The productivity of students' schoolwork: an exercise in Marxist rigour

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Abstract

In this article we will use central elements in Mature Marx's theory of productive labour to prove that not only the work of teachers and staff but also the expenditure of students' muscles and nerves' is productive labour. This theme has some intersection with the work of housewives that autonomist Marxism asserts to be productive labour too. We end the paper indicating further developments concerning how students produce and seize surplus-value.

Key Words: Productive labor, Qualified labor power, Autonomist Marxism, Production of labor power, School as a place of economic production, School and surplus-value.

Introduction

In the last decades we have seen an unprecedented intervention of governments into education, mainly in Britain and US. The intervention has been promoted by liberal as well as conservative governments and has been maintained for more than two decades in spite of meagre results. This suggests that expected "results" are just a cover up for something more important which we must investigate. Some authors begin to suspect that the intervention is a necessity of capital not of education. Simon Boxley already noticed that "education in Britain has for at least in the last century been conducted within capitalist economies of power and production, which have shaped its remit and directed its 'content'" (Boxley 2003, 1).

Many authors are now considering schoolⁱ from the economic point of view; they all agree that school participates in the reproduction of a special commodity, the labour-power, and thus becomes subjected to the needs of global capital. If school is indeed a place of economic production, it must also follow the economic law of the tendency of the profit rate to fall and become subjected to the race for productivity just as any other economic sector. School has to produce labour-power in the most efficient way: standardised quality, abundant amount and low cost. Since part of this production is fed back into school under the form of teaching power, capital must intervene on the whole cycle. The long term imposition of the needs of capital on teachers is to force them "increasingly into conditions comparable to those of industrial and routine office workers with payment by results, assessment and appraisal systems, increased concern with timekeeping, and enhanced discipline codes" (Harman 1010. 334). Given this framework, it seems urgent to investigate the internal procedures through which capital installs its demand upon schools.

In order to describe the effects and react against the increasing constraints on teachers' freedom in face of capitalistic impositions on education, authors are using words such as reification, commodification and dehumanizing (Boxley 2003), alienation (Cleaver 2006; Harvie 2005; Williams 2012), accountability and punishment (Lissovoy and Mclaren 2003), school-as-a-factory (Tronti 1973).

In this article we endeavour to show that not only the work of teachers and staff but also the *schoolwork of students is productive labour* in the precise sense of Mature Marx Theory (MMT). We will draw on MMT in order to (1) make precise in what sense according to MMT school can be considered to be a place of economic production; (2) show that the work of teachers in school is *productive labour*; (3) introduce the concept of *qualified labour-power*; (3) show that in the school processes, students carry out a *double function* as workers and as capitalists; (4) develop answers to the question: if students' labour is productive, who and how the inherent surplus-value is produced and who seizes it?

The main difficulty that we faced is that in MMT labour power (*Arbeitskraft*) is a unity of social relations (to be reproduced) and a certain amount of skill and handiness (to be developed) in each human being. On introducing the concept of *qualified labour power* we must be careful so as to preserve this unity. Our exercise on rigour in not an attempt to teach basic Marxism; but in order to ground our development on MMT some micrology will be necessary.

School as a place of economic production

That schools are places of economic production has not been an object of controversy. It seems that such assertion does not need further arguments. We disagree. To ground this common sense on MMT some development is needed.

Everybody agrees that through schoolwork the labour-power of students acquires a higher value (Harvie 2005, Cleaver 200, 2006, Boxley 2003). Besides and above all such consensuses we have Marx's own words:

In order to modify the human organism, so that it may acquire skill and handiness in a given branch of industry, and become labour-power of a special kind, a *special education* or training is requisite, and this, on its part, costs an equivalent in commodities of a greater or less amount. This amount varies according to the more or less complicated character of the labour-power. The expenses of this education (excessively small in the case of ordinary labour-power), enter *pro tanto* into the total value spent in its production. (Marx 1995[1867], 119, our emphasis).

That is, according to Marx, (1) the general nature of human beings may be modified through education; (2) this education has a cost; (3) this cost is negligible for the simple labour-power; (4) this cost enters into the value of the simple labour-power; (5) through schooling the simple labour-power increases its value.

So the question seems to be thoroughly solved: a value is produced in school, so school is a place of economic production, hence all the expenditure of muscles and nerves that occur in it should count as productive labour, including the work of students.

Not so fast. Against all consensuses and apparently against the words of Marx himself, in MMT a work may produce value and still not be productive labour. In his Manuscript on the productivity of labour, Marx (1994[1863]) gives an explicit example: he may hire a teacher and consequently his labour-power will have its value increased; the teacher's work produces value but it is not productive labour; it is just consumption of her labour-power. En passant we note that Marx is silent about his own work as a learner, so we cannot quote him to infer the nature of the students' work.

However, later on in Capital, he indicates that the work of the teacher is productive provided s/he is working to enrich the school proprietor. Marx is more explicit: "a schoolmaster is a productive labourer when, in addition to belabouring the heads of his scholars, he works like a horse to enrich the school proprietor" (Marx 1995[1867], 334). In this case the work of the teacher is productive *to the capitalist*. We assume that in public schools, the state functions as the capitalist that hires the teachers. This assumption does not contradict MMT since Marx did not leave us indications about the capitalistic role of the State. So, in both cases the teachers' work is productive labour.

Objection 1: the value is created in the market

Since a productive work occurs inside the school, namely, that of teachers, can we say that school is a place of economic production? Not yet. Some have argued that as though the productive labour of teachers occurs in school, the *creation of value* only occurs when the student graduates and goes to the market to sell his/her labour-power; so, they argue, the actual production of value occurs elsewhere. However, since a value is created in the form of a qualified labour-power we can say with Marx that "just as commodities are, at the same time, use-values and values, so the process of producing them must be a labour-process, and at the same time, a process of creating value" (Marx 1995[1867], 129). Hence, a certain value is created together with the use value of the student's labour-power. Where is this value created? Marx answers:

The consumption of labour-power is at one and the same time the production of commodities and of surplus-value. The consumption of labour-power is completed, as in the case of every other commodity, *outside the limits of the market or of the sphere of circulation*. (Marx 1995[1867], 121, our emphasis)

So, the consumption of the labour-power of teachers and hence the production of the students' labour-power with its inherent creation of value, *does not occur in the circulation sphere* but, as Marx says, in the "hidden abode of production", where we must look for "not only how capital produces, but how capital is produced" (Marx 1995[1867], 121). Only now can we state our full conclusion: (1) the work of teachers in schools is indeed productive labour; (2) the creation of value of qualified labour-power occurs inside the school and (3) school is indeed a place of economic production. Of course, the school space is delimited by the specifications of educational programs, not necessarily by physical walls.

Objection 2: autonomist Marxism

The assertion 'the work of teachers in school is productive labour' is situated on the same terrain already inhabited by the so called *autonomist Marxism* which argues for the inclusion of several forms of work into the concept of productive labour. So we have first to relate our questions to the ones that are already on the field. One of the most important theoretical demands of autonomist Marxism is that housewives' work should be considered as productive labour (Dalla Costa and James 1972). So, in spite of all support that women's activist movements deserve, we have here to deal with this thorny specific question from the point of view of MMT. Marx foresaw the attempts to consider other kinds of work as productive.

Productive labour would therefore be such labour as produces commodities or directly produces, trains, develops, maintains or reproduces labour-power itself. Adam Smith excludes the latter from his category of productive labour; arbitrarily, but with a certain correct instinct—that if he included it, this would open the flood-gates for false pretensions to the title of productive labour. (Marx 1991[1863], 313)

Apparently this means that Marx, following Adam Smith would exclude teachers and necessarily students from doing productive labour insofar as they train labour-power.

In order to avoid future confusions we think that it is convenient to consider labour-power more closely. In MMT labour-power *is not* a kind of thing that human beings possess. In Value, Price and Profit (1985[1865]) Marx introduces the concept of *social work* in item VI. He says that the value of a commodity, that is, its price, is determined by the amount of social work that it contains. He argues that, from this statement, one could wrongly infer that the laziest and most unskilled worker would produce the most valuable commodity. He dismisses this error introducing the concept of *average social work* (Marx 1985[1865], 37)

What is actually contained in the commodity is the socially necessary work which is made of a certain amount of *average social work*. Only in item VII Marx introduces the concept of *labour-power* as the commodity that the worker sells to the capitalist, conceding his/her right to use it for a certain time. The labour-power is the only commodity whose use is able to introduce average social labour into the commodities, thereby crystallizing labour as value.

Thus, labour-power only exists while it is being sold and used; when the labourer goes home he does not take his labour-power with him. Nevertheless, labour-power is a commodity that *belongs* to him. We could even conjecture whether there is a man who, in the process of selling his labour-power would be introducing into the commodity upon which he works, exactly the amount that would be introduced by average social work. This work-power Marx calls the *simple work power (einfache Arbeitskraft)*. It is his/her *capacity to work*. In MMT, work power is made of capacities *and* relations.

Therefore the meaning of the above quotation is clear: what Adam Smith excludes from productive labour is the "labour that produces, trains, develops, maintains or reproduces" the social relation called *simple labour-power*. The question then becomes: does the work of teachers "produce, train, develop, maintain or reproduce" simple labour-power? Or, more precisely, can we say that *the work power that belongs to students in all educational levels is simple work-power*?

Seeing where we are leading to someone could argue that since teachers do not work on simple labour-power, a housewife whose husband owns a more specialised labour-power such as that of an engineer would also not be excluded by Marx from doing productive work. True, but we must be careful; so far we are dealing with simple labour-power. But According to MMT, from the existence of simple labour-power it does not immediately follow the existence of a "non-simple" labour-power as common sense would imply. Its existence has to be proved.

We intend to argue *for* the productivity of the work of teachers, not *against* the productivity of the work of housewives. Perhaps our arguments may be of some help for *automist Marxism*. Nevertheless the comparison is unavoidable. Either in private or public schools *there is a capitalistic stance accounted for hiring the teacher*. Unfortunately the same argument does not apply to housewives; there is no capitalist hiring them to do their housework.

So far, According to MMT, if students' labour power were simple labour power then the work of teachers would not be productive labour. In other words, if the work of teachers were simply reproducing the social relation labour power, their work would not be productive according to MMT. Does this contradict Marx' 1863 statement quoted above? No; it simply

means that that the teacher is not only working on the reproduction of 'simple labour-power' as a social relation; s/he is building up the work-power that students possess as an amount of skills and handiness and this *is not* 'simple labour-power'. What is it then? To answer this question we will have to consider the work in school more closely.

The qualified labour-power

What does it mean a 'special kind of labour-power' that Marx refers to in connection with education (Marx 1995[1867], 119)? Common sense would have no doubts: it is the labour-power produced in school. However, is this concept grounded on MMT? Does Marx name it under some signifier? No. He approaches the development of labour-power from differences of quality of labour. In Capital there is no reference to *developed labour-power (entwickelte Arbeitskraft)*. He only refers to "more or less developed" and to "development of labour-power makes it into a 'developed labour-power'. ⁱⁱ We would be tempted to postulate that the development of labour-power makes it into a 'developed labour-power'. But such ontology would be strange to MMT. In MMT ontology is grounded on social relations, not on things. We must dig a new kind of 'developed labour-power' out of MMT.

Considering kinds of work, Marx says that the work of a general or a banker "plays a greater part" than the work common men whose "expenditure of simple labour-power, *i.e.*, of the labour-power which, on an average, apart from any special development, exists in the organism of every ordinary individual" (Marx 1995[1867], 129). He adds that simple average labour varies according to countries and epochs but in a given society it is determined. Based on this remark Marx reduces the quantitative analysis of the work that "plays a greater part" to the consideration of simple labour. "Complexified labour counts only as potentialized or rather, as multiplicated simple labour, so that a small quantum of complexified labour equals a greater quantum of simple labour" (ibid, our translation, original emphasis). ⁱⁱⁱ

He explains that this reduction is constantly been made in daily experience and he does not go into the consideration of how the proportion of simple and complexified labour in a given commodity can be determined. He only states that this proportion appears to be fixed by custom; he concludes: "For simplicity's sake we shall henceforth account every kind of labour to be unskilled, simple labour; by this we do no more than save ourselves the trouble of making the reduction" (Marx 1995[1867], 129).

So, in Capital, published in 1887, Marx does not cede to the temptation that assaults us: to postulate a *complexified labour-power* that would be responsible for producing *complexified labour*. Why did he not do so? He could not; in MMT ontology is relational: 'complexified labour power' has to be dug out from social relations and this requires development. However, in his 1865 Value Price and Profit he had been more specific:

Still I must seize upon this occasion to state that, as the costs of producing labouring powers of different quality differ, so must differ the values of the labouring powers employed in different trades. (...) Upon the basis of the wages system the value of labouring power is settled like that of every other commodity; and as different kinds of labouring power have different values, or require different quantities of labour for their production, they *must* fetch different prices in the labour market. (...) The question is: What is necessary and unavoidable with a given system of production? (Marx 1985[1865], <45>-<46>)

Also in one place in Vol. 1 of Capital Marx refers to "kinds of labour-power"^{iv}. Based on these fragment we decided to freely speak of (1) "different kinds of labour-power" which (2) have different market prices and consequently (3) take different amounts of labour to be produced. Only from this previous work and from the point of view of prices in market circulation it makes sense to say that complexified labour is expenditure of a *likewise complexified labour-power*..

There are many ways in which labour-power can become complexified; experience is one of them. Everyone knows that it is difficult to get the first job because one "lacks experience". Self-teaching and internship are two other ways of complexifying labour-power. Since we are interested in the complexification that occurs in school we will name it *qualified labour-power*. It is a social relation *and* a commodity that belongs to students.

Paradoxically a concept was more evident in 1865 than in 1867. Why? Did Marx want to erase it in Capital? We conjecture that he foresaw that this step would lead him to consider another "kind" labour-power besides the simple labour-power and somehow deviated from it. We conjecture that this concept of a different kind of labour-power was there lurking in the

background but Marx did not 'want' to *produce* it exactly because a development such as the above one would have been necessary. In MMT ontology is relational.

We remark that this qualified labour power is sold in the market by the students who pass and get certificates; it is not capital, it is labour-power, it will be sold for wages, it will produce value and surplus-value just like simple labour-power. However its production is not simply reproduction of labour power. It is produced in recognised institutions with juridical status. It is not immediate to argue that graduate fellowships or any other support that the student can get are intended to the reproduction of graduate students as such. Is his/her qualified labour-power produced, reproduced, or both? Let us ask MMT in the following item.

The economic nature of students' schoolwork

So far we can say that the expenditure of muscle and nerves of teachers, students and staff ends up embodied in a commodity in the market, namely the qualified labour-power produced in school. It was seen that the work of teachers and a fortiori of the staff is productive labour. What about the expenditure of muscle and nerves of students? Is it only consumption? Is it also productive labour, or neither one? Apparently David Harvie explicitly states our main thesis in this article; he argues that the work of "teachers, lecturers, *students* and others" who work in school-as-factories "produces value and surplus-value for the capital" (Harvie 2005, 26, our emphasis). However his inclusion of students among productive labours is not specific but is due to his overarching position: "all labour is productive and unproductive" (Harvie, 2003, 2).

Since the production of qualified labour-power is the result of joint cooperative work of students, teachers and staff, we face a case where "many workers cooperate in the production of the same commodity" (Marx 1994[1863], 20). In what measure can we apply the following paragraph to this case?

All these people are not only employed *directly* in the production of material wealth, they exchange their labour *directly* for capital's money, and therefore give their work *directly* against money as capital and thus reproduce, directly from their [unpaid] salaries, a surplus-value for the capitalist. This labour consists of paid labour plus unpaid labour. (Marx 1994[1863], 20)

This paragraph may certainly be applied to teachers and staff; they are hired either by the State or by the school owner, they produce a share of the total wealth and receive a corresponding value as salaries as a share of the future revenue as the process turns.

As for the work of the students, things are not so easy. Adults work, children go to school; this is a truism almost everywhere. Otherwise the poorer families would extract an extra income from them in either informal waged or unwaged activities. In spite of the laws, these activities are still common after school time. In wealthier families the parents discard this extra income so that the children's stock of muscle and nerves that could be used in economic enterprises remains in reserve: in Hegelese this reserve is made of labour-power only *in itself*.

When the child, teen-ager or adult goes to school his/her labour-power (in itself) cannot be sold, cannot become *for itself*, at least during class time: this is a condition that has to be accepted at the registration act; in some cases it is enforced by law. Without disposing of this commodity, or better, without depositing it in consignation, the individual cannot participate in the school process. If s/he has serious disabilities his/her schooling assumes special features that we will not consider here. Through the act of enrolling the individual becomes a student.

If, instead of going to school the individual chooses to sell his/her labour-power s/he would be employed for a certain salary. After the schooling process, by exhibiting a certificate, this salary will generally be higher. In other words, the exchange value of the labour-power that has been qualified through the school process is higher than the exchange value of the simpler labour-power that was put into the process. It was essential that the simple labourpower *could have been* sold before the school process starts so that it can be counted as warranty. Also it is essential that the qualified labour-power be sold after the school process so that it can be counted as wealth. It is hard to think of any commodity that does follow this basic law: capital is movement.

In resume, an individual sets apart a commodity of his/her property and invests it into a productive enterprise in order to get a transformed commodity with a higher value at the end. In this process the only expenditure of muscle and nerves is his/hers own expenditure, plus the indirect expenditure of teachers' and staff's energies. The student works together with teachers and staff, but does not pay them directly. This seems to be a rather common kind of

economic activity that Marx considers under the label "independent handicraftsmen" (*selbständigen Handwerkern*):

The independent peasant or handicraftsman is cut into two. (...) As owner of the means of production he is a capitalist, as worker he is his own wage labourer. (...) It is therefore only through ownership of the latter that he obtains control of his own surplus labour, and thus he relates to himself as wage labourer as his own capitalist. (Marx 1994[1863], 18)

Marx explains that this split of a person into two functions is natural in a society where the *social determinacy* of the means of production is so intertwined with these means that the *categorical determinacy* is applied even where the determination directly contradicts the apparent reality.

The social determinacy of the means of production in capitalist production — so that they express a particular relation of production — is so intertwined with, and in the understanding of bourgeois society so inseparable from, the material existence of these means of production as means of production, that that determinacy (categorical determinacy) is applied even where the relation directly contradicts it. (Marx 1994[1863], 19)

The dependence of our intellect and our understanding on the material existence of conditions and means of production is further developed by Sohn-Rethel: "The understanding of form as attached to being and not only to thinking was the main principle of dialectics which Marx drew from Hegel" (Sohn-Rethel, 1978, p. 30).

Again, in MMT, beings are social relations. Marx resumes the analysis of the independent handicraftsmen saying that "*it emerges in very striking fashion that the capitalist as such is just a function of capital, and the worker a function of labour capacity*" (Marx 1994[1863], 19, our emphasis). This is striking: what common sense takes for human 'beings' attached to attributes such as 'capitalist' and 'labourer', are *functions*! That is, nobody *is* a capitalist or *is* a labourer unless in *exercise of a function*. In MMT what common sense sees as individual identities, are in fact *functions*.

Our conclusion is this: In the social practices that occur at school, students, teachers and the administrative personnel participate in a process of transformation of students' labour-power, initially simpler and less qualified, into a commodity of higher value, to be sold in the future for a higher salary, which is expected to pay off the investment of muscle and nerves of

students as well as salaries of teachers and staff. In the process of qualification of their labour-power, students exert a double function: while actively engaged in the work of raising the quality of their labour-power, they *function* as labourers; while owners of the commodity in process of increasing quality, they function as *capitalists*. Consequently, according to MMT their work is productive labour just as the handicraftsman's. As a consequence, as far as their inner processes are concerned, schools function as *producers' cooperatives*.

It is convenient to stress that we are not comparing the student with the handicraftsman. We are concluding from MMT that the same individual may accomplish *two simultaneous functions, as labourer and as capitalist.* These functions certainly differ in the student and in the handicraftsman.

Final words

Since the student participates in the school process both as capitalist and as labourer, the simpler labour-power enters the process twice, once as fixed capital, and once more as means of work (raw material). In both cases, it is classified as *constant capital* whose juridical owner is the student. The student also, enters the process twice. As owner of the labour-power he is concerned with the increase of the constant capital; in this position he functions as *capitalist*. While applying mainly nerves to "learn" s/he fulfils the function of *labourer*. *The students tend to produce the highest value of their capital with the minimum expenditure of their labour-power*. This assertion may be a cue to understand general student's behaviour.

The "minimum entry standards" evaluate whether the student's simpler labour-power represents a sufficient value for the required deposit. The ritual, marking the stripping of the labour-power is well known: freshmen hazing, shaving heads, etc. The ritual that marks the recapture of the higher valued qualified labour-power is the solemnity of graduation when they are dressed up with formal clothes and panache. At the end of the graduation ceremony they symbolic get rid of school's constraints throwing their bunting hats in the air... Since then, they are "free" to sell their qualified labour-power for a higher salary. Profit, however, will only be realised, provided the graduate student goes to work to recover his/her investment that is, provided his/her labour-power enters the process of commodity circulation. How long recovering will take is called the *turnover*. It seems that this kind of investment is becoming less profitable, unless...

Schools are organized in such a way as to assure success just as if failure were accidental and as if everybody could succeed provided teachers themselves succeeded. This uncanny ideology has been in force not only in England in the last decades as is well documented and discussed (Brown and McNamara (2005) and Boxley (2003). Students are organized into classes and subjected to classification through criteria of evaluation. Certificates are the final prizes. With higher or lower pressure this system is the fundamental organization of schools at all levels and all around the world. Vinner (1997) has called it the credit system.

Pais (2011) has deeply explored the inversions imposed by the credit system on the dominant pedagogies. He shows how apparently good intentions like "mathematics to all", "actions for equity" or "teaching for inclusion" invert themselves into efficient exclusion when they become subjected to the reality of the credit system in classrooms. On the same line Beach and Dovemark (2009)) refer to the "appropriation of teacher time for personal gain at the expense of others" (Beach and Dovemark, 2009, 698). We surplus that the global organization of school system is comparable to the intensification of capital and production of relative surplus-value, whereas the inherent school exclusion is connected to absolute surplus-value.

In resume Capital's interpellation announces itself through the explicit discourse of success and materializes itself in the failure imposed by the credit system. In elementary school the value gain from simpler to qualified labour-power is minimal as Marx says in Loan, Price and Profit. Of course, insofar as the educational level increases, the gain is also bigger. Nevertheless the ideological interpellation in classrooms subjected to the credit system is the same, from elementary to post-doctor; only the rewards change form.

Appropriation of one's fellow work is not a moral issue, it is the consequence of the credit system based on assessment of knowledge abilities which is in force throughout the world in all school grades. Hereby we can find an answer to Althusser's question: "*Why is the educational apparatus in fact the dominant Ideological State Apparatus (ISA) in capitalist social formations, and how does it function?*" (Althusser, 1970 p. 93). We retrieve our answer of many years ago: "It is because at school the student learns, above all, to participate in and accept the conditions of production and seizure of surplus-value, the work done by one's fellow men" (Baldino, 1998, p. 77).

It is hard to think of a more important "skill and handiness" that capital, as an automatic subject (*automatisch Subjekt*), would require to be imparted to its supporters (*Träger*). In the absence of failure such as announced by some pedagogies, there would be no appropriation of surplus-value and the fundamental ideological lesson demanded by capital from school practices would hampered.

References

ALTHUSSER, L. (1970). *Idéologie et appareils idéologiques d'état*. Paris : Éditions Sociales. Available in English in

http://www.marxists.org/reference/archive/althusser/1970/ideology.htm [Accesses Jan. 4, 2012].

- BALDINO, R. R. (1998). School and surplus-value: contribution from a Third-World country. In P. Gates (Ed.), Proceedings of the First International Mathematics Education and Society Conference, (pp.73-81). Nottingham: Nottingham University.
- BEACH, D. and DOVEMARK, M. (2009). Making 'right' choices? An ethnographic account of creativity, performativity and personalised learning policy, concepts and practices. Oxford Review of Education, 35:6, 689-704.
- BOXLEY, S. 2003. Performativity and capital in schools. *Journal for Critical Educational Policy Studies*, *1*, 22 p. Availabel in http://www.jceps.com/?pageID=article&articleID=3. [Accessed in Jan.4, 2013].
- BROWN, T. & MCNAMARA, O. (2005). *New teacher identity and regulative government*. New York: Springer.

CLEAVER, H. 2000. Reading Capital Politically, Second Edition, London: AK Press.

- CLEAVER, H. 2006. On Schoolwork and the Struggle Against It. Available in: <u>https://webspace.utexas.edu/hcleaver/www/OnSchoolwork200606.pdf</u> [Accessed Jan. 4, 2013].
- DALLA COSTA, M. AND S. JAMES. 1972. *The Power of Women and (the) Subversion of the Community*. London: Falling Wall Press.
- HARVIE, D. (2003). All labour is productive and unproductive. *Discussion Papers in Political Economy*, Department of Political Economy, Nottingham Trent University.
- HARVIE, D. 2005. Value production and struggle in the classroom: Teachers within, against and beyond capital. *Capital & Class #88*. Available in: <u>http://www2.le.ac.uk/departments/management/documents/people/david-harvie/HARVIE-David-ValueProductionClassroom.pdf</u> [Accesses Jan. 4, 2013].

ⁱ We will refer to all educational institutions from kindergarten to post-doctor as *the school*.

ⁱⁱ "Allerdings muß die menschliche *Arbeitskraft* selbst mehr oder minder *entwickelt* sein, um in dieser oder jener Form verausgabt zu werden" (Marx, 1962[1887], <59>, our emphasis). "Arbeitsmittel in der Agrikultur wieder eine ganze Reihe andrer Arbeitsmittel und eine schon relativ hohe *Entwicklung der Arbeitskraft* voraus" (ibid, <194>, our emphasis).

ⁱⁱⁱ "Kompliziertere Arbeit gilt nur als *potenzierte* oder vielmehr *multiplizierte* einfache Arbeit, so daß ein kleineres Quantum komplizierter Arbeit gleich einem größeren Quantum einfacher Arbeit" (Marx, 1962[1867], <59>, orig. emph.).

^{iv} "... jede Art Arbeitskraft" (Marx 1962 [1867], <59>).

HARMAN, C. 2009. Zombie Capitalism. Canada and Australia: Haymarket Books.

MARX, K. 1962 (1867). *Das Kapital* [*Capital*], Vol 1. Karl Marx - Friedrich Engels - Werke, Band 23, S. 11-802, Dietz Verlag, Berlin/DDR 1962. Avaiable in Marxists' International Archive: <u>http://www.mlwerke.de/me/me23/me23_000.htm</u> [Accessed, Jan 4 2013].

- MARX, K. 1985 (1865). Value, price and profit. MECW, Vol. 20. Moscow, URSS: Progress Publishers. Available in: Marxists' International Archive <u>http://www.marxists.org/archive/marx/works/1865/value-price-profit/ch02.htm#c7</u> [Accessed Jan 4, 2013].
- MARX, K. 1991 (1863). Theories of surplus-value. *MECW*, Vol. 30. Moscow, URSS: Progress Publishers. Available in: Marxists' International Archive <u>http://www.marxists.org/archive/marx/works/1863/theories-surplus-value/index.htm</u> [Accessed Jan. 4, 2013].
- MARX, K. 1994 (1863). Productivity of Capital: Productive and Unproductive Labour. MECW, Economic Works, 1861-1864, Vol. 34. Moscow, URSS: Progress Publishers Available in: Marxists' International Archive

http://www.marxists.org/archive/marx/works/1861/economic/ch38.htm [Accessed Jan 3, 2013].

- MARX, K. 1995 (1867). *Capital*, Vol 1. *MECW*, Vol. 35. Moscow, URSS: Progress Publishers. Available in: Marxists' International Archive.
 - http://www.marxists.org/archive/marx/works/1867-c1/index.htm [Accessed: Jan 4, 2013].
- PAIS, A.J.S. (2011). *Mathematics Education and the Political: An Ideology Critique of an Educational Research Field*. PhD Thesis in Mathematics Education, Aalborg, Denmark: Aalborg University
- SOHN-RETHEL, A. 1978. *InItellectual and manual labour: a critique of epistemology*. Atlantic Highlands: Humanity Press
- TRONTI, M. 1973. 'Social capital'. Telos, no.17, 98-121.
- VINNER, S. (1997). From intuition to inhibition mathematics education and other endangered species. In E. Pehkonen (Ed.), *Proceedings of the 21th conference of the International Group for Psychology of Mathematics Education*, *1*, (pp. 63-78). Lahti, Finland: PME 21.

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