determined by value, which is the average socially-necessary labour-time embodied in commodities. Wages are determined by the value of labour-power, which is the labour-time embodied in “wage goods”, or the commodities comprising a “living wage”. Those two quantities – price of output, and wages paid to the workers producing the output – are distinct, and can vary in different ways. The difference between them is surplus-value, expressed in rent, interest, and profit.

If wages are determined by the value of labour-power, then class struggle over wage levels is built in to the system for several reasons.

Fundamentally: there is no mechanical balance in capitalist society constantly equating price to value. In fact, values are not known, day to day. Wages are adjusted to “living wage” levels only by struggle.

The cost of “wage goods” may rise, just in money terms, or in money terms reflecting an increased labour-time necessary to produce them. Struggle by workers for higher (money) wages is then necessary just to restore the long-term relation.

The intensity of labour may be increased, thus increasing the “using-up” of labour-power by the capitalists; or capitalists may try to lengthen working hours. Wage battles may erupt as, so to speak, “displaced” forms of struggle over work intensity or working hours. Workers will and must fight for higher wages, both to deter the capitalists from imposing longer hours, and to gain the means to restore themselves.

In the business cycle, wages tend to get pushed down below long-term value in depressions. If only to restore the long-term relation, workers must fight to limit that pushing-down, and to push up wages above long-term value in boom times.

Also, and in some ways more fundamentally, what about the general capitalist tendency to increase the productivity of labour?

“By virtue of the increased productivity of labour... only four hours of the working day, instead of six, [might] be wanted to reproduce an equivalent for the value of the daily necessities... [Thus the worker might receive the same “real wage”, and yet her or his relative position compared to the capitalist would be worse]. If the working man should resist that reduction of relative wages [relative to capitalist income], he would only try to get some share in the increased productive powers of his own labour”.

And there is built-in scope for that sort of attempt, because the “value of labour-power”, as Marx points out, has a “moral and historical element”. What wage-goods comprise a “living wage” is something relative and fluid, not fixed for all time.

There is inbuilt space for workers to expand that relative and fluid definition.

In “Wages, Price, and Profit”, Marx seems to conclude with a pessimistic estimate. “The general tendency of capitalist production is to sink the average standard of wages”, because wage advances will be met by mechanisation which increases the capitalists’ control and enables them to keep a more-or-less permanent pool of unemployed.

However, I think Marx is here talking of a lower level of wages in terms of equivalent hours of labour-time, which in those days of gold-based currency was roughly equivalent to a lower level of wages in terms of cash. Prices would be more likely to fall than to rise, so a sinking “average standard of wages” might well mean an increasing volume of wage-goods, or “real wage”.

And the “general tendency” is only a “general tendency”. Capitalist production also has a “general tendency” to extend the working day. That calls forth, as we have seen in chapter 10, a counter-tendency of workers’ struggle, which eventually establishes (though never perfectly) a more or less normal working-day.

The “general tendency” to sink wages also calls forth a counter-tendency of workers’ struggle to raise wages. The increased productivity generated by capitalist development means that capital can in fact simultaneously concede increased “real wages” and increase the rate of exploitation.

On the statistical evidence, exactly that has happened over the long term. Fred Moseley has estimated that the rate of exploitation in the USA is now about 300%. Other estimates agree that the rate of exploitation has risen: see for example Michel Husson. In his numerical examples in *Capital*, Marx takes 100% as the rate of exploitation, and it seems that he did that on the basis of such data as he could get from Engels. The rate of exploitation has risen considerably; but evidently workers can buy much more stuff with their wages in 2012 than they did in 1865 (or even than they did in 1972).

In other writings, Marx points out that capital itself, in a back-handed way, constantly tends to stir up new needs and wants in the working class, and thus (despite itself) to increase the amount of stuff embodied in the “living wage”.

In chapter 22 of *Capital*, Marx observes that in general wages are higher (will buy more stuff) in more-capitalistically-developed countries (his example: Britain) than in less (his example: Germany), but the wage-cost (“unit labour cost”) of commodities in the more-developed countries tends to be lower because higher productivity outweighs the higher wages.

“Each capitalist does demand that his workers should save, but only his own, because they stand towards him as workers; but by no means the remaining world of workers, for these stand towards him as consumers. In spite of all ‘pious’ speeches he therefore searches for means to spur them on to consumption, to give his wares new charms, to inspire them with new needs by constant chatter etc. It is precisely this side of the relation of capital and labour which is an essential civilizing moment, and on which the historic justification, but also the contemporary power of capital rests”. (Marx, *Grundrisse*)

“Production of surplus value based on the increase and development of the productive forces requires the production of new consumption; requires that the consuming circle within circulation expands as did the productive circle previously. Firstly quantitative expansion of existing consumption; secondly: creation of new needs by propagating existing ones in a wide circle; thirdly: production of new needs and discovery and creation of new use values”. (Marx, *Grundrisse*)

“Capital... impels... a greater diversity of production, an extension of the sphere of social needs and the means for their satisfaction, and therefore also impels the development of human



productive capacity and thereby the activation of human dispositions in fresh directions. But just as surplus labour time is a condition for free time, this extension of the sphere of needs and the means for their satisfaction is conditioned by the worker's being chained to the necessary requirements of his life". (Marx, 1861-3 manuscripts)

"The workers themselves, although they cannot prevent reductions in (real) wages, will not permit them to be reduced to the absolute minimum; on the contrary, they achieve a certain quantitative participation in the general growth of wealth". (Marx, Theories of Surplus Value part III ch.21. I think "real" wages here means wages as measured in labour-time.)

A few years after Marx's death, Karl Kautsky summarised this dialectic well:

"The elevation of the working class which the class struggle brings about is less an economic than a moral one. The economic conditions of the proletarians... improve slightly and slowly... But the self-respect of the proletarians increases and also the respect that other classes of society give them... they are beginning to expect more from themselves... becoming more sensitive towards every slight and every oppression... All the improvements, which some hope and others fear will make the workers contented, must always be less than the demands of the latter, which are the natural result of their moral elevation".

## **Week 6: Capital chapters 7-11**

SO FAR:

- # Wealth in capitalist society takes the form of commodities (things that are bought and sold).
- # Commodities are both use-values (things people want) and values (embodiments of chunks of average social labour-time).
- # Commodities are numerically compared and exchanged in society as values (embodiments of so many hours or minutes of average social labour-time).
- # Labour in capitalist society is two-fold: both concrete labour (a particular work activity producing a particular use-value) and abstract labour (or universal social labour: labour as the employment for this or that many hours of average social labour-power).
- # By its own logic, the world of commodities separates into two sections. On the one hand, money, a special commodity which functions as the social approximation of abstract labour; on the other, all other commodities.
- # Exchange-value of a commodity is the proportion in which it exchanges with other commodities. In fact it is price: the amount of money it exchanges with. Price is the only social expression of value. (No-one knows the social labour-time embodied in an apple, or a mobile phone, or a pen, without doing long research and calculations).
- # The capitalist world, where wealth is commodities, is thus a world where the social relations between different people, producing the different things people want, are expressed as, and in fact become, social relations between things (between commodities and money). This is "commodity fetishism".
- # Money-economy forms hoards of money, rather than money just coming into social life as a technical convenience for exchanging commodities. And it also drives people to try to gather bigger and bigger stashes of money, without limit.
- # In a capitalist market economy, as a regular thing, not through windfalls or cheating, money can



be taken through circuits and each time round converted into more money. This happens because capitalists can buy labour-power, a special commodity which produces new value when the buyer "consumes" it.

#### MAIN POINTS THIS WEEK

How the process of "consuming" labour-power - i.e. enforcing labour - is organised so in fact it yields profits.

What the drive to gather more and money translates into, in the workplace

#### DISCUSSION POINTS

# What's wrong with the idea that profits come from the capitalist's 'abstinence' in investing his wealth in production rather than consuming it straight off?

# Or from his "wages of management"?

# Or from his "compensation for risk"?

# Why can't machines and raw materials add more than their own value to the product?

# During what period was the working day increased, and why?

# During what period was the working day reduced, and why?

# What is the "rate of exploitation"?

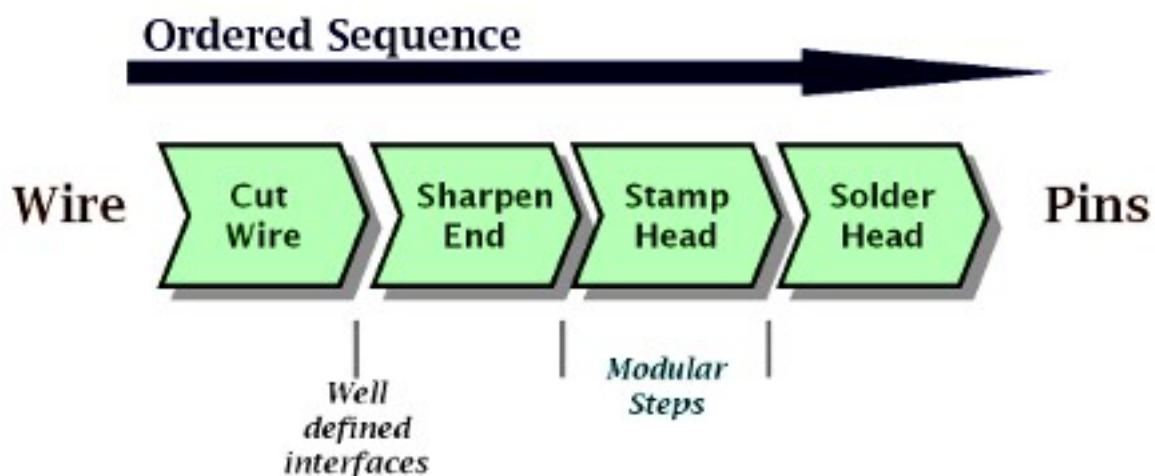
# Why can not every sum of money act as capital?

# Why must prices systematically diverge from being proportional to values?

#### MAIN POINTS TO TAKE FORWARD TO NEXT SESSION:

Profits arise from an exchange in which the capitalist pays a relatively fixed pittance for labour-power, gets in return the use of the elastic, expandible ability to create new value, and stretches labour so as to ensure profits.

Capital strives always to lengthen the working day. But the resistance of the working class, and "the same necessity which spread guano over the English fields", limit it.



#### Week 7. Chapters 12 to 14

#### Discussion points

1. After scattered handicraft production, Marx identifies two further stages of development of capitalist production prior to machine industry. How are each of these three stages defined?

2. Increased productivity of labour is, on the face of it, a good thing. Why is it not as simple as that for the workers?

3. Does capitalism promote or hinder routine large-scale cooperation in social production? Does that cooperation promote or hinder capitalism?

4. Why do the creative powers of the collective worker appear as the property of capital?

5. How can they come to appear as the workers' own property?

## **Week 8: Chapter 15**

Chapters 1 to 6 showed that a society defined by the production of most goods and services as commodities, and by labour-power being a commodity – i.e. a capitalist society – generates a system of production which dominates and alienates humanity.

It generates money as the market representation of abstract labour, and a process (the circuit of capital) in which money is constantly thrown into production in order to transform it into more money.

That transformation can happen because in the exchange between capitalist and workers, the capitalist pays out a limited pittance, defined by the social minimum “living wage”, but in return for that gets control over the whole open-ended creative power of human labour.

In the first place, the capitalist extracts surplus-value because she or he makes the workers work longer than the time required to produce the equivalent of their “living wage” (chapter 7).

We see in chapter 10, and in Wages, Price, and Profit, that part of the system is also a reaction by the working class, which battles, and with some success, to limit working hours (so that workers sell their labour-power, but are able to have it fresh again for the next week) and to increase wages, at least in terms of the amount of goods and services bought by a “living wage”.

In chapters 13 to 14, we learn about how capitalists can respond to and counteract that reaction by extracting “relative surplus value”. Surplus value is extracted not so much by lengthening the working day, or even by reducing the amount of goods and services bought by a “living wage”, but by reducing the hours required to produce the equivalent of a “living wage”.

Marx's numerical examples in Capital, apparently based on information he got from Engels about factories in Manchester, estimate “necessary labour time” (the labour time necessary to produce the equivalent of a “living wage”) at about six hours a day, or 36 hours a week. Today in the richer capitalist countries it is probably somewhere between 10 and 15 hours a week, even though the amount of goods and services it's equivalent to is much greater.

Chapter 13 describes how cooperation – the gathering-together of workers to work in a common workplace, helping each other – can be made to increase productivity, and how the benefits of that increased productivity appear as (and in immediate terms are) the property of the capitalist rather than the cooperating workers.

Chapter 14 describes the development of a detailed division of labour in the workplace, with each specialised skilled worker dealing with a small part of the product or the process. That too generates an increase in productivity which appears as the property of the capitalist.

Nevertheless, it inescapably involves a degree of control by each specialised skilled worker over her or his particular part of production.

With the industrial revolution, capitalist production moved on to “machinery and modern industry”. Marx analyses these in chapter 15, which is the central chapter of the whole book.

The difference between working with tools, and working with machinery, or a system of machinery

In short: the worker uses the tool. The system of machinery, in the factory, uses the worker.

“The machine, which is the starting-point of the industrial revolution, replaces the worker, who handles a single tool, by a mechanism operating with a number of similar tools and set in

motion by a single motive power" [497].

"The worker has been appropriated by the process; but the process has previously to be adapted to the worker" [501].

"Large-scale industry... possesses in the machine system an entirely objective organisation of production, which confronts the worker as a pre-existing material condition of production" [508].

In factory production, science appears as a force of production which is the property of capital, which capital acquires gratis, and which "confronts" the worker.

Machinery vs workers

Factory production unleashes and expedites tendencies of capital:

To "deskill" workers, replacing specialised skilled workers by versatile all-purpose workers;

To expand the workforce to include women and children on a more-or-less equal basis with men;

To lengthen working hours (because the capitalist wants to keep his expensive machinery turning with as little interruption as possible);

To speed up production (by speeding up the machines, the capitalist can force the workers to speed up too);

To constantly create and recreate an army of unemployed from those workers replaced by machinery. Even if eventually the introduction of machinery into one industry, cutting jobs, is accompanied by new jobs elsewhere, in the meantime the reserve army of unemployed is constantly recruited.

The capitalists come to understand that they can use machinery to increase their control over the workers, and, by constantly reshaping the workforce, to counter trade-union struggle.

"The instrument of labour strikes down the worker" [559].

"Machinery does not just act as a superior competitor to the worker, always on the point of making him superfluous. It is a power inimical to him, and capital proclaims this fact loudly and deliberately, as well as making use of it. It is the most powerful weapon for suppressing strikes, those periodic revolts of the working class against the autocracy of capital" [562].

The revolutionary implications of factory production

Large-scale machine production has, however, revolutionary implications.

"It destroys both the ancient and the transitional forms behind which the dominion of capital is still partially hidden, and replaces them with a dominion which is direct and unconcealed. But by doing this it also generalises the direct struggle against its rule" [635].

"By maturing the material conditions and the social combination of the process of production, it matures the contradictions and antagonisms of the capitalist form of that process, and therefore ripens both the elements for forming a new society and the forces tending towards the overthrow of the old one" [635].

It amasses workers into large workplaces and defines them as a working class, as a collective worker, rather than a collection of specialists.

It constantly revolutionises the labour process, and constantly moves large numbers of workers from one sort of work to another. Marx cites the autobiographical statement of a French worker migrating to California: "I became in succession a typographer, a slater, a plumber, etc. As a result of this discovery that I am fit for any sort of work, I feel less of a mollusc and more of a man" [618].

"Large-scale industry, through its very catastrophes, makes the recognition of the variation of labour and hence of the fitness of the worker for the maximum number of different kinds of labour into question of life and death..." [618]. It requires more versatile and more generally educated workers.

But in its capitalist form, it expresses that "recognition" by constantly shifting the worker from one alienated, narrow form of labour to another, and by periodically throwing her or him out of work.

Thus "those revolutionary ferments whose goal is the abolition of the old [craft] division of

labour stand in diametrical contradiction with the capitalist form of production, and the economic situation of the workers which corresponds to that form. However, the development of the contradictions of a given historical form of production is the only historical way in which it can be dissolved...." [619].

In other words, large-scale machine production pushes towards a class struggle for control, and for humanity against alienation.

### Agriculture

The chapter concludes with a short section on agriculture, of interest for modern ecological discussions.

### Some queries and issues

Harvey says that Marx tends to overstate Manchester's textile factories as the model to which all capitalist production must tend. Although Marx does in fact, despite Harvey, mention Birmingham's different industrial development [592], there is some force to this objection.

In some passages, Marx does seem to suggest that the whole or the bulk of capitalist production will take the same form as those textile factories. Marx himself does point out that the textile factory workforce is (in his day) something less than 10% of the whole economically active population. Domestic servants account for almost twice as many workers, and agricultural workers too; miners are almost as numerous as textile factory workers.

Even if he thought factory production would spread to other sectors, it is hard to see how he could have thought that anything like a majority of the working class would be in factories like the textile factories within any compassable future. But he does seem to see those factory workers as the most completely proletarianised, as the most "capitalistically-advanced" sector of the working class.

Marx comments on sectors of the working class which have become vastly more important since his day, but, with it seems, an inadequate understanding of how soon and how quickly they would become more important. The textile industry was characterised by production of the same sort of things that had been produced for many centuries, and moreover with a technology changed mainly by inserting the tool into a machine rather than having it wielded by an individual worker.

However, capitalism also creates entirely new products, previously not produced in any way at all. Marx: "The chief industries of this kind are, at present: gas-works, telegraphy, photography, steam navigation and railways... But the place occupied by these branches in total production is far from important, even in the most developed countries... The total number of persons... employed in these five new industries [in England and Wales] amounts to 94,145..."

Factory production requires "in addition to these two principal classes" of workers [operatives and "attendants"] another "group whose occupation it is to look after the whole of the machinery and repair it from time to time, composed of engineers, mechanics, joiners, etc." This group is "numerically unimportant", says Marx. But the "technician" element of the working class has grown considerably since then, and - despite frequent moves by capitalists to replace repair of machinery by simple replacement of faulty modules - continues to increase.

Although Marx mentions clerks and other service workers elsewhere in *Capital*, he considers them too marginal a group to mention in his analysis here. However, the 1861 census shows over a million people working in "dealing" and in "transport and storage", and 445,000 in "public service".

These are the figures I get from the 1861 census

[http://www.staffs.ac.uk/schools/humanities\\_and\\_soc\\_sciences/census/downcen.htm#CEN1861](http://www.staffs.ac.uk/schools/humanities_and_soc_sciences/census/downcen.htm#CEN1861).

I don't know the reasons for the discrepancies from Marx's figures, or whether he had access to a breakdown of the category of "general labour" or to breakdowns which would show, for example, how many of those in "agriculture and farming" were wage-workers, and how many capitalist farmers.

Agriculture and farming 1,572,044 (21%)

Mining 314,080 (4%)

Building 471,510 (6%)

Manufacturing 2,402,249 (32%)  
 Transport and storage 342,068 (5%)  
 "Dealing" and "commercial service" 700,617 (9%)  
 General labour 263,186 (4%)  
 Public service 445,449 (6%)  
 Domestic service 948,029 (13%)

Marx says that "along with the development of the factory system... production in all the other branches of industry not only extends, but alters its character".

This indicates that production organised according to a craft division of labour ("manufacture"), and even simple cooperation and homeworking, continue alongside expanding factory production.

That is indeed the case. Very often lines of production organised in large enterprises with high technology have clustered round them suppliers and contractors operating on a small scale, with low technology and low wages. By constantly recreating the "reserve army of labour", mechanisation and automation constantly recreate the pool from which workers can be recruited for those enterprises operating on a small scale, with low technology and low wages.

However, in some passages Marx seems to suggest that with the legal limitation of the working day and the regulation of working conditions, the whole of production will move over to large-scale factory operation.

That does not happen. There is a constant move towards more and more lines of production organised on high-technology, large-scale lines, but at the same time pools of "craft" production and of low-wage ancillary enterprise are generated alongside them.

Harvey makes a fuss about Marx saying that workers eventually come to realise that the problem is not machinery but the mode of production in which it is used. He suggests, implausibly, that the problem with Stalinism is that the Stalinists adopted that view from Marx. Isn't it more likely that Marx recognised that a socialist revolution would have to start with the technology ready to hand, which no doubt would be modified as humanity developed, but could not be scrapped and replaced by a new technology in the way that a capitalist social organisation can be scrapped and replaced by a socialistic one? And that the Stalinist states were in no position to develop a technology superior to capitalism even if they wanted to? And that many of the crimes of the Stalinist states involved them using technologies more backward than those of even moderately advanced capitalism (Stalin having the White Sea Canal dug by hand; Mao's "backyard steel furnaces")?



Harvey also takes up the idea from Paul Baran and Paul Sweezy that capitalism (or advanced capitalism?) has a chronic problem of what to do with its surplus product. But if surplus value can be "realised" (i.e. the products sold) at all, then there is absolutely no problem about what to do with. People with lots of money, in a capitalist society, always have lots of things to do with it.

### **Week 9: chapters 16-24**

In order to make more time in this course to study difficult and basic parts of Capital such as chapter 1 more fully, a lot of material is telescoped into this week.

1. How does Marx define productive and unproductive labour?

(See start of chapter 16).

2. Which are unproductive?

- a) A nurse in an NHS hospital
- b) A nurse in a private hospital
- c) A station supervisor on the London Underground
- d) A bank clerk.

3. What is the value of labour?

(See start of chapter 19).

In Capital, Marx writes:

'Hence we may understand the decisive importance of the transformation of value and price of labour-power into the form of wages, or into the value and price of labour itself. This phenomenal form, which makes the actual relation invisible, and, indeed, shows the direct opposite of that relation, forms the basis of all the juridical notions of both labourer and capitalist, of all the mystifications of the capitalist mode of production, of all its illusions as to liberty, of all the apologetic shifts of the vulgar economists'.

(See chapter 19).

4. Which is better for the worker, time-wages or piece-wages?

(See chapters 20 and 21).

6. What does the process of capitalist production, repeated week after week, year after year, yield for the workers? And for the capitalists?

(See chapter 23).

### **Week 10: chapter 25 and chapter 32**

In chapter 25 Marx shows that even in capital's greatest prosperity:

"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 the wage worker has already forged for himself, allow of a relaxation of the tension of it".

Even such relatively favourable conditions develop only patchily. Capitalism has a constant tendency towards mass unemployment.

New machinery constantly throws workers out of jobs. There are new industries which draw them in. But the pull and push do not balance. Once a "reserve army of labour" – a mass of

unemployed – is created, it strengthens the hand of the capitalists to squeeze more labour out of those who still have jobs.

Equally, capitalism prepares the way for socialist revolution. It develops technology. It makes production more and more of a social process.

It creates a large working class and, by constantly reorganising production and shifting workers from place to place and job to job, breaks down barriers of trade and locality between them, and brings them together in large collectives.

It generates a class struggle between capitalists and workers over the terms of the exchange between capital and labour, and that class struggle periodically spills over into attempts by "the collective worker" to assert itself as controller of production.

In chapter 25, though without making much of it at that point, Marx argues that it is a "law" of capitalist production that the value-ratio of constant capital (machinery and material inputs) to variable capital (capital laid out on wages) will rise.

Harvey argues that Marx's "explication of rising value compositions... is not... correct". I agree.

However, Harvey is also right that "the main line of argument that unfolds in this chapter is readily understandable without" the rising-composition thesis.

## DISCUSSION POINTS

Machine A costs £100. It lasts for a year. It requires three workers to operate it, paid £100 for the year, and with it the workers produces £700-worth.

Machine B costs £600. It lasts for a year. It requires two workers to operate it, paid £100 for the year, and with it those worker produces £1200-worth.

We start with a capitalist who has Machine A. He employs two workers. He himself consumes £100 worth.

# What does he have at the end of the year? What do the workers have?

# What does the capitalist do if he wants to expand? What does he need?

# This goes on a while, and one year the capitalist has £600 after paying his own upkeep. What will he do now?

# What happens to the workers?

# In what part of this development might the workers push up wages?

# Why don't supply and demand balance in the market for labour-power as they tend to in other markets?

# In this scheme the value composition of capital rises over time. Why might it not do that?

In chapter 32 Marx (having made some qualifications) portrays capitalist production as emerging from:

"small-scale industry... where the peasant owns the land he cultivates, or the artisan owns the tool with which he is an accomplished performer".

This economy of small-scale industry:

"is a necessary condition for the development of... the free individuality of the worker".

But simultaneously:

"it excludes the concentration of... means of production... cooperation, division of labour within each separate process of production, the social control and regulation of the forces of nature..."

To perpetuate it would thus:

"be... to decree universal mediocrity".

# How, and by what processes, does capitalist production emerge from an economy of small-scale industry?

Some socialists of Marx's day saw socialism as a society of small cooperative workshops linked by fair exchange. What does Marx say here to those socialists?

In the pre-capitalist society, writes Marx:



"new forces and passions spring up in the bosom of that society, forces and passions which feel themselves to be fettered by that society".

# What would those forces and passions be? Are they just the revolt of humanity against "universal mediocrity"?

Does capitalist society generate yet new forces and passions, incompatible with itself?

### **Week 11: chapters 26 to 31, and 33**

1. Compared to the feudal serf, the wage worker is more free in a straightforward sense. How? And also more free in a sarcastic or ironic sense. How?

2. Marx argues that the rise of the capitalist farmer and of the industrial capitalist involve different stages and factors. Which different stages and factors?

3. Why is it only half-true to present the rise of bourgeois society as a battle for liberty against feudal and guild restrictions?

4. When did capitalism first appear? In what ways was it then not fully-fledged?

5. Were there capitalists and capital before capitalism?

-----

More:

**<http://www.workersliberty.org/study#capital>**