2016-09-19 Compilation from the preparatory notes for Classes 17, 18, 19, 20 and 21 of the introductory course on political economy: 'The evolution of property and how it rules the world'.

After discussion in two groups of paragraphs 62-74 of the extracts from *The German Ideology*, return to discussion of some topics in the full class:

Colonisation: what was the driver?

Protection and free trade

Who would favour free competition and free trade?

What are the benefits of free trade?

Development of large-scale industry.

Continuation of inter-imperialist rivalry and war.

> Illustrations: Hitler's negotiations with Chamberlain over Africa. Churchill on keeping India.

Churchill combined free-trade liberalism with the view that Britain needed India as a captive market.[1] Churchill's India policy was located within his view of a coming struggle of all against all. See Jenkins (*Churchill: A Biography*), who explains in this connection his 'Mussolini' tendencies.[2]

In 1932 Churchill wrote to Lord Linlithgow (who was to become British Viceroy of India from 1936-1943):[3]

> I think we differ principally in this, that you assume that the future is a mere extension of the past whereas I find history full of unexpected turns and retrogressions. The mild and vague Liberalism of the early years of the twentieth century, the surge of fantastic hopes and illusions that followed the armistice of the Great War have already been superseded by a violent reaction against Parliamentary and electioneering procedure and by the establishment of dictatorships real or veiled in almost every country. Moreover the loss of our external connections, the shrinkage in foreign trade and shipping brings the surplus population of Britain within measurable distance of utter ruin. We are entering a period when the struggle for self-preservation is going to present itself with great intenseness to thickly populated industrial countries.
>
> It is unsound reasoning therefore to suppose that England alone among the nations will be willing to part with her control over a great dependency like India. The Dutch will not do it; the French will not do it; the Italians will not do it. As for the Japanese, they are conquering a new empire. All the time you and your friends go on mouthing the bland platitudes of an easy safe triumphant age which has passed away, whereas the tide has turned and you will be engulfed by it.

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[1] See Jenkins, Roy. *Churchill: A Biography*. New ed. Pan, 2002. P. 423.

[2] *Op cit* p. 457.

[3] Quoted by Jenkins, *op cit* p. 457.

> In my view England is now beginning a new period of struggle and fighting for its life, and the crux of it will be not only the retention of India but a much stronger assertion of commercial rights .... Your schemes are twenty years behind the times.

The riposte of Linlithgow is very important:[4]

> You envisage ... an approaching period of red tooth and claw, a struggle for the means to live. I doubt it, Winston! I wonder whether you take sufficient cognizance of two basic changes of tendency. (a) falling birth-rates, (b) enormously enhanced production, actual and potential, both of primary and manufactured products? I think it is difficult to overestimate the significance of (b). ... Forgive me, then, if I say that it is not, it seems to me, so much I who am mouthing the bland platitudes of an age that has passed away, twenty years behind the times, but rather you who are hanging, hairy, from a branch, while you splutter the atavistic shibboleths of an age destined by some to retreat into the forgotten past. In conclusion, let me as one Tory to another, beseech you to see in time the errors of your mind, and to retract them, lest irretrievably you miss the bus.

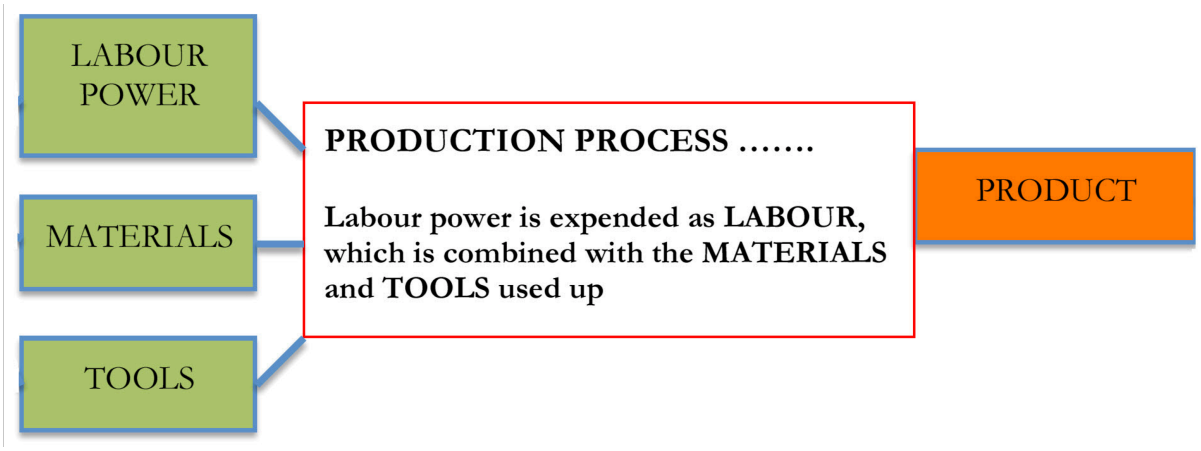
Yet it was Churchill who was equipping himself with the outlook necessary for victory in the coming World War — while remaining hopelessly unprepared for post-War decolonisation. And it was the United States, victorious in the World War, which was in the position to benefit most from the neo-colonial exploitation of the former colonies after the War.

'Concentration of capital' : what does this mean?

Return to the discussion of **what is capital? ... ⬇**

Recap on the two meanings of wealth. Connect this with the definition of property.

Diagram of physical production:



Material inputs, ... physical production process... , material output. So far, the question of ownership (entitlement) does not arise. Now let's bring it in.

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[4] Quoted by Jenkins, *op cit* p. 458.

Who will be entitled to the ownership of the product?

In production for exchange, what happens to the product?

Money as a form of socially recognised entitlement. (We shall discuss money more fully below.)

Surplus: recap on understanding that the social surplus is a physically produced surplus — objects of utility (goods and services)

If there's a surplus, who owns it? Would production for exchange continue without production of surplus?

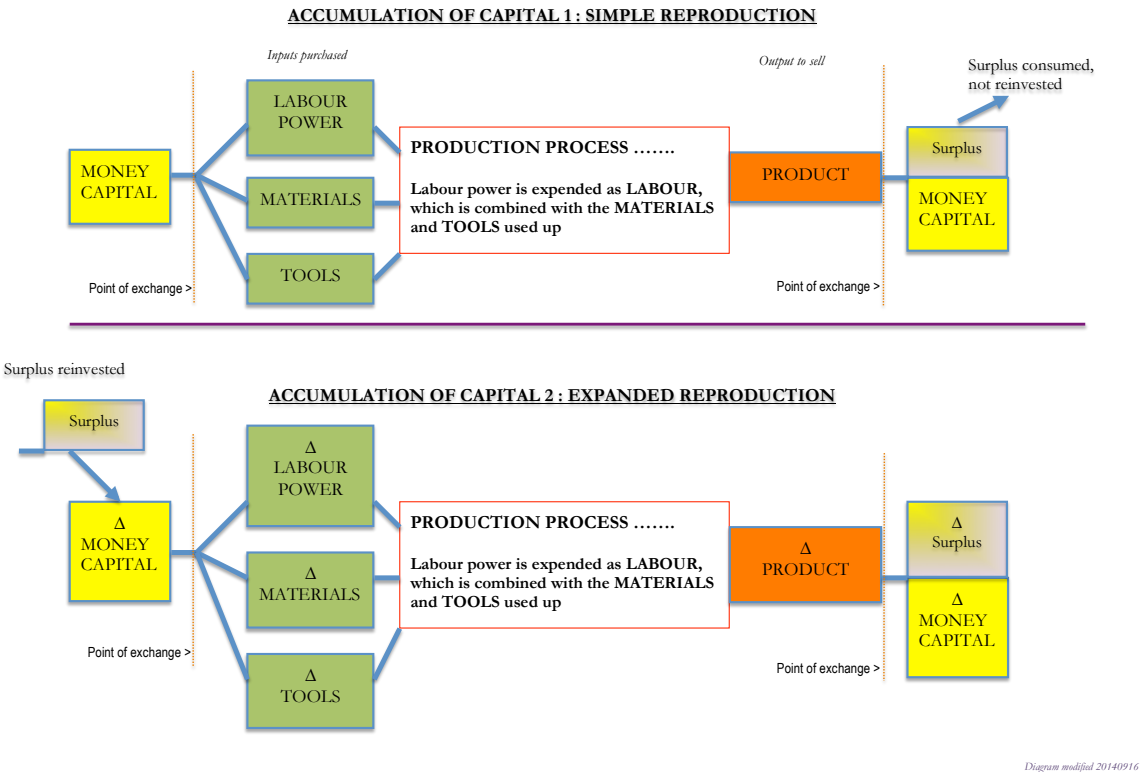
Capital is property capable of participating in surplus. Capital is thus a species or sub-set of **entitlement**.

'Capital' in common parlance. The inputs required for production — but more accurately, the ownership of those inputs. And likewise capital in the sense of 'money capital'.

Capital changes its form, in the sense that the **object of the entitlement** changes. Ownership of the inputs, … , ownership of the output, ownership of the money into which it is converted in exchange.

Does that money remain 'capital'? That depends on whether it is destined to go back into the production of surplus.

Simple reproduction and **Reproduction on an expanded scale**



What is 'capitalism'? Is it simply the same as production for exchange?

No. 'Capitalism' refers to the system of production for exchange at a stage, and in circumstances, where **reinvestment of surplus** has become essential if enterprises are to sustain their competitive position and survive.

The headlong pursuit of growth becomes a fundamental feature of the system, both for enterprises themselves and for the owners of capital in general.

This is the basis on which production for exchange has transformed the world. It is also the basis upon which inequality persists and is constantly regenerated, and which gives rise to the repeated crises of the system.

A 57-minute **BBC film on the Industrial Revolution in Britain** was shown.[5]

A critical discussion on the film follows, emphasising its omission of material on the oppression and degradation of the industrial working class.

Key conditions which made England the country where the industrial revolution took off:

- Coal, and its location.
- Britain's maritime power.
- Political conditions favouring invention and investment in machines and infra-structure, and the expansion of middle-class consumer demand.
- Slave plantations in the Americas supplying materials.
- The availability of a landless proletariat capable of being formed into an industrial working class under harsh exploitative conditions.

The film deals with the first four of these conditions, but omits the fifth.

Who mined the coal that the film begins with?

Handout containing passages from **The Condition of the English Working Class** and related material.

Some **images on the condition of the English industrial working class**.

Discuss the indications nonetheless of a 'Nordhaus' beneficial effect resulting from the economic advances brought by the industrial revolution.

Arising from our reading of paragraphs 71 and 72 of the extracts from the *The German Ideology*, what were Marx and Engels saying about the relationship between **large-scale industry** and **private property**? What did they mean and were they right? Was the problem created in translation?

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[5] 2013 BBC, Industrial Revolution 1.mp4

Refer to **tabulated text with German original and English translation** (handed out).

How Marx and Engels saw the outcome of the historical development which they had analysed:

> **... concentration of capital ... large-scale industry ... polarisation of society between owners and industrial proletariat ... solution envisaged whereby the means of production are taken over by the state and run according to plan (not the market) under the power of the workers, so that the surplus goes to the people.**

Did a workers' revolution succeed in any industrialised country?

Did the workers succeed in taking power anywhere?

Were they able to hold on to power?

Where was state ownership and central planning instituted in place of the market? What happened to it?

Today's global system of production for exchange. Discuss the implications.

Billions of different products: In his 2007 book, *The Origin of Wealth*,[6] Eric Beinhocker has calculated that in a typical tribal society there were several hundred or at most a few thousand different items of utility. But in the exchange economy in New York today there are, by his calculation, billions of distinct articles of utility (goods and services) that have been produced for exchange. What applies to New York applies now to the world.

Robofacture: a post-industrial and increasingly service-based society, from which labour is being eliminated by technology. **Decline of the industrial working class.**

To understand our modern predicament, to guide our activism in these changed conditions, we must beware of simply citing old dogmas based partly on science but partly on utopian wishful thinking. We ourselves must try to avoid wishful thinking — without ceasing to imagine, and imagine passionately, the world that could be.

We have to understand how private property has continued to evolve. We have to understand property in its modern financial form, and how it connects at the base with the way in which products and surplus are produced and appropriated. That is where we are heading in this course.

Back to the diagram of simple and expanded reproduction

The diagram on **Accumulation of Capital: Simple Reproduction and Expanded Reproduction** handed out. It should be brought with you from now on to every class.

Return to the discussion of the meaning of **'capital'**.

In common parlance, 'capital' refers to the inputs required for production, and in particular to the machinery and materials required.

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[6] Random House Business Books, London, 2007, page 9.

However, in a lecture to workers in 1847, published as *Wage Labour and Capital* in 1849,[7] Marx pointed out that capital 'is a social relation of production'. This is surely correct: capital is not the various means of production themselves, not the **objects** as such but the socially-recognised **entitlements** to those objects — and to the products resulting from consuming them in production. It is consequently also the **money**, the units of social accounting and apportionment into which the products are exchanged.

But Marx went on to argue that capital 'is a *bourgeois production relation*, a production relation of bourgeois society.'[8] We suggest that this conception is too narrow. Capital has obviously existed long before capitalism. In the *German Ideology* manuscript, Marx and Engels themselves refer repeatedly to developments in the nature of capital well before capitalism itself.

It surely does make sense to speak of 'capital' before capitalism — so long as we connect the concept to entitlement to the product, or to a share in the product, containing surplus.

It makes little sense to speak of 'natural capital' before the rise of proprietary entitlement. Even 'natural capital' should be understood not as the things to which it commonly refers, but as **a social relation in regard to those things** — as property in (i.e., socially recognised entitlement to) the **products** to which the forces of nature, the naturally provided means of production, contribute.

Today, economists are trying to give a dollar value to the forces of nature, for example to sunshine and wind — which shows how hopelessly they confuse the **material ingredients** of production with the **entitlements** which society (capitalist society) has come to recognise in everything that is produced, and in everything exchangeable. So far, sunshine and wind themselves have managed to escape being turned into objects of property, and objects of exchange.

Capital reaches its highest development in the period of capitalism and indeed becomes the world-dominating form of the property relation. **Today it is particularly in its form as financial entitlement that capital rules the world.** More of that later.

To recap:

> ***Capital is property capable of participating in surplus.*** Capital is thus a species or sub-set of **entitlement**.
>
> 'Capital' has as its **objects** the inputs required for production — but precisely stated it is not the inputs themselves which are 'capital' but the **ownership** of them. And likewise capital in the sense of 'money capital'.
>
> Capital changes its form, in the sense that the **object of the entitlement** changes. Ownership of the inputs, … [production process] … , ownership of the output, ownership of the money into which it is converted in exchange.

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[7] *MECW* vol 9, pp. 212-213. As published in April 1849.

[8] Id., p. 212.

> Does that money remain 'capital'? That depends on whether it is destined to go back into the production of surplus.

Deal with the question raised in a previous class:

> "If I buy an office block, for which I own the land, and I am paid rent by those who use it, can it be considered capital? I.e. is the land, and the office block standing upon it, participating in the creation of surplus?"

Apply the diagram in answering this.

In answering this question, also deal with **interest** and **ground rent** as species of socially-recognised entitlement to surplus. Bear in mind that 'ownership' itself is not a physical ingredient in production. It is not a material input into production — not a 'factor' of production.

The factors of production are consumed (i.e. destroyed) in production and have to be replaced for purposes of **reproduction**. Only after that is there a 'surplus'.

The enterprise may own its own money-capital needed to purchase inputs, the factors of production. If not, the enterprise must turn to a money-lender, an owner of money-capital, such as a bank.

The money-lender's money lent to the enterprise is spent by the enterprise on factors of production. **The money-lender is entitled to repayment with interest even if production by the enterprise fails.** It is the **enterprise** which risks the factors of production. The risk for the money-lender is only that the enterprise itself may ultimately prove unable to meet its payment obligations.

The **interest** paid to the money-lender cannot in general be paid out of that part of the value of the product which must be used to replace the stock of money-capital in the hands of the enterprise. If that were to happen, reproduction would become impossible. Furthermore, the capital sum borrowed could then not be repaid. The interest paid to the money-lender is **a subtraction from the surplus** which accrues in the first instance to the enterprise itself, and which would remain in the hands of the enterprise if the latter had its own money-capital and did not have to borrow.

Therefore interest in general is a charge levied by money-owners on the surplus produced by enterprises in which they (the money-owners) do not directly invest. It is a pure return to ownership of money-capital. But it also follows that, if there was no surplus being produced by enterprises, the sources of interest would dry up.

In the case of rent on **unimproved ground (so-called 'ground rent')**, this is likewise **a pure return to ownership**. Ground may be regarded as a necessary physical input in the sense that (as, for example with the provision of office accommodation as a service) production has to take place somewhere, and also because the land (as in the case of agricultural land) may itself be making a necessary contribution to the ingredients of production regardless of improvements such as ploughing, dams for irrigation, fertilisers and so forth. But note that in the case of nature's own elementary contribution, **nothing has to be replaced out of the product**. Nature does the elementary **reproducing** itself.

The matter is different to the extent that there have been **improvements** to the ground, or to the extent that the ground has to be cleaned and **maintained** in order to be used. The example of the office block can serve as an illustration in this regard.

'Ground rent' — the portion of any rental that the owner can exact from the enterprise in respect simply of **unimproved ground** — is best understood as **a charge levied on the surplus that accrues to the enterprise in the first instance and which would remain with the enterprise itself if it owned the ground**. Thus ground rent is a socially-recognised claim on the social surplus by those who produce nothing. To repeat: it is **a pure return to ownership of land**. But again, if there was no surplus being produced by enterprises, the sources of ground rent would dry up.

The same is happening **indirectly** when interest and ground-rent are paid by **consumers**. For the present, however, let's keep focussed on the enterprise where products and surplus are produced.

MONEY — what it is, how it came into existence and developed.

Show *Open University film clip 1*: **The History of Money (1 Early money)**.

Read the following passages from RP's draft notes on …

The nature of money

'Money of account,' wrote Keynes, 'namely that in which debts and prices and general purchasing power are *expressed*, is the primary concept of a theory of money.'[9] Money, in fact, is any socially recognised means of keeping general account of the respective entitlements of people to the stocks and flows of goods and services among them. It expresses, and so registers—albeit that the register may be writ in water—their property relation in a universal form.

This 'universality' begins, however, within a restricted compass. It is only through an expanding network of *particular* property relations that the *general* nature of any unit of account becomes established. There are, of course, degrees of generality, and there are overlaps and changes in general acceptance. Nevertheless, it is in connection with the essential nature of money as a generally accepted unit of account that its more particular functional characteristics as medium of exchange, store of value and means of payment have evolved. Money in all of its particular forms, whether entering into exchange or held aloof, always retains the general character of a unit of social accounting.

Those who have explained money *as arising out of exchange itself* through the refinement of *barter*, whereby certain commodities (most notably gold and silver) established themselves through general acceptance as money commodities, have tended to confuse a particular phenomenon and *stage* in the development of exchange, and thus in the evolution of money,

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[9] *A Treatise on Money*, CW05, p 3.

with the *nature* of money itself.[10]

The more narrowly bounded the material relations of any group of people, and the more immediate and spontaneous the interactions within the group, the less would that group have need of any *general* means of accounting among its members for their respective entitlements to the common wealth. Thus the productive and distributive relations within a family or clan living simply from the land and receiving their respective shares of the social product and its means of production more or less immediately by tradition or by the adjudication of their patriarch or chief, do not call forth money.

> [It was observed at this point by a member of the class that, for example, the emergence of institutions such as *lobola* shows the existence in early societies of generally recognised units of value (notably cattle) which become significant in the development of money. **More on this later.**]

Likewise in their neighbourly relations, where reciprocal gift-giving and episodic borrowing are the norm, specific obligations may be noted down or simply carried in the common memory until satisfied or avenged, without giving rise to money.

Traditional hospitality to strangers when not at war, part of the implied mutual insurance by which human societies survive, breaks down only gradually as exchange relations become more anonymous and remote, coming to the fore again in times of unpredictable disaster. Even in the most developed society, reciprocal favours not counted in money continue to play an enormous role. Here a rough sense of fairness and honour usually suffices. The generous reciprocity of friends, extending often to each other's relatives and close acquaintances, would usually disdain all thought of reducing that mutuality to money and would be wary of the alienating effects of any detailed keeping of account. Yet money relations do hover in the background, and begin to assert themselves as soon as the elastic communism of friendship is overstretched.

Money has developed in history out of the increasing complexity, regularity and geographic extension of economic dealings within a growing population and with other populations more remote. But its development has been first and foremost that of a unit of account.

The archaeologist Denise Schmandt-Besserat, interpreting ancient evidence from Iraq, Iran, Turkey and the Levant, has famously deduced that writing itself first emerged in Mesopotamia, not from the drawing of pictures, but from abstract symbols used in the keeping of accounts.[11] The earliest form of writing 'consisted of wedges, circles, ovals, and triangles impressed on clay tablets and was anything but pictographic.'[12] These symbols in turn were representations of little clay tokens of different shapes, representing sheep, cattle, metal, garments, and other items of real material wealth.[13]

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[10] Smith, Marx, Menger, Marshall — to mention but a few.

[11] *How Writing Came About*. See esp ch 5 and 6.

[12] Id. [Kindle edition, loc 200 of 3752]

[13] For illustrations of the clay pellets or tokens and the symbols derived from them, see Schmandt-Besserat, "Reckoning Before Writing", *Archaeology*. May/June 1979, Vol. 32, No. 3, p. 22-31; accessible at http://en.finaly.org/index.php/Reckoning_before_writing

The tokens themselves had evolved—probably from about 8,000 BC—'to meet the needs of the economy, at first keeping track of the products of farming, then expanding in the urban age to keep track of goods manufactured in workshops. The development of tokens was tied to the rise of social structures, emerging with rank leadership and coming to a climax with state formation.'[14]

[14] *How Writing Came About*, [Kindle edition, loc 240 of 3752]

Writing in *Science News*,[15] Ivars Peterson provides a succinct summary:

> Archaeological studies of the period show evidence of grain cultivation in fields surrounding villages, the construction of communal silos for storing grain, and a rapid increase in population. In such a setting, individual farmers needed a reliable way to keep track of their goods, especially the amount of grain stored in shared facilities.
>
> It seems they did it by maintaining stocks of baked-clay tokens—one token for each item, different shapes for different types of items. A marble-sized clay sphere stood for a bushel of grain, a cylinder for an animal, an egg-shaped token for a jar of oil. There were as many tokens, or counters, of a certain shape as there were of that item in the farmer's store.
>
> Thus, tokens could be lined up in front of accountants, who doubtless organized them according to types of goods and transactions. They could even be arranged in visual patterns to make estimation and counting easier.
>
> This simple system of data storage persisted practically unchanged for almost 4,000 years, spreading over a large geographic area. Eventually, the growth of villages into cities and the increasing complexity of human activities, especially in southern Mesopotamia, forced a shift to a more versatile means of record keeping. This shift was marked by the appearance of elaborate tokens alongside the well-established system of simple counters. Though similar in size, material, and color and fabricated in much the same way as their plainer cousins, the new tokens bore surface markings and showed a greater variety of shapes.
>
> The elaborate tokens were apparently used for manufactured products—the output of Sumerian workshops. Incised cones and rhomboids probably represented loaves of bread and vessels of beer. Disks and parabolic tokens marked with lines signified different types of fibers, cloths, and finished garments. Incised cylinders and rectangles stood for ropes and mats. Other tokens seem to have represented luxury goods, including perfumes and various kinds of metalwork.
>
> The advent of complex tokens coincided with the emergence of powerful central governments and the construction of monuments and great temples, beginning around 3350 B.C. Art from that period shows the rise of a governing elite and the pooling of community resources for celebrating large festivals. The token system, extended to cover goods and services, played a key role in managing massive building projects and orchestrating large public events.
>
> Temple excavations reveal that the Sumerians often kept sets of tokens in clay globes, or envelopes. Temple clerks marked the envelopes by pressing tokens into the soft clay before sealing and baking them, making visible the number and shape of tokens enclosed. Excavated specimens show circular imprints left by spheres and wedge-shaped imprints left by cones.
>
> Once sealed in their clay cocoons, the tokens were hidden from view. It didn't take long for busy bureaucrats to realize that once the clay envelopes were marked, it was no longer necessary to keep the tokens. In fact, the marks by themselves, impressed on a clay tablet, were sufficient.

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[15] March 8, 2006; accessible at https://www.sciencenews.org/article/counting-writing

> Complex tokens couldn't be stored in clay envelopes as conveniently as simple counters because they often left indecipherable impressions. Instead, perforations allowed such tokens to be strung together, with special clay tags apparently identifying the accounts. In this case, the shortcut that the bureaucrats discovered was to inscribe the incised pattern found on the surface of a complex token directly onto a clay tablet. For example, they could replace an incised ovoid token with a neatly drawn oval with a slash across it.
>
> The result was a practical, convenient data storage system. A small set of clay tablets with neatly aligned signs was much easier to handle than an equivalent collection of loose tokens, and using a stylus for marking clay tablets was a lot faster than making an impression of every token.
>
> Around 3100 B.C., someone had the bright idea that, instead of representing, say, 33 jars of oil by repeating the symbol for one jar 33 times, it would be simpler to precede the symbol for a jar of oil by numerals—special signs expressing numbers. Moreover, the same signs could be used to represent the same quantity of any item.
>
> The signs chosen for this new role were the symbols for the two basic measures of grain. The impressed wedge (cone) came to stand for 1 and the impressed circle (sphere) for 10.
>
> In this way, the token system evolved into a kind of shorthand in which signs representing standard measures of grain, impressed on a clay tablet, came to represent not grain or any other specific commodity, but the concept of pure quantity. It was a revolution in both accounting and human communication. For the first time, there was a reckoning system applicable to any and every item under the sun.

In *Taming the Infinite: the story of mathematics*, Ian Stewart traces the history of all number symbols to this development.[16]

It is in the evolution of the social relations of production, exchange and distribution that money develops, so as to take account of and enable more remote and anonymous dealings. Yet its emergence from units of account, and its service as a store of value, is evident well before any significant development of production for exchange, and without money necessarily serving yet as medium of exchange or means of payment.

Consider the case of the rai stones of the remote Pacific island of Yap

NPR article on 'Island of Stone Money' (handed out).

Michael F. Bryan of the Federal Reserve Bank of Cleveland in the United States, who has researched the matter quite thoroughly and provides more detail in his 2004 article, 'Island Money',[17] emphasises that rai stones were not used for purposes of everyday exchanges. Prices were rather set in terms of baskets of a food crop or cups of syrup. Moreover —

> because Yap historically did not have close cultural ties with any of its trading partners and trade with off-islanders was somewhat infrequent, the stones did not facilitate transactions on these occasions. When transacting with other islands, the Yapese used woven mats (a common exchange medium

[16] Stewart, Ian. *Taming the Infinite: The Story of Mathematics*. Quercus, 2009. P. 14.

[17] Bryan, Michael F. "Island Money." *Federal Reserve Bank of Cleveland,* 1 February 2004.

> throughout the South Pacific), while trade with Westerners often involved an exchange of coconuts.
>
> Even on the island, the indivisibility of the stones necessitated the use of other items as media of exchange for most transactions. Most rai are highly valued: By one account, a stone of "three spans" (about 25 inches across) would have been sufficient in the early twentieth century to purchase 50 baskets of food or a full-sized pig, while a stone the size of a man would have been worth "many villages and plantations." Obviously, these stones do not change hands very frequently, since expenditures of such magnitude are rare. For more ordinary transactions, the Yapese either used pearl shells or resorted to barter.

What are the changes that must necessarily follow from the development of more extended exchange relations, so that one is exchanging objects of material wealth with **strangers who cannot be relied on to pay their debts, and who may not readily be subject to powers of enforcement**?

Discuss in this regard: **The rise of metallic money** as 'universal equivalent' capable of serving as *medium of exchange*, *unit of account*, *means of payment* and *store of value* for purposes of long-distance exchange.

Show *Open University film clip 2:* **The History of Money (2 Metal money).**

In his 1892 work, *The Origin of Metal Currency and Weight Standards*,[18] William Ridgeway showed how in early societies the conventional unit of account and standard of value for purposes of exchange depended upon whether the community lived in temperate or frozen regions.

Where the climate allowed the keeping of herds of domestic animals, it was these — most notably the cow or ox — which provided the social unit for the measurement of wealth. Hence the Roman *pecus* (a single head of cattle) supplied the root for the Latin word *pecunia,* meaning money or wealth in general (i.e., the second meaning of 'wealth' — the socially recognised means of commanding material wealth).

In Homer's poems of ancient Greece, which came before coined money, the cow or ox was the prevailing unit, while the 'Talent' (a certain weight of gold) was initially the equivalent of a cow or ox.

In the Caucasus, the value of metallic money was reckoned according to its cow-equivalent — five roubles equalling one cow.

'We shall likewise find,' writes Ridgeway, 'that when the ancient Irish borrowed a ready made silver unit (the *uncia*) from the Romans, they had to equate this unit to their old barter-unit the cow, just as in modem times [1892] the wild tribes of Annam [in central Vietnam] when borrowing the *bar* of silver from their more civilized neighbours have had to equate it to their native standard, the [water] buffalo; facts in close accord with the well known derivation of Latin *pecunia*, money from *pecus*, English *fee* from *feoh*, which still meant cattle, as does the German *Vieh*, and *rupee* (according to some) from Sanskrit *rupa*,

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[18] Ridgeway, William. *The Origin of Metallic Currency and Weight Standards*. Cambridge University Press, 1892.

also meaning cattle.'[19]

In contrast, in the extreme north 'the rigour of an arctic winter forbids the keeping and rearing of domestic animals, or the cultivation of corn and vegetables. Hence the hunter form of existence remains almost unaltered. The sole or chief wealth of the people consists of the skins of the fur-bearing animals such as the seal, the beaver, the marten, or the fox, or stores of dried fish, which they exchange with traders for a few scant luxuries, or which form their own sustenance and protection against the pitiless frosts and snows. In these regions therefore we find the skins of certain animals serving as units of account, in spite of the difference in value between those of different quality and rarity.'[20]

Precious metals gradually established themselves as universally recognised equivalents. Initially in many places silver served this purpose; then silver and gold; eventually only gold.

In *The Wealth of Nations* (1776), Adam Smith wrote:[21]

> In all countries, ... men seem at last to have been determined by irresistible reasons to give the preference, for this employment, to metals above every other commodity. Metals can not only be kept with as little loss as any other commodity, scarce any thing being less perishable than they are, but they can likewise, without any loss, be divided into any number of parts, as by fusion those parts can easily be reunited again; a quality which no other equally durable commodities possess, and which more than any other quality renders them fit to be the instruments of commerce and circulation. The man who wanted to buy salt, for example, and had nothing but cattle to give in exchange for it, must have been obliged to buy salt to the value of a whole ox, or a whole sheep, at a time. He could seldom buy less than this, because what he was to give for it could seldom be divided without loss; and if he had a mind to buy more, he must, for the same reasons, have been obliged to buy double or triple the quantity, the value, to wit, of two or three oxen, or of two or three sheep. If, on the contrary, instead of sheep or oxen, he had metals to give in exchange for it, he could easily proportion the quantity of the metal to the precise quantity of the commodity which he had immediate occasion for.
>
> Different metals have been made use of by different nations for this purpose. Iron was the common instrument of commerce among the ancient Spartans; copper among the ancient Romans; and gold and silver among all rich and commercial nations.
>
> Those metals seem originally to have been made use of for this purpose in rude bars, without any stamp or coinage. ...
>
> The use of metals in this rude state was attended with two very considerable inconveniencies; first with the trouble of weighing; and, secondly, with that of assaying them [determining their quality]. In the precious metals, where a small difference in the quantity makes a great difference in the value, even the business of weighing, with proper exactness, requires at least very accurate weights and scales. The weighing of gold in particular is an operation of some nicety. In the coarser metals, indeed, where a small error would be of little consequence, less accuracy would, no doubt, be necessary. Yet we should find

[19] *Op. cit.,* p. 4. One of the meanings of *rūpa* is cattle.

[20] *Op. cit.,* p. 21.

[21] Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations* (Glasgow Edition of the Works and Correspondence of Adam Smith). Oxford University Press (Liberty Press reprint), 1981. Vol 1, pp. 38-40.

> it excessively troublesome, if every time a poor man had occasion either to buy or sell a farthing's worth of goods, he was obliged to weigh the farthing. The operation of assaying is still more difficult, still more tedious, and, unless a part of the metal is fairly melted in the crucible, with proper dissolvents, any conclusion that can be drawn from it, is extremely uncertain. Before the institution of coined money, however, unless they went through this tedious and difficult operation, people must always have been liable to the grossest frauds and impositions, and instead of a pound weight of pure silver, or pure copper, might receive in exchange for their goods, an adulterated composition of the coarsest and cheapest materials, which had, however, in their outward appearance, been made to resemble those metals. To prevent such abuses, to facilitate exchanges, and thereby to encourage all sorts of industry and commerce, it had been found necessary, in all countries that have made any considerable advances towards improvement, to affix a public stamp upon certain quantities of such particular metals, as were in those countries commonly made use of to purchase goods. Hence the origin of coined money, and of those public offices called mints … .

H. W. F. Saggs tells us that in about 2000 BC—roughly a thousand years before the emergence of coined money—debts connected with exports and imports could be incurred and settled in Sumer by the use of a silver standard, even when payments were not actually made in silver. Thus, to give a typical example, when Ur-ninmar-ka supplied oil and thirty garments on credit to two merchants so that they could, at their own risk, exchange these for copper at Tilmun in the Persian Gulf, the contract valued the oil and garments at two minas of silver, and provided that the merchants could satisfy the debt to Ur-ninmar-ka in copper at the 'just price' of four minas of copper for each shekel of silver.[22]

The mina was a conventional unit of weight, which was widely used but varied somewhat between ancient Mesopotamia, Persia, Palestine and Greece. Modern sources have not reached consensus in this regard. In Mesopotamia it seems to have been about half a kilogram. It was divisible there into 60 shekels—the Sumerians used a sexagesimal system of numeration alongside a decimal system.[23] From units of weight, minas and shekels developed into units of currency. The Israelites derived their system of weights and coins from the Babylonians, but 50 shekels appear by then to have made up one mina.[24]

Later silver and gold served side by side, with gold being used for larger purchases because of its greater rarity and greater value embodied in an equivalent weight of metal. Attempts were made to maintain both gold and silver as a standard for paper money, but the attempts at 'bimetallism' failed because changing conditions of supply made the exchange rate between them unstable. This showed that money and its value is not fundamentally in the hands of the state.

Discuss the **role of the state in the minting of coins and the debasement of the coinage**.

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[22] Saggs, H.W.F. *The Babylonians: A Survey of the Ancient Civilisation of the Tigris-Euphrates Valley*. 2nd ed. The Folio Society, 1988, 1999. P. 215.

[23] *Id.*, pp. 366-7.

[24] See http://jewishencyclopedia.com/articles/13536-shekel; http://www.jewishvirtuallibrary.org/jsource/History/weightsandmeasures.html.)

William Bernstein writes in *A Splendid Exchange*:

> The basic unit of currency of the premodern world was remarkably constant: a small gold coin weighing approximately four grams — one-eighth of an ounce — and about the size of a present-day American dime, appearing in various times and places as the French livre, Florentine florin, Spanish or Venetian ducat, Portuguese cruzado, dinar of the Muslim world, Byzantine bezant, or late Roman solidus. At the current [2008] price of gold, this corresponds to a modern value of roughly eighty American dollars. The three major exceptions to this rule were the Dutch guilder, which weighed about one-fifth as much, and the English one-pound sovereign and the early Roman aureus, each of which weighed twice as much. The Muslim dirham, Greek drachma, and Roman denarius were silver coins of roughly the same size and weight, each equivalent to the daily wage of a semiskilled worker, with a value ratio of about twelve to one between the gold and silver coins.[25]

Marc Bloch records that, while metallic money was never wholly absent from business transactions in feudal Europe, even among the peasants, and was always used as a standard of exchange, it was by no means invariably used as means of payment. 'Payments were often made in produce; but the produce was normally valued item by item in such a way that the total of these reckonings corresponded with a stipulated price in pounds, shillings and pence.' *Feudal Society*, p. 66.

Return to the point that the fundamental nature of money is as a socially recognised unit of account. This is why money could develop further, from metallic money into paper money and then into electronically stored units of debit and credits.

Show *Open University film clip 3:* **The History of Money (3 Paper money).**

Show *Open University film clip 4:* **The History of Money (4 Controlling money).**

Show *Open University film clip 5:* **The History of Money (5 Money and inflation).**

The Spanish conquest of central and south America, and the resulting inflow of precious metals into Spain, had the paradoxical effect of weakening — not strengthening — capitalist development in Spain itself. The massive enrichment of the Spanish king and ruling class, and the increase of their military power for a period, did not translate into economic development in Spain.

From Neil MacGregor, *A History of the World in 100 Objects*:[26]

> The Spaniards had been drawn to America by the lure of gold, but what made them rich there was silver. They quickly found and exploited silver mines in Aztec Mexico, but it was in Peru, in the 1540s, that they really hit the silver jackpot – at the southern end of the Inca Empire at a mountainous place called Potosí, now in Bolivia, which quickly became known as the Silver Mountain.

[Pause here to show some **images of Potosí**.]

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[25] Bernstein, William J. *A Splendid Exchange: How Trade Shaped the World*. Atlantic Books, 2008. P. 19.

[26] MacGregor, Neil. *A History of the World in 100 Objects*. Allen Lane, 2010. Pp. 517-518.

MacGregor continues:

> Within a few years of the discovery of the Potosí mines, silver from Spanish America began to pour across the Atlantic, growing from a modest 148 kilos a year in the 1520s to nearly three million kilos a year in the 1590s. In the economic history of the world, nothing on this colossal scale, or with such grave consequences, had ever happened before.
>
> The isolated hill of Potosí sits 3,700 metres (12,000 feet) above sea level, on a high, arid and very cold plateau in the Andes – one of the most inaccessible parts of South America. Despite this remoteness, the silver mines required so much labour that by 1610 the population of this village had grown to 150,000, making it a major city by European standards of the day, and an unimaginably rich one. ...[27]

Deal with **the 'mit'a' system of forced labour** under Spanish rule. See https://en.wikipedia.org/wiki/Mit'a

'Without Potosí,' continues MacGregor —

> the history of sixteenth-century Europe would be very different. It was American silver that made the Spanish kings Europe's most powerful rulers and paid for their armies and armadas. It was American silver that allowed the Spanish monarchy to fight the French and the Dutch, the English and the Turks, establishing a pattern of expenditure that was ultimately to prove ruinous. Yet for decades the flow of silver provided rock-solid credit for Spain through the direst crises and bankruptcies: it was assumed that next year there would always be another treasure fleet, and there always was. 'In silver lies the security and strength of my monarchy,' said King Philip IV.
>
> The production of this wealth came at a huge cost in human life. At Potosí young native American men were conscripted and forced to labour in the mines. Conditions were brutal, indeed lethal. In 1585 one eyewitness reported:
>
>> "The only relief they have from their labours is to be told they are dogs, and to be beaten on the pretext of having brought up too little metal, or taken too long, or that what they have brought is earth, or that they have stolen some metal. [...]"
>
> In the freezing high altitude of the mountains, pneumonia was a constant danger, and mercury poisoning frequently killed those involved in the refining process. From around 1600, as the death rate soared among the local Indian communities, tens of thousands of African slaves were brought to Potosí to replace them. They proved more resilient than the local population, but they, too, died in large numbers. ...[28]

At Potosí the silver was minted into coins, the legendary 'pieces-of-eight' (worth eight Spanish *reales*). Also known as the **'Spanish dollar'**, these coins were widely used as the international currency during the ascendancy of Spain. They continued to be legal tender in the United States until 1857.[29]

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[27] *Op. cit.,* p. 518.

[28] *Op. cit.,* pp. 518-519.

[29] Bernstein, William J. *A Splendid Exchange: How Trade Shaped the World*. Atlantic Books, 2008. P. 212.

William Bernstein tells us that '[t]his coin, which flooded the European currency markets in the sixteenth century, was approximately the same size and weight as the Bohemian thaler—from which the word "dollar" derives. (Since eight reales equaled one "dollar," and the coins were too unwieldy for everyday use, they were frequently broken up into eight one-real pieces, hence the term "piece of eight," and the nickname of the quarter-dollar, "two bits.")'

MacGregor says:

> From Potosí the coins were loaded on to llamas for the two-month trek over the Andes to Lima and the Pacific coast. There, Spanish treasure fleets took the silver from Peru up to Panama, where it was carried by land over the isthmus and then across the Atlantic in convoys. ...[30]

The coins were also shipped across the Pacific to Spain's Asian empire, where they penetrated and destabilised the economies of East Asia and Ming China. In Europe,

> the very abundance of silver brought a new set of problems. It increased the money supply – much like governments printing money in modern terms. The consequence was inflation. ... "Ironically, silver coin became a rarity within Spain itself, as it haemorrhaged out to pay for foreign goods while local economic activity declined.
>
> As gold and silver vanished from Spain, its intellectuals grappled with the gulf between the illusion and the reality of wealth, and the moral consequences of the country's unexpected economic troubles. One writer in 1600 describes it like this:
>
>> "The cause of the ruin of Spain is that riches ride on the wind, and have always so ridden in the form of contract deeds, of bills of exchange, of silver and gold, instead of goods that bear fruit and which, because of their greater worth, attract to themselves riches from foreign parts, and so our inhabitants are ruined. We therefore see that the reason for the lack of gold and silver money in Spain is that there is too much of it and Spain is poor because she is rich."

Refer to extracts from *The German Ideology*, paras 54 and 59.

Who in Spain got rich? Who in Spain became poor?

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[30] *Op cit.*, page 519.