

Gambling with “Human Capital”: on the Speculative Logic of the “Knowledge Economy”

Jean François Bissonnette and Christian Laval

Sophiapol, Université Paris Nanterre, France

The educational and academic fields have not been spared by the neoliberal logic. They indeed became one of its primary targets. Critics of neoliberalism too often neglect this, for they merely see in the latter a doctrine exclusively concerned with economic policy. They forget that knowledge constituted in fact a central element of the various approaches that contributed to the neoliberal synthesis.¹ The “knowledge economy”, as it is often called, is the paradigmatic product of this synthesis. It holds that economic growth is set to become ever more “knowledge intensive”, and thus, that only those economic and political actors who manage to produce and make use of the rarest innovations and skills will prevail in the global competition between firms and the nation states that champion them.

Far from being an independent offshoot, the “knowledge economy” is thus an essential aspect of the neoliberal regime. It establishes itself as a strategic imperative for political and economic leaders in every capitalist country. Institutions dedicated to the production and diffusion of knowledge can hardly avoid surrendering to this strategy, as it gets implemented through an ensemble of norms, directives and procedures that profoundly alter their goals and functioning. To be sure, its ways and means vary from one country to another. Yet this strategy, which we could call the *capitalist knowledge strategy*, presents a high degree of coherence. Not a single aspect of these institutions and of the subjectivities that they harbour are left unscathed by the rationality that inspires it.

The worldwide transformation of universities cannot be understood without questioning this strategy. It depends on the articulation of two fundamental concepts: the “knowledge economy”, on the one hand, and “human capital”, on the other. These are but the two sides of the same strategic orientation. In the first instance, the emphasis is put on the utility of knowledge as it is supposed to give firms an edge in a context of global economic competition. In the second, the focus is set on the incentive for individuals to accumulate a

¹ Worthy of mention here are, among others, Schumpeter’s theory of innovation, Hayek’s theory of information, Becker’s neoclassical economics, and Drucker’s theory of management. Cf. Joseph Schumpeter, *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*, New Brunswick and London, Transaction Publishers, 2008 [1934] ; Friedrich Hayek, “The Use of Knowledge in Society”, *American Economic Review*, XXXV, n°4, 1945, pp. 519-30 ; Gary S. Becker, *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, Chicago, University of Chicago Press, 1993 [1964] ; Peter Drucker, *Innovation and Entrepreneurship*, New York, HarperBusiness, 2006 [1985].

number of skills, experiences and attitudes that are supposed to boost their income and social standing. The concept of “market” performs the theoretical articulation of both logics, since markets allegedly harmonize the interests of businesses and those of individuals alike.

This strategy thus leads to a radical reinterpreting of knowledge itself, which reduces its cultural and social significance to the mere calculation of its economic value. It also operates at the subjective level by fundamentally transforming the nature of the work accomplished by scholars and teachers, just as it changes the meaning that their studies have for the students themselves. The product of the professional activity of the former and the result of the latter’s learning are likewise reinterpreted as the accumulation of a ‘human capital’ whose value is supposedly validated by the market.

The “knowledge economy” thus implies a profound transformation of both institutions and subjectivities, by means of a number of reforms that aim to introduce more competition among universities, to rationalize their “governance”, and intensify the rivalry between scholars and labs seeking to increase their budgets and status. Combined with tuition fee hikes and the piling up of huge debts on the students’ side, such reforms are meant to hollow out academic institutions and create in their midst a network of market relationships whose alleged efficiency should help satisfy the economy’s need for innovations and professional skills as well as the financial needs of universities themselves, while ensuring the profitability of students’ educational “investments”.

In that sense, as we intend to show in this paper, the political economy of higher education now takes a decidedly *speculative* turn, as the market-like functioning of universities forces upon their members a typical kind of ethos, whereby their relationship to knowledge acquires the meaning of a gamble on the future payoff of their scholarly activity.

1. The Capitalist Knowledge Strategy

Neoliberal policies targeting universities transform knowledge itself by ascribing to it a value that only makes sense in economic terms. The purpose, organization and functioning of higher learning institutions depends more than ever on a market logic that superimposes on knowledge the abstract form of economic value, which is taken as an absolute criterion of validity, thus breaking with properly scientific means of evaluation, and more largely, with the ethical principles that had been enshrined in the academic field over the last two centuries.

Of course, this strategy remains only partly fulfilled to this day, as it stumbles over the remnants of institutional autonomy that ensured, in the classical order of the university, its

capacity to attain its own ends as far as research and teaching went. This classical order of the university designates, in our view, the principles and values that guaranteed the relative autonomy of academic institutions and that shielded them against religious, political and economic powers. These entailed a number of consequences relative to the symbolic status of science and culture in society and to the role that scholars and teachers, as well as students, played in their respective institutions.

This classical order of the university is explicitly challenged today at different levels. Ideas and proposals set forth by large international organizations such as the World Bank, the OECD and the European Commission have laid the groundwork for a radical reconsideration of knowledge itself and of its institutional conditions of possibility. Universities worldwide have become contested turf, where the very definition of knowledge is at stake, as capitalist forces, pursuing their secular work of enclosure, are now bent on eroding the former's autonomy and capturing the means of knowledge production to their own ends. Neoliberal reforms thus aim to institutionalize a distinctively capitalist conception of knowledge, so that this *conception* becomes in effect the very *form* of knowledge.

The capitalist form of knowledge does not stem directly from the effective selling of "cognitive goods and services" on real, complete markets. Knowledge need not be turned into an actual merchandise, in the way in which it is taught or acquired, to receive a merchant *form* and be treated as such. Karl Polanyi spoke of land, money and labour as "fictitious merchandises".² The same could be said of knowledge. Ascribing an economic value to the latter necessitates a process of normalization that runs through both the cognitive and practical operations that shape the very categories under which knowledge is rendered thinkable, as well as the institutional apparatuses for its production and diffusion, and the norms that regulate its financing. These function *as if* all scholarly activity could in effect be quantified, evaluated according to its economic output, and integrated into a calculus of costs and benefits. The properly fictional construction of a 'market for knowledge' entails very real consequences, however, be it only by means of the selection it makes possible between 'profitable' and 'useless' activities, between market-validated scholarship and the rest.

It goes without saying that this normalization, by considering knowledge *as if* it were a merchandise, often creates the conditions for it to actually become so. Critics of "academic capitalism" have brilliantly shown how universities are being turned into profit centres that specialize in the production and sale of cognitive goods, and how scholars are made into

² Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, Boston, Beacon Press, 2001 [1944].

producers and sellers of such goods, in accordance with the requirements of the new economy.³ This was made possible, as they argue, only because the university has itself become a stakeholder in this new economy that exploits the already existing stock of available knowledge and speculates on its future expansion. According to their hypothesis, universities would in fact constitute the quintessential institution of the new knowledge economy. This interpretation of “academic capitalism” is however flawed by its tendency to forget that even in the absence of effective selling and buying relationships, all scholarly activities are now susceptible to receiving an economic form, by means of an operation of abstraction that separates from the content of any concrete and specialized knowledge the general property of having a potential market value.

This operation of abstraction unfolds in two different directions whether it concerns teaching or research. As regards teaching, the notion of *skills* has become a strategic category that underpins the generalized professionalization of academic curricula as well as the restructuring of learning contents and the modalities for evaluating the professional activity of teachers.⁴ Selected and prioritized according to their professional and social utility, the production of skills is now posited as the only legitimate purpose of teaching institutions and as the sole criterion that decides which subjects are to be taught. Parallel transformations in the field of research are driven, for their part, by the logic of *innovation*, which presides over the selection of research projects and the allocation of financial resources by prioritizing the types of scholarship that prove useful for the technocratic management of complex economies and their competitive performance on global markets.

Skills and *innovation* are the two sides of the capitalist knowledge strategy, which reduces learning and research to their sole economic finality: producing exchange value on the job and educational markets, on the one side, and producing exchange value on the market for patents and intellectual property on the other.

If knowledge is to be ruled by the logic of its economic valuation, it is thus advisable that it be developed in such conditions and such forms that suit the production of exchange value, i.e., within publicly or privately owned enterprises subjected to competition and performance norms modelled after those that regulate the wider economic sector. In other terms, institutions of learning have to adopt the form, aims and procedures of the firm. For

³ Cf. Sheila Slaughter and Gary Rhoades, *Academic Capitalism and the New Economy, Markets, State and Higher Education*, Baltimore, The Johns Hopkins University Press, 2004. See also the earlier book by Sheila Slaughter and Larry L. Leslie, *Academic Capitalism, Politics, Policies, and the Entrepreneurial University*, Baltimore, The Johns Hopkins University Press, 1997.

⁴ It is a telling example that Ireland's Department of Education was renamed in 2010 “Department of Education and Skills”. Its British counterpart had also been named such between 2001-2007, after having been called for six years “Department for Education and Employment”. The fact that it has since reverted to being simply a “Department for Education” does not signal a radical change of orientation, however. In modern parlance, education is basically a form of professional training and nothing else.

their part, administrators and scholars accompany and reinforce this transformation by actively engaging in the same logic of competition. They thus participate in the construction of an academic market by importing into their institutions, in accordance with their own professional interests and strategies, the entrepreneurial values and behaviours that characterize the economic world. Students likewise contribute to this market logic by being made into unknowing yet decisive operators of institutional change, through their educational choices and expectations, as they are incentivized to consider their studies as a form of financial investment. The capitalist knowledge strategy is thus enacted through the very calculations that these various publics are led to make in relation to the university. These calculations are speculative both in form and content.

2. The Speculative Logic of Higher Education and the Production of Learned Subjectivities

Academic institutions have to be steered according to the market logic, but the latter also reconfigures the very activity of those who frequent them. Much could be said about the relatively new managerial class that now dominates universities; all those experts and administrators whose mandates are to design and enact the branding, positioning, fundraising and real-estate development strategies that are arguably essential to navigating the market of higher education. The sheer importance of the budget resources drained off by this managerial strata⁵ suggests that their activity has indeed become central to the functioning of academic institutions, thus displacing their core mission to advance knowledge and educate, which are now considered at best as side products of their growth and logistical flows management.

Yet, the market logic has also come to inform the meaning and objectives of the activities accomplished by the traditional members of these institutions, namely scholars and students. Their relation to knowledge now takes a “speculative” form. Students are led to consider education as a kind of market transaction by means of which they can gain the skills and certifications needed to enter the workforce; hence as an “investment” that will pay off once they land the lucrative job for which they train. Scholars, on the other hand, are also urged to embrace the market logic by positioning themselves as “entrepreneurs” whose success is measured by a quantitative appraisal of their research output and by their capacity to secure competitive funding. Both students and scholars are thus pushed to

⁵ The right-wing Goldwater Institute noted in 2010 that: “Between 1993 and 2007, the number of full-time administrators per 100 students at America’s leading universities grew by 39 percent, while the number of employees engaged in teaching, research or service only grew by 18 percent. Inflation-adjusted spending on administration per student increased by 61 percent during the same period, while instructional spending per student rose 39 percent.” Jay P. Greene, “Administrative Bloat at American Universities: the Real Reason for High Costs in Higher Education,” *Policy Report*, Goldwater Institute, no. 239, August 27th, 2010, p. 1.

develop a speculative relationship to knowledge as their use and/or production of which now appears essential to the maximization of their life chances on the job market.

While it operates at the level of institutional norms and procedures, the strategic rationality of the “knowledge economy” thus translates into specific subjective dispositions that “perform” its inner logic. The “speculative logic” here described corresponds to the rise of a new, calculative kind of academic ethos that derives its thrust from the mostly economic expectations that come to be invested in the very activity of studying or doing research. Such dispositions are of course ideal-typical. Exceptions and resistances abound. Yet, by modifying the ‘incentives structure’ if not the value system that shape the daily experience of students and scholars alike, the institutional transformations introduced by this strategic rationality also tend to induce parallel changes in the behaviour of those whose life gravitates around academic institutions; changes that amplify in return the conversion of the latter into market actors and the reduction of knowledge to its mere exchange value.

Students are to play a decisive role in enforcing on universities the kind of market discipline that is supposed to improve their performance as organizations as well as their contribution to the national economy. Such was indeed the project set forth by Lord Browne in his 2010 report to the British government,⁶ which has deeply influenced the wholesale transformation of public funding to academic institutions in England, and which has been the harbinger of similar trends that have since taken roots in other countries as well. Acknowledging the need for universities to access new resources in order to better compete at the international level, Lord Browne ruled out however the idea of increasing the share of government-allocated funds, since it was deemed “unfair” to the taxpayers who might not have benefitted themselves from a university education.

The main idea here is that, although a better trained workforce is essential to the competitiveness of the country as a whole, the benefits of a university education mostly accrue to the private individual. Students being but wage-earners in waiting, they have to choose among institutions of higher learning which one presents the most profitable option, that is, the programs that offer the best prospects for their future careers. In doing so, it is they who will provide the institutions with these much needed additional resources, by paying tuition fees, and their choosing thus functions as a market signal that universities have to follow so as to attract the students’ money, by working hard to improve the “quality” and appeal of their educative and “experiential” offer. Deregulating tuition fees, as Lord Browne proposed – which led in effect to their trebling in 2010 – was in essence a means of amplifying this market signal, which effectively transforms students into “clients”

⁶ John Browne, *Securing a Sustainable Future for Higher Education*, Independent Review of Higher Education Funding & Student Finance, 2010.

whose rational and calculative purchase decisions are to act as a selection mechanism to separate deserving, competitive, “world class” universities, from poorly performing and irrelevant ones soon to be rooted out by systematic underfunding.

Of course, increasing tuition fees threefold had to have an adverse effect on students’ motivation to undertake university studies. Lord Browne acknowledged that but maintained nevertheless that a diploma remained a “good investment”. A widespread idea holds that university graduates earn a considerable wage “premium” over their non-graduate peers, a figure that one former British Education Minister put at no less than £400,000 over the course of one’s working life.⁷ The prospect of earning such a premium should outweigh the deterrent effect of increased cost, and besides, students should have the possibility to borrow the money they need to study. Just like any cunning financial speculator, students should learn to take advantage of the “leverage effect” of borrowing, which allows investors to magnify their gains by borrowing several times their own initial capital, thus multiplying the size of their investment and increasing their potential returns.

Lord Browne proposed a student finance scheme that would allow students to start repaying their loans only once their income would reach a certain threshold, and praised this formula for being “risk free” for students. A risk free investment promising considerable returns sounds like a deal that students could hardly refuse. At any rate, English students are now the most heavily indebted among anglophone countries.⁸ Yet, notwithstanding national differences in terms of student loan conditions, the strategic reasoning behind the piling up of student debt worldwide is the same. Students are called upon to act like “leveraged investor subjects”⁹ who gamble on the convertibility of their acquired “human capital” into future financial earnings, which is of course dependent on the unpredictable economic conjuncture in which they will find themselves once they graduate and on their capacity to find the jobs they will need to pay off their debts in an ever more “flexible” and precarious market.

Credit is always but an advance on future income and borrowing a wager on one’s capacity to repay.¹⁰ Considering that university studies are presented as an almost mandatory entry ticket on the job market, or at least, as a condition for climbing up the economic ladder (and

⁷ For a critique of this figure and of the reasoning behind it, see Stephen Kemp-King, *The Graduate Premium: Manna, Myth or Plain Mis-selling?*, London, The Intergenerational Foundation, 2016.

⁸ Philip Kirby, “Degrees of Debt; Funding and Finance for Undergraduates in Anglophone Countries,” The Sutton Trust, April 2016, pp. 12-13.

⁹ Paul Langley, “Debt, Discipline and Government: Foreclosure and Forbearance in the Subprime Mortgage Crisis,” *Environment and Planning A*, Vol. 41, n° 6, 2009, pp. 1404-1419. Langley applies this concept to homeowners, but it is certainly relevant to understand the subjective aspects of student debt as well. Homeownership and university degrees are hallmarks of middle-class status, and both rely on debt.

¹⁰ Alex Gourevitch, “Debt, Freedom, and Inequality,” *Philosophical Topics*, Vol. 40, no. 1, 2012, pp. 135-151; p. 142 ; see also Gustav Peebles, “The Anthropology of Credit and Debt,” *Annual Review of Anthropology*, Vol. 39, 2010, pp. 225-240; p. 227.

accumulating other assets – e.g. real estate – by means of more leveraging debts), one might add that student loans function as an instrument for the disciplining of labour, since the pressure to repay makes graduates utterly dependent on their salary and thus tied up with their employers, much like the peonage system of old. In that sense, the speculative logic with which students are led to engage in their studies infuses higher education with a “spirit of indenture”.¹¹

Often heavily indebted themselves, early career scholars, on the other hand, also participate in the entrenchment of a speculative logic inside academic institutions, by transforming themselves into “niche entrepreneurs” competing for teaching gigs, research grants, claims of expertise, and citations counts, in the hope of landing one day the ever-more elusive tenure-track appointment. This “rent-seeking” or entrepreneurial spirit fits perfectly into the costs optimization strategies that the managerial university, confronted with budgetary uncertainties due to austerity measures, fluctuating enrolment and real estate debt commitments, aims to implement. Administrators have figured out that the core mission of the university could be outsourced, thus saving considerable sums for more profitable endeavours. The unprecedented share of casual labour on university campuses – 73% of all academic instructors in the US are now contingent faculty,¹² and figures are similar in other countries as well – is reflective of a trend that has become deeply internalized by younger scholars. In spite of their vocational ideal – that is, as the word *vocation* indicates in French, their “calling” – the academic world now appears, like any market, as an unforgiving survival game, in which “performance”, as measured by a variety of indicators from student evaluation surveys to “impact factors”, is key.

“Human capital” in the case of scholars takes the form of “expertise”. Scholars have to find a niche and invest it with all their enterprising skills so as to be able to claim that they are experts in their field. Ascertaining expertise has little to do with the actual qualitative value of one’s research, however, but everything to do with the quantifiable aspects of one’s productivity as a researcher. Much has been said about the “publish or perish” dogma, and yet, although most scholars are perfectly aware of the considerable waste it generates (accounts vary as to the actual average readership of scientific articles, but it is largely agreed that it is abysmally low, a great many articles being never read let alone cited), publication metrics remain the only tangible way of “evaluating” the scientific output of

¹¹ Jeffrey Williams, “Student Debt and the Spirit of Indenture,” *Dissent*, Fall 2008, pp. 73-78. See also Jeffrey Williams, “The Pedagogy of Debt,” *College Literature*, Vol. 33, n° 4, 2006, pp. 155-169 ; Morgan Adamson, “The Financialization of Student Life: Five Propositions on Student Debt,” *Polygraph*, n° 21, 2009, pp. 97-110.

¹² American Association of University Professors, “Status of the Academic Labor Force, 2013,” <https://www.aaup.org/sites/default/files/Status-2013.pdf>.

researchers.¹³ Scholars are thus incentivized to behave like Weber's "specialists without spirits", by both narrowing down their research topics and outstretching their results so as to maximize the number of articles they can yield, instead of engaging in a time-consuming – and probably presumptuous – quest for polymathesis.

Speculating on the publishing yield of one's research – which sometimes leads to questionable ethical behaviour in reporting results, or which makes intellectual wandering and indecisive soul-searching a catastrophic waste of time – feeds into this other speculative operation, which here again consists in converting "human capital" into actual, hard cash by securing competitive research grants. Here, the logic of scientific "credibility" merges with that of financial credit, understood as one's capacity to raise capital so as to further one's unlimited accumulation of publications. As attested by the multiplication of unwaged positions,¹⁴ precarious scholars now often have to fund their own research work, which entails dedicating a considerable amount of their activity not to doing actual research, but rather to developing and applying their "grantsmanship". In any case, the capacity to attract funding appears more and more as a critical asset in hiring decisions. Scholars thus have to continually justify their existence in order to glean whatever targeted grants they can find, in a never ending cycle of applications writing. The morality of debt here plays out as an obligation to repay in kind, by providing "creditors" – that is, society as represented by funding bodies – with the technical innovations or the problem-solving data they seek to obtain. In this utilitarian view, research that does not contribute to the governing of complex economies and is not readily applicable can hardly be deemed viable, when proof of its value is calculated only in monetary signs.

Unless a scholar was a shrewd student-investor in his or her youth, and lucky or far-sighted enough to attend the top-ranked universities that churn out the vast majority of future professors,¹⁵ his or her chances of ever securing stable employment are hopelessly dim, unless he or she sticks to a rigorous and calculative discipline so as to keep adding new lines to his or her C.V. "Human capital", as a prerequisite for employment, is arguably more taxing in the academia than in any other professional field. Such is the paradox of the "knowledge economy" that in spite of the strategic value that science is meant to have for developed societies, those who are supposed to produce it are subjected to a mounting pressure that is proportional to their increasingly precarious economic conditions. Be it because they are still motivated by an idealistic calling for the life of the mind, which makes

¹³ The pressure to improve such metrics thereby contributes to the extraordinary boon of the publishing industry, which cashes in on the free labour of writers and reviewers and on the huge subscription costs they impose on libraries.

¹⁴ See, for instance, Kirsten Forkert and Ana Lopes, "Unwaged Posts in UK Universities: Controversies and Campaigns," *triple C*, Vol. 13, no. 2, 2015, pp. 533-553.

¹⁵ Aaron Clause, Samuel Arbesman and Daniel B. Larremore, "Systematic inequality and hierarchy in faculty hiring networks," *Science Advances*, Vol. 1, no. 1, 2015, pp. 1-6.

them utterly docile casual labourers, or because they seek in academic life a form of symbolic recognition that compensates for the lack of actual compensation for their work, scholars succumb to a speculative logic that has little left to do with intellectual speculation. In that sense, the “knowledge economy” amounts to the destruction of the conditions of possibility for knowledge itself.

3. Concluding Remarks

What do we criticize exactly when we bemoan the rise of the “corporate university”? In keeping with the “accumulation by dispossession” thesis,¹⁶ the tendency is to treat the university as the merely passive object of capitalist attacks, with alien economic interests encroaching on its traditional autonomy and threatening academic freedom. A creeping colonization of academic space would allow capitalist forces to subvert the production and transmission of knowledge. Meanwhile, all scholars and students could do is witness powerlessly the ongoing transformation of their institutional environment, or, at best, protest it in sporadic fits of resistance. However valid, this view is perhaps reductive. Maybe the critique of the “corporate university” would be more solid if it also took into account the following point of method: the neoliberal reforms targeting the university do not merely consist in the importation of an external economic logic inside academia. They rather enact the strategic integration of the university within the rationality of financialized, cognitive capitalism. The transformation of the university mirrors that of capitalism itself, for which knowledge has become a primordial source of valorization. Value, however, does not mean material or monetary worth exclusively. Value should rather be understood as the determination of the very meaning of scholarly activity.

The academic community often likes to think of itself as being dedicated to the disinterested quest for knowledge and learning, hence its being foreign to any profit logic whatsoever. Yet, the neoliberal rationality introduces in academic life a new, calculative ethos, for which knowledge only matters so long as it is instrumental to the accumulation and future convertibility of “human capital”. In their daily practices, and often against their better judgement, students and scholars alike are thus led to speculate on the value of their own activity, that is, to calculate the odds that knowledge, skills and expertise will one day pay off in terms of jobs, status and income stream. Debt plays a strategic role in this regard, as it forces one to calculate the costs and benefits of one’s relation to knowledge, since it conditions one’s future capacity to pay back. In the “knowledge economy”, then, knowledge not only has economic or monetary value. It also becomes an object of *speculation*, and it

¹⁶ David Harvey, “The ‘New’ Imperialism: Accumulation by Dispossession,” *Socialist Register*, Vol. 40, 2004, pp. 63-87, see esp. p. 75.

weighs as such on the orientation of our conducts as scholars, researchers, teachers and students, thereby contributing to the transformation of our institutions.

Knowledge, as Foucault argued, is indissociable from power, and their enmeshment determines who we are to become as subjects. The transformation of the university is but the reflection of parallel changes in the form and significance of knowledge. As capitalist powers take over the university, we also become, as subjects of knowledge, both products and producers of a new rationality that permeates the very meaning and value of what we do. If there is a struggle around the meaning and value of knowledge today, we, as scholars and students, are not so much soldiers in that war. We are the battlefield.

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Author contact: jfbissonnette@u-paris10.fr and chr.laval@wanadoo.fr

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