An Earthly Trinity making a Future Paradise possible.

Scattered throughout the essays on this website are observations on universal labour time. This posting does not introduce anything new, but it does bring together, in summary form, these scattered observations.

Universal labour time is the basis for costing any future plan of production. Universal labour time differs from the ideal (abstract) labour time employed by Marx as an analytical and descriptive tool in the first two volumes of Das Kapital. Without reducing labour to abstract labour Marx could not describe the capitalist social relation in a pure and uncomplicated form, nor could he demonstrate the difference between value and price.

But labour time in the real world does not exist as a simple average. It exists and circulates as a weighted average. In the case of capitalism, this is represented by weighted differences in intensity and skill (which feeds into cost price), weighted differences in productivity (which feeds into selling price) and of course the weighted differences in the technical composition of capital (which feeds into equalising the rate of profit).

Simple averages therefore cannot hope to capture the total expenditure of labour used to produce a product. When average labour time is multiplied by the volume of production it will yield a total expenditure which invariably stands above or falls below the actual expenditure. Only when multiplied by the weighted average, will the volume of production yield the actual expenditure of labour. This point cannot be stated often enough nor emphasised often enough.

The trinity.

History will show that measuring labour time to be quite a complex matter. "*Accordingly, the individual producer receives back from society -- after the deductions have been made -- exactly what he gives to it. What he has given to it is his individual quantum of labour. For example, the social working day consists of the sum of the individual hours of work; the individual labour time of the individual producer is the part of the social working day contributed by him, his share in it. He receives a certificate from society that he has furnished such-and-such an amount of labour(after deducting his labour for the common funds); and with this certificate, he draws from the social stock of means of consumption as much as the same amount of labour cost."* (Marx, Critique of the Gotha Programme https://www.marxists.org/archive/marx/works/download/Marx_Critque_of_the_Gotha_Programme.pdf) Contained in this simple formulation is the trinity: intensity, skill and productivity.

What the individual worker contributes to the social product is his or her concrete labour which needs to be costed. All individual contributions are distinguished by intensity and skill. The first depends on genes and is innate, and the second is based on learning and is acquired.

As has been previously been stated, it is mathematically impossible to calculate three variables simultaneously, intensity, skill and productivity, nor is it advisable. This is particularly true for intensity. "*But one man is superior to another physically, or mentally, and supplies more labour in the same time, or can labour for a longer time; and labour, to serve as a measure, must be defined by its duration or intensity, otherwise it ceases to be a standard of measurement."* (Critique of the Gotha Programme.) Of course, since Marx's time, power hand tools have made such differences inconsequential as the strongest man using a manual drill will drill fewer holes than a woman carpenter armed with a power drill. In addition, what Marx is describing would make it impossible to close the gender gap or prevent those getting on in years being disadvantaged. Above all, and what Marx could not foretell, was how

piece rate production in the USSR, based on rewarding intensity, ended up provoking sectional interests and with it, uneconomic and damaging results.

Thus, in order to universalise labour time, intensity has to be turned into a 1, from a variable to a constant. That is done by homogenising intensity through democratic consultation. Thus everyone, female and male, young and old, the disabled and abled, work equally hard adjusted for their capacity to work. And this is done by agreement. Yes, a stronger man working at the agreed level of intensity may out produce another, but this is now inconsequential. This may have been a problem in Marx's day with its preponderance of manual labour, but today jobs which depend purely on physical strength, are in the minority and declining faster than any other. In any case, workers are already steeped in this smoothing process, having won "the rate for the job" in millions of workplaces. Here they are not paid by output but by hour of work. This is a result of a century of trade unionism which has abolished piece rate work constituting a development which Marx could not foresee. Of course, the capitalists are always trying to roll back these collective agreements in order to atomise workers once more.

It is worth reminding ourselves that in the absence of an agreed intensity that is fair to all, to which workers are signed up to and with which they abide, there would be backbiting, resentment and endless accusations that someone is not pulling their weight. In addition, it avoids the uneconomic cost of having to account for these variations in intensity which require monitoring individual outputs.

This 1 then becomes universal labour time. Once workers work at the agreed tempo then the total labour time expended in production, can be divided by the hours worked to yield, say an hour of universal labour time. We refer hereafter to the abbreviation of universal labour time as the UNILAT. However, measuring total labour time itself is not a simple task but a complex one.

Here the question of skill comes in. Skill is an acquired capability based on the absorption of labour from teachers and trainers. For this reason, skilled labour can be seen as a multiple of simple labour. If we assume that the distinction between the least skilled and the most skilled to be a factor of three, then we could say the average is 2, with 1 below balanced by 1 above (1 + 2 + 3 =6/2). We could say, problem solved, all we do is multiply actual hours worked by 2 to obtain total social hours.

Not so fast. What if the labour expended by lower skilled workers outweighs the labour of the more skilled workers by its magnitude, as it does in the real world? Now the weighted average would lie below the average of 2. Let us say it is 1.5. Which of the two would set universal labour time, the coefficient of 2 or 1.5?

Let us provide an example to answer this. Let us say that the actual expenditure of labour is 1.5 billion hours. This is the result of 50 million productive workers working for 30 hours in one week. But we know that from an accounting point of view, which takes into account skills, the total expenditure of hours adjusted for coefficients of labour (skill) must be more than 1.5 billion. But is it 2.25 billion or 3.0 billion, is it multiplied by 1.5 or by 2?

If it was multiplied by 2 to yield 3 billion hours, then the labour price of the social product would be 3 billion, but the labour vouchers would only add up to 2.25 billion hours or 1.5 billion hours multiplied by the weighted average coefficient of 1.5. A gap of 0.75 billion would result. 0.75 billion worth of product would not be claimed.

So, the answer is that the social product must be priced at 2.25 billion or what is the same thing, the total hours multiplied by universal labour time (UNILATs). Each worker's contribution would be measured in terms of UNILATs, not actual labour time. If an unskilled and skilled worker both worked

30 hours in the same factory, their vouchers would be credited with different amounts of universally determined hours. In the case of the unskilled worker with a coefficient of labour below 1.5 that would be less than 30 hours, and in the case of the skilled worker it would be more than 30 hours. Only in the case of a worker with a coefficient of 1.5, would actual and universal hours coincide.

Thus, skill which is an individual capability, must be recorded on the voucher or income side.

Productivity on the other hand has to be recorded on the output side. If we define productivity as the increase in output resulting from the amplification of labour power through the use of instruments of labour, then the reason for doing so soon becomes clear. These instruments or means of production are owned collectively by each and every worker. But not all workers are in control of the same amount of means or of the same quality in their workplace. Some factories are more advanced than others. Some industries require more means of production than others. Technical conditions (what used to be called compositions) also vary between countries. And finally, because of diverse environmental factors the use and effectiveness of these means may vary even when they are similar. For example, the same truck with the same drive train can go faster and further in a warm country than in a country prone to snow and ice which limits its speed.

To ensure that no worker is advantaged or disadvantaged by this variation in the mass and means of production, productivity is measured by price. As productivity increases, so prices fall, because the same product is now produced in less time. And by less time we refer to universal labour time. This distinction is important. If in order to work with more advanced equipment, workers need to be retrained or they require up-skilling, then this will affect universal labour time by increasing it. The net result is that there will be a moderating effect on the fall in labour time. For example, if additional training leads to a 10% increase in the total expenditure of labour, while this reskilling or upskilling results in a 50% increase in productivity, then the price fall will not be 50% but 45%, because it is no longer 50% of 100 but 50% of 110.

Falling prices, the motive of socialist production, is the reward for collective labour. Through general price falls workers are rewarded for the growing productivity and efficiencies found in production in equal measure. Those who design the new machinery, those who build them and those that use them, all gain equally as prices fall as a result of the increase in productivity these machines make possible. There is thus no room or scope for sectional interests and arguments that individual productivities need to be taken into account. We all own the means of production and we all benefit equally from their employment.

The final consideration applies to planning itself. Once universal labour time is established it becomes the standard for costing production. Only then are the planning bodies in a position to allocate the labour time of society accurately and consciously. Without universal labour time, without this measure, planning would be blind, for there would be no way to balance the individual labours contributed with the social labours withdrawn. The planning bodies are forbidden to determine universal labour time because they have no say over the intensity of labour. This is exactly the opposite to what happened in the USSR. There the planning bodies arbitrarily applied costings to production and tried to bend the will of the enterprises to achieve them. In a communist society, universal labour times only emerge after workers agree their intensity, and it is this universal labour time that is adopted by the planning bodies to prepare the plan.

A final word on terminology. The relation between the producer and the product is one of cost. The relation between the product and the consumer is one of price. Here both terms have a specific

historical context. They are not measured indirectly by the medium of money as in the case of capitalism, but directly in terms of labour time or what is the same thing UNILATs.

Conclusion.

Thus, when Marx describes the individual producer contributing a quantum of labour then withdrawing products that cost the same quantum of labour, a state of equivalence exists. However, to measure that contribution and withdrawal, they have to be made commensurate, and this is done by applying a common standard, UNILATs. Thus, equivalence exists because the contribution is costed by the same standard as the product is priced.

I do not want to minimise the complexity of tallying up universal labour times. However, a super-computer run by an algorithm based on these assumptions, with sufficient input, would make short work of this. And if not, a number could be connected to cope with the volume of inputs. Much more complex algorithms are in place today, ones which factor hundreds of different interactions in real time, such as weather forecasting, resulting in usable data and predictions. There is thus no technical obstacles to costing production based on universal labour time. The only obstacle before us is political, capitalist private property.

From my standpoint, this discussion on universal labour times and their applications is not an academic exercise. By the day the problems tripping up the capitalist mode of production increase in scope and intensity. The global industrial economy together with world trade is now in contraction. If the financial markets continue to defy this gravity that is because they have been anesthetised by the promise of easy central bank monetary policy. The real crash will occur when this easing is shown not to be supportive of the world economy. Illuminated by this Crash we need to be able to demonstrate a real and living alternative to the moribund capitalist system.

Brian Green, July 2019.