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The Living and the Dead in Education: Commentary on Julian Williams

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Each of our life states always has its own double. A dead double. — Mamardashvili (1997, p. 7)

INTRODUCTION

Jean Lave and Ray McDermott (2002) did us a service with their powerful reading of Marx's 1844 essay on "Estranged Labour" (Marx, 1964). In reworking Marx's critique of "alienated labour" in terms of "alienated learning," they reminded us of Marx's own impassioned revolt against the inhumanity of the capitalist order and found a novel way of illuminating Marx's standpoint through an exploration of formal schooling.

We also owe a debt to Julian Williams (this issue), who, responding to Lave and McDermott's initiative, offers us a subtle and sensitive discussion of the problems and contradictions in formal education generally, and maths education in particular, in relation to capitalist society. Although Lave and McDermott emphasised the striking congruences between what passes for "work" and what passes for "education" in a society built on alienated labour, Williams attempts to throw further light on "alienated learning" by tracing the inner connections between school activity and capitalist production, seeing formal education in terms of its role in the production of labour power as a commodity.

The two publications complement one another and should stimulate further discussion about the relevance of Marx's work to the educational sphere (cf. Green, Rikowski, & Raduntz, 2007) as well as to other forms of activity (cf. Jones, 2009). Their work also connects to more general discussions of the import of Marx's notion of alienation in such classic texts as Ollman (1976) and Mészáros (1978). At the same time, their work echoes the theme of the necessity for radical transformation of educational practice and educational institutions as part of a general programme of socioeconomic and political transformation (Freire, 1969).

For the cultural-historical and activity theory traditions specifically, the deadening and unrewarding nature of formal schooling is a familiar, if not central, theme. Much scholarship, research

and practice, too much to summarise here, has acknowledged and analysed the stultifying "encapsulation of school learning" (Engeström, 1991) and has sought to suggest ways of improving or transforming educational experience or of offering alternatives or supplements to it (e.g., Cole, 2006; Engeström, 1991; Engeström, Miettinen, & Punamäki, 1999; Lave and Wenger, 1991; Rogoff, 1990). Some work has sought to challenge the "politics-neutral ideology that dominates psychology, and education today" (Stetsenko & Arievich, 2004) in reemphasising the radical social project underlying and implied by Vygotsky's approach to learning (Stetsenko, 2008; Vianna & Stetsenko, 2006).

Against this rich and diverse backdrop, the distinctive feature of Williams's approach, like that of Lave and McDermott, lies in explicit application of Marx's philosophical and economic work to an analysis of the connection between institutionalized education and the kind of society that creates it and is educated by it. I follow their lead here with some reflections on the significance of the issues they raise and their implications for current debates within CHAT.

EXPLOITATION AND ALIENATED LEARNING

For Marx, alienated labour and the general alienation in the human condition that it engendered was not the product of some metaphysical malaise or existential angst but was inherent in the process of production under capitalist conditions. Workers, deprived of any other means of living, have to labour for the propertied classes and, in the process, their time and the fruits of their labour are "alienated" from them and appropriated by others. This use of the life activity of one group of people for the purposes of enriching another is exploitation, a form of servitude that Marx considered a denial of our intrinsic humanity. It is this inhuman relationship in which people are "estranged" from their own creative practices and products and, by the same token, from each other, which is at the heart of the phenomenon of alienation as Marx understood it.

When a whole social system is built on exploitation, the consequences are felt—are *suffered*—in all domains and spheres of life that are connected to and spring up from it. All institutions, including educational ones, created to serve the "public good" ring hollow on such foundations. If they temper and alleviate the conditions of those who suffer most, then they are also bound to contribute to the reproduction of these same conditions. More fundamentally, all productive, creative, and life-affirming capacities and activities on which human well-being could be built, when harnessed in one way or another to exploitative ends, get blunted, diverted, and twisted out of shape, becoming devalued, destructive, or even unrecognizable.

For example, Marx considers labour (or "work") to be "free, conscious activity," "life engendering life" (1976, p. 86). But this is not a description one could apply to "alienated labour," as Lave and McDermott emphasised. Thus, work, which could be (and sometimes is) an affirmation of our potential for creative, positive, and productive interdependence with others, becomes "work" as all too many of us know it: Unfulfilling, stressful, and exhausting drudgery, a soul-destroying, pointless waste of energy and time.

Similarly, learning—a natural and vital dimension of all productive and creative activity and essential to our growth as responsible human beings—becomes what we know as "learning" at school: A dulling of the mind and spirit, a mortifying replay and imitation of the dried-out products of *other people's* life and work; products devoid of connection to our lives and, hence,

dead to us (Mamardashvili, 1997, p. 7). At just the age when we are most eager to learn, most receptive to new ideas and experiences, most curious, most carefree, energetic, and altruistic—at just this age we are forcibly confined by age group to a largely sedentary existence to be endlessly bombarded with purposeless verbiage. A competitive scramble for grades and certificates, or the slow motion train wreck called "educational failure," ensues. The child labourers in the mines and factories have become the child labourers for Standard Assessment Tests (SATS) scores. Whereas we expect education to result in knowledge, this school-based "education" produces "alienated knowledge," "dead knowledge" (Reimer, 1971, pp. 167–168), "synthetic stupidity" (Wagenschein, as cited in Engeström, 1991, p. 247). A whole philosophy of communication as transmission or transfer hereby finds its disconfirmation on a massive and historic scale.

Anything of intrinsic value and worth can be spoiled and despoiled by the "education" business. Maths, as Williams shows, is a case in point. Schools can quickly kill off any interest in this complex and creative discipline whose value, in terms of its use to humankind, is incalculable (cf. Solomon, 2009, for a detailed investigation of the difficulties school pupils have with maths). As Reimer (1971) told it, "Einstein, commenting upon a short period he had to spend in school preparing for a degree examination, said that as a consequence he was, for several years afterwards, unable to do any creative work" (p. 33).

Thus, in a world built around alienated labour, the most enjoyable and rewarding experiences that human life could potentially offer seem to have been replaced by alien doubles: Work becomes "work," learning becomes "learning." A lifeless double. But this dead double for work or for education is often the only form or work or education people ever experience or know about, or even imagine.

Incidentally, the parallel between school and factory—and, hence, the extended analogy in Lave and McDermott's discussion—is not just a piece of Marxist rhetoric. Schools and their "educational" practices and products have often been conceptualized, measured, and modelled on the lines of factory production, with similar systems of discipline, hierarchy, accountancy, and control:

During the first two decades of the twentieth century, schools were being transformed into bureaucratically administered institutions modelled on the factory. By 1918, all forty-eight states had enacted compulsory education laws. Growing urban industrialization and immigration created a need for rapid assimilation of the young (especially the foreign-born and poor) into American culture (especially the culture of the factory). . . . The literature of the time compares school superintendants to factory managers, teachers to industrial workers, and children to the "raw materials" which were to be "shaped and fashioned into products to meet the various demands of life." (Newman & Holzman, 2006, p. 92)

THE PSYCHOLOGY OF ESTRANGED LEARNING

However, as Williams points out, the essential issue is not so much the parallels between work and school as their interdependence. On that note, Lave and McDermott (2002) argued that their reading of Marx has

allowed us a conceptual advance, namely, to see, once again but in a new way, not just learning, but the nation's very ideas about learning as part of a wider system of cultural, political and economic forces that organize and define education and its problems. (p. 45)

More specifically, they made the case that "theories of learning," including "ideas of learning, intelligence, creativity, genius, stupidity and disability" (p. 21) have grown up in close association with and mutual dependence on the kind of "work" we find under capitalism.

In other words, "alienated labour" and the alienated forms of social life it generates are also expressed and reproduced in educational practices and in the educational theories, and psychological theories (Newman & Holzman, 2006, p. 92) that purport to account for, justify, and measure the "learning" going on within such practices. And that has to be a fundamental issue for us as educators, and as theorists of education, of psychology, of psychological development, and of the communicative practices (the "discourse") of learning and development. For the implication of Lave and McDermott's argument is that much research in education and allied disciplines—including possibly research within CHAT—is uncritically taking as its object not *learning* but "learning" as it appears in a million classrooms all around us, this corpselike doppelganger. In studying the development of knowledge in school (perhaps via dialogue in the classroom), perhaps we are only looking at the passing around of "dead knowledge." More to the point, there is a danger that, although explicitly acknowledging the flaws and failures of formal education, we nevertheless still take the dead double as a model for theorising the springs and dynamic of real learning.

Taking this further, how confident are we that our principal theoretical tools for the analysis of learning and its communicative mediation—such as the Vygotskian notions of spontaneous and scientific knowledge, of the zone of proximal development, of the "planning function of speech," and so on—are telling us about learning rather than "learning"? You will certainly look in vain for any acknowledgment of the problem of "estranged learning" in the work of Vygotsky or Luria, for whom the values of Westernized education appeared to be self-evident (although see Newman & Holzman, 2006; Stetsenko, 2008; Stetsenko & Arievich, 2004, for a positive interpretation). Of course, the founders of our tradition were working in a different context when "alienated learning" would have been the least of their problems and where the humane environment of school represented hope and salvation for generations of children. All the same we should take care not to make theoretical virtues out of such practical necessities (cf. Matusov, 2008).

THE ROLE OF EDUCATION IN SOCIETY

But perhaps I'm being alarmist. As previously noted, much research in our tradition has taken as its starting point a rejection of the "learning" practices on offer in formal schooling and has sought or advocated other practices, or other models. However, the problem of formal schooling as it emerges in the discussions of Williams and of Lave and McDermott is not merely a problem to do with how schools are organized, how lessons are conducted, how the curriculum is decided and developed, what kind of communicative activity takes place between pupils and teachers and between pupils, and so on, although all these things are concerns. Nor is it merely a problem to do with the separation ("encapsulation") of school from work or community activity, although, again, this is one side, and an important one, to the whole issue. (And, of course, we have an obligation as theorists or practitioners to improve, enliven, or radicalise educational theory and practice wherever we can.)

The problem is that the school as an institution has developed to fit with, and to serve, the social system of which it forms a part. What happens in school can be explained only by the reciprocal relations between school and what is going on outside it. And when we adopt that point of view it becomes clear that "encapsulation of school learning," the divorce of "knowledge" from "application," and all the other characteristics of "learning" are not the result of defective design of the school system but the tried and tested, *inevitable*, and *ineradicable* means of producing the "outputs" that society requires of its "education" system. Ineradicable because *to change education means to change work*; to go from "learning" to learning involves going from "work" to work. To make education "whole again"—to restore its vital and creative powers—means to make work whole again. Unravelling the apparently paradoxical waste of life that "education" represents for many therefore takes us to the need for a concrete view of the reciprocal ties between educational institutions, along with their practices and theories, and the social inequalities, injustices and deprivation built around exploitative "work." This leads us to conclude that the positive transformation of schooling is at the same time a social transformation.

EDUCATIONAL COMMODITIES?

Julian Williams tackles the problem of alienated learning by considering how the later Marx, from the vantage point of *Capital*, might have looked at education. Analogies and parallels to one side, he correctly points out that the grades and certificates learners churn out are not commodities (pace Warmington, 2007). Grades and certificates belong to the student, not the teacher or school, and are not sold or exchanged. Furthermore, the pupils' "labour" in the classroom does not produce surplus value, and hence they are not "productive workers" in Marx's sense. Neither are the teachers in the public school system. Looked at narrowly, then, what is going on in the classroom is not capitalist production as such. But there is, as Williams points out, a massive consumption of resources in wages, materials, and so on. Education costs and, as Williams shows, it is run as a business with "outputs" measured by grades, certificates, and other "proxies" for learning. Indeed, other scholars have pointed out more specific ways in which education fits into neoliberal economic and political strategies (Cole, 2007; Raduntz, 2007).

But if teaching and learning activities in school do not involve exploitation of labour for profit, then why does "alienated learning" so strongly resemble "alienated labour"? Williams looks for the solution in the interconnected processes of production and consumption of commodities that link schooling to work under capitalist conditions. On this, he argues that the consumption of resources along with the "labour time" of the pupils in class is productive consumption, in Marx's terms. It is productive of labour power as a commodity to be exchanged later (after school) for wages at work (see Rikowski, 2002/2003 and Harvie, 2007; see Mohun in Harvie, 2007, p. 231, for an opposing view). In other words, it is productive of those skills and abilities to be exercised in "alienated labour." More specifically in the case of maths education, it is productive of "enhanced" (Williams), or "complex" or "intensified" (Marx, 1976, p. 135), labour power, which can command higher wages on the job market. The specific function of education on this view, then, is bound up with the commodification of labour power as a necessary link in the chain of capitalist production. This entails the systematic taming, controlling, and disciplining of children's natural creative energies and intelligence as they are forced to perform to standardized

measures but at the same time must also succeed in transmitting a measure of genuine skills and intellectual accomplishments, even if all genuine interest in the subject matter is strangled early on.

So the production of labour power in school has a number of different sides to it, of which subject "knowledge" is only one. As Mészáros (1978) put it,

Thus in addition to reproducing, on an enlarging scale, the manifold *skills* without which productive activity could not be carried on, the complex educational system of society is also responsible for producing and reproducing the framework of *values* within which the particular individuals define their own specific aims and ends. (p. 289)

In his classic account, Everett Reimer (1971) gave a more fine-grained analysis:

Different schools do different things, of course, but increasingly, schools in all nations, of all kinds, at all levels, combine four distinct social functions: custodial care, social-role selection, indoctrination, and education as usually defined in terms of the development of skills and knowledge. It is the combination of these functions which makes schooling so expensive. It is conflict among these functions which makes schools educationally inefficient. (p. 23)

Education, in other words, is a low priority for "education" as we know it. In terms of the actual development of skills and knowledge, Reimer (1971) cited a statement by a former U.S. Secretary of Health, Education and Welfare that "everything a high-school graduate is taught in twelve years of schooling could easily be learned in two years and with a little effort in one" (pp. 23–24).

Looked at from this perspective, then, "education" is not so much about the production of labour power, whether simple or complex, but the reproduction of all the social relations involved in capitalist production in the form of the individuals who pass through the system with their values, behaviours, aspirations, and aptitudes shaped and moulded in their contacts with it. From this point of view, then, education can hardly be seen as an activity in its own right, or, as we might say, a "unit of analysis." Indeed, as Mészáros (1978) went on to say, "Marx strongly stressed the objective ontological continuity of the development of capital, embodied in all forms and institutions of social interchange, and not merely in the directly economic second order mediations of capitalism" (p. 290).

Similarly, it is difficult to be satisfied with the idea that "the contradiction between use- and exchange value" is "the prime source of contradiction within the object of activity in the state health care (and other) professions" (Williams, this issue, citing work by Y. Engeström and R. Engeström) as this contradiction is merely a precondition for capitalist production and "alienated labour" with it (see Jones, 2009). By the same token, the "CHAT perspective on education," which sees "mathematical learning activity as social, and as collective/joint 'object'-oriented activity" (Williams, this issue, p. XX) is also rendered problematic if we take seriously the "ontological continuity of capital." What "object" could be being produced here? And what "activity" are the individuals concerned engaged in? Is this learning, or is it "learning"? As Williams says, "We cannot presume that a classroom has a collective activity going on just because a collection of people sit together in one classroom with a teacher" (p. XX). Indeed so, and Williams's own discussion shows how one "activity" (the production of labour power as a commodity) can masquerade as another ("education").

MARX ON EDUCATION

On a final note, we might consider Marx's own views on education (for a more detailed account, see Thorpe & Brady, 2007). For Marx, the provision of compulsory education was certainly not a plot by the capitalist class to further enslave workers by ideological means. On the contrary, Marx (1976) considered it a positive good, a humane measure that was necessary to the very survival of the working class itself in conditions of rapacious and unconstrained capitalist exploitation:

But the intellectual degeneration artificially produced by transforming immature human beings into mere machines for the production of surplus-value . . . finally compelled even the English Parliament to make elementary education a legal requirement before children under 14 years could be consumed "productively" by being employed in those industries which are subject to the Factory Acts. (p. 523)

Marx (1976) also considered the results of these early educational experiments to have great significance in terms of how educational activity should be integrated into social practices generally and how the education of the future might look:

Paltry as the education clauses of the Act appear on the whole, they do proclaim that elementary education is a compulsory precondition for the employment of children. The success of those clauses proved for the first time the possibility of combining education and gymnastics with manual labour, and consequently of combining manual labour with education and gymnastics. The factory inspectors soon found out, by questioning the schoolmasters, that the factory children, although they received only one half the education of the regular day students, yet learnt quite as much and often more. "This can be accounted for by the simple fact that, with only being at school for one half of the day, they are always fresh, and nearly always ready and willing to receive instruction. The system on which they work, half manual labour, and half school, renders each employment a rest and a relief to the other; consequently, both are far more congenial to the child, than would be the case were he kept constantly at one. It is quite clear that a boy who has been at school all the morning, cannot (in hot weather particularly) cope with one who comes fresh and bright from his work. (p. 613)

Marx went on:

Further evidence of this will be found in Senior's speech at the Social Science Congress at Edinburgh in 1863. He shows there, amongst other things, how the monotonous, unproductive and long school day undergone by the children of the upper and middle classes uselessly adds to the labour of the teacher, "while he not only fruitlessly but absolutely injuriously, wastes the time, health, and energy of the children. (pp. 613–614)

On that basis Marx (1976) drew certain conclusions about education under socialism:

As Robert Owen has shown us in detail, the germ of the education of the future is present in the factory system; this education will, in the case of every child over a given age, combine productive labour with instruction and gymnastics, not only as one of the methods of adding to the efficiency of production, but as the only method of producing fully developed human beings. (p. 614)

CONCLUSION

Marx's comments, though old-fashioned, nevertheless still give us food for thought today. Perhaps the main point, though, is that formal educational institutions had their roots in the socially progressive state-enforced measure of erecting and maintaining a barrier between working-class children and the workplace. Education was "encapsulated" to protect children from exploitation. However, this enforced separation of school from work, as a principle and model of education, had its own serious drawbacks that, as we have seen, were well known even in Marx's day. After all, schooling did not end the exploitation of labour but merely postponed it; school was initially little more than a waiting room, purgatory. Indeed, the enforced idleness of classroom attendance actually increased workers' labouring capacities (and, therefore, profits), a fact that brought reluctant employers on board. Thus, school attendance was marked out from the very beginning not as a positive but as a one-sided negative—as the removal from work, as the protection from exploitation. It did not so much transcend the inhuman features of alienated labour as simply invert them, reproducing its poverty and one-sidedness with colours reversed. "Work" and "education," these "misbegotten parts" of a splintered human nature (Ollman, 1976, p. 131), became mirror images of one another, equal and opposite in their deficiency—the opposite poles of attraction in a system of relations developed to ensure exploitation and at the same time to struggle against its worst excesses. This one-sidedness fosters the familiar problems of reification and decontextualization of "knowledge" in written texts and classroom ritual, of the disconnect between "theory" and "practice," and so on. If children are not being exploited at school, their conditions can still be as grim in some ways as the grimmest of workplaces.

In other words, the provision of education, although a socially progressive measure, was never about overcoming or removing exploitation, although it has the power to mitigate it and even in some circumstances to create a unique forum for critical and transformative action. It was a protective measure, an essential political and social gain, but it was not the healing of a wound on the body of humanity, a wound inflicted by the enforcement of "alienated labour" on working people, and in its application prepared new, if different, wounds on hearts and minds. It is not the positive transcendence of alienation, something that would require the transformation of "work" as well as, and alongside of, the transformation of "learning."

Overly bleak and negative, you may say. After all, can't we all recount very positive, even inspirational, even *life-changing* school experiences? Indeed we can, and the same could be said of our working lives. But wouldn't it be true to say that these experiences, so vivid by contrast, are not a vindication of formal schooling but simply proof that learning as a *vital activity*—as opposed to "learning"—is going on whatever obstacles and artificial boundaries we put in its way, however adverse the conditions may be? Although what is learned, and what is learned about "education," is another question.

REFERENCES

Cole, M. (2006). The Fifth Dimension: An after-school program built on diversity. New York: Russell Sage Foundation.
Cole, M. (2007). Neoliberalism and education: A Marxist critique of new labour's five-year strategy for education. In
A. Green, G. Rikowski, & H. Raduntz (Eds.), Renewing dialogues in Marxism and education: Openings (pp. 103–116). New York: Palgrave Macmillan.

Engeström, Y. (1991). Non scolae sed vitae discimus: Toward overcoming the encapsulation of school learning. *Learning and Instruction*, 1, 243–259.

Engeström, Y., Miettinen, R., & Punamäki, R-L. (Eds.). (1999). *Perspectives on activity theory*. Cambridge, England: Cambridge University Press.

Freire, P. (1969). Pedagogy of the oppressed. New York: Continuum.

- Green, A., Rikowski, G., & Raduntz, H. (Eds.). (2007). Renewing dialogues in Marxism and education: Openings. New York: Palgrave Macmillan.
- Harvie, D. (2007). Academic labor: Producing value and producing struggles. In A. Green, G. Rikowski, & H. Raduntz (Eds.), *Renewing dialogues in Marxism and education: Openings* (pp. 231–248). New York: Palgrave Macmillan.
- Jones, P. E. (2009). Breaking away from Capital? Theorising activity in the shadow of Marx. Outlines, 1, 45-58.
- Lave, J. & McDermott, R. (2002). Estranged learning. Outlines: Critical Social Studies, 1, 19-48.
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge, England: Cambridge University Press.
- Mamardashvili, M. (1997). A psychological topology of the journey. M Proust's 'In Search of Lost Time' [Russian]. St. Petersburg, Russia: Russkiy Khristianskiy Gumanitarniy Institut.
- Matusov, E. (2008). Applying a sociocultural approach to Vygotskian academia: 'Our Tsar Isn't Like Yours, and Yours isn't Like Ours.' *Cultural Psychology*, 14, 5–35.
- Marx, K. (1964). The economic and philosophical manuscripts of 1844. New York: International.
- Marx, K. (1976). Capital. Volume 1. Harmondsworth, England: Penguin.
- Mészáros, I. (1978). Marx's theory of alienation. London: Merlin Press.
- Newman, F., & Holzman, L. (2006). Unscientific psychology. A cultural-performatory approach to understanding human life. New York: iUniverse, Inc.
- Ollman, B. (1976). Alienation. New York: Cambridge University Press.
- Raduntz, H. (2007). The role of education in capital crisis resolution. In A. Green, G. Rikowski, & H. Raduntz (Eds.), *Renewing dialogues in Marxism and education: Openings* (pp. 57–70). New York: Palgrave Macmillan.
- Reimer, E. (1971). School is dead. An essay on alternatives in education. Harmondsworth, England: Penguin.
- Rikowski, G. (2002/2003). That other great class of commodities: Labour-power as spark for educational theory. Available from http://www/leeds.ac.uk/educol/documents/00001624.htm
- Rogoff, B.(1990). Apprenticeship in thinking: Cognitive development in social context. New York: Oxford University Press.
- Solomon, Y. (2009). Mathematical literacy. Developing identities of inclusion. New York: Routledge.
- Stetsenko, A. (2008). From relational ontology to transformative activist stance on development and learning: Expanding Vygotsky's CHAT project. Cultural Studies of Science Education, 3, 471–491.
- Stetsenko, A., & Arievitch, I. M. (2004). The Vygotskian Collaborative Project of Social Transformation. History, politics, and practice in knowledge construction. Critical Psychology, 12, 58–80.
- Thorpe, G., & Brady, P. (2007). Toward a political economy of education in the transitional period. In A. Green, G. Rikowski, & H. Raduntz (Eds.), *Renewing dialogues in Marxism and education: Openings* (pp. 35–56). New York: Palgrave Macmillan.
- Vianna, E., & Stetsenko, A. (2006). Embracing history through transforming it: Contrasting Piagetian versus Vygotskian (Activity) theories of learning and development to expand constructivism within a dialectical view of history. *Theory & Psychology*, 16, 81–108.
- Warmington, P. (2007). Popular press, visible value: How debates on exams and student debt have unmasked the commodity relations of the "learning age." In A. Green, G. Rikowski, & H. Raduntz (Eds.), *Renewing dialogues in Marxism and education: Openings* (pp. 215–228). New York: Palgrave Macmillan.