What is ‘Human’ in Human Capital Theory? Marking a transition from industrial to postindustrial education

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Abstract
This article addresses educational practice as a site for the development of human capital theory. The article considers metaphysical constructions that are broadly typical of educational thought, and shows how they are amenable to economic analysis. Using different Marxist and feminist methods, it discusses pedagogy and the family as kinds of investment. The author questions the underlying assumptions about humanity on which both economics and education are predicated. If Western educators are certain of the historical ends to which modern Western education aims, do they also fully appreciate the implications of their own certainty and confidence for the future? As educators, are we equally confident that we question ourselves about why we uphold the value of education in the way each of us does? To engage educators in a debate about these values, the article employs poststructuralist critique to place words and concepts central to education and economics, e.g. the market, under erasure. It questions the way in which idealizations of teaching and learning are seen as forms of production and exchange. The article contests the notion of ‘humanity’ advanced within a postindustrial era, and seeks to open a more prescient account of knowledge as a form of wealth, and schooling as a form of commerce.

Keywords: human capital, patriarchy, postindustrial, history, knowledge production, exchange

Introduction
This article approaches the relationship between education and human capital. It challenges what educators ordinarily take education to be, and it also raises the issue of how educators ought to understand what it means to refer to humanity, or to a human, in the postindustrial era.

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The common thread between the words ‘human’ and ‘capital’ is that they each refer to intangible entities. ‘Human’ is a generalized thing; as a name it refers to a kind of existing or being, and can also be adapted to describe an individual’s own singular identity. ‘Capital’ refers to wealth and the accumulation of value. To say that both human and capital are metaphysical entities is to suggest a paradoxical arrangement in which there is in fact no tangible ‘human’ or ‘capital’, even though it is commonly presumed that both terms signify things for which there is empirical evidence. Each term signifies a kind of value.

Values mean nothing and can have no function for any application or context except for a human context. A ‘human’ context is a historical context in which the notion of a human being has taken precedence, and for which ‘humanism must necessarily be a perspective that places man at the centre of the universe and makes him the master of Being’ (Vattimo, 1988, p. 32). From this perspective, Humanism is predicated on the priority of a culture in which humans have already been accepted as dominant. Accordingly, capital is predicated on the existence of that humanistic culture. The point I make here is necessary in order to show that theories of human capital entail a metaphysics, which assumes particular idealized things to be permanent; at the same time, in adopting this metaphysics, economists and educators generally overlook the historical contexts and traditions through which their own presumptions have been generated.

Firstly, this article cannot pretend to exhaustively analyse all of the important implications of this adoption of metaphysical concepts in either education or economics. Though it does provide a brief introduction—for the sake of educators—to theories of human capital as they arise from the discourse of economics in the past five decades. Secondly, I work back through the metaphysics of human capital, to analyse more carefully what ought to be the most salient repercussions of the economic theory for education. Finally, I provide a brief analysis of how some aspects of the critique of metaphysics could apply to educational theory, using examples drawn from Marxist deconstructionism.

**Human Capital and the Economics of Education**

Economics is a science in which the flesh-and-blood human is completely subordinate to a statistical methodology, as well as to certain moral and ethical values. Since the eighteenth century, few economic theories have emerged that explicitly address these moral concerns, leading to a scientism in which the human is rendered up to an idealizing ‘typicality’: populations of humans in pre-ordained categories such as producers, consumers, capitalists, etc. The human as an individual gathers very specific functions, so as to fit a priori laws of capital development and accumulation. This idealization is typical of human sciences in general. In this article I wish to draw closer attention to a hierarchy that economists establish between the family and the school. This is necessary because ‘family’ and ‘school’ are converted in economic discourse from their social character and meaning into resources that have more or less natural or cultural dimensions. To analyse the impact of human capital theory on education I think it is useful to recognize these natural and cultural dimensions as depending on the transformation of what might otherwise be known as private and public spheres. Where in the industrial age the family and the school were completely separated as different institutions, one ostensibly ‘private’, the other ‘public’, now in the postindustrial era the breakdown of the family has been
established as a basis for a chronological shift in the relationship. Public and private are no
longer opposites in practice, especially as they relate to family policy in economically develop-
oped nations (Organization for Economic Cooperation and Development [OECD], 2011).

In the first place, in studying economic discourse we encounter a widespread image of
those families that have ‘failed’ (socially and economically) and who are consequently
subject to state intervention (I provide examples of this later). Although writers like Don-
zelot (1997) point to a regulatory bureaucracy emerging around the family during the
industrial era, the commercialization of regulatory services now modifies the nature of
older privacy structures. In effect, the older regulatory bureaucracy that emerged in the
nineteenth century as forms of welfare for poor families and orphans etc. is now being dis-
mantled. The state is increasingly willing to shift responsibility for ‘failed families’ from
itself to the market, so as to lift a welfare burden from the state to the private sector,
and make such intervention a commodity in itself.

Second, economists assert that waiting until a child begins school and hoping that
parents will invest appropriately and wisely in their child’s future is too high a risk.
Parents often cannot be relied upon to make such investments appropriately. The insti-
tution of early childhood education has emerged to take up the slack between birth and
school and to reduce further the likelihood of educational failure.

From this perspective, human capital is little more than a historically specific modifi-
cation to vocabulary about the labour market.Treating individual humans as a source
for generating wealth, as a resource to be exploited, and from which to yield surplus, is
nothing new. The two theoretical problems that I raise in this article focus on what econ-
omists think about humans as a resource, and what it means more generally to treat edu-
cation as a means of developing humans as capital resources.

In Western countries the history of public policy with respect to investment in schooling
is generally one in which elite schools were established (over several centuries) for the
purpose of educating a population strata that could afford to distinguish itself from the
broader community, the latter being largely incapable of paying for the cost of private edu-
cation (Kenway, Fahey, & Koh, 2014). A distinction between private and public education
stems from this stratification. Public education was not commercialized as such and has
largely been provided by governments as a means of fulfilling a need for labour to have
a minimum level of schooling. In effect, as neoliberal economists might argue, government
has subsidized education. A political culture has developed in which education is viewed as
a right that governments must uphold.

Since the 1960s however, economists have concluded that public investment in schools
is either (1) a potential market failure altogether, (2) rates of return are clearly trending
consistently lower in advanced economies than in poor nations and/or (3) it is too hard
to accurately calculate returns on investment in education for women, as opposed to
men, because the variability in female enrolment patterns and interruptions due to
health or child-rearing produce statistical bias (Schultz, 1993).

In addition to these trends, Friedman (1962) claimed that governments were paterna-
listic and impeded the freedom and liberty of individuals when they provided educational
services from tax revenue. More recently, writers like Mead (1997) have extended this
‘paternalism’ by the state to a range of welfare provisions. The logic of this position is
that the value of the provision (e.g. education) is lowered, because individuals fail to invest in the service when it is freely available. The cost of providing it for government increases, on the basis of public demand.

The connection that these scholars make between liberty and investment is very complex, and I can only touch on it in this discussion. I raise it because of its significance for the idea of humanity, and particularly because ideas about free will constitute a long-standing political issue in Western society. Essentially, economic writing on education argues for a human individual whose freedom to participate actively and contribute to society must be acquired.

The real credit constraint facing children is not the lack of access to funds for tuition and room and board in the college-going years. Rather, it is the inability of children to borrow against future income to buy a parental environment that will allow them to fulfill their potential. It is the accident of birth. (Heckman & Masterov, 2007, p. 23)

According to this perspective, freedom is something to be purchased, and in addition, without the available private credit to do so, children will remain un-free. Furthermore, prominent economists like James Heckman are acting as if returns on public investment in schooling in advanced economies have effectively peaked; private investment by individuals themselves is viewed as the alternative: ‘the cost of reducing class size would be better spent on giving children a savings account’ (Heckman & Masterov, 2007, p. 22). Some economists see educational arguments about classroom practice and the improvement of curriculum systems as failing to incorporate macro-economic data and consequently being skewed. They see the value of economic analysis as determining statistically valid laws about constant and variable factors in education, and how schooling can be used by individuals to better contribute to capital development on a national or international scale.¹

**Education as Seen by the Chicago School of Economics**

What is variable, as opposed to constant, and certain, when measuring the productive relationship between family and school? Economists say: the family is more constant and less variable than the quality of schooling. The family lies at the core of human capital because it is the place where humans reproduce in naturalistic and biological terms. It is the well-spring of human capital. What is most fundamentally metaphysical, and intangible, about the human in human capital is that ‘nature’ that is necessary for the production of capital resources. ‘Family’ is symbolic of a limitless natural resource. Seen from this perspective, the child is a link in the chain of human production and reproduction, or, as Judith Blake (1968, p. 5) puts it ‘a consumption good analogous to cars, houses and refrigerators’. Parents must spend on the their children in order to redeem the investment of time and energy they make in breeding: according to Blake (1968), the economists at the Chicago School of Economics uphold an elasticity between income and numbers of children produced that would always lead to wealthy people being able to breed more frequently than poor people.

Accordingly, we can begin to discern a simplicity about how ‘human’ is defined by modern economists in human capital theory. This simplicity may become visible as a
naiveté if we recognize that statistical types do not characterize the family, let alone the human, in sufficient depth, precisely in order to make them fit mathematical formulae. Furthermore, it is precisely on the basis of simplistic definitions of the human as a producer or consumer good, etc., that the confinement of ‘human being’ to a kind of symbolic value persists. It is confined because treating the family, and thus the human, as an idealized, fixed category of natural resource, is not subject to debate and alternative meaning and interpretation. The human is a kind of value in the sense that the meaning of human becomes stable, idealized, fixed. At the vernacular level, we have no doubt about what ‘human’ refers to because of this stability.

How is this possible? For the human sciences, it is not only possible but necessary that the meaning of ‘human’ remain static across applications of the term, even across academic disciplines. The significance of this observation is raised by surveying debate about education generated within the so-called Chicago School of Economics, which re-models the family (Becker, 1960, 1964, 1985; Becker & Lewis, 1974; Ben-Porath, 1982; cf. Dogan, 2004) and provides an initial focus for my analysis. Gary Becker’s work is representative of this discourse, and pioneered new analyses of relationships within the family, and between the family and the labour market. Together with the school, the family becomes a form of ‘an input–output system which can be reduced to an economic production function’ (Olssen & Peters, 2005, p. 324). Yoram Ben-Porath (1967) elaborates on Becker’s theory to produce an econometric model through which education can be analysed as the cost of acquiring and improving one’s own individual capital stock. Ben-Porath’s model continues to enjoy currency in recent economic scholarship (Cunha & Heckman, 2007, p. 35). In essence, the prevailing conception of human capital demands that many differences (other than age) between human individuals are effectively disregarded. This is ostensibly in order to idealize the way in which work can be defined as combining and building upon biologically inherited capital resources e.g. intelligence quotient (IQ) and other physiological characteristics.

More fundamentally, however, to disregard a range of differences between individuals in this context is to hypostatize ‘human’ and render it absolute, or constant. The aim of reducing variability emanates from a prior idealization of the ‘human’ and not simply from the economic requirement that it submit to statistical laws, which is anterior to the fundamental hypostasis itself. Accordingly, we begin to glimpse the metaphysical characteristics of the ‘human’, i.e. those that are not tangible and do not relate to empirical qualities.

For example, participation in employment is not simply a physical activity, i.e. a form of energy expenditure, but is ranked in levels of value-output. Accordingly, Ben-Porath asserts that for the purpose of his model, ‘the stock of human capital, $K$, of which every individual has some initial endowment, is homogeneous and subject to an exogenously given rate of deterioration, $\delta$’ (1967, p. 353). Further

the stock of human capital is defined as a concept analogous to ‘machines’ in the case of tangible capital … Each individual is assumed to possess only a small fraction of the total homogeneous stock of human capital in the economy and is regarded as a perfect competitor facing a given rental … which is independent of the volume of services he offers in the market. (Ben-Porath, 1967, p. 353)
Ben-Porath acknowledges that human capital is not tangible and must be recognized by analogy to something regarded as tangible, i.e. machines. Furthermore, an *instrumentalist* image of learning emerges quite explicitly in this analogy with machines.² For Ben-Porath (1967), human education consists of incremental or fractional value-units that can be increased from a baseline that is measured from an average (estimate) that each individual is presumed to begin with at the start of life. What Ben-Porath means by a ‘stock’ of human capital is akin to Marx’s sense of the residue of the products of labour: ‘there is nothing left of them in each case but the same phantom-like objectivity; they are merely congealed quantities of homogeneous human labour’ (Marx, 1976, p. 128). Being non-tangible, educational value is absorbed in a manner that cannot be observed, from parents who provide an initial investment. From the economic perspective, what the child inherits from its parents reappears within each incremental moment of accomplishment. The child’s achievements are secondary, they add to a primary capital-base: the family’s inherited stock. In this manner, the idealized ‘child’ is transformed into a site of capital investment or ‘human capital’; the yield or profit consists of the reappearance of the initial capital investment, at the point of successful rental of the child’s services, or market-employment.

Analysed as a form of hypostasis, ‘human education’ ought rather to be understood as the preservation of wealth, or, as Bourdieu would describe it, cultural capital. To inherit capital stock in this case is to be identified with an antecedent, existing idea of your-self, one you inherit from your parents, as a site for development and accumulation of wealth. Human capital conflates non-tangible and tangible wealth, in this sense. To be identifiable with your-antecedent-self is to be named as an owner of property; to have a proper name; to *be* a persistent and reliable social and economic entity in chronological terms. You have been produced by your family, you will not disappear, so not only can you be valued, but you are *reducible* to a value: ‘in the history of thought the subject affirms its own centrality only by disguising itself in the “imaginary” appearance of a foundation’ (Vattimo, 1988, p. 33).

**Liberty and Investment**

The metaphysics of human education proceed from an underlying presumption that all individuals follow an identical progression through life. It is the substance, or value, of the ‘human individual’ that it is characteristically transient while remaining constant. Humanity is reducible in so far as it is possible to assert that every kind of human is at a fundamental level the same as every other kind, and, accordingly, the value of a given human is always equally commensurate with all others. While such principles may seem initially most pertinent to the notion of *equity*, a kind of *sameness* that is intrinsic to *equality* is also necessary for the chronological functioning of capital in the human context. Capital value transcends the variables of the social context in which it is produced, to afford a metaphysical financial and mercantile context. Here, sameness affords predictability and functionality, as well as control, especially from a statistical perspective. The capacity to reduce human individuals to a numerical value (one is always equal to another until investments and risks are calculated) is fundamental to the process of developing and accumulating capital as an array of constant and variable forms of wealth. The irony of this observation is that making every human the same as each other from a statistical
perspective effectively removes the human from a universal ‘reality’ in which chronological change is presumed.

A distinction is made for the age of a human, on the basis that the quantity of capital stock for any given individual will change in accordance with a universal pattern of growth (maturation) and eventual deterioration. This pattern effectively rehearses a psychological chronology in which capacity to improve upon endowments increases at first, and subsequently decreases as one gets older. In other words, human capital assumes a ‘natural’ and purified origin within the family that is immediately submitted to the relative, chronologically measurable variables of development and decline. However, the construction of the human as a numerical value (along with the analogy between an individual and a ‘machine’) captures the sense that human capital is only discernable at a population level: Ben-Porath’s (1982) econometric formulae eliminate extraneous and relatively irrelevant distinctions that apply to individuals, like social class, race or gender.

This supposedly natural origin is equally significant when it becomes necessary to resolve the conflict between a chronological reality and the hypostasis of the human in general. Do economists proceed naturalistically upon a connection between those processes that appear to occur and unfold spontaneously (ascent and decline) and a freedom to determine one’s own path in life? Does the theory of education similarly represent human freedom as a form of the development of human capital?

Despite the fact that investments and the form of their appreciation (returns) are not normally calculated at an individual level, and that what economists take as yield or ‘output’ is only visible statistically, it is nevertheless the case that the Chicago School of Economics treats the ‘human’ through the prism of the family, and more particularly of the household. Moreover, writers like James Heckman argue that human capital depreciation (failure to gain education) cannot be blamed on social and economic disadvantage:

If parents cannot make wise choices about the schooling of their children, how can we trust them to make the right choices for their children in the pre-school years? The logical extension of the paternalistic argument that denies parental sovereignty in schooling would suggest that the state should play a far more active role in the pre-school life of the child as well, a position few would be willing to accept. I reject the paternalistic argument for most groups. However, for certain disadvantaged families paternalistic interventions may be appropriate (Heckman, 2000, pp. 25–26).

Education effectively becomes a by-word for identifying and evaluating the mode of ‘investment’ that a parent makes in their child, transforming the child into a component of the family’s revenue-base. Taken in its crudest form, fulfilment of one’s genetic potential is either a matter of having wise parents who invest in you properly, or of managing to escape their misdirection (bad parenting).

The objective of the individual at any time is to maximize the present value of his disposable earnings … [this objective] is treated as applicable to an individual from birth; up to a given age actual decisions are made by his parents … If the parents do not take into account the full economic life of the child, or in the
The extreme case where only the period of attachment to the present household is considered, less investment would be undertaken, and the age of entry into the labor force would be lower. (Ben-Porath, 1967, p. 354)

The theory posits objectives for young children that can only be imputed to a parent. This is a confusing issue: emphasis is placed on the potential trajectory of an individual whose destiny as a ‘perfect competitor’ is assumed. However, ‘destiny’ is complex. Heckman’s deflection of ownership of the future from the child to ‘his’ parent (Cunha & Heckman, 2007, p. 36) suggests that destiny is quite possibly a kind of compulsion, which tends to undermine the self-determining pathway that Friedman insists upon. In the Chicago School of Economics ‘sociology’ when an individual has to escape ‘his’ own bad parenting, education is curtailed, and workforce participation begins earlier in life (clearly, Heckman accepts that this is very possibly a constraint on the child, and that ‘he’ has little choice in many circumstances but to ‘own’ the destiny his parents accord to him).

Nature as Opposed to Liberty

How then does liberty arise for the child? Only by ascent to autonomous decision-making: the burden of improvement in the endowed stock of capital in any given child is placed directly on the parents as a responsibility to recognize the ‘full’ potential of ‘economic life’. Ascent to freedom can logically only arise as a matter of strategizing how to add value to one’s existing stock (how to develop human capital, by wise investment) so as to increase the value of disposable earnings and to capitalize upon both the inherited endowment, and on the capital produced by improving on those resources.

Is this ‘ascent’ an authentic pathway to liberty and autonomy? I think the first issue to contend with is whether this ascent is or is not a maturation, defined in terms of a natural or spontaneously unfolding self-consciousness. In answering my earlier question (do economists proceed naturalistically upon a connection between those processes that appear to occur and unfold spontaneously [ascent and decline] and a freedom to determine one’s own path in life?) it would seem the conclusion must be affirmative, if the child has little alternative but to ascend to autonomous productivity more or less as a result of conscious effort.

But surely the attainment of a self-consciousness that enables one to ascend to productivity and independence is an engagement with prevailing cultural values? This could contradict the sense of a natural and spontaneous path to freedom, if nature and culture are held as opposite sources of growth.

It would in fact seem that the ‘natural’ path is too rocky and variable for Heckman. Having already elaborated the tendency toward bad parenting, Heckman finds such risk to be too high for the capitalist system, and concludes that the question of capital development needs to be addressed by approaching the family as a ‘technology of skill development’ (Cunha & Heckman, 2007). This argument is largely dependent on rejecting Ben-Porath’s (1982) prior assumption that human capital is built through an inherited stock-base, as well as Becker’s ‘story’ of a ‘one period model of childhood’, in which parents input is ‘crowded out’ by public resources (Cunha & Heckman, 2007, p. 38). Heckman employs neurological data to insist that ‘abilities are produced and gene
expression is governed by environmental conditions’ (Cunha & Heckman, 2007, p. 32, emphasis added). In other words, he contests the natural and spontaneous image of freedom that stems from earlier models of the family. Liberty is something that individuals can acquire. An image of ‘dynamic complementarity’ is constructed that tries to take accounts of a range of variables and ‘multipliers’ that may add or detract from a child’s development profile.

Given, Heckman says, that ‘levels of child skills are highly correlated with family background factors like parental education and maternal ability’ (Cunha & Heckman, 2007, p. 32) he and Flavio Cunha offer this ‘dynamic’ model to measure and map the formation of a child’s skills. It focuses on the nature of a household in which the child is reared.

A household consists of an adult parent and his child. Parents invest in their children because of altruism. They have common preferences and supply labor inelastically… [Contrary to what Heckman regards as prevailing economic wisdom] as a child matures, he gains much more control over the investment process [i.e. children do not rely entirely on their parents to make investment decisions about the longer-term development of skills]. (Cunha & Heckman, 2007, p. 36)

It is significant that Heckman’s analysis formulaically disregards the ‘real’ family structure (two parents) so as to generate a coherent developmental profile for family capital, and how it can be accumulated inter-generationally (such that he only needs to refer to ‘a’ parent in terms of stratification of the family-as-capital chronologically). The image of ‘complementarity’ treats mothers with a strangely suspicious objectivity, in which women are simplistically represented as a risk factor to human capital development. He typically refers to teenage mothers from ‘low-ability’ and ‘minority’ backgrounds, as a source of inter-generational social and economic breakdown; he proposes generally that early childhood intervention programmes are the best and most efficient strategy for remediating this and related problems. Early childhood becomes a protective service to erase and substitute for the effects of bad mothering on the economy at large.5

Of course, this suspicion is largely a result of the conceptualizations that necessarily coincide with statistical methodologies. For example, when psychometric approaches began making a serious impact on educational systems during the 1950s and 1960s (corresponding nicely with the emergence of econometric approaches) psychologists like Benjamin Bloom similarly reduced their description of learning, so as to develop a classificatory system or taxonomy of learning objectives, in which

we are defining knowledge as little more than the remembering of the idea or phenomenon in a form very close to that in which it was originally encountered … It may be helpful in this case to think of knowledge as something filed or stored in the mind. The task for the individual in each knowledge test situation is to find the appropriate signals and cues in the problem which will most effectively bring out whatever knowledge is filed or stored. (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956, p. 29).

Bloom’s is an example of an older, industrial value-form, wherein education is represented in concrete terms as fundamental cognitive, practical and affective operations. For
example, the inculcation of speech-acquisition, literacy and numeracy. These skills already exist in some form but need to be disclosed, since children may not spontaneously learn to unfold their language and cognitive capacity.

The value of such fundamental skills (literacy and numeracy) as they appear in their industrial form, recurs in postindustrial value-forms. However, now those same skills become abstract in a secondary sense. Heckman’s turn from natural, spontaneous sources to cultural, produced sources (a technology of skill development) characterizes the family as a postindustrial means of developing capital (Cunha and Heckman, 2007). The family now expresses a cyclical economic shift, and at the same time, when analysed as a capital resource the ‘family’ becomes visible as a metaphysical operation. To appear as a reproductive device, economic definitions of the family draw on a set of scientific assumptions about the functioning of an individual human. For example, human development rests on the prior existence of a primary abstraction (the mind) and new ways of producing mental ability e.g. emphases on brain science, on genetic and neural predispositions for abilities that were once simply accounts of brain faculties now become subject to genetic manipulation, to shaping and even ‘sculpting’ (Cynader & Frost, 1999).

In light of this postindustrial analysis, the production of an economically successful human reappears, as a layering of different, descriptive characteristics that each holds a function in the determination of economic value. The relationship between these layered characteristics is one of displacement. Instead of referring to a primary abstraction (the brain) we now also refer to secondary abstractions (the control of neural predispositions, or ‘biological embedding’). This definition of human development presumes that a natural resource (the brain) is fundamentally shaped by cultural practices, which may lead either to the erosion of value or the redemption of capital investment. The classroom is displaced and subordinated as a site of production, by events in the life of the individual child, especially family events. The productive development of the child as an economically successful human follows a dynamic trajectory based on the varying sources of influence in its life.

Heckman’s sense of a new, ‘dynamic’ and necessary ‘complementarity’ of abstract thought and concrete activity is reinforced, if we further consider this notion of the post-industrial human in the light of Fredric Jameson’s account of development and accumulation i.e. such that ‘capital itself becomes free-floating’.

It separates from the ‘concrete context’ of its productive geography. Money becomes in a second sense and in a second degree abstract (it always was abstract in the first and most basic sense): as though somehow in the national moment money still had a content – it was cotton money, or wheat money, textile money, railway money and the like. Now, like the butterfly stirring within the chrysalis, it separates itself off from that concrete breeding ground and prepares to take flight. (Jameson, 1998, p. 142)

Just as financial services now supersede older stockmarket and banking practices, so educational services augment the child’s competitive status, i.e. in league tables, etc. (Owens, 2013). The critical point for us in understanding Heckman’s shift towards a dynamic complementarity of nature and culture, is that parents acquire that productive, value-added
status on behalf of their child. For parents who cannot make the purchase, who cannot add value to their child’s life, human development still bears the older, industrial appearance of a slow and unsteady passage through life, i.e. unemployment, poor health, crime, etc. As Heckman and Cunha put it

disadvantaged children are at risk of being permanently poor and uneducated, and of participating in crime. In our simulation, disadvantaged children come from a background where mothers are in the first (lowest) decile in the distribution of parental skills. If no intervention occurs, the children receive investments equivalent to the first decile of the distribution of parental investment. (Cunha & Heckman, 2007, p. 43)

Either the state intervenes (converting the family from private to public) or parents who have the capital to invest in their child use schooling to ensure the realization of knowledge and skills that children are owed, either as a right, or because a child is predisposed to capacity.7 (Are rights potentially the equivalent of a financial debt?) The predisposition is now to be converted into a capital yield on the parent’s investment at the point of maturity.

What is ironic about this commercialization of education services is that a shift from psychological to psychometric developmentalism cannot provide guarantees about a child’s future, and the postindustrial is no more ‘truthful’ or authentic than the older kind of human education. The process of acquiring skills is no more straightforward and obvious than it ever was in the past.

**Postindustrialism and the Re-invention of the Family**

That the family is now subject to public regulation that supersedes older privacy structures is a difficult matter to make visible. A critical factor in this historical change is that in the postindustrial ‘family’ the individual human is modelled on a head-of-household who is no longer always presumed to be concretely paternal, masculine, a biological father. The emancipatory politics of the modern era may have resulted in an economic morality that grants to each individual a capacity for economic wealth based on a confluence of statistical naiveté and a humanism that privileges the centrality of human being per se. Since every child regardless of gender, class or race is assumed to proceed on the same path of economic activity through the life-span, the same ubiquitous ‘human’ is presumed to appear in every case, one who in the industrial period was confined to an adult ‘bread-winner’ role.

There are three aspects of this remodelling of the family and the individual human. First, of course, is the redundancy of natural morphology as a way of distributing capital, i.e. where historically the head-of-household was a male. Here, genital characteristics were critical from religious and cultural perspectives, and simply as a way of understanding the causality of human reproduction; now, invitro-fertilization and other genetic sciences have overtaken a traditional form of credit claimed by the father-as-masculine.

Paradoxically, the new model of the family relies on that older, deeper cultural practice in which credit was always enjoyed by father-as-masculine. Economic roles in the family, i.e. producer or produced, had always, already been assigned (Irigaray, 1985, p. 192). These roles took the traditional shape of public and private spheres, with fathers finding work external to the household, and mothers managing the household. But the new
model assigns the role of producer homogeneously because it fails to distinguish at the level of sexual and racial variables. This means that individuals must all be joining up to a homogeneous stock of human capital because the model cannot question whether particular individuals bear an inherent capacity to participate in exchange or not (despite the suspicion toward mothers).

Third, this tendency to eliminate all extraneous distinctions and to make every human even more ‘same’ than they were before, is treated as if it were a destiny for humanity. As such, it is profoundly compelling, and effectively forces a given individual to comply with market demands. (Does your knowledge have both use-value and exchange-value, or does what you ‘know’ satisfy no significant demands within the market?) The individual is destined to arrive at a moment of employment or failure. For the economist, the expectation that every human will somehow exchange his or her educational capital for ‘a given rental’ is applied generically. But it has paradoxical effects, for example: father-masculine characteristics drawn from the industrial era may be redundant in certain contexts as the demand for manual labour falls, and parents who once could get by throughout their entire life with few skills, now face long-term unemployment.

The family is re-invented in a postindustrial sense when the market itself displaces the father at the centre of the household. I mean that the organization of the family as a capital resource is no longer overtly aligned with a sexual type, and is instead predominantly determined by mercantile exchange rather than private relationships, i.e. marriage (understood as a religious institution, not as an economic function).

At this point in the article I am developing and extending a poststructuralist analysis introduced earlier when I began to show that the notion of human development now relies on a layering of different value-characteristics for brain capacity. My justification for doing so is to demonstrate an alternative theoretical procedure to the prevailing identity that statistics establishes between an idea (the human individual) and a numerical or mathematical value (i.e. ‘the stock of human capital, $K$, of which every individual has some initial endowment, is homogeneous and subject to an exogenously given rate of deterioration, $\delta$ [Ben-Porath, 1967, p. 353]). I wish to show that we can instead study the sign ‘man’ or ‘head-of-household’ under erasure, and I explain this later in the next section. Where the form of exchange once appeared as a kind of trade or barter between men with varying degrees of ownership of the goods being purchased and sold, now the market determines what is valuable for the sake of exchange, in a manner that seems, at first glance, to subvert tradition.

The displacement of the masculine within the household does not mean that the patriarchal tradition is being superseded, so much as transformed, to support the production of human capital. Household is synonymous with family in this context. The Chicago School of Economics’ model of the family, indeed, of society and social institutions more broadly, should be seen in terms of a historical decline in the ideals on which industrial society was based. This decline provides much of the substance of postmodern and postindustrial criticism. For example, the economic historian Giovanni Arrighi (1992) places the contemporary decline and fragility of the nation-state against the cyclical context in which the nation-state first emerged. Capital development gives way, in this analysis, to capital accumulation, i.e. to a cyclical crisis in which wealthy investors can no longer profitably redeploy money into an existing business and instead withdraw into safer investments to protect surplus capital.
Just as Arrighi (1992) sees the nation as a construct that is eventually surplus to the needs of a global market, so in current analysis contemporary economic modelling of the family expresses the redundancy of a traditional family structure in which the male breadwinner is ascendant (at least in the context of increasing evidence of the volatility of men’s earnings and the comparative stabilization of women’s earnings) (cf. Kopczuk, Saez, & Song, 2007; Gottschalk & Moffitt, 2009). What does ‘redundancy’ mean here?

The ways in which the labour market in advanced economies relies on particular patterns of workforce participation are changing, and the ramifications of these changes include the deterioration of structures which allow men to monopolize family income. The erosion of that monopoly of the male head-of-household may lead to gender-role breakdowns or related changes, in which women assume authorities that were previously identifiable exclusively with men. In other words, patriarchy does not necessarily cease but that the power structure adapts to shifts in the labour market.

‘Erasure’ and the Re-invention of the Head-of-household

The centrality of the market for human capital theory is often difficult for educators to comprehend and incorporate in their daily professional life, partly because the process of commercializing the education sector is still far from complete. In developing nations that commercialization process has barely commenced.

The task for educators in comprehending the relationship between human capital theory and education is further complicated by the overriding prevalence of primary, ‘concrete’ ideals relating to the child and the teacher, and the parent, that have so far largely withstood the onslaught of economic rhetoric. Educators and the general community do not often see the applicability of human capital to education, because they assert the priority of personal experience over theoretical understandings. Teachers commonly approach professional practice through ‘concrete’ images of education, that underpin how it is valued and cherished as a social experience. What teachers overlook is the language they use and the way it is generated as an effect of historically located discourse. Accordingly, the aim and purpose of schooling is constituted through the more or less unconscious deployment of a ‘pedagogical imaginary’ i.e. the cathexis, preservation and retention of an array of idealized forms within the discourse of educational practice.

We imagine teaching and learning by reference to such forms. The imaginary takes the shape of metaphors that stand in the place of a ‘sign’ or referent, something that is presumed to precede the image and for which it provides meaning.

When teachers give priority to personal or professional experience at the scene of the classroom, in producing meanings for their own function as educators, they privilege an intangible ‘self’ and place that ‘self’ at the centre of ‘reality’. Jacques Derrida’s analysis of metaphysics offers the procedure of studying a sign under ‘erasure’ as a way of deliberately addressing the problem of the ‘reality’ of a sign. Derrida queries the practice of referring to the self on the basis that the perceived stability of an idealized self-identity is only ever a habit of referring back to a sign for ‘me’. This means that ‘me’ (the teacher) is a signifier that must function by tracing its own meaning back to ‘another sign which never appears as such’ (Spivak, 1976, pp. xx). Similarly to Derrida, Giorgio Agamben argues that giving priority to personal experience is effectively to privilege a ‘linguistic I
transcending any possible experience’ (Agamben, 1993, p. 45). The personal is instantiated by the unity of the ego-cogito expressed by the ‘I’. When teachers unconsciously trace their understanding back to personal experience they return to the ‘I’ (as a referent) as if the familiarity of the ‘self’ erased the possibility that the ‘I’ could be more than an expression of one’s own spontaneity, one’s own natural existence. To place the teacher under erasure is to ask what thing the sign ‘teacher’ refers? Is this ‘I, the teacher’ more real and indisputable than another teacher, another sign, that might stand in its place?

At a more practical level, we might ask, do children know the difference between the sign and the thing to which it refers, or do they simply mimic the codified reference? C-a-t refers to an idealized cat that the child may never have encountered in real life.

This metaphysical problem is significant for comprehending how human capital theory can be applied to education in a general sense. In busy daily life, teachers and parents can rarely stop to consider the way that signs and metaphors are produced, a process that is not directed by individuals (as it might be in the production of a poem, for instance). Unaware of the metaphysical character of the concepts they are using, the economists at the Chicago School of Economics ran into unexpected complexity when they sought to explain how women could fit within human capital theory, in my view (Becker, 1985). The most fundamental evidence for this is that there is no systematic recognition that non-market labour has a value. Unless women can function economically in the same way as men, they have to be treated suspiciously and/or left out of the model (Cohen, 2004).

Erasure of a primary idealization of ‘woman’ expresses a sense of flight from the concrete toward a new, metamorphosed human. The form of the human changes in alignment with the outline of the new, postindustrial historical boundaries, at least at a metaphysical level. To this extent there is a potential for emancipation for women (and for humans generally) from this model, if it means that the subordinate, unproductive status of the feminine is left behind.

However, erasure is not a linear, chronological process, and it actually entails tracing back to the older sign that is under erasure. Consequently, the problem with attaining emancipation for women is that in setting aside the older, concrete form of woman it becomes necessary to adopt a secondary abstraction upon the feminine, without necessarily relinquishing either. Where ‘the sign [for woman] must be studied “under erasure”, [it is] always already inhabited by the trace of another sign which never appears as such’ (Spivak, 1976, pp. xx). What human capital theory amounts to, at least as far as an image of the autonomous individual is concerned, is a self-referential operation, in which only one ‘self’ is assumed. ‘Human’ has to mean the same thing all the time. So in studying the sign ‘human’ we are necessarily doing so ‘under erasure’ because we have always already determined that there is only one ‘human’ not two, not a masculine human and a feminine human. Humanity is, as Spivak (1976) explains, always already inhabited by the trace of another sign which never appears as such, in this case, the variable ‘thing’ that has been discarded because it interrupts the flow of value to ‘human’ as a unified, constant ‘thing’. Therefore both masculine and feminine are relegated to the status of primary abstractions, or concrete ‘things’.

To analyse this further, we might consider such ‘thing-ness’ in relation to Marx: ‘a thing can be a use-value without being a value.’ Use-value is a metaphysical category necessary to hold, fix, and idealize some ‘thing’ that social discourse names as bearing certain
knowable properties. But Marx notes that a ‘thing’ does not have to be a value at the same time that it is a use-value—it can be secondary without being primary. ‘This is the case whenever its utility to man is not mediated through labour’ (Marx, 1976, p. 131): in other words, use-value is the abstraction and assignment of (new) value to a ‘thing’ (so the older, concrete form, e.g. the air, a meadow, is erased when it becomes wind-power or a mine-site).  

This means that the ‘human’ of human capital is gender-neutral, and that in erasing sexual variability, we also erase the existing, historical displacement of the mother’s inherent value (now known as non-market labour). We necessarily erase the usefulness of what women do in order to prop up a new sign (gender-neutral, homogeneous human) that itself refers back to that usefulness without acknowledging it (Spivak [1987] calls this a ‘double displacement’). So women may still have to do what they used to do in the family, without remuneration, and earn even less acknowledgement than they did before.

Knowledge as a Commodity

In a discussion of the connection between economics and patriarchal social practice, Luce Irigaray (1985) has pointed to a potential flaw in the model of a unified and homogenized humanity: if humans all perform the same social and economic function as each other, with whom do they carry out exchange?

The exchanges upon which patriarchal societies are based take place exclusively among men. Women, signs, commodities and currency always pass from one man to another; if it were otherwise, we are told, the social order would fall back upon incestuous and exclusively endogamous ties that would paralyze all commerce. Thus the labor force and its products, including those of mother earth, are the object of transactions among men and men alone. (Irigaray, 1985, p. 192)

This passage should be understood with special attention to the influence of metaphysics on economic practice. The point Irigaray (1985) is raising here is that the historical era in which economics develops as a pattern of patriarchal social operations, is also an era in which a division is established between culture and nature. Different layers of abstraction (primary and secondary) are deployed in order to regulate the mode of exchange. Exchange is effectively a name for what the owners of property do among themselves. Irigaray elaborates on the culture-nature binary:

\[ A \text{ commodity} – \text{a woman} – \text{is divided into two irreconcilable ‘bodies’}: \text{her ‘natural’ body and her socially valued, exchangeable body, which is a particularly mimetic expression of masculine values. No doubt these values also express ‘nature’, that is, the expenditure of physical force. But this latter – essentially masculine, moreover – serves for the fabrication, the transformation, the technicization of natural productions. And it is this super-natural property that comes to constitute the value of the product. Analyzing value in this way, Marx exposes the meta-physical character of social operations. (Irigaray, 1985, p. 180) \]
According to this definition of exchange, the market is a metaphysical construct. By adopting the notion of the market in discussing the household, modern economists erase the generic ‘father’ who traditionally occupied its centre. The market becomes a completely intangible, imaginary place that subsumes the older, individual responsibility for determining what is a value. Indeed, the market determines what is worth producing in the first place, and what is worth consuming, or, to step back once further, the market is responsible for the metaphysics of what appears as a commodity i.e. for the process of apprehending what is in the first place, what can be named and the circumstances as to how that name was assigned.

To analyse the sign ‘market’ (or, more particularly, ‘exchange’) we are again doing so under erasure, which is to say that in each case the sign market is ‘always already inhabited by the trace of another sign which never appears as such’. We do not name the ‘man’ (the idealized individual undertaking an exchange of commodities with another ‘man’) and neither do we name how the name market was assigned in place of man, but we can recognize that the sign ‘market’ inevitably refers to the same process of men exchanging things that they deem valuable. Beneath the new nomenclature, it is the same economics of producing, buying, and selling commodities in order to yield wealth and property. ‘As among signs, value appears only when a relationship has been established. It remains the case that the establishment of relationships cannot be accomplished by the commodities themselves, but depends upon the operation of two exchangers’ (Irigaray, 1985, p. 180).

‘Market’ denotes a collective, social operation. Heads-of-households do not disappear in their essence, rather, they are integrated within the social operations of mercantile exchange and commerce, now transformed by means of a secondary abstraction on ‘man’, such that ‘he’ is redundant, and Adam Smith’s ‘invisible hand’, by which market forces are able to discreetly regulate what otherwise appears to be an anarchic and primordial mode of competition, takes on a fresh vitality (Hill, 2001).

How should we readjust these examples so to more effectively apply them to those images of teaching and learning that are so familiar to educators, and which as yet, do not appear to have been bent or reshaped by economic theory? Educators may be surprised to know that educational discourse furnishes human capital theory with very convenient precedents, making it that much easier to explain schooling as a commercial practice. In order to explain these precedents, we must begin with a simple example.

For the most part, educators are not acquainted with their own practice from a metaphysical perspective, and they do not understand the content of pedagogical practice as different layers of abstract content. They may recognize ‘knowledge’ as somewhat intangible, but they are usually trained instead to look for prescribed ‘signs’ of learning when it is made visible, or when a child demonstrates a given skill, such as correctly spelling c-a-t.

Does the child’s performance of c-a-t constitute use-value? It cannot be exchanged for money. The child does not ‘own’ the correct spelling, although they can claim to have spelled c-a-t correctly. But does such a claim equate to owning knowledge? Is such knowledge property in an economic sense?

My suggestion is that the correct spelling, indeed, any accomplishment of a child at school, is non-market labour, an activity that one undertakes without being employed and paying tax. Education is still redolent of a purely intellectual activity undertaken at the leisure of a privileged elite. But this means that learning may still sit outside the
labour-market, in the same way that what mothers do in the household cannot currently be remunerated. Neither mothers or children engage in mercantile exchange; similarly, intellectual activity is not a form of exchange comparable with mercantile exchange, despite the statistical naiveté of economists who would treat schooling as an input–output function. Teaching and learning remain binary dimensions of a power relationship, in which the participants cannot contract with each other in equal terms. Knowledge cannot be a use-value unless the child is self-conscious enough to comprehend the abstraction of a ‘skill’ in its primary form. Accordingly, the necessity of comprehending a skill as a skill is fundamental to ownership.

Similarly, the child’s skill in spelling cannot have exchange-value, or be a commodity at all, unless it is treated as if it is identical to a second commodity, and unless the relationship between c-a-t and that second commodity (such as performing times tables e.g. \(1 \times 1 = 1\)) is represented by an equation in which literacy is equivalent to numeracy.

What does this equation signify? It signifies that a common element of identical magnitude exists in two different things [literacy and numeracy] … both are therefore equal to a third thing, which is itself neither the one nor the other. Each of them, so far as it is exchange-value, must therefore be reducible to this third thing. (Marx, 1976, p. 127)

What is the ‘third thing’ in the case of learning the three Rs? Sometimes the ‘third thing’ is ‘knowledge’ as in the example from Bloom et al. (1956), remembering how to do something. But an explanation of a common element between such ‘things’ can best be provided after first explaining that schooling is not a market in which children are engaged themselves. Within human capital theory, children are regarded as consumers of schooling, once they (supposedly) reach an age when their parents can stop doing so on their behalf. I think that what this assumes is that schooling is something to be consumed in the first place. To call the child’s learning experience an exchange, or to imply that it is a form of exchange comparable with an economic exchange relation is misleading.

Placed in the context of schooling, the problem that Irigaray (1985) raises is that exchange must happen between exchangers: however, teachers and students are not exchangers. From the point of view of human capital, it would be more correct to assert that children are ‘only supposed to keep commerce going by being an object of consumption or exchange’ (Irigaray, 1985, p. 158).

A confusion arises about pedagogy when we imagine that in order for it to be a form of exchange that it must involve payment of money. The word ‘exchange’ does not mean the same thing in each case. In fact the circulation of knowledge depends on a more complex structure in which (a) the learner conducts an exchange with herself, she must become both producer and consumer at once; (b) following Rousseau, it is a human individuality that is the product of learning; (c) knowledge only has value as it is demonstrated in public speech-acts within a given discursive context where what is spoken has appropriate significance; (d) the transcendental character of this production entails the effacement or erasure of sources external to the self, including the parent and the teacher (I explain this in the next section). As long as the child continues to be dependent upon a teacher they reduce their significance as a human individual (Harari, 1987).
How does learning operate as an ‘internal’ exchange? For a child, the exchange she conducts with herself involves circulation between two different facets of the ego-cogito: these two components are natural and cultural in their character. But such a splitting of the ego-cogito would always be superimposed on the child at a cultural level. The child knows how to say ‘mummy!’ quite intuitively, and this might be called the natural basis of knowing how to say the mother’s name. But the child does not register the social operation it accomplishes when it cries out in this fashion.

Similarly, for the child, performing the correct spelling of c-a-t is not immediately a performance, nor is it knowledge. It only becomes a performance, something to be repeated, in the child’s relationship with a parent or teacher who gives c-a-t a significance that the child would not ordinarily and spontaneously impute to it themselves. In other words, the child might find making the marks for c-a-t on the page interesting, but it might not occur to them to do it again unless prompted. It does not have a use-value, let alone an exchange-value.

The exchange relation of commodities is characterized by its abstraction from their use-values. Within the exchange relation, one use-value is worth just as much as another, provided only that it is present in the appropriate quantity … when commodities are in the relation of exchange, their exchange-value manifests itself as something totally independent of their use-value. (Harari, 1987, pp. 127–128)

The economic character of c-a-t does not lie in the child’s accomplishment: and it does not amount to a form of autonomy. Rather, it consists in something that ‘always escapes’ (Irigary, 1985, p. 176) the kinds of exchange that occur between the child and the adult completely. Spelling correctly only has exchange-value in so far as it upholds the significance and pre-eminence of language in itself. But here it is necessary to cautiously acknowledge that ‘language’ is not simply a transcendental characteristic of the human, since that would be to refer us back to an idealized ‘human’ being, and to suggest that both the child and the adult are unified by their common value as instances of humanity (humans-in-themselves, by dint of their acquisition of language).

Conclusion

The separation and opposition of natural products and cultural products is an unresolved dimension of the critique of neoliberal economics as it impacts on education. It is unresolved because the tendency to regard language as a natural capacity of the human (still unrecognized as a metaphysical construct) can lead to equating language and literacy as similar forms of innate predisposition. In other words, economics as a science fails to appropriately analyse the metaphysical character of a concept, and upholds the pretence that a word is the same as the thing to which it refers.

Human capital upholds a value for an idealized human that must always supply a generic set of fundamental characteristics in order to function as an economic resource. The fundamental purpose of this generality is possibly the most easily concealed dimension of human capital theory, as it is of educational theory too. It comes dressed as a claim to equality between citizens, and appears thus to be incontestable in its significance for human freedom. And yet the
conclusions that are reached in the name of freedom and equality sometimes contradict those goals, or define those goals in ways that are difficult to understand.

So when James Heckman proclaims that ‘document literacy is defined as the ability to locate and use information from timetables, graphs, charts and forms’ (Heckman & Masterov, 2007, p. 9) he is contributing to a debate about the constraints on freedom. Statistical data that he and Dimitri Masterov presented in 2007 suggests that in the United States, there is ‘a thick lower tail of essentially illiterate and innumerate persons, who are a drag on productivity and a source of social and economic problems’ with ‘roughly 20%’ of all employees in America having an ‘inability to determine the correct amount of medicine from information on a bottle of pills’ (Heckman & Masterov, 2007, p. 9). Reduced to such examples, language is converted to a kind of ‘functional’ literacy, and effectively becomes a cipher for the kind of literacy that is taken in terms of its exchange-value.

To this extent, language is a form of wealth, or ‘cultural capital’ as Bourdieu (1986/2007) would have it. Reduced to being a speaker-of-language, individual employees can participate in exchange, if they demonstrate some literacy. The problem Heckman raises is that their capacity to do so is often insufficient (Heckman & Masterov, 2007). When profitable exchange demands higher levels of language competency, a workers failure to meet that demand lowers their productive contribution to gross national product.

Literacy functions as a form of wealth inasmuch as a language peculiar to a particular market is practiced, so that it is stipulated as a criterion for employment, i.e. to participate in mercantile operations, i.e. commerce. What economists and educators are doing, today, when they variously stipulate the necessity of literacy in any given community as a core part of the curriculum that all children must learn, is equivalent to saying that, should you not reach minimum standards of functional literacy, you will let the side down, produce a ‘drag’ on others around you, and essentially that you will cost other people more than what you produce yourself. You are less valuable—and less free—than people who are more literate, better educated.

Educational practice is complicit in this social and economic operation. We may recognize why educators often seem unaware of the repercussions of treating their work as if it functioned in isolation from the economy at large, by accepting that educators normatively take the notion of exchange as a concrete experience. Their conflation of different kinds of exchange might go like this: pedagogic ‘exchange’ is predicated on the transfer of knowledge from the teacher to the student, the latter being required to demonstrate an understanding of the skill in question, in order to reciprocate the teacher’s investment in them.

For human capital, such an account of teaching and learning would be fortuitous because it suggests that the teacher invests in the student and redeems the investment in observing a prescribed outcome. Whenever the teacher cannot or does not observe empirical evidence of a child reciprocally demonstrating a given skill, then doubt applies to whether any production (let alone exchange) occurred at all.

The problem here is that both teacher and student are taken as if they are exchangers. No questions are asked about how a child comes to engage in classroom activity as if she already knows that activity to be an exchange. In other words, the concept of exchange educators apply to teaching is naïve.

For someone to be an exchanger, they must equate things they have in their possession, that their partner-in-exchange wishes to purchase. Effectively, for it to be useful to the
partner, the object-of-exchange must be split into ‘natural’ form and ‘cultural’ value or significance. It’s use is not inherent to the object, it is a metaphysical quality assigned to it, since we do not all use a given ‘thing’ for the same purpose; indeed, a ‘thing’ becomes a ‘thing’ by having a quality or character assigned to it. Similarly, children’s activity is not inherently valuable. Value must be assigned to it. The idea that a teacher transfers knowledge to a student is to assert that each of them is already both intuitively self-conscious and cognisant of cultural signifiers about the knowledge in question.

What is this transfer of knowledge so central to pedagogical practice? It is only a transfer because it instantiates a chronology that is, necessarily, itself completely transcendental to an everyday, concrete experience. I am suggesting that the tradition surrounding the idea of teaching as a form of transfer is only satisfactory if we are happy to accept the rigid idealization of the human-who-learns. Transfer is transcendental because of its paradoxical temporal (anti-chronological) structure: the teacher proceeds in advance of each and every encounter she has with a child. The chronology of pedagogical transfer is characteristically a ‘delay’ that ‘can only have the pure form of anticipation’. Such a delay looks like this: the kindergarten teacher waits, during the delay, which must follow either an example, or an instruction, or both, for the child’s correct spelling of c-a-t. The teacher automatically begins looking at her encounter (the modelling of how to spell c-a-t or her instruction etc.) from an anterior perspective. The teacher already knows the range of possible outcomes. In so far as the teacher operates to respond formulaically to one of the possible outcomes (child spells correctly or not) she is rehearsing a scene. There is a script, or even a mise en scène—she has placed the child into a staged pedagogical drama and it is her job as a teacher to ensure that the unfolding narrative reaches a satisfactory climax. To the extent that the teacher conforms to prescribed outcomes, her pedagogy is a metaphysical practice.

The expectation that the child will do as instructed is fundamental. Such an expectation ascribes a common element (a ‘third thing’) between teacher and pupil. It encompasses a relentless tracing backward in time from the idea that the teacher has of the ‘original’ encounter, to the observation of the child’s response to instruction. But this trace in fact goes both backwards and forwards, chronologically, from the instruction to the response. The trace is erasing the possibility of any variation between the child’s experience and the teacher’s comprehension of the entire sequence. The erasure is necessary because pedagogy is a form of compulsion for both teacher and student, not simply for the student.

Through the always idiomatic relays, one is guided back to the most permanent tradition of the philosophical concept of teaching: revelation, unveiling, truth discovered on the mode of the not-yet, Socratic-Platonic anamnesis. (Fischer cited in Cahen, 2001, p. 19)

Truth is always already fully constituted. Truth stands outside time. Accordingly, so does the teacher’s authority to evaluate a correct response to instruction. But the teacher’s ‘authority’ is never their own property, since it derives from the cultural significance of the code itself. The nature of the secondary layer of abstraction through which pedagogy is practiced as a social operation strips both teachers and students of any authentic claim on exchange at all. To the extent that they regard pedagogy from a concrete perspective, both teacher and student are functioning below the level of metaphysical consciousness. Education is a system that necessarily disempowers those who participate in it, at least in so far as it is a successful
form of ‘cultural reproduction’. Again, this is entirely due to the fact that the function of erasure at the scene of learning is to ‘converge by fusing the other into the same’ (Cahen, 2001, p. 19). Making everyone the same is an objective of schooling because it is a social operation and can only regard those who participate in it through the prism of identity, or erasure: a metaphysical operation in which differences between ideal and concrete, secondary and primary, are displaced. The precedent that education provides to human capital is precisely an example of eliminating all extraneous variations between those who are participating in the scene of learning, and of upholding a modern, humanistic image of the learner so as to instantiate a transcendental image of freedom.

Notes

1. Some debate on this application of statistical methods among economists when discussing educational problems is noteworthy i.e. Hanushek (2003) discusses the limitations and flaws in economic analysis of educational factors such as cognitive ability etc.
2. For an account of ‘instrumentalist’ learning, see Moore and Young (2001).
3. Cunha and Heckman (2007), cite Erikson as a model of human development that economists have overlooked; p. 35.
4. Here Heckman (2000, pp. 25–26) posits a confusing denial that education a posteriori mitigates the variability of family background, in order to describe it as a point of consumption necessary to ameliorate the risks associated with a priori stock-values. (Does Heckman really know the difference?)
5. Heckman (2000, pp. 25–26) is proposing that the government should engage in dramatic, coercive intervention to ‘regulate’ bad parenting, but only amongst a small selection of poor and disadvantaged families—among whom single motherhood is a frequent statistic. The ‘paternalism’ to which Heckman refers is, of course, that proposed by Lawrence Mead in his 1997 collection entitled _The New Paternalism. Supervisory Approaches to Poverty_ (see in particular Maynard, 1997, pp. 89–129). Mead’s explanation of ‘paternalism’ in this context poses the government as a parent with a traditionally masculine sensibility or authority. Paternalism here correlates to a representation of the poor in society—whom Mead explicitly identifies as those for whom such supervisory practice is required—as child-like and errant. ‘Society says to the clients, in effect, “we will support you in need, but only if you behave in ways society routinely expects”’ (Mead, 1997, p. 5). This supervisory relation highlights the conceptualization of individual citizens as autonomous and responsible for themselves, using neoliberal philosophy.
6. According to Clyde Hertzman ‘because the central nervous system, which is the centre of human consciousness, “talks to” the immune, hormone and clotting systems, systematic differences in the experience of life will increase or decrease levels of resistance to disease. This will change the long-term function of vital organs of the body and lead to socio-economic differentials in morbidity and mortality’ (Hertzman, 2000, p. 14). The implications of this statement are that if we can control the environment in which a child develops we are effectively controlling the capacity of the child’s ‘consciousness’ to cope with hardship and resist disease, as well as to participate productively in socio-economic activity.
7. For an additional historical perspective on the changing position of children with respect to education and the labour market, see Miller (2005).
8. _The New York Times_ and the _Australian Financial Review_ reported research on 31 May 2013 indicating that the frequency of female breadwinners in American families with children under 18 had quadrupled since 1960 and was now estimated at 40% of all such families (Rampell, 2013).
9. I give credit to Harari (1987) for the use of this phrase.
10. I owe the use of this quotation to Spivak, who cites it at length (2000, p. 4).
11. Spivak citing both Derrida and Husserl (1976, p. li).
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