SUPPLEMENTARY NOTES TO THE ARTICLE: "A SUBSIDIARY PROOF FOR THE TRANSFORMATION SOLUTION"

I would like to add some explanatory notes to the Main Article which I consider the most difficult to understand of the initial tetralogy (four) of articles explaining the transformation solution. I have therefore added the following additional notes. The fourth article deals with how the profit margin arises in each capital as a result of the market value produced within it together with movement of capital to or away from it. The fourth article in fact should have been entitled ***How the Profit Margin Emerges from Market Value and the Movement of Capital****. (Hereafter referred to as the Main Article.)*

It is worth reminding the reader that unless the redistribution of surplus value is split into two streams, one for capital the other for profit, value cannot be transformed into prices.

In Chapter 9 of volume 3, Marx intends two things. To demonstrate how much surplus value needs to be redistributed to achieve a uniform rate of profit, and secondly, in which direction. A total of 26 has to be distributed in parcels of varying size. (See the 3rd table in Chapter 9.) The question that is posed is whether this 26 is distributed over the full 610 (total value in existence at the end of the cycle, 500 capital + 110 profit) or just over the 500 of capital (both circulating and non-circulating).

The answer is clearly over 610, not 500, because the articles which enter into the unproductive consumption of the capitalists, despite being withdrawn from production, have themselves to be priced. If we did not, we would end up in the unfortunate situation where capital is priced but the revenue forming profits is not.

When we include the pricing of revenue as well as capital, in short the full 610, the following transpires which is detailed below (based on the data taken from Chapter 9). We note that 110 profit is 18% of 610 leaving capital with 82% of the allocation. (The bottom row is the extent of the movement which contras out.)

Table 1.

Column (1)	(2)	(3)	(4)
Redistribution of surplus value	Allocated to capital (82%)	Allocated to Profit (18%)	**Capitals.** (Chapter 9 notations)
+2	1.6	0.4	**I**
-8	-6.6	-1.4	**II**
-18	-14.8	-3.2	**III**
+7	5.7	1.3	**IV**
+17	13.9	3.1	**V**
=26	**=21.2**	**=4.8**	

We also note that the redistributions found in columns (2) and (3) cancel each other out despite being fractionally different because we are using only one decimal point. Having introduced decimal points, the shift in surplus value is 21.2 to capital and 4.8 to profit. The total movement remains unchanged at 26.

All of the 4.8 is applied to the mass of profit. As each capital is no longer valued at 100 but now priced differently, different masses of profits, no longer 22 in all cases are needed to achieve a uniform rate

of profit of 22%. In the brackets in column (1) all capitals are at 100 but in column (2) they are all different ranging from 85 to 114. (For a fuller explanation refer to the first article on transformation.)

Table 2.

(1) Original Profit	(2) Adjusted profit	(3) Difference
22 (100 x 22%)	22.4 (102 x22%)	+0.4
22 (100 x 22%)	20.5 (93 x 22%)	-1.5
22 (100 x 22%)	18.7 (85 x 22%)	-3.3
22 (100 x 22%)	23.3 (106 x 22%)	+1.3
22 (100 x 22%)	25.1 (114 x 22%)	+3.1
TOTAL	**110 (500 x 22%)**	**0 (+4.8 – 4.8)**

In turn it is this "Difference" which is applied to the important Table 4 in the Main Article, to column 3 marked "Balancing Item". What that article failed to make explicit is that this is the manner by which the margin of 22% in each case is established. To reinforce this, the Main Article is not so concerned with pricing as it is with how the margin emerges in the first place. It shows that this margin is imminent, derived from the combination of market value in each industry together with the increase or decrease in money received due to the movement of capital. Obviously, what is being referred to here is only the surplus value component of market value. Thus, the margin of 22% is not voluntary but forced upon the individual capitalist due to alterations in market value, the rate of exploitation and the changes to the volume of production caused by the prior movement of capital.

Finally, because each capital is now priced at 100 in the Main Article (Table 5) and given the derived 22% profit margin, it is a simple case to determine cost price and therefore market price from these figures. What was omitted in the Main Article is the observation that the market price of production in Table 5 matches that found in the 3rd table in Chapter 9 under the heading "Prices of Commodities".

This matching arises only because our starting point is different. The market value which gives rise to capitals priced at 100 is different to the ones found in Chapter 9. Table 3 below is based on Table 4 in the Main Article. It shows that the new market value (column 2) caused by the movement of capital altering the amount produced by each capital and therefore the labour expended in it. It differs from the market value set out by Marx found in column (1) below.

A note on the Balancing Item. As the Main Article prices each capital at 100 there is no longer any need to redistribute surplus value to alter the mass of profits needed to yield 22. Thus, this movement based on the transient movement of revenue is reversed out, it is zeroed out.

Table 3.

(1) Marx's Market Value	(2) New Market Value	(3) Balancing item	(4) Market value & balance c/f	(5) Rate of Profit
80c + 20c = 100	78.4c + 19.6v = 98	-0.4	98 – 0.4 = 97.6	(19.6+2)/97.6 = 22%*
70c + 30v = 100	76.4c + 30.6v = 107	+1.5	107+ 1.5 = 108.5	(30.6-7)/108.5 = 22%
60c + 40v = 100	73.6c + 41.4v = 115	+3.3	115 + 3.3 = 118.3	(41.4-15)/118.3= 22%
85c + 15v = 100	79.9c + 14.1v = 94	-1.3	94 – 1.3 = 92.7	(14.1+6)/92.7= 22%
95c + 5v = 100	81.7c + 4.3v = 86	-3.1	86 – 3.1 =82.9	(4.3+14)/82.9 = 22%
390 +110 = 500	**390c + 110v = 500***			**500 = 22%**

(*Rounded off)

Column 5 above is the key. It explains how the margin of 22% emerges. That it is not random. That it is the product of the surplus value produced within the industry as well as the gains or losses resulting from the movement of capital. Thus, in the case of the first capital, of its 21.6 in realised surplus value, 19.6 is contributed by the workers in that industry plus 2 arising from outside that industry due to the prior movement of capital. In short, the profit margin comprises the sum of the internal surplus value produced as well as the external surplus value gained or lost through the price mechanism. It certainly does not emerge from the imaginations of the owners of capital, though they may swear they have set the profit margin independently themselves.

Finally, it is worth re-emphasising the two fundamental points on which the transformation solution hinges. Firstly, value cannot be converted into price without repricing the original capitals. That is why my definition of market prices of production differs somewhat from Marx: *market prices of production represent those prices which yield an average rate of profit on the newly priced capital and not on the original capital*. This brings up the second fundamental point. The redistribution of surplus value must be broken into the two streams as described above, otherwise there is no surplus value to adjust the mass of profits, so that differing capitals can yield a uniform rate of profit.

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